

**DRAFT CONSENT
N0353/12
STAGE 2, 79-91 MACPHERSON STREET, WARRIEWOOD**

PART 1

DEFERRED COMMENCEMENT

THIS CONSENT CANNOT BE ACTED ON UNTIL THE APPLICANT RECEIVES WRITTEN CONFIRMATION FROM COUNCIL THAT THE FOLLOWING DEFERRED COMMENCEMENT CONDITIONS HAVE BEEN SATISFIED AND THAT THE CONSENT HAS BEEN ACTIVATED:

1. The Applicant is to submit the appropriate information to Council that demonstrates that there is no net decrease in the floodplain volume of a floodway or flood storage area within the Site for any event up to the Probable Maximum Flood. In addition, it is also to be demonstrated that there is no additional adverse flood impact on surrounding properties or flooding processes for any event up to the Probable Maximum Flood event
2. A revised and detailed set of landscape plans, together with a proposed planting schedule that is actual rather than indicative, are to be submitted to Council for its approval. This information must satisfy the following requirements:
 - a. The plant schedule and landscape plans are to clearly show each individual species, their pot size, number to be planted and their planting locations.
 - b. The appropriate level of detail is required to be provided so as to allow no possibility of confusion as to what is proposed to be planted and where.
 - c. The landscape information submitted is to show all detail that would be required to demonstrate compliance with the approved Landscape Concept Plan, including all of the content of the following notations:

“PEDESTRIAN / CYCLE PATH

A shared bicycle/pedestrian path has been located to form the primary buffer between the Asset Protection Zone (APZ) and the core riparian zone. The path is to link with similar paths on adjoining land. The proposal allows for 3 (three) lookouts to be located at suitable points for viewing into the wetlands. Elevated timber boardwalks are to provide access over sensitive Riparian planting and flood storage area. Seating, signage, solar lights and litter bins to be provided.”

“BOONDAH ROAD STREETSCAPE

Existing Anogopheras to be retained where possible. Additional Angopheras (400 Litre) will be planted to create filtered views in and

out of the site through the development of a tree canopy on the road frontage.”

“BOONDAH ROAD ENTRY STATEMENT

*Stone wall signage and feature paving. Feature tree and shrub planting including *Livistona australis* (400 Litre), *Doryanthes excelsa*.”*

“MACPHERSON STREET STREETSCAPE

Indigenous tree species will be planted to create filtered views in and out of the site through the development of a tree canopy on the street frontage kerb widenings are to include a managed understorey of low-growing shrubs and grasses.”

“EXISTING SWAMP SCLEROPHYLL FOREST

All native vegetation that is outside footpath, road and building reserve is to be retained as part of the ‘wetland buffer strip’ and will form a vegetated link between the wetlands to the south and Boondah Road.”

- d. The revised landscape plans are to include greater planting density, particularly of trees and shrubs and particularly within the front building setbacks to both Boondah Road and Macpherson Street. In this regard, it is suggested that more tree planting be proposed within the turfed street frontage areas
- e. The revised landscape plans are to clearly show the proposed planting of at least 11 Eucalypt specimens (e.g. *Angophora costata* or *Eucalyptus robusta*), with a minimum pot size of 400L (at least 9 are to be planted in the Boondah Road reserve and at least 2 are to be planted within the existing Swamp Mahogany Forest).
- f. The revised landscaping information is to clearly demonstrate, with illustrations or montages if necessary, that the density and scale of the revised proposed planting regime will be consistent at maturity with the scale of the proposed development and successfully screen and soften the appearance of the development when viewed from Macpherson Street and from Boondah Road. This information must also demonstrate that the views of the buildings will be effectively “filtered” by the proposed street frontage tree canopy.
- g. The revised landscape plans are to be amended to provide for effective privacy screen planting and a 2 metre high lapped and capped fence around the full extent of the eastern and southern boundaries of No. 5 Macpherson Street and the southern boundary of No.7 Macpherson Street. The screening species are to be included on the planting schedule and the quantities and pot sizes (minimum of 300 mm) are to be specified. Selected species are all to be locally native and in accordance with those listed in the *Warriewood Valley Landscape Masterplan* and are to have mature heights of 2 to 4

metres. The cost of all planting and fencing is to be fully borne by the developer. Note: The design and construction of the fence below RL 5.0 is to allow for the passage of floodwater.

- h. Evidence is to be submitted that demonstrates that there is sufficient deep soil area provided along the Boondah Road and Macpherson Street street frontages to the Stage 2 development to ensure the successful establishment and continued survival to maturity of all proposed tree planting within these areas. This evidence is to include, but not necessarily be limited to, a report prepared by a qualified and practicing arborist.

Upon receipt of evidence within 12 months from the date of this consent satisfying the above, the consent will become operative, subject to the conditions listed in Part 2 below.

The consent will lapse if evidence satisfying the above conditions is not received within the prescribed time period.

CONSENT NO: N0353/12
ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979 (AS AMENDED)
NOTICE TO APPLICANT OF DETERMINATION
OF A DEVELOPMENT APPLICATION

Applicants Name and Address:

MERITON PROPERTY MANAGEMENT PTY LTD
LEVEL 11, 528 KENT STREET
SYDNEY NSW 2000

Being the applicant in respect of Development Application No **N0353/12**

Pursuant to section 80(1) of the Act, notice is hereby given of the determination by Pittwater Council, as the consent authority, of Development Application No **N0353/12** for:

Stage 2 of Multi-Unit Housing Development in accordance with the Concept Approval (MP09_0162)

At: 122/79 - 91 MACPHERSON STREET, WARRIEWOOD (SP 86957)

Decision:

The Development Application has been determined by the granting of consent based on information provided by the applicant in support of the application, including the Statement of Environmental Effects, and in accordance with:

Architectural plans, all drawn by Meriton Apartments Pty Ltd:

- DA00 Revision F dated 18/09/2012;
- DA01 Revision E dated 14/09/2012;
- DA02 Revision D dated 14/03/2013;
- DA03 Revision C dated 02/10/2012;
- DA04 Revision E dated 02/10/2012;
- DA05 Revision B dated 31/03/2011;
- DA06 Revision C dated 02/10/2012;
- DA07 Revision D dated 04/03/2013 Carparking Blocks O-P Level 2;
- DA08 Revision E dated 14/09/2012;
- DA09 Revision C dated 02/10/2012;
- DA10 Revision C dated 02/10/2012;
- DA11 Revision C dated 02/10/2012;
- DA12 Revision E dated 02/10/2012;
- DA13 Revision D dated 04/03/2013;
- DA20 Revision C dated 02/10/2012;
- DA21 Revision D dated 02/10/2012;
- DA22 Revision D dated 02/10/2012;
- DA23 Revision C dated 04/03/2013;
- DA24 Revision C dated 02/10/2012;
- DA25 Revision D dated 04/03/2013;
- DA26 Revision D dated 02/10/2012;
- DA27 Revision D dated 04/03/2013;
- DA28 Revision D dated 04/03/2013;
- DA30 Revision A dated 21/11/2012;

- DA31 Revision A dated 21/11/2012;
- DA32 Revision A dated 21/11/2012;
- DA80 Revision A dated 15/10/2012;
- DA81 Revision B dated 15/10/2012;
- DA07 Deep Planting Revision F dated Feb 2010

Civil drawings

- Stormwater Concept Plan Buildings H-N, Job Number 1304, Drawings STW-03 Revision P02, dated March 2013, prepared by Ilias Design Group
- Roadworks and Stormwater Drainage Plans, Project Number 10-23, Drawings C213 Issue 8, C214 Issue 7 and C215 Issue 8, all dated 28/10/11, prepared by at&I
- Bio Retention Basin B Detail Plan, Project Number 10-23, Drawing C245 Issue A, dated 13/03/13, prepared by at&I
- Waste Management Plan, dated 19 November 2012, prepared by Wastech Engineering
- Flora and Fauna Assessment, 14-18 Boondah Rd Stage 2 Development Application, dated March 2013, prepared by Total Earth Care Pty Ltd
- Stormwater and Environmental Management Plan, Buffer Area 3 Warriewood Valley, Stage 2 14-18 Boondah Road, Warriewood, Report No.V08066.01_01E dated March 2013, prepared by Brown Consulting
- Water Management and Maintenance Plan; Stage 2: 14-18 Boondah Road Warriewood NSW, Report reference P1002934JR04V01, dated March 2013, prepared by Martens Consulting Engineers
- Mosquito Risk Assessment, Boondah Road, Warriewood NSW, dated April 2011, prepared Cameron E Webb and Richard C Russell, Department of Medical Entomology, ICPMR and University of Sydney, Westmead Hospital
- Arboricultural Assessment Report, dated 11 March 2013, prepared by TALC Tree and Landscape Consultants
- Bushfire Report, 14-18 Boondah Road, Warriewood, Stage II, dated 24 November 2012, prepared by Bushfire Planning Services Pty Ltd
- BASIX Certificate numbers 355450M_04 (Building P) dated 28 November 2012, 365449M_04 (Building O) dated 28 November 2012, 365332M_04 (Building M) dated 28 November 2012, 365448M_04 (Building N) dated 28 November 2012, 365447M_04 (Building L) dated 28 November 2012, 365445M_04 (Building K) dated 28 November 2012, 365442M_03 (Building H) dated 28 November 2012, 365443M_05 (Building I) dated 29 November 2012 and 365444M_04 (Building J) dated 28 November 2012.
- Access Review, Block H, Block I, Block J, Block K, Block L, Block M, Block N, Block O & Block P: 14-18 Boondah Rd, Warriewood, all dated 30 November 2012, prepared by Morris-Goding Accessibility Consulting
- Geotechnical Assessment for Proposed Residential Development at Cnr Macpherson Street Boondah Road, Warriewood NSW dated February 2010, prepared by Jeffery and Katauskas.
- Unsigned letter from Brown Consulting to Meriton Apartments, "14-18 Boondah Road, Warriewood Flood Evacuation" dated 1 March 2013
- Unsigned letter from Brown Consulting to Meriton Apartments, "14-18 Boondah Road, Warriewood Flood Storage PMF" dated 7 March 2013
- Letter from Meriton to Pittwater Council, "Response to Council Assessment – DA at 122/79-91 Macpherson Street, Warriewood (SP 86957)" dated 14 March 2013

as amended in red (shown clouded) or as modified by any conditions of this consent.

The reason for the imposition of the attached conditions is to ensure that the development consented to is carried out in such a manner as to achieve the objectives of the Environmental Planning and Assessment Act 1979 (as amended), pursuant to section 5(a) of the Act, having regard to the relevant matters for consideration contained in section 79C of the Act and the Environmental Planning Instruments applying to the land, as well as section 80A of the Act which authorises the imposing of the consent conditions.

Endorsement of date of consent **insert date**

Mark Ferguson
GENERAL MANAGER
Per:

PART 2

CONDITIONS OF APPROVAL

This consent is not an approval to commence building work. The works associated with this consent can only commence following the issue of the Construction Certificate.

Note: Persons having the benefit of development consent may appoint either a council or an accredited certifier as the principal certifying authority for the development or for the purpose of issuing certificates under Part 4A of the Environmental Planning and Assessment Act. When considering engaging an accredited certifier a person should contact the relevant accreditation body to ensure that the person is appropriately certified and authorised to act in respect of the development.

