## 1147-1149 PACIFIC HIGHWAY AND 2 BOBBIN HEAD ROAD PYMBLE SUPPLEMENTARY REPORT

## **EXECUTIVE SUMMARY**

PURPOSE FOR REPORT:	To address the issues raised by the Sydney West Joint Regional Planning Panel (JRPP) at the meeting of 10 November 2011 and for the JRPP to determine DA0091/11 for the demolition of existing structures and construction of a residential flat building comprising 50 units with basement carparking and landscaping at 1147-1149 Pacific Highway and 2 Bobbin Head Road Pymble.
BACKGROUND:	An assessment report was considered by the JRPP on 10 November 2011, the JRPP resolved to defer its determination pending further information and amended plans from the applicant to address the officer's reasons for refusal of the application.
COMMENTS:	The additional information and amended plans are addressed in this report.
RECOMMENDATION:	Approval.

## PURPOSE FOR REPORT

To address the issues raised by the Sydney West Joint Regional Planning Panel (JRPP) at the meeting of 10 November 2011 and for the JRPP to determine DA0091/11 which proposes the demolition of existing structures and construction of a residential flat building comprising 50 units with basement carparking and landscaping at 1147-1149 Pacific Highway and 2 Bobbin Head Road Pymble.

## BACKGROUND

At its meeting of 10 November 2011, the Panel deferred determination of the subject development application and resolved the following:

The majority of the panel (Taylor, Cross, McDonald, Fletcher) voted not to approve or refuse this application based on the material provided and will allow the applicant until 5.00 pm on 2 December 2011 for the following material to be provided to the Council for assessment. If the material is not provided by that date, the Panel will determine the application based on the material presently before it. The following is required:

1. Demonstration that the architectural plans are consistent with the Basix Certificate.

2. A lighting plan that complies with the Residential Flat Design Code and DCP 55.

3. Demonstration that the stormwater design complies with DCP47.

4. Modification of the plans demonstrating satisfactory compliance with the requirements of the Residential Flat Design Code and KPSO for the matters spelt out in the recommendation for refusal No 2 in Council's report entitled Particulars (a), (b), (c), (e) and (g) with the particulars (a) and (b) amended in each case after the words "poor residential amenity" add "in relation to daylight and ventilation".

5. Modification of the drawings so as not to allow studies to be used as bedrooms.

6. Modification of the position and treatment of the lift shaft and overrun to reduce visual impact to the Pacific Highway.

Council Malicki voted not to agree with the recommendation to allow additional time for submission of further material."

The Council's reason for refusal No. 2 has been reproduced below specifically amended to reflect the minutes of the JRPP as mentioned above:

*"2. The proposal does not comply with apartment layout, building depth, daylight access, apartment mix and natural ventilation requirements of the Residential Flat Design Code (RFDC) and Clause 25C (2) and 25D (2) of the Ku-ring-gai Planning Scheme Ordinance* 

### Particulars

(a) Single aspect apartments within the development have an overall depth greater than 8 metres, resulting in a poor residential amenity in relation to daylight and ventilation.

(b) Single aspect apartments within the development have their associated kitchens located at a depth greater than 8.0 metres from an acceptable window resulting in a poor residential amenity in relation to daylight and ventilation.

(c) The proposal has not demonstrated that compliant solar access and cross ventilation is achieved.

(e) The study rooms located within Units 47, 48 and 49 do not have access to adequate natural light or ventilation which results in poor residential amenity.

(g) The extensive use of highlight windows, particularly in the penthouse apartments, results in poor amenity to those apartments."

On 2 December 2011 the applicant wrote to the JRPP (and sent a carbon copy to the Council) with a request for a further week to submit the additional information.

## AMENDED PLANS AND INFORMATION

The applicant submitted amended plans and information to Council on 9 December 2011, which included:

- revised Basix Certificate No. 356814M\_04
- lighting plan prepared by Mackenzie Architects
- stormwater plans prepared by Northrop Engineering
- architectural plans prepared by Mackenzie Architects
- revised solar impact report
- amended landscape plans prepared by Conzept Landscape Architects
- covering letter prepared by Chapman Planning

The applicant has advised that the following amendments have been made to address the issues raised by the JRPP:

"The single aspect dwellings have been redesigned to ensure that the depth of the dwellings measured from the north facing glass line to the rear habitable space is 8.0m. The single aspect dwellings have been redesigned to ensure that the back of the Kitchen are no more than 8m from a window measured in a "straight line" meeting the rule of thumb contained within part 3 - Apartment layout of the RFDC.

Dwellings numbered 47, 48 and 49 have been redesigned and the study rooms have been deleted.

The highlight windows at the penthouse level of dwelling 48 have been replaced with full height windows, with the installation of privacy screens set off the north facing window to ensure adequate light is achieved to this and potential overlooking between properties is mitigated.

The amended plans have relocated the lift shaft and overrun in the building facing the Pacific Highway. The lift has been set within the building and as shown on the Pacific Highway elevation at plan No. *SK12B* the lift shaft is integrated with the building."