A. Prescribed Conditions:

1. All works are to be carried out in accordance with the requirements of the Building Code of Australia.
2. Critical stage inspections are to be carried out in accordance with clause 162A of the *Environmental Planning & Assessment Regulation 2000*. To allow a Principal Certifying Authority or another certifying authority time to carry out critical stage inspections required by the Principal Certifying Authority, the principal contractor for the building site or the owner-builder must notify the Principal Certifying Authority at least 48 hours before building work is commenced and prior to further work being undertaken.
3. A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
 - a. showing the name, address and telephone number of the Principal Certifying Authority for the work, and
 - b. showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
 - c. stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

4. Residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council) has given the Council written notice of the following information:
 - a. in the case of work for which a principal contractor is required to be appointed:
 - i. The name and licence number of the principal contractor, and
 - ii. The name of the insurer by which the work is insured under Part 6 of that Act.

- b. in the case of work to be done by an owner-builder:
 - i. The name of the owner-builder, and
 - ii. If the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.
- 5. If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under clause (4) becomes out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council) has given the Council written notice of the updated information.
- 6. The hours of construction are restricted to between the hours of 7.00am and 5.00pm Monday - Friday and 7.00am to 1.00pm on Saturdays. No works are to be carried out on Sundays or Public Holidays. Internal building work may be carried out at any time outside these hours, subject to noise emissions from the building or works not being audible at any adjoining boundary.
- 7. In the case of residential building work for which the *Home Building Act 1989* requires there to be a contract of insurance in force in accordance with Part 6 of that Act, there is to be such a contract in force.

B. Matters to be incorporated into the development and maintained over the life of the development:

- 1. Waste Removal
 - a. All wastes (including garbage, recyclables, organics and general clean up items) are to be collected by a private waste contractor. Any costs associated with the private waste contractor activities are to be fully paid by residents, body corporations, or alike. Council may still elect to levy a waste availability charge for each parcel of rateable land in accordance with the *Local Government Act 1993*.
 - b. An on-site caretaker is to be employed to manage the storage and removal of all wastes from this development in accordance with the Waste Management Plan prepared by Wastech Engineering dated 19 November 2012.
 - c. The on-site caretaker must submit to Pittwater Council in July each year, evidence of annual tonnages and other relevant information relating to waste streams including garbage, paper recycling, co-mingled recycling, vegetation (organics), bulky wastes, separation of metals, etc. Council will include this information in its annual waste data return to the NSW Office of Environment & Heritage (former Department of Climate Change and Water (DECCW)).
- 2. The premises shall not cause air, water, noise and/or land pollution.

3. Planning for Bushfire Protection

- a. Access to the development must comply, in perpetuity with the requirements of section 4.1.3 (1) of *'Planning for Bush Fire Protection 2006'*.
- b. At the commencement of building works and in perpetuity the Asset Protection Zone must not:
 - i. Be located within the approved 10m wide Vegetated Wetland Buffer.
 - ii. Be located within any land to be dedicated to public ownership
 - iii. Be transferred to public ownership and is to be maintained by the property owner, as per section 4.1.3 of *'Planning for Bush Fire Protection, 2006'*.
- c. At the commencement of works and in perpetuity, the Asset Protection Zone is to be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of *'Planning for Bush Fire Protection 2006'* and the NSW Rural Fire Service's document *'Standards for asset protection zones'*.
- d. At the commencement of building works and in perpetuity access to the development must comply with the requirements of section 4.1.3 (1) of *'Planning for Bush Fire Protection 2006'*.
- e. A water supply complying with Australian Standard AS 2419 - Water Storage for Domestic and Rural Fire Fighting Purposes and section 6.4.3a of Planning for Bushfire Protection is to be provided. All hydrants are to be marked with a blue cats eye in the centre of the road.

4. At least 11 large (400 litre pot size) Eucalypt specimens (e.g. *Angophora costata* or *Eucalyptus robusta*) are required to be planted to offset the loss of Angophoras from the Boondah Road reserve. At least 9 specimens are required to be planted within the road reserve and at least 2 specimens are required to be planted on southern side of the Swamp Mahogany Forest (Swamp Sclerophyll Forest) area.

5. Approval is not granted to remove or modify vegetation located in the adjacent Council land to the rear (west) of the subject site, or any neighbouring lands.

6. Visitor and Resident Parking

- a. All parking spaces, access ramps and aisles are to be designed in accordance with AS28901.1 and AS2890.6 with particular reference to traffic sight distances for the access ramps from the basement under Buildings H-K.

- b. To satisfy the off-street vehicle parking requirements for the development, the minimum number of vehicle space requirements shall be as follows:
 - 419 residential vehicle spaces
 - 45 visitor vehicle spaces
 - 76 bicycle spaces
 - 3 car wash bays
 - 25 vehicle spaces for people with disabilities

These spaces are to be provided and retained over the life of the development.

- c. The visitor car spaces located in the Building H-K basement car park, Building L-N basement car park and Building O-P basement car park are to be accessible at all times and not be separated by a gate or any other device from the internal access driveways on the site.
- d. Each adaptable unit is to be allocated at least one accessible car parking space within the basement car park and are to be located nearby to the basement lift.
- e. Above ground car wash bays are to be covered with a roof to prevent stormwater entering the sewer.

7. Utility Services

- a. Street lighting facilities to the development street frontages of the site and to the existing Public Road reserve are to be provided at the full cost of the developer and in accordance with the requirements of Energy Australia.
- b. All services, including electrical and telecommunications for the proposed lots, shall be provided underground in accordance with Pittwater 21 Development Control Plan. The location of any trenching shall have regard for future and proposed landscaping in the public domain.
- c. The public footways and roadways adjacent to the site are to be maintained in a safe condition at all times during the construction phase. Pedestrian access is to be maintained at all times during the construction phase
- d. The adjustment of all public utilities and services is to be at the full cost of the developer.

8. Flood levels

- a. Storage of hazardous materials, electrical items, items of plant, equipment or stock and other items which may be susceptible to water damage are to be located above 4.3m AHD.

- b. Finished floor levels for buildings shall have a minimum floor level of 5.0m AHD comprising the Probable Maximum Flood with the 2100 Climate Change Scenario.
- c. All building structures are to be ensured structural integrity for immersion and the impact of hydraulic forces of floodwaters and debris up to the Probable Maximum Flood with the 2100 Climate Change Scenario.
- d. All structural elements below the PMF level with the 2100 Climate Change Scenario are to be flood compatible in terms of materials used and in the design.

9. Flood Emergency Response

The Flood Emergency Response Plan is to be implemented by strata management in accordance with established legally binding mechanisms and is to include annual testing and certification of the Flood Emergency Response Plan.

10. Flood Risk to Basement Car Parks

- a. The minimum level of the entry to all underground car parking shall be 4.3m AHD, however it is recommended that the crest level of the access to the car parking have flood protection up to the Probable Maximum Flood with the 2100 Climate Change Scenario (5.0m AHD) given the large number of vehicles and the possibility of many people accessing these at any one time.
- b. A clearly signposted flood emergency pedestrian access way from the basement carpark of Buildings O and P is to be provided to allow egress via a low flood hazard area (and separate to the vehicular access ramps) to an area above 5.0m AHD.
- c. All access, ventilation and any other potential water entry points to underground car parking shall be above 4.3m AHD, however it is recommended that entry points to the car parking have flood protection up to the Probable Maximum Flood with the 2100 Climate Change Scenario (5.0m AHD).

11. Flood Storage

The post development flood storage commitments reported in the Water Management Report (Stormwater and Environmental Management Plan – Buffer Area 3 – Warriewood Valley Stage 2 - 14-18 Boondah Road, Warriewood March 2013 Brown Consulting, Report No. X08066.01_01E) that forms part of the consent, are to be maintained for the life of the development.

12. Water Management

- a. The commitments reported in the Water Management Report that forms part of the consent are to be maintained for the life of the development.

- b. The water management facilities are to be maintained by the owners of the development or its Corporation over the life of the development.

13. Overland Flow Path – Boondah Road to Warriewood Wetlands

The existing overland flow path through the existing Swamp Mahogany Forest (Swamp Sclerophyll Forest) from Boondah Road to Warriewood Wetlands is to be maintained at current pre-development levels and capacity.

14. Easements / Positive Covenants

The development is to provide for:

- a. The creation of appropriate easements, rights of way, restrictions on use of land, or positive covenants sufficient to provide appropriate legal rights for access services and facilities where they are not contained in the lot which they benefit.
- b. The provision of binding legal mechanisms to ensure the ongoing maintenance of any facilities or activities required to be carried out by the owners of the development or its corporation over the life of the development by this approval, including maintenance of water management facilities, pedestrian and cycle paths, buffer areas, vegetation and asset protection zones and to also provide for public access.
- c. The creation of suitable binding legal mechanisms to ensure the ongoing maintenance of any facilities or activities required to be carried out by the owners of the development or its corporation over the life of the development by this approval including the maintenance of the water management facilities, roads and parking areas, buffer areas, weed management, continual maintenance of landscape vegetation, asset protection zones, the gymnasium and swimming pool and any other proposed common facilities.

- 15. The Stormwater Harvesting and Reuse Scheme shall be installed and operated in accordance with the accepted design, Environmental and Health Risk Management Plan, Operation and Maintenance Plan, Manufacturer's Specifications and associated operational guidelines.
- 16. The internal driveway is to be constructed to an all weather standard finish to be of dark or earthy tones, linemarked and signposted.
- 17. No water pollution shall result from the operation of any plant or equipment or activity carried out.
- 18. You are advised to contact Australia Post regarding the required size and location of letterboxes.
- 19. Street address numbering can only be authorised by Council. Before proceeding to number each lot/occupancy in your development, approval must be sought from Council's Planning and Assessment Business Unit.

20. Water conservation devices with an AAA rating must be installed, including tap flow regulators, shower head roses and dual flush toilets. All new hot water systems are to have a minimum rating of 3.5 stars.
21. All sanitary drainage must be concealed in service ducts or otherwise hidden from external view to the satisfaction of the Responsible Authority.
22. All external glazing is to have a maximum reflectivity index of 25%.
23. New electrical connections are to be carried out using underground cabling.
24. Dogs are to be restricted to within the building at night and otherwise to be either within a fenced compound on the lot or on a lead.
Cats are to be restricted to within the building at night.

C. Matters to be satisfied prior to the issue of the Construction Certificate:

Note: All outstanding matters referred to in this section are to be submitted to the accredited certifier together. Incomplete Construction Certificate applications / details cannot be accepted.

1. Waste Management

- a. Roads, driveways, turning circles and other infrastructure required for waste services in the development shall comply with the *Better Practice Guide for Waste Management in Multi-Unit Dwellings* published by the Department of Environment & Climate Change NSW, June 2008. The infrastructure is to be designed and constructed to allow the safe passage of laden collection vehicles in all seasons.
- b. The waste and recycling management system for this development shall be designed in accordance with the *Better Practice Guide for Waste Management in Multi-Unit Dwellings* published by the Department of Environment & Climate Change NSW, June 2008. A revised Waste Management Plan is to be completed based on the approved number of dwellings in accordance with this guide and the *Waste Avoidance and Resource Recovery Strategy 2007*.
- c. Each building within the Stage 2 development is to include additional floor areas of 0.5m² per dwelling to be permanently dedicated for the on-site storage of bulky wastes (hard rubbish/general clean up wastes) in accordance with the *Better Practice Guide for Waste Management in Multi-Unit Dwellings* published by the Department of Environment & Climate Change NSW, June 2008. Note: Bulky wastes are separate to storage for Linen/Coats/Laundry/Storage cupboards, Study and Media areas.
- d. Garden organics (vegetation) is a wholly recyclable product and the development shall be provided with garden organics storage facilities in order to divert garden organics from landfill. The storage

of garden organics at the development is to be designed to meet the objectives of the NSW Waste Strategy 2007 and the *Better Practice Guide for Waste Management in Multi-Unit Dwelling* published by the Department of Environment & Climate Change NSW, June 2008.

2. Construction Waste Management

A Construction Waste Management Plan is to be prepared and submitted to the Principal Certifying Authority.

The Construction Waste Management Plan is aimed to minimise waste materials (generated through demolition, excavation, construction and operation of the approved development) being disposed at an appropriate waste facility and where appropriate maximise opportunities for re-use/recycling, in accordance with the *Waste Avoidance and Resource Recovery Strategy 2007*.

The Plan is to include the following:

- a. The amount of demolition, excavation and construction wastes likely to be generated and how these materials are to be sorted and dealt with.
- b. The design and construction of the internal roads, driveways and other infrastructure required for waste services in the development is in accordance with the stated document.
- c. All waste generated by the approved development (including residents, business and any other activity on the site) are to be collected by a private waste contractor.
- d. Bulky waste items collected by a private waste contractor.
- e. Commitment to providing an on-site caretaker to manage the storage and removal of waste generated by the approved development.
- f. Commitment to retain the demolition, excavation and construction waste/recycling dockets to confirm which authorised waste/recycling facilities received the material for recycling or disposal.

3. Construction Process Management

A comprehensive Construction Process Plan of Management (CPPM) is to be submitted to Council that outlines statutory obligations and regulatory requirements affecting all site works and procedures that will be implemented for the duration of all clearing works, earthworks and construction works associated with the approved development that will ensure the safety and amenity of the surrounding residents and the environment are not adversely affected. In particular, this Plan of Management must address the following requirements:

- a. A report from a qualified/practising acoustic consultant addressing the objective of demonstrating that the development may be constructed in compliance with the requirement that the L10 level measured over a period of not less than 15 minutes when the construction site is operating must not exceed the background level by more than 10db(A) measured inside the nearest dwelling, and outlining the measures necessary for this objective to be achieved, such as: selection of specific noise reduced plant and equipment; silencing of construction site plant and equipment; location of plant; regular site monitoring by the site manager and the acoustic consultant etc. There must also be no delivery of machinery, trucks, plant or equipment to the site outside of the approved work hours.

If that acoustical report discloses that this objective cannot be satisfied, the report must identify the areas of non-compliance and must recommend the implementation of measures to be to the reasonable satisfaction of the Council.

- b. Site management in terms of delivery of materials, parking for workers (including No Parking provisions in Boondah Road), removal of excavated materials, how temporary power will be supplied, and stabilisation of any temporary structures, stockpiles and stored materials.
- c. Measures for air quality management and in particular the control of airborne dust, litter and other contaminants in relation to the neighbouring properties.
- d. Waste management methodology including details quantities of material to be transported and implementation of recycling measures (e.g. mulching of vegetative matter) in accordance with Condition C2 above.
- e. Stormwater, sediment and erosion control methodology.
- f. Commitment for the provision of site management signage including contact names and telephone numbers for 24 hour contact by the public relating to site issues including the name and telephone contact of the Principal Certifying Authority.
- g. Ensure that there is a process of 'site induction' to be the responsibility of the site manager whereby each employee or contractor is advised of the procedures relating to the requirements of this Plan.

The construction must be carried out in accordance with the approved Construction Process Plan of Management for this development.

4. Traffic & Pedestrian Management

Prior to the issue of a Construction Certificate, a Traffic and Pedestrian Management Plan prepared by a suitably qualified person shall be submitted to and approved by the Principal Certifying Authority. The Plan shall address, but not be limited to, the following matters:

- a. Ingress and egress of vehicles to the site,
- b. Loading and unloading, including construction zones,
- c. Predicting traffic volumes, types and routes, and
- d. Pedestrian and traffic management methods.

The Proponent shall submit a copy of the approved plan to Council.

5. Parking and Internal Road Network

- a. A certificate is to be provided to the Principal Certifying Authority, by a suitably qualified traffic engineer/consultant, that the parking spaces, internal access roads and ramps comply with the requirements of AS/NZ 2890.1 and 2890.6, prior to issue of a Construction Certificate.
- b. Engineering plans and specifications for all roads, drainage and other civil engineering works within the development site are to include the following matters:
 - i. Pedestrian facilities,
 - ii. Pavement design and treatments. Where Kerb and Guttering does not form the edge of a road pavement in a street, a means of preventing vehicles from parking off the road pavement shall be provided,
 - iii. Drainage facilities and associated water treatment facilities,
 - iv. Threshold treatments, and
 - v. Street landscape, including street lighting and sign posting.
- c. The engineering plans and specifications are to meet the objectives and requirements of the *Warriewood Valley Roads Master Plan*, *AustRoads*, *AUSSPEC* and *Pittwater 21 Development Control Plan*, and achieve a road design and landscape effect consistent with the *Warriewood Valley Concept Masterplan (Public Domain) 2007*
- d. The engineering design and plans for road and drainage works must be certified as meeting the requirements of these conditions of Approval by a suitably qualified experienced civil engineer who is NPER accredited by Engineers Australia.

6. NSW Office of Water

Licences under Part V of the *Water Act 1912* are required for the works for purposes of temporary dewatering as part of proposed construction.

- a. Groundwater shall not be pumped or extracted for any purpose other than temporary construction dewatering.
- b. Pumped water (tailwater) shall not be allowed to discharge off-site (e.g. adjoining roads, stormwater system, sewage system, etc) without the controlling authority's approval and/or owner's consent.

- c. The licensee shall allow (subject to Occupational Health and Safety Provisions) the NSW Office of Water or any person authorised by it, full and free access to the works (excavation of bore/borefield), either during or after construction, for the purpose of carrying out inspection or test of the works and its fittings and shall carry out any work or alterations deemed necessary by the NSW Office of Water for the protection and proper maintenance of the works, or the control of the water extracted to prevent wastage and for the protection of the quality and prevention from pollution or contamination of the groundwater.
- d. If the work is abandoned at any time the licensee shall notify the NSW Office of Water that the work has been abandoned and seal off the aquifer by such methods as agreed to or directed by the NSW Office of Water.

The following documents are to be supplied to the NSW Office of Water in a form suitable to the Office:

- e. A report predicting the impacts of pumping on any licensed groundwater users or groundwater dependent ecosystems in the vicinity of the site. Any adverse impacts will not be allowed and the project will need to be modified.
- f. A report assessing the potential for salt water intrusion to occur as a result of the dewatering. This report is only required for sites within 250m of any marine or estuarine foreshore area. The generation of conditions leading to salt water intrusion will not be allowed, and the proposal will need to be modified.
- g. Descriptions of the methods used and actual volume of groundwater to be pumped (kilolitres/mega litres) from the dewatering works, the works locations, the discharge rate (litres per second), duration of pumping (number of days/weeks), the amount of lowering of the water table and the anticipated quality of the pumped water.
- h. Descriptions of the actual volume of pumped water (tailwater) to be reinjected (kiloliters/mega litres), the reinjection locations, the disposal rate (litres per second), and duration of operation (number of days/weeks) and anticipated quality of treated water to be reinjected.
- i. Monitoring of groundwater levels (minimum of 3 weekly measurements of depth to water at a minimum of 3 locations broadly distributed across the site) beneath the proposed structure shall extend greater than one floor level into the existing ground level.

7. Ground Water

- a. The design and construction of the structure must preclude the need for permanent dewatering.

- b. The design and construction of the structure that may be impacted by any watertable must include a water proof retention system (ie a fully tanked structure) with adequate provision for future fluctuations of water table levels. (It is recommended that a minimum allowance for a water table variation of at least +/-1.0 metre beyond any expected fluctuation be provided). The actual water table fluctuation and fluctuation safety margin must be determined by a suitably qualified professional.
- c. Construction methods and material used in and for construction are not to cause pollution of the groundwater.
- d. Monitoring of groundwater levels is to be continued at least weekly during the construction stage and at least weekly over a period of at least 3 months following cessation of dewatering, with all records being provided to the NSW Office of Water on expiration of the licence. This requirement is only for sites where the proposed structure shall extend greater than one floor level into the existing ground level.
- e. Groundwater quality testing must be conducted (and report supplied to the NSW Office of Water). Samples must be taken prior to commencement of dewatering, (and ongoing to the satisfaction of the NSW Office of Water for any extraction and reinjection activities). Collection and testing and interpretation of results must be done by suitably qualified persons and NATA certified laboratory identifying the presence of any contaminants and comparison of the data against accepted water quality objectives or criteria.
- f. Discharge of any contaminated pumped water (tailwater) that is not to be reinjected, must comply with the provisions of the Protection of the Environment Operations Act 1967 and any requirements of the relevant controlling authority. The method of disposal of pumped water (ie street drainage to the stormwater system or discharge to sewer) and written permission from the relevant controlling authority must be presented to the NSW Office of Water in support of the licence application.
- g. Discharge of any contaminated pumped water (tailwater) that is reinjected, must comply with the provisions of the Protection of the Environment Operations Act 1997. The quality of any pumped water (tailwater) that is to be reinjected must be compatible with, or improve the intrinsic or ambient groundwater in the vicinity of the reinjection site. Contaminated groundwater is not to be reinjected into any aquifer. The following must be demonstrated in writing:
 - i. The treatment to be applied to the pumped water (tailwater) to remove any contamination,
 - ii. The measures to be adopted to prevent redistribution of any contamination in the groundwater system. Any reinjection proposal that is likely to further spread contamination within the groundwater system will not be allowed and the project will need to be modified.
 - iii. The means to avoid degrading impacts on the identified beneficial use of the groundwater. Any reinjection proposal that is likely to lower the identified

- beneficial use of a groundwater system will not be allowed and the project will need to be modified.
 - iv. The means to avoid degrading impacts on the identified beneficial use of the groundwater. Any reinjection proposal that is likely to lower the identified beneficial use of a groundwater system will not be allowed and the project will need to be modified.
- h. Written advice be provided from the Certifying Authority to the NSW Office of Water to certify that the following ground settlement issues have been addressed in reports submitted by the proponent.
- i. Assessment by a suitably qualified geotechnical professional that the proposed dewatering activity does not pose an unacceptable risk of off-site impacts such as damage to surrounding buildings or infrastructure as a result of differential sediment compaction and surface settlement during and following pumping of groundwater.
- j. Settlement monitoring activities to be undertaken prior to, during and for the required period of time following the dewatering pumping to confirm the impact predictions.
- k. Locations of settlement monitoring points, and schedules of measurement.

8. Ground Water Licence

An application must be completed on the prescribed form for the specific purpose of temporary construction dewatering and a licence obtained from the NSW Office of Water prior to the installation of the groundwater extraction works. A plan drawn to scale will be required with the application clearly identifying the location of dewatering installations

Upon receipt of Approval from the Department of Planning a fully completed licence application form, unambiguous documentation of the means by which the below-ground areas of the development will be designed and constructed to prevent any groundwater seepage inflows (and therefore preclude any need for permanent or semi-permanent pumping), together with all other required supporting information, the NSW Office of Water will issue a Water Licence under Part 5 of the Water Act, 1912.