#### **CONSULTATION - WITHIN COUNCIL**

#### Urban design

Council's Urban Design consultant, commented on the amended proposal as follows:

#### **Principle 1: Context**

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

No further comment required.

#### Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area. The habitable rooms in the top storeys of both buildings remain as close as 6.6m to the boundary. This is less than the minimum 9m required, however the potential separation and privacy problems are addressed through the employment of highlight windows. The issue of amenity with the highlight windows being the only windows to bedrooms has been resolved through the inclusion of additional primary windows in alternative orientations to the penthouse bedrooms.

The issue with the setback of the top floor remains, with parts of the top floor setback scaling as little as 700mm in several instances. This will be most noticeable along Bobbin Head Road. The top floor condition is exacerbated by the method of calculation used to determine the gross floor area of the top level which excludes the corridor space as described previously. A reduction in floor space equivalent to the area of the corridor, or at the least, a re-distribution of floor space away from the edges of the building towards the centre, would assist to make the top storey more recessive and 'minimise the appearance of the top floor as viewed from the street' as per DCP 55 control 4.3 C-9.

#### Principle 3: Built form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including views and vistas, and provides internal amenity and outlook.

The issue with building depths over 18m remains as described previously. This is discussed further under Principal 7: amenity.

The proposal has been improved with regard to the treatment of the corner of Pacific Highway and Bobbin Head Road as previously described. The proposal has been further improved by rationalising the south-western elevation facing Pacific Highway and by making it parallel to the street in accordance with DCP control 4.3 C-6. The lift shaft has been moved within the building and is better integrated, not being visible on the elevations. These are positive changes. The treatment of the Pacific Highway frontage is now considered to be satisfactory.

The flatness of the northern elevations has been addressed through the introduction of articulation, or 'slots', which is related to revised unit types. These unit types are discussed further under Principle 7: Amenity. Whilst the facades are now articulated sufficiently, the slots scale at 4.2m deep, which is of concern as the penthouse level floor plate covers over the slots. The slots are not open to the sky and therefore the bedrooms, particularly on the third floor immediately below the cover, will likely receive little daylight. This could be improved by adjusting the penthouse level plans, however this is not a straightforward exercise and would require a redesign. The eastern wall plane compliance has been addressed satisfactorily.

#### **Principle 4: Density**

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

No further comment required.

#### Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

The cross ventilation remains non-compliant. The reasons are discussed further under Principle 7: Amenity. Lack of appropriate solutions for cross ventilation relates negatively to energy consumption.

The chart in the solar access report shows that 36 of 50 (72%) of apartments receive 3 hours of sun in mid-winter. This is less than the 39 of 50 (78%) previously claimed. It should also be noted that Unit 45 receives all of its sunlight from skylights and this is considered to be sub-optimal. However, even discounting Unit 45, there remain 35 of 50 apartments receiving 3 hours sunlight and therefore the proposal is still compliant with the 70% control. No graphic substantiation has been provided as described previously.

#### Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, microclimate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise usability, privacy and social opportunity, equitable access and respect for neighbour's amenity, and provide for practical establishment and long term management.

No further comment required.

#### Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

The site shadow diagrams provided remain inadequate for the reasons previously described. However, given the site location and orientation, the impact is probably negligible.

Cross ventilation remains non-compliant. Only 29 of 50 (58%) of apartments are cross ventilated. Unit 49 is single aspect and should not be considered to receive cross-ventilation. The skylights relied upon for Unit 49 would be unlikely to provide sufficient effective open area to enable cross ventilation and do not provide the same practicality and functionality as windows do. The revised drawings also show a proposal to use a high level vent (SK29B) which goes from the unit, over the communal circulation, to the external face of the building. This solution would not be effective as the area of the grille is far too small to enable cross ventilation. This advice has been verified by an environmental engineer. As such, the 8 units (including Unit 49) which show this solution are not satisfactory and there is a shortfall of cross ventilated apartments.

The proposed building depths are over 18m deep. 21 of 50 (42%) of the apartments in the proposal are single aspect and over 8m deep. In general, these attributes are unacceptable. 18m is used as a rule of thumb as it generally provides a good ratio of floor space to building perimeter, meaning that most of the floor plate can be within 8m of a window for light and air (for double loaded corridor plans this allows for a 2m central corridor). Buildings

greater than 18m typically display internalised habitable spaces (such as studies and media rooms) and internalised service rooms (such as bathrooms and laundries) as there is not adequate frontage to service them. This makes for poor amenity for the inhabitants as well as having negative implications for energy use. The SEPP 65 Better Design Practice notes are clear on these points.

In previous versions of this proposal, the single orientation 1 bedroom apartments relied on re-entrant windows to measure the 8m to the rear of the kitchen from, even though this window was several metres removed from the exterior face of the building. In the present revision, these units have been redesigned so that the rear of all habitable spaces is now 8m or less from the external face of the building.