A Licence application under Part 5 of the Water Act 1912 must be accompanied by a \$151.00 fee and must specify the proposed volume of groundwater to be pumped in total (mega litres). The licence is also subject to administrative charges as determined from time to time by the Independent Pricing and Regulatory Tribunal (IPART).

9. Water Management Report

- a. An updated Water Management Report and updated Civil and Infrastructure drawings are to be submitted providing additional detailed designs, plans, specifications for all works to achieve full compliance with the *Warriewood Valley Water Management Specification February 2001 (WMS 2001)* and the *Pittwater 21 Development Control Plan*, based on Brown Consulting – Brown

Consulting Report – Stormwater and Environmental Management Plan – Buffer Area 3 – Warriewood Valley Stage 2, 14-18 Boondah Road, Warriewood (March 2013).

- b. The updated Water Management Report is to address the following:
- i. Flood Emergency Report
A detailed Flood Emergency Response Plan for the site and its surrounds (ie surrounding streets around the site) is required to cater for floods up to the level of the probable maximum flood with a 2100 Climate Change Scenario.
 - ii. Water Cycle Management – Bio-retention Basin
 - The design specifications for the bio-retention basin shall be in accordance with best practice, to meet safety, environmental, aesthetic and practical long term maintenance constraints of the site.
 - The bio-retention basin is to be located outside the 10m vegetated wetland buffer zone.
 - Groundwater sampling is to be undertaken in the vicinity of the bio-retention systems to ensure that any elevated nutrient concentrations in the groundwater system are managed through the design and construction process.
 - Water balances for the site are in full compliance with WMS 2001.
 - iii. Stormwater Quality Improvement Devices (SQID) Management/Maintenance Plan
 - A comprehensive SQID Management/Maintenance Plan to practically achieve long term maintenance of all water management facilities used in the development is to be prepared.
 - The Plans is to make provisions for the monitoring and reporting of the effectiveness of all water management structures. The Plan is to provide details of the location, type, flow capacities, pollutant removal efficiencies, replacement life of components, access and monitoring points and the general functioning of all SQIDS and water management facilities and compliance with water quality
 - iv. Water and Sediment Quality Monitoring Plan
 - A comprehensive Water and Sediment Quality Monitoring Plan is to be prepared and maintained over the life of the development, with supporting evidence of water quality conditions at key stormwater inlet and discharge point
 - The Plan is to provide a practical framework for the monitoring and reporting or water quality specific to the development and mechanisms for enacting remedial measures should non-compliances occur
 - v. Mosquito Risk Assessment

- A mosquito risk assessment is to be undertaken by an appropriately experienced and qualified medical entomologist for all proposed water management works to ensure that the mosquito risk is minimised.

10. Water Management System

- a. The detailed engineering design, construction plans and specifications for the water management system are to be in accordance with the updated Water Management Report. The water management system is to include the design for:
 - i. A stormwater drainage system, which drains collected roof, road and surface water from the site and is to cater for flows from upstream catchments. The system is to include combined piped and overland flow components and comply with relevant Australian Standards and contemporary engineering best practice.
 - ii. All stormwater collections points, including on-site detention, with details of location, volume, maintenance access points and all system connections to achieve full compliance with water quality and quantity objectives.
 - iii. All water management systems/facilities (quantity and quality) are to be resized to account for climate change impacts.
 - iv. Type, location and size of all water quality devices to be shown on drawings.
 - v. Type, location and size of all detention facilities to be shown on drawings.
 - vi. Cross section drawings of Basin B.
 - vii. Piped drainage system including type, location, size and level of the proposed infrastructure, including an inter-allotment drainage system through the subject site to drain properties 5 & 7 Macpherson St Warriewood to a public drainage system.
 - viii. A minimum 2.0 metre wide inter-allotment drainage easement over the inter-allotment drainage system through the subject site to drain properties 5 & 7 Macpherson St Warriewood to a public drainage system.
 - ix. Incorporating the potential impacts of climate change and an increase in rainfall intensity with regards to stormwater management infrastructure and facilities.
 - x. A minimum 2.5 metre wide drainage easement over Council's drainage system that traverses the site from Macpherson Street to Fern Creek.
- b. All water management facilities related to the site development including the bio-retention basin, are to be located within private property and outside of the ten metre vegetated wetland buffer zone.

- c. The detailed design of all works associated with the water management system must provide for a complete system which meets the objectives and requirements of the *Warriewood Valley Water Management Specification (February 2001)* and the *Pittwater 21 Development Control Plan*.

The system is to be in accordance with the updated Water Management Report in accordance with Conditions C9 above.

The System is to be designed to meet the objectives and requirements of the *Warriewood Valley Integrated Water Management Strategy* and *Warriewood Valley Water Management Specification* and is to include and provide for staging of the works is to ensure that the objectives of the *Warriewood Valley Water Management Specification* are achieved for each stage prior to the release of any Occupation Certificate. Sufficient water quality and water quantity facilities must be provided to service each stage

11. Certification of Water Management Report and plans

- a. The updated Water Management Report, and all associated plans and detailed design are to be certified as being in accordance with the *Warriewood Valley Water Management Specification (February 2001)* and as meeting the requirements of conditions C9 and C10 above. The certification is to be provided by a qualified practising Civil Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a Corporate member and has appropriate experience and competence in urban stormwater (quantity & quality) and flood management.
- b. A copy of the updated and certified Water Management Report is to be submitted to the Council for its records.

12. Remnant Vegetation

- a. No excavation, civil works or construction is to occur within the Swamp Mahogany Forest (Swamp Sclerophyll Forest) located between the northernmost driveway off Boondah Road and Building O. This area is to be adequately fenced with a 1.8 metre high chain wire link or welded mesh fence, fully supported at gate, along all margins, to minimise disturbance to existing ground conditions within the existing canopy drip line. No machinery, equipment or materials are to be placed within this area.
- b. A Vegetation Management Plan is to be prepared and implemented to provide protection measures during construction works, and regeneration/revegetation treatments and appropriate weed control post-construction, for the remnant vegetation within the Stage 2 development area, including the Swamp Mahogany Forest (Swamp Sclerophyll Forest) located between the northernmost driveway off Boondah Road and Building O. The Plan should specify minimum planting rates at 4 plants per m² and all species are to be in accordance with those listed in *Warriewood Valley Urban Release Area Landscape Masterplan and Design Guidelines (Public*

Domain) 2006. The Plan is to be implemented from the commencement of construction works and for a further period of 24 months following issuance of final Occupation Certificate. Evidence of engagement to be submitted to and approved by the Principal Certifying Authority prior to issue of Construction Certificate.

13. Landscaping of the site

- a. Landscape works for the site are to be installed as per the approved amended landscape plans required by Deferred Commencement Condition 2.
- b. Detailed working drawings to be prepared for quotation/tender proposals and required prior to issue of construction certificate.
- c. Working drawings for construction certificate to be certified by nominated landscape architect that they are in accordance with the approved Development Application and Conditions of Consent.
- d. All proposed planting areas to have a gradient no steeper than 1:4 to allow effective growth and maintenance.
- e. Playground area to be certified as conforming to Australian Standards prior to issue of occupation certificate.

14. Balconies – Building M

All balconies off living rooms in Building M are to have a minimum depth of 2 metres. Construction Certificate plans for Building M are to incorporate this detail.

15. Acoustic Privacy – Building K

The bedroom windows to Units G21, G22, 121, 122, 221, 222, 320 and 321 that open out into the ventilation shaft are to be double glazed. Relevant detail is to be included in the plans submitted with the Construction Certificate for Building K.

16. Windows – Building H

All bedroom, dining room and kitchen windows on the western elevation of Building H are to be either highlight windows with sill heights no lower than 1.6 metres above the finished floor level, or, have fixed external louvers that prevent direct views toward 5 Macpherson Street. Construction Certificate plans for Building H are to incorporate this detail.

17. Building Accessibility

- a. All Buildings (Building H to P)
 - i. Lobby stairs are to have suitable clearances to allow for appropriate handrail extensions compliant with AS1428.1:2009 and the DDA Premises Standards. Stair will need to be recessed approximately 650mm whilst maintaining a minimum 1000mm clearance between handrails.

- ii. The passenger lift car has minimum internal dimensions of 1400mm wide x 1600mm long compliant with the DDA Premises Standards.
- iii. The passenger lift car components (grab rail, control buttons, lighting) to comply with AS1735.12.
- iv. The approach to each adaptable car parking bay should not have vertical clearance of less than 2.2m and height clearance of 2.5m at adaptable unit car bays compliant with AS4299.
- v. No garbage/recycling bins are to be provided within the garbage chute room on adaptable unit floors.
- vi. The garbage room in the basement level is to have suitable door clearances and circulation compliant with AS1428.1:2009 to ensure access to all recycling facilities.
- vii. A level area (maximum 1:40 gradient) over a 1550mm diameter turning area is to be provided in front of the mailboxes, suitable for a wheelchair user to perform 180° turns in accordance with AS4299.

b. Building H

- i. A level accessible path of travel is to be provided from the main entry porch (Macpherson Street frontage) to the building foyer of Building H, compliant with AS1428.1:2009
- ii. The ramp from the internal road to the rear entry (adjacent to playground/exercise station) of Building H is to have a 1:14 gradient throughout its length, compliant with AS1428.1:2009
- iii. The ramp from the internal road to the rear entry (adjacent to playground/exercise station) of Building H is to have a suitable 1500mm x 1500mm wheelchair turning area to allow for a wheelchair 90° turn, compliant with AS1428.1:2009
- iv. Handrails are to be provided on both sides of the stair and tactile ground surface indicators (TGSIs), compliant with AS1428.1:2009
- v. A level accessible path is to be provided from the rear entry porch (adjacent to playground/exercise station) to the building foyer of Building H, compliant with AS1428.1:2009
- vi. The entry door at the rear entrance (adjacent to playground/exercise station) of Building H is to have a minimum 850mm clear width with a suitable 530mm latch side clearance when the door opens toward the user (510mm when the door is opening away from the user), compliance with AS1428.1:2009
- vii. The wall of the laundry cavity sliding door of adaptable units in Building H (Units G06 & 106) are to have no electrical details to ensure ease of removal at a later stage, compliant with AS4299.

c. Building I

- i. An accessible path of travel to the main building entry (Boondah Road frontage) is to be provided within 50m of

- the entry stair from Boondah Road, compliant with AS1428.1:2009.
- ii. The entry stairs (Boondah Road frontage) is to have suitable handrails on both sides with appropriate tactile ground surface indicators (TGSIs), compliant with AS1428.1:2009.
- iii. A level accessible path of travel is to be provided from the main entry porch (Boondah Road frontage) to the building foyer of Building I, compliant with AS1428.1:2009.
- iv. A level accessible path of travel is to be provided from the rear entry porch (adjacent to Building H) to the building foyer of Building I, compliant with AS1428.1:2009.
- v. A minimum 530mm internal latch side clearance is to be provided for the adaptable units of Building I (Units 109 & 209), compliant with AS4299.
- vi. The laundry areas of the adaptable units of Building I (Units 109 & 209) are to have a circulation area in front of the laundry appliances of 1550mm in diameter.
- vii. The lift lobby entry door of Building I in basement car park level is to have a maximum 1:8 gradient over 280mm depth suitable for wheelchair manoeuvrability, compliant with AS1428.1:2009

d. Building J

- i. An accessible path of travel to the main building entry (Boondah Road frontage) of Building J is to be provided within 50m of the entry stair from Boondah Road, compliant with AS1428.1:2009.
- ii. The entry stairs from Boondah Road are to have suitable handrails on both sides with appropriate tactile ground surface indicators (TGSIs), compliant with AS1428.1:2009.
- iii. A level accessible path of travel is to be provided from the main entry porch (Boondah Road frontage) to the building foyer of Building J, compliant with AS1428.1:2009.
- iv. A level accessible path of travel is to be provided from the rear entry porch (adjacent to the internal road) to the building foyer of Building I, compliant with AS1428.1:2009.
- v. The ramp landings of the ramps to the rear entry of Building J are to have a minimum 1500mm x 1500mm clearance to allow 90° turns and 1540mm x 2070mm clear landings for 180° turns, compliant with AS1428.1:2009.
- vi. The wall of the laundry cavity sliding door of adaptable units in Building J (Units 115 & 215) are to have no electrical details to ensure ease of removal at a later stage, compliant with AS4299.
- vii. The lift lobby entry door of Building J in the basement car park level is to have a maximum 1:8 gradient over 280mm

depth suitable for wheelchair manoeuvrability, compliant with AS1428.1:2009.

e. Building K

- i. The kerb ramps leading to the main building entry (adjacent to visitor parking between Building K and H) of Building K are to have an appropriate 1:8 gradient compliant with AS1428.1:2009.
- ii. A level accessible path of travel is to be provided from the main entry porch (adjacent to visitor parking between Building K and H) to the building foyer of Building J, compliant with AS1428.1:2009.
- iii. Fire egress doors with minimum 850mm clear widths are to be provided, compliant with AS1428.1:2009.
- iv. The wall of the laundry cavity sliding door of adaptable units in Building K (Units G25, 125 & 225) are to have no electrical details to ensure ease of removal at a later stage, compliant with AS4299.
- v. The lift lobby entry door of Building K in the basement car park level is to have a maximum 1:8 gradient over 280mm depth suitable for wheelchair manoeuvrability, compliant with AS1428.1:2009.

f. Building L

- i. A level accessible path of travel is to be provided from the internal road, along the pedestrian footpath, to the building foyer of Building L (adjacent to the pedestrian walkway/cycleway), compliant with AS1428.1:2009.
- ii. Fire egress doors with minimum 850mm clear widths are to be provided, compliant with AS1428.1:2009.
- iii. The lift lobby entry door of Building L in the basement car park level is to have a maximum 1:8 gradient over 280mm depth suitable for wheelchair manoeuvrability, compliant with AS1428.1:2009.

g. Building M

- i. A level accessible path of travel is to be provided from the internal road to the two building foyers of Building M (adjacent to the cul-de-sac), compliant with AS1428.1:2009.
- ii. Fire egress doors with minimum 850mm clear widths are to be provided, compliant with AS1428.1:2009.
- iii. The adaptable units of Building M (Units 136 and 236) are to have entry doors with a minimum 530mm internal latch side clearance, compliant with AS1428.1:2009.
- iv. The lift lobby entry door of the M1 lobby of Building M in the basement car park (Level 1 and 2) is to have a maximum 1:8 gradient over 280mm depth suitable for

wheelchair manoeuvrability, compliant with AS1428.1:2009.

h. Building N

- i. An accessible path of travel to the main building entry (Boondah Road frontage) of Building N is to be provided within 50m of the entry stair from Boondah Road, compliant with AS1428.1:2009.
- ii. The entry stairs from Boondah Road are to have suitable handrails on both sides with appropriate tactile ground surface indicators (TGSIs), compliant with AS1428.1:2009.
- iii. A level accessible path of travel is to be provided from the main entry porch (Boondah Road frontage) to the building foyer of Building N, compliant with AS1428.1:2009.
- iv. A level accessible path of travel is to be provided from the rear entry porch (adjacent to the internal road) to the building foyer, compliant with AS1428.1:2009.
- v. The lobby stairs of Building N are to have suitable clearances to allow for appropriate handrail extensions compliant with AS1428.1:2009 and the DDA Premises Standards. Stairs will need to be recessed approximately 650mm whilst maintaining a minimum 1000mm clearance between handrails.
- vi. The laundry areas of the adaptable units in Building N (Units 147 & 247) are to have a circulation area in front of the laundry appliances of 1550mm in diameter.
- vii. The threshold ramp from the car park level below Building N is to have a maximum 1:8 gradient over 280mm depth suitable for wheelchair manoeuvrability compliant with AS1428.1:2009.

i. Building O

- i. A continuous accessible path of travel is to be provided from the pedestrian footpath on Boondah Road to the entry of Building O, compliant with AS1428.1:2009.
- ii. A level accessible path of travel is to be provided from the entry porch of Building O to the building foyer compliant with AS1428.1:2009.
- iii. The lobby stairs of Building O are to have suitable clearances to allow for appropriate handrail extensions compliant with AS1428.1:2009 and the DDA Premises Standards. Stairs will need to be recessed approximately 650mm whilst maintaining a minimum 1000mm clearance between handrails.
- iv. The entry doors to the adaptable units in Building O (Units 153 & 253) are to have a minimum 530mm internal latch side clearance, compliant with AS4299.

- v. The threshold ramp from the car park level below Building O is to have a maximum 1:8 gradient over 280mm depth suitable for wheelchair manoeuvrability compliant with AS1428.1:2009

j. Building P

- i. A continuous accessible path of travel is to be provided from the pedestrian footpath on Boondah Road to the main entry (Boondah Road frontage) of Building P, compliant with AS1428.1:2009.
- ii. A level accessible path of travel is to be provided from the main entry porch (Boondah Road frontage) of Building P to the building foyer compliant with AS1428.1:2009.
- iii. A minimum 1450mm depth clearance at the automatic sliding door at the rear entry (adjacent to wetland buffer area) is to be provided to allow for suitable door clearance compliant with AS1428.1:2009.
- iv. A level accessible path of travel is to be provided from the rear entry porch (adjacent to wetland buffer area) of Building P to the building foyer compliant with AS1428.1:2009.
- v. Fire egress doors with minimum 850mm clear widths are to be provided, compliant with AS1428.1:2009.

18. Certification from an Accredited Access Adviser that design details and specifications comply with the approved Access Reports (Access Review, Block H, Block I, Block J, Block K, Block L, Block M, Block N, Block O & Block P: 14-18 Boondah Rd, Warriewood, all dated 30 November 2012, prepared by Morris-Goding Accessibility Consulting), must be submitted to the Accredited Certifier or with the Construction Certificate.

19. Design details and technical specifications relevant to recommendations in the Access Reports (Access Review, Block H, Block I, Block J, Block K, Block L, Block M, Block N, Block O & Block P: 14-18 Boondah Rd, Warriewood, all dated 30 November 2012, prepared by Morris-Goding Accessibility Consulting) must be submitted to an Accredited Access Adviser for written confirmation which is to be submitted to the Principle Certifying Authority with the Construction Certificate application.

20. Colours and Finishes

Finished materials and colour schemes are to use dark earthy tones in accordance with the requirements of section D16.2 of Pittwater 21 DCP. Roofs to all structures are to be dark grey, brown and/or green tones only. Relevant detail is to be submitted with the Construction Certificates for each building.

21. CPTED Measures Within Basement Car Park

To minimise the opportunity for crime in accordance with CPTED principles, the development shall incorporate the following to the satisfaction of the Certifying Authority prior to the issue of the relevant Construction Certificate:

- a. In order to maintain a safe level of visibility for pedestrians within the development, adequate lighting to AS 1158 is to be provided to the basement car park, including entry/exits, lift and stair access, storage and bike racks and waste storage areas. This lighting shall ensure consistency to avoid contrasts between areas of shadow/illumination and preferably be solar powered and with an automatic/timed switching mechanism, motion sensor or equivalent for energy efficiency. Such lighting shall be installed and directed in such a manner so as to ensure that no nuisance is created for surrounding properties or to drivers on surrounding streets. Car parking lighting system is to be controlled by sensors to save energy during periods of no occupant usage.
 - b. The soffit of the basement parking area shall be painted a gloss white (or equivalent) in order to ensure good visibility, surveillance and less reliance on artificial lighting lux levels.
 - c. Adequate signage within the basement to identify facilities, including visitor and accessible parking spaces, entry/exit points, and direct movement within the development.
 - d. Provision of 24 hour security surveillance over the basement car park by means of monitored CCTV cameras and on-site management/security.
22. Engineering details showing the Stormwater Harvesting and Reuse Scheme are to be submitted to the Accredited Certifier or Council with the Construction Certificate application. Such details are to be accompanied by a certification by a qualified practicing Water/Environmental/Civil Engineer with corporate membership of the Institution of Engineers Australia (MIE Aust), or who is eligible to become a corporate member and has appropriate experience and competence in the related field, confirming that the plans/details comply with Pittwater 21 DCP.
23. Drainage plans including specifications and details showing the site stormwater management are to be submitted to the Accredited Certifier with the Construction Certificate application. Such details are to be accompanied by a certificate from (as appropriate) either a Licensed plumber or qualified practicing Civil Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a Corporate member and has appropriate experience and competence in the related field, that the stormwater management system complies with the requirements of section 3.1.2 Drainage of the Building Code of Australia Housing Provision and AS/NZS 3500.3.2 - Stormwater Drainage. The details shall include disposal of site stormwater (if the site is in a known slip area the stormwater disposal system must comply with the recommendations of a Geotechnical Engineers Report).

Note: Where Council is the Principal Certifying Authority 3 sets of plans/specifications are to be submitted.

24. Applicants will be required to obtain prior to the issue of a Construction Certificate, a Section 139 Consent for Works on a Public Road Reserve issued by the Council under the provisions of Section 138 of the Roads Act 1993 for the design and construction of any works located on the road reserve including Access Driveways.
25. A certificate is to be provided to the Principal Certifying Authority, by a suitably qualified traffic engineer/consultant, that the parking spaces, internal access roads and ramps comply with the requirements of AS/NZ 2890.1 and 2890.6, prior to issue of a Construction Certificate.
26. Submission of construction plans and specifications and documentation which are consistent with the approved Development Consent plans, the requirements of Building Code of Australia and satisfy all conditions shown in Part B above are to be submitted to the Principal Certifying Authority.
27. The Accredited Certifier or Council must be provided with a copy of plans that a Quick Check agent/Sydney Water has stamped before the issue of any Construction Certificate.
28. The applicant is to consult with Sydney Water to establish whether there are any Section 73 Compliance Certificate requirements for this proposal, under the provisions of the *Sydney Water Act, 1994*. A copy of any Notice of Requirements letter which may be issued by Sydney Water, is to be provided to the Private Certifying Authority with the Construction Certificate application.
- Application must be made through an authorised Water Servicing Coordinator. Please refer to the Building Developing and Plumbing section of the web site www.sydneywater.com.au then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance.
- Following application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.
29. In accordance with Clause 94 of the *Environmental Planning and Assessment Regulation 2000*, plans are to be submitted with the Construction Certificate application demonstrating how the building will be brought into full conformity with fire and spread of fire requirements of the Building Code of Australia.