This is an improvement but it does not come without compromises. The dining area scales at only 2.5m wide which is sub-optimal for furnishing and becomes tight as a usable connection to the balcony space; the living room is internal to the dining room, not next to the balcony, as is the usual optimal arrangement; and the bedroom frontage has been reduced to 1m, with the window located in a deep slot (which would be much improved if open to the sky - see Principle 3: Built form). Whilst the current plans adequately address the previous issues raised over this apartment type and could therefore now be considered satisfactory in this regard, this approach should in no way be encouraged or set a precedent for future developments. It is a sub-optimal solution that provides sub-optimal amenity as described above.

The internalised rooms labelled as studies on the penthouse level have been deleted through the redesign.

#### Principle 8: Safety and security

Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

No further comment required.

### Principle 9: Social dimensions and housing affordability

Good designs respond to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community. New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

The previous comments regarding mix remain valid.

### Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

No further comment required.

#### Conclusion/recommendations

This proposal should not be approved in its present form. It should be acknowledged that positive changes have been made to the proposal and addressed many of the issues that have been raised, however the proposal remains non-compliant on cross ventilation which is a primary consideration in assessing the quality of amenity provided. This should be resolved. Other remaining issues include the top floor setback; measurement of the top storey GFA; building depth; and the depth of single orientation apartments.

The top floor setback and measurement of the top storey GFA, as previously described, could be resolved. This would require the reduction of GFA equivalent to the common circulation space and the redistribution of floor space away from the edges of the building towards the centre. This would lessen the visibility of the penthouse levels from Bobbin Head Road which would align with the objectives of the DCP.

The issue with building depth and single orientation apartment depth is more difficult. Substantial reworking of the design has been able to overcome the major criticisms of the previous unit plans. Whilst this is an improvement, the resulting units still have sub-optimal characteristics that should not be encouraged, but that no current control restricts. On its own, this proposal (with the exception of the issues above) could now generally be considered acceptable. However, Council should strongly consider what kind of precedent it might set by approving this development and what it could do to strengthen controls to limit replication of this approach/solution, particularly in terms of building depth.

#### Assessment Officer's comments

Council's Urban Design consultant has questioned the calculation of the top floor ratio relating to FSR and whether the corridor should be entirely or partly included in the calculation. Technically, the applicant is correct in their calculation relating to the definition of the method of calculation for Gross Floor Area (GFA) as the corridor is not entirely enclosed at a height of greater than 1.4 metres above the finished floor level. Whilst the calculation meets the definition, it is arguable as to whether it meets the intention of the control in terms of calculating bulk and mass. It is the assessing officer's opinion that this issue is required to be considered in the context of the overall development and as this proposal has a FSR of 1.11:1 (less than the maximum) and the top floor is generally set back from the third floor beneath, it is considered acceptable in this instance.

The Urban Design consultant has raised concern with the extent of setbacks associated with the top (or penthouse) level. C-9 of DCP 55 does not specify a minimum numerical setback to that of the lower floor and the proposal generally has greater setbacks where it addresses the street with the exception of elements fronting Bobbin Head Road. However, in terms of the entire top floor, this element is minor and not considered to result in an impact which would warrant further changes or refusal. It is further noted that there is no requirement for a 9.0m setback to the side boundary (associated with the top floor) for this development.

Concern has been raised in relation to the proposed "slots" and the impact that this design has on bedroom windows in relation to solar access. It is agreed that the proposal reduces solar access to bedroom windows through its design, however, the proposal as a whole complies with the solar access requirement of the RFDC and it is therefore considered unnecessary to require further amendments in this respect.

The applicant, in addressing the concern of kitchens being located at a distance of greater than 8.0m from an appropriate window has reconfigured that layout of the units to satisfy the JRPP concern in this regard. The Urban Design Consultant has identified that the amendment to the floor plan has resulted in a reduction in the width of living rooms which subsequently reduces amenity within these units. It is noted this occurs in 9 units and it is for a minor portion of the living rooms are functional allowing for the placement of furniture and are considered

satisfactory in this instance to achieve kitchens with a much higher level of daylight access than what was previously proposed.

Cross-ventilation remains non-compliant with 58% of units being cross ventilated and not 60% as set out by the RFDC (therefore a shortfall of one unit). The applicant has indicated that 76% of units are cross ventilated with 6 units relying upon "cross vents", however, Council's Urban Design Consultant has indicated that cross ventilation will not be adequately achieved due to the size of the vent. A review of the plans has indicated that to achieve a further unit with an external window, significant amendments would have to be made to the plans to achieve the requirement which leads to the question as to whether this issue would warrant refusal of the application and it is the assessing officer's opinion that it would not. Whilst certainly not preferred, the application is generally acceptable in this respect.

It is agreed that the proposal remains non-compliant with the 10-18m building depth control. However, solar access has been demonstrated as compliant with the RFDC, all kitchens are now located within 8.0m of an acceptable