A satisfactory and complete schedule of essential fire safety measures required to be installed within and/or in association with the building including the minimum standard for performance of each measure is to be submitted to the Accredited Certifier or Council prior to release of the Construction Certificate. The schedule is to include a signed statement from a suitably qualified person confirming that all essential fire safety measures as required by the Building Code of Australia have been listed so as to ensure the safety of persons in the building in the event of an outbreak of fire.

30. Relevant Structural Engineering details are to be submitted to the Accredited Certifier or Council prior to release of the Construction Certificate. Each plan/sheet is to be signed by a qualified practising Structural Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a corporate member and has appropriate experience and competence in the related field.
31. A Schedule of Works prepared by a qualified practising Structural Engineer with corporate membership of the Institute of Engineers Australia (M.I.E), or who is eligible to become a corporate member and has appropriate experience and competence in the related field is to be submitted to the Accredited Certifier or Council in respect of the following items:
 - a. The details and location of all intercept drains, provided uphill of the excavation, to control runoff through the cut area.
 - b. The proposed method of disposal of collected surface waters is to be clearly detailed
 - c. Procedures for excavation and retention of cuts, to ensure the site stability is maintained during earthworks.
32. Dwellings in bushfire prone areas are to be designed and constructed in accordance with AS 3959 *Construction of Buildings in Bush Fire Prone Areas*. Construction specifications to achieve this are to be provided to the Principal Certifying Authority with the Construction Certificate application.
33. Details in the Construction Certificate are to reflect the requirements of the Bushfire Assessment report provided by Bushfire Planning Services Pty Ltd and dated 24 November 2012.

D. Matters to be satisfied prior to the commencement of works and maintained during the works:

Note: It is an offence to commence works prior to issue of a Construction Certificate.

1. Construction Waste Management

A record keeping document management system is to be implemented prior to the commencement of works and maintained during the works to record

the excavation, construction and demolition wastes generated by the development in accordance with the Construction Waste Management Plan required by Condition C2 above. The system is to record the amount of demolition, excavation and construction wastes generated (tonnages) and how these materials are to be sorted and dealt with.

All demolition, excavation and construction waste/recycling weighbridge/receipts/dockets are to be retained on-site to confirm which authorised waste/recycling facilities received the material for recycling or disposal.

2. Planning for Bushfire Protection

The following matters to be complied with prior to commencement of works on site:

- a. Access to the development must comply with the requirements of section 4.1.3 (1) of *'Planning for Bush Fire Protection 2006'*
- b. The Asset Protection Zone must not:
 - i. Be located within the approved 10m wide Vegetated Wetland Buffer.
 - ii. Be located within any land to be dedicated to public ownership
 - iii. Be transferred to public ownership and is to be maintained by the property owner, as per section 4.1.3 of *'Planning for Bush Fire Protection, 2006'*.
- c. The Asset Protection Zone is to be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of *'Planning for Bush Fire Protection 2006'* and the NSW Rural Fire Service's document *'Standards for asset protection zones'*.

3. Construction Traffic Management

A Construction Traffic Management Plan (CTMP) prepared by a suitably qualified traffic consultant for the contractor is required to be submitted for approval by Council prior to the commencement of any site works. The CTMP is to detail: -

- a. Quantity of material to be transported
- b. Proposed truck movements per day
- c. Proposed hours of operation
- d. Proposed traffic routes, noting that 3 Tonne load limits apply to some roads in Warriewood Valley.

4. Public Access

The public way must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances. Non-compliance with this requirement will result in the issue of a notice by Council to stop all work on site.

5. Complaints Register

The applicant shall record details of all complaints received during the construction period in an up to date Complaints Register. The Register shall record, but not be limited to:

- a. The date and time of the complaint,
- b. The means by which the complaint was made,
- c. Any personal details of the complainants that were provided, and if no details were provided, a note to that effect,
- d. Nature of the complaints,
- e. Any action(s) taken by the applicant, including any follow up contact with the complainant, and
- f. If no action was taken by the applicant in relation to the complaint, the reason(s) why no action was taken

The complaints register shall be made available to Council and/or the Principal Certifying Authority upon request.

6. Erosion and Sediment Control

Erosion and sediment control devices are to be installed, as necessary, prior to the commencement of any demolition, excavation or construction works upon the site. These devices are to be maintained throughout the entire demolition, excavation and construction phases of the development where necessary.

7. Remnant Vegetation

The Swamp Mahogany Forest (Swamp Sclerophyll Forest) located between the northernmost driveway off Boondah Road and Building O is to be adequately fenced along all margins, in accordance with Condition C12a above. "Tree Protection Zone" signage is to be attached to the fencing.

8. All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.

9. All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

10. Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must preserve and protect the building from damage and, if necessary, underpin and support the adjoining building in an approved manner.

11. Temporary sedimentation and erosion controls are to be constructed prior to commencement of any work to eliminate the discharge of sediment from the site.

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

13. Waste materials generated through demolition, excavation and construction works are to be minimised by re-use on site, recycling or where re-use or recycling is not practical, disposal at an appropriate authorised waste facility.

All waste dockets and receipts regarding demolition, excavation and construction waste are to be retained on site to confirm which facility received the material for recycling or disposal.

The ongoing operation of Recycling and Waste Management Services is to be undertaken in accordance with the Waste Management Plan.

14. The site is to be fully secured by a fence to all perimeters to the site to prevent unauthorised access both during the course of the works and after hours.
15. No works are to be carried out in Council's Road Reserve without the written approval of the Council.
16. A Road Opening Permit, issued by Council, must be obtained for any road openings, or excavation within Council's Road Reserve associated with the development on the site, including stormwater drainage, water, sewer, electricity, gas and communication connections. During the course of the road opening works the Road Opening Permit must be visibly displayed at the site.
17. No skip bins or materials are to be stored on Council's Road Reserve.
18. A clearly legible Site Management Sign is to be erected and maintained throughout the course of the works. The sign is to be centrally located on the main street frontage of the site and is to clearly state in legible lettering the following:
- a. The builder's name, builder's telephone contact number both during work hours and after hours.
 - b. That no works are to be carried out in Council's Road Reserve without the written approval of the Council.
 - c. That a Road Opening Permit issued by Council must be obtained for any road openings or excavation within Council's Road Reserve associated with development of the site, including stormwater drainage, water, sewer, electricity, gas and communication connections. During the course of the road opening works the Road Opening Permit must be visibly displayed at the site.
 - d. That no skip bins or materials are to be stored on Council's Road Reserve.
 - e. That the contact number for Pittwater Council for permits is 9970 1111.
19. All construction in the public road reserve must be undertaken by a Council authorised contractor.
20. Demolition works must be carried out in compliance with *WorkCovers Short Guide to Working with Asbestos Cement* and Australian Standard AS 2601 2001 *The Demolition of Structures*.

The site must be provided with a sign containing the words *DANGER ASBESTOS REMOVAL IN PROGRESS* measuring not less than 400mm x 300mm and be erected in a prominent visible position on the site. The sign is to be erected prior to demolition work commencing and is to remain in place until such time as all asbestos cement has been removed from the site and disposed to a lawful waste disposal facility.

All asbestos laden waste, including flat, corrugated or profiled asbestos cement sheets must be disposed of at a lawful waste disposal facility. Upon completion of tipping operations the applicant must lodge to the Principal Certifying Authority, all receipts issued by the receiving tip as evidence of proper disposal.

Demolition works must be carried out in compliance with WorkCovers *Short Guide to Working with Asbestos Cement* and Australian Standard AS 2601 2001 *The Demolition of Structures*.

The site must be provided with a sign containing the words *DANGER ASBESTOS REMOVAL IN PROGRESS* measuring not less than 400mm x 300mm and be erected in a prominent visible position on the site. The sign is to be erected prior to demolition work commencing and is to remain in place until such time as all asbestos cement has been removed from the site and disposed to a lawful waste disposal facility.

All asbestos laden waste, including flat, corrugated or profiled asbestos cement sheets must be disposed of at a lawful waste disposal facility. Upon completion of tipping operations the applicant must lodge to the Principal Certifying Authority, all receipts issued by the receiving tip as evidence of proper disposal.

21. Any proposed demolition works shall be carried out in accordance with the requirements of AS2601-2001 *The Demolition of Structures*.

Amongst others, precautions to be taken shall include compliance with the requirements of the WorkCover Authority of New South Wales, including but not limited to:

- a. Protection of site workers and the general public.
- b. Erection of hoardings where appropriate.
- c. Asbestos handling and disposal where applicable.
- d. Any disused service connections shall be capped off.

Council is to be given 48 hours written notice of the destination/s of any excavation or demolition material. The disposal of refuse is to be to an approved waste disposal depot.

22. A stamped copy of the approved plans is to be kept on the site at all times, during construction.

23. Toilet facilities are to be provided in a location which will not detrimentally affect the amenity of any adjoining residents at or in the vicinity of the work site during the duration of the development.
24. Where excavations extend below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must give the owner of the adjoining property at least seven (7) days written notice of their intention to excavate below the level of the base of the footing and furnish the adjoining property owner with particulars of the proposed work.
25. Any fill material imported to the site is to be the subject of testing and monitoring throughout the course of the works, and is to consist of clean fill inert material only, that is, non contaminated excavated material and soil, and suitable material. Putrescible and non putrescible solid waste (including demolition material) is not permitted. All imported fill must be sourced locally where practicable to reduce traffic movements. A report certifying that fill complies with the requirements of this condition prepared by a suitably qualified person is to be provided to the Private Certifying Authority on completion of the filling works.

The fill shall be deposited and works carried out in strict compliance with the N.S.W. Department of Land and Water Conservation's *Urban Erosion and Sediment Control* manual.

The batters of the fill area are to be graded to a slope of no more than 4(H):1(V) in accordance with the N.S.W. Department of Land and Water Conservation's *Urban Erosion and Sediment Control* manual.

E. Matters to be satisfied prior to the issue of Occupation Certificate:

Note: Prior to the issue of an Occupation Certificate the principal certifying authority is to ensure that Council's assets, including road, kerb and gutter and drainage facilities adjacent or near to the site have not been damaged as a result of the works. Where such damage has occurred, it is to be repaired to Council's written satisfaction prior to the issue of an Occupation Certificate or suitable arrangements put in place to effect those repairs at a future date to Council's written satisfaction. Should this process not be followed, Council will pursue action against the principal accredited certifier in relation to the recovery of costs to effect such works.

Note: It is an offence to occupy the building or part thereof to which this consent relates prior to the issue of an Occupation Certificate.

1. Waste Management

- a. The applicant shall submit documented evidence to the principal certifying authority evidence that the roads, driveways, turning circles and other infrastructure required for waste services in the development comply with the *Better Practice Guide for Waste*

Management in Multi-Unit Dwellings published by the Department of Environment & Climate Change NSW, June 2008.

- b. The applicant shall submit documented evidence to the principal certifying authority confirming the waste and recycling management system for the Stage 2 development has been designed and constructed in accordance with the Waste Management Plan approved with the Construction Certificate.
- c. The applicant shall submit documented evidence to the principal certifying authority confirming that each building within the Stage 2 development includes additional floor areas of 0.5m² per dwelling to be permanently dedicated for the on-site storage of bulky wastes (hard rubbish/general clean up wastes) in accordance with the *Better Practice Guide for Waste Management in Multi-Unit Dwellings* published by the Department of Environment & Climate Change NSW, June 2008. Note: Bulky wastes are separate to storage for Linen/Coats/Laundry/Storage cupboards, Study and Media areas.
- d. The applicant shall submit documented evidence to the principal certifying authority confirming that the development has been designed and constructed to meet the on-site organics storage requirements in accordance with the *Better Practice Guide for Waste Management in Multi-Unit Dwellings* published by the Department of Environment & Climate Change NSW, June 2008 and objectives of the NSW Waste Strategy 2007

2. Waste/Recycling Facilities

The applicant shall submit documented evidence to the Principal Certifying Authority confirming that all waste and recycling enclosures and storage rooms have been designed and constructed as follows:

- a. Constructed of solid material, cement rendered and steel trowelled to a smooth, even surface and made vermin proof. Framing in timber is not permitted.
- b. Floors shall be of impervious material coved at the intersection with the walls, graded and drained to an approved floor waste within the enclosures/rooms. All wastewaters shall be drained to the sewer.
- c. Stormwater shall not enter the floor of the enclosures/rooms such that the sewer system will be contaminated by rainwater.
- d. The enclosures/rooms are to be roofed. Roofwater shall be directed to an approved stormwater disposal system.
- e. Enclosures/rooms shall be vented to the external air by natural or artificial (mechanical ventilation) means. The installation and operation of the mechanical ventilation system shall comply with AS 1668, Parts 1 & 2.
- f. Hot and cold water hose cocks shall be located within the enclosures/rooms.

3. Construction Management Plan

The applicant shall submit documented evidence to the principal certifying authority confirming that the Construction Process Plan of Management has been completed in accordance with Condition C3 above. The documented evidence is to include:

- a. The total amount (in tonnages) of demolition, excavation and construction wastes generated and how these materials were sorted/separated and dealt with; and
- b. Confirmation of the authorised waste/recycling facilities that received the materials for recycling or disposal.

4. Planning for Bushfire Protection

- a. Access to the development must comply with the requirements of section 4.1.3 (1) of *'Planning for Bush Fire Protection 2006'*
- b. The Asset Protection Zone must not:
 - i. Be located within the approved 10m wide Vegetated Wetland Buffer.
 - ii. Be located within any land to be dedicated to public ownership
 - iii. Be transferred to public ownership and is to be maintained by the property owner, as per section 4.1.3 of *'Planning for Bush Fire Protection, 2006'*.
- c. The Asset Protection Zone is to be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of *'Planning for Bush Fire Protection 2006'* and the NSW Rural Fire Service's document *'Standards for asset protection zones'*
- d. The development must comply with the requirements of section 4.1.3 (1) of *'Planning for Bush Fire Protection 2006'*.
- e. Compliance with these requirements and the bush fire safety authority must be certificated by a bush fire consultant recognised by the NSW Rural Fire Service.

5. Water Management

- a. Certification by a qualified experienced practising Civil Engineer with corporate membership of Engineers Australia (MIEAust), or who is eligible to become a member and has appropriate experience and competence in the related field, that the drainage/stormwater management system has been installed to the manufacturer's specification (where applicable) and completed in accordance with the engineering plans and specifications required under this approval.

- b. The Water Management Report and all associated plans and detailed design must be certified in accordance with the *Warriewood Valley Water Management Specification (February 2001)* as meeting the requirements of these conditions
- c. Certification is to be provided to Council, by an appropriately qualified professional as prescribed in this development approval, that works associated with the water management system have been carried out and completed in accordance with the Water Management Report required under this approval. Certification is to be provided in accordance with the *Warriewood Valley Water Management Specification (February 2001)*.
- d. A copy of the updated Water Management Report required under this approval must be submitted to Council. The Water Management Report must contain all reports, assessments and plans as required by the *Warriewood Valley Water Management Specification (February 2001)*.
- e. Notification to Council, certified by an appropriately qualified professional, will be required to change Council's Flood Hazard Classification of the properties, for the purpose of changing notations on the Section 149(2) Planning Certificates of the properties issued under the Environmental Planning and Assessment Act, 1979. Any change in Flood Hazard Classification and accompanying change in Section 149(2) Planning Certificate notations must be adopted by the elected Council and so should be submitted in sufficient time to complete this process.

6. Flood Emergency Response

- a. Prior to any Occupation Certificate being issued for the Stage 2 buildings, a Flood Emergency Response Plan is to be prepared which addresses the emergency response for all floods up to the Probable Maximum Flood with the 2100 Climate Change Scenario.
- b. The Flood Emergency Response Plan must address the capability of horizontal evacuation as the primary method of flood emergency response. High level on-site vertical refuge (sheltering-in-place) may be considered as a secondary or method of last resort only.
- c. The evacuation capability assessment must include, and is not limited only to:
 - i. Determining ground levels adjacent and around the development and at the evacuation centre for the 20% AEP, 5% AEP 1% AEP and Probable Maximum Flood Level (with the consideration of a 2100 Climate Change Scenario):
 - Maximum depth of inundation;
 - Length of time of inundation at zero depth and above;
 - Length of time of inundation at 300mm and above;

- Likely rate of rise of floodwaters from zero to maximum depth of inundation.
 - ii. An appraisal of the risk exposure posed to children, disabled persons, adults, vehicle occupants during movements to and from the site during a flood evacuation and flood isolation scenarios
 - iii. The evacuation time-line from the onset of rainfall to recovery and a return to the development including key trigger levels
 - iv. The method by which evacuation trigger levels will be determined (eg. by real-time rainfall, predicted rainfall, water level recorders, etc.)
 - v. The method by which occupants will respond to SES emergency management and evacuation messages
 - vi. Details of how on-going awareness and evacuation training will be carried out and assured in the long term
- d. The Flood Emergency Response Plan is to be incorporated into the strata management operating requirements by legally binding mechanisms and is to include annual testing and certification of the Flood Emergency Response Plan.

7. Water Management System

- a. Certification is to be provided to Council, by an appropriately qualified professional, that works associated with the water management system have been carried out and completed in accordance with the Water Management Report required under conditions C1, C2 and C3 of this consent. Certification is to be provided in accordance with the *Warriewood Valley Water Management Specification (February 2001)*.
- b. All works associated with the water management system required under conditions C1, C2 and C3 of this consent are to be completed prior to the issue of the Occupation Certificate.
- c. A copy of the updated Water Management Report required under Conditions C9, C10 and C11 of this consent must be submitted to Council. The Water Management Report must contain all reports, assessments and plans as required by the *Warriewood Valley Water Management Specification (February 2001)*.

8. Directional Signage

Prior to any Occupation Certificate being issued for Stage 2, directional signage is to be provided throughout the development with maps of the location of all buildings at major entry points.

9. Remnant Vegetation

- a. A qualified ecologist is to inspect the site and certify that the Swamp Mahogany Forest (Swamp Sclerophyll Forest) located between the northernmost driveway off Boondah Road and Building O is undisturbed and has not been impacted by construction works in accordance with the Condition C13(a) above and Condition C1 of

MP10_0177. Evidence of compliance with this condition shall be submitted to the Principal Certifying Authority for approval prior to the issue of the final Occupation Certificate.

10. Landscaping of the Site

- d. The 10 metre wide, vegetated Wetland Buffer Zone and Asset Protection Zone is to be planted in accordance with Condition B26 of MP10_0177 and in accordance with the adopted *Warriewood Valley Urban Release Area Landscape Masterplan and Design Guidelines (Public Domain) 2006*.
- e. All landscaping in the approved landscape plans is to be completed prior to any Occupation Certificate being issued for that part of the site.
- f. Prior to the release of final Occupation Certificate, all landscape works, including the planting of 11 large Eucalypt specimens required by Condition B4, need to be certified as complying with the approved landscape plans by a registered landscape architect.
- g. A Landscape Management Plan is to be prepared and implemented to outline the technique and frequency of maintenance tasks during the establishment of the landscaping and on a permanent basis. The Landscape Management Plan is to be implemented for 24 months immediately following completion of the landscaping works on site, and is to incorporate weeding, watering, mowing, a procedure for the replacement of failed plantings, and a reconsideration of other endemic species type where plantings do not respond to the conditions as expected. Evidence of engagement to be submitted to and approved by the principal certifying authority prior to issue of final Occupation Certificate.

11. Children's Play Area

The Children's Play Area and exercise station located between Buildings H and K is to be constructed and fully equipped prior to the issue of any Occupation Certificate for Buildings H, I, J or K.

12. Travel Access Guide/Green Travel Plan

An amended Travel Access Guide/Green Travel Plan is required to be submitted prior to issues of any Occupation Certificate for Stage 2. The document should contain sufficient detail and should address car sharing schemes.

13. Post-construction Dilapidation Report

- a. The applicant shall engage a suitably qualified person to prepare a post construction dilapidation report at the completion of the construction works. This report is to ascertain whether the construction works created any structural damage to the adjoining buildings, infrastructure and roads. The report is to be submitted to the Principal Certifying Authority. In ascertaining whether adverse

structural damage has occurred to adjoining buildings, infrastructure and roads, the Principal Certifying Authority must:

- i. Compare the post-construction dilapidation report with the pre-construction dilapidation report (as required by Condition D11 of MP10_0177), and
 - ii. Have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.
- b. A copy of the Post-Construction Dilapidation Report is to be forwarded to Council

14. Public Infrastructure and Assets

- a. The cost of repairing any damage caused to Council or other Public Authority's assets in the vicinity of the subject site as a result of construction works associated with the approved development is to be met in full by the developer prior to the issue of the final Occupation Certificate.
- b. 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.

15. Parking and Internal Road System

A Certificate is to be submitted to the Principal Certifying Authority with the Occupation Certificate application by a qualified practising Traffic Engineer/Consultant confirming to the satisfaction of the Private Certifying Authority that the internal access roads, parking spaces and ramps have been constructed in accordance with the approved plans and relevant conditions of Development Consent.

16. Work-as-executed information is to be provided certified by a Registered Surveyor for all infrastructure (assets) or facilities which will be dedicated to Council, or which are located on Council land, or which are located within drainage easements or which will require ongoing maintenance by Council. This information must include work-as-executed drawings and the underlying key important asset data that is used to create these drawings.

The drawings are to be submitted in both paper and electronic format [AutoCAD (R14) dwg or dxf file]. The key data is to include material used, key dimensions, depths, GPS coordinates and all other key asset data are to be provided as Excel type (csv) files.

The drawings and data are to cover the following:

- a. Boundary layout,
- b. Kerbing and guttering, road pavement, footpaths, traffic devices, retaining walls,
- c. Signage (including type and wording), line marking,

- d. Easements, survey numbers and marks, reduced levels and coordinates,
- e. Stormwater drainage, pipe sizes and types, pit sizes and types, subsoil drains,
- f. Water quality devices, ponds, creek-line corridors, parkland, play equipment, and
- g. Significant landscaping.

17. Geotechnical Risk Form

Form 3 of the Geotechnical Risk Management Policy is to be completed and submitted to the Principle Certifying Authority in accordance with Pittwater 21 Development Control Plan.

18. Developer Contributions

- a. Consistent with the Concept Approval, the following is to be made for the provision of public infrastructure and services in respect of Stage 2 prior to the issue of the final Occupation Certificate for Stage 2 works:
 - i) A total cash contribution of \$5,208,29.00 (subject to c below); and
 - ii) Works-in-kind regarding the dedication of the internal emergency access/shareway connecting Macpherson Street and Boondah Road
 - iii) Works-in-kind regarding the pedestrian network to the value of \$403,317.00
 - iv) Works-in-kind regarding the dedication 8,920sqm of land valued at \$2,899,000.00 in accordance with d below
- b. The Proponent shall provide evidence of payment of the cash contribution stated in this condition to the Certifying Authority within 14 days of fulfilling E18(a) above
- c. Consistent with the conditions of Stage 1 Project Approval, if the cash contribution amount (or part thereof) stated in E18(a)(i) remains unpaid after 30 June 2013, the amount unpaid (whether it be the full cash amount or a part of it) will increase on a quarterly basis in accordance with the applicable Consumer Price Index. If this Condition applies, the cash contribution payable will be the total unpaid cash contribution in E18(a)(i) as adjusted under this Condition.
- d. The applicant shall dedicate to Council 8,920sqm of land known as Lot 504 in DP1175520.
- e. In accordance with the Warriewood Valley Section 94 Contributions Plan No. 15, the applicant may negotiate with Pittwater Council for the direct provision of other facilities and services and dedication of

land in lieu of the cash contribution stated in E18(a)(i) above (or any portion of the cash contribution) through an agreement for Material Public Benefit under the Warriewood Valley Section 94 Contributions Plan No. 15. Where an agreement for Material Public Benefit is sought in lieu of payment of the cash contributions in E18(a)(i) (or any portion of that cash contribution), the agreement for Material Public Benefit is to be finalised and signed by the proponent and Pittwater Council prior to the release of the final Occupation Certificate.

19. Drainage Easement – Adjoining Properties

Prior to the issuing of the first Occupation Certificate for Stage 2, evidence is to be submitted to the PCA of the creation of a 2.0 metre wide inter-allotment drainage easement over the inter-allotment drainage system through the subject site to drain adjoining properties at 5 and 7 Macpherson Street, Warriewood to a public drainage system, benefiting the owners of 5 and 7 Macpherson Street Warriewood. The cost of the creation of the drainage easement is to be borne by the developer.

20. Drainage Easement - Council

Prior to the issuing of the first Occupation Certificate for Stage 2, evidence is to be submitted to the PCA of the creation of a 2.5 metre wide drainage easement over Council's drainage system that traverses the site from near the driveway entrance on Macpherson Street to Fern Creek, benefiting Council. The cost of the creation of the drainage easement is to be borne by the developer.

21. Privacy Screen Planting and Fencing around 5 & 7 Macpherson Street

The privacy screen planting and fencing required by Deferred Commencement Condition 2(g) is to be fully implemented and constructed prior to the release of the Occupation Certificate for Building K. The full cost of the screen planting and fencing is to be borne by the developer.

22. Certification is to be provided to a Private Certifying Authority by an experienced Water/Environmental/Civil Engineer who is NPER accredited by the Institution of Engineers, Australia that the stormwater harvesting and reuse scheme has been completed in accordance with the engineering plans and specifications required under this consent.

23. Certification is to be provided to the Principal Certifying Authority by a qualified experienced practicing Civil Engineer with corporate membership of the Institute of Engineers Australia (M.I.E.), or who is eligible to become a corporate member and has appropriate experience and competence in the related field, that the drainage/stormwater management system has been installed to the manufacturer's specification (where applicable) and completed in accordance with the engineering plans and specifications required under this consent.

24. A Certificate is to be submitted to the Principal Certifying Authority with the Occupation Certificate application by a qualified practising Traffic

Engineer/Consultant confirming to the satisfaction of the Private Certifying Authority that the internal access roads, parking spaces and ramps have been constructed in accordance with the approved plans and relevant conditions of Development Consent.

25. Prior to issue of the final Occupation Certificate photographic evidence of the condition of the street trees and road reserve and area adjoining the site after the completion of all construction, must be submitted to the Principal Certifying Authority showing that no damage has been done and if damage has been done that it has been fully remediated. The photographs shall be accompanied by a statement that no damage has been done (or where damage has been remediated that Council has approved that work). In this regard Council's written agreement that all restorations have been completed satisfactorily must be obtained prior to the issue of any Occupation Certificate.
26. 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 final Occupation Certificate application.
27. An Occupation Certificate application stating that the development complies with the Development Consent, the requirements of the Building Code of Australia and that a Construction Certificate has been issued must be obtained before any building is occupied or on completion of the construction work approved by this Development Consent.
28. A copy of the Section 73 Compliance Certificate issued under the provisions of the Sydney Water Act, 1994, is to be forwarded to Council or the Private Certifying Authority with the Occupation Certificate.
29. All existing and /or proposed dwellings/sole occupancy units are to have approved hard-wired smoke alarms installed and maintained over the life of the development. All hard-wired smoke alarms are to be Australian Standard compliant and must be installed and certified by any appropriately qualified electrician prior to the issue of any Occupation Certificate.
30. Prior to the issue of the Occupation Certificate, a qualified person is to certify to the satisfaction of the Principal Certifying Authority that the requirements of the NSW Office of Water have been satisfied.
31. An Accredited Certifier is to provide a certification to the Private Certifying Authority that the requirements of the NSW Rural Fire Service have been complied with in relation to any potential risk to dwellings or occupants within the development from bushfire in landscaped areas in or adjoining the creekline corridor or other natural bushland areas in or adjoining the site. The requirements of the Rural Fire Service forming part of this consent must be satisfied.
32. Street numbers are to be affixed to each building prior to occupation.
33. Roads, driveways, turning circles and other infrastructure for waste servicing

Prior to release of the Occupation Certificate the applicant shall submit documented evidence to the principal certifying authority evidence that the roads, driveways, turning circles and other infrastructure required for waste services in the development comply with the '*Better Practice Guide for Waste Management in Multi-Unit Dwellings*' published by the Department of Environment & Climate Change NSW, June 2008.

34. Waste and recycling storage and collection areas

Prior to release of the Occupation Certificate the applicant shall submit documented evidence to the principal certifying authority confirming the waste and recycling management system for the Stage 2 development has been designed and constructed in accordance with the Waste Management Plan approved with the Construction Certificate.

35. Bulky waste - storage areas and removal

Prior to release of the Occupation Certificate the applicant shall submit documented evidence to the principal certifying authority confirming that each building within the Stage 2 development includes additional floor areas of 0.5m² per dwelling to be permanently dedicated for the on-site storage of bulky wastes (hard rubbish/general clean up wastes) in accordance with the "*Better Practice Guide for Waste Management in Multi-Unit Dwellings*" published by the Department of Environment & Climate Change NSW, June 2008. Note: Bulky wastes are separate to storage for Linen/Coats/Laundry/Storage cupboards, Study and Media areas.

36. Garden organics - storage area/s

Prior to release of the Occupation Certificate the applicant shall submit documented evidence to the principal certifying authority confirming that the development has been designed and constructed to meet the on-site organics storage requirements in accordance with the "*Better Practice Guide for Waste Management in Multi-Unit Dwellings*" published by the Department of Environment & Climate Change NSW, June 2008 and objectives of the NSW Waste Strategy 2007.

37. Construction and Demolition Waste Management Plan

Prior to release of the Occupation Certificate the applicant shall submit documented evidence to the principal certifying authority confirming that the Construction and Demolition Waste Management Plan has been completed in accordance with Pittwater Council's DCP21 Control B8.3: Construction and Demolition Waste Minimisation. The Construction and Demolition Waste Management Plan is to include:

- a. the total amount (in tonnages) of demolition, excavation and construction wastes generated and how these materials were sorted/separated and dealt with; and
- b. confirmation of the authorised waste/recycling facilities that received the materials for recycling or disposal.

38. Construction of Waste and Recycling Storage enclosure/rooms

Prior to release of the Occupation Certificate the applicant shall submit documented evidence to the principal certifying authority confirming that all waste and recycling enclosures and storage rooms have been designed and constructed as follows:

- a. Constructed of solid material, cement rendered and steel trowelled to a smooth, even surface and made vermin proof. Framing in timber is not permitted.
- b. Floors shall be of impervious material coved at the intersection with the walls, graded and drained to an approved floor waste within the enclosures/rooms. All wastewaters shall be drained to the sewer.
- c. Stormwater shall not enter the floor of the enclosures/rooms such that the sewer system will be contaminated by rainwater
- d. The enclosures/rooms are to be roofed. Roofwater shall be directed to an approved stormwater disposal system.
- e. Enclosures/rooms shall be vented to the external air by natural or artificial (mechanical ventilation) means. The installation and operation of the mechanical ventilation system shall comply with AS 1668, Parts 1 & 2.
- f. Hot and cold water hose cocks shall be located within the enclosures/rooms.

39. Car Wash Bays

Prior to release of the occupation certificate documented evidence is to be submitted from a licensed plumber to the Private Certifying Authority confirming that the floor of the car wash bay is graded and drained to the Sydney Water Sewerage Network and that the perimeter of the designated wash bay is suitably bunded to prevent storm waters entering the sewer.

G. Advice:

1. All development should be consistent with the “deemed” bush fire safety authority provided by the NSW Rural Fire Service on the 12th February 2013 (ref. D13/0168).
2. Portions of the site may be liable to flooding from the 1% AEP and the PMF (Probable Maximum Flood) and effective precautions should be taken by the owner(s) and/or occupier(s) of the building to reduce any potential risk to personal safety and to minimise any property damage to the structure, its fixtures and contents.
3. Failure to comply with the relevant provisions of the *Environmental Planning and Assessment Act, 1979* (as amended) and/or the conditions of this Development Consent may result in the serving of penalty notices (on-the-spot fines) under the summary offences provisions of the above legislation or legal action through the Land and Environment Court, again pursuant to the above legislation.
4. The applicant is also advised to contact the various supply and utility authorities, i.e. Sydney Water, Sydney Electricity, Telstra etc. to enquire

whether there are any underground utility services within the proposed excavation area.

5. You are advised to contact Australia Post regarding the required size and location of letterboxes.
6. It is the Project Managers responsibility to ensure that all of the Component Certificates/certification issued during the course of the project are lodged with the Principal Certifying Authority. Failure to comply with the conditions of approval or lodge the Component Certificates/certification will prevent the Principal Certifying Authority issuing an Occupation Certificate.
7. In accordance with Section 95(1) of the Act, this consent will lapse if the development, the subject of this consent, is not physically commenced within 5 years after the date from which this consent operates.
8. To ascertain the date upon which the determination becomes effective and operates, refer to Section 83 of the *Environmental Planning and Assessment Act, 1979* (as amended).
9. Should any of the determination not be acceptable, you are entitled to request reconsideration under Section 82A of the *Environmental Planning and Assessment Act, 1979*. Such request to Council must be made in writing, together with appropriate fees as advised at the time of lodgement of such request, within 1 year from the date of determination.
10. If you are dissatisfied with this decision, Section 97 of the *Environmental Planning and Assessment Act, 1979*, gives you a right of appeal to the Land and Environment Court within 6 months of the date of endorsement of this Consent.
11. The approved plans must be submitted to a Sydney Water Quick Check agent or Customer Centre to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met. The approved plans will be appropriately stamped. For Quick Check agent details please refer to the web site at www.sydneywater.com.au then see Building Developing and Plumbing then Quick Check, or telephone 13 20 92.
12. This approval does not prejudice any action in respect of upgrading the building pursuant to the provisions of the Section 121B of the *Environmental Planning and Assessment (Amendment) Act, 1997*.
13. You are reminded of your obligations under the objectives of the *Disability Discrimination Act (DDA) 1992*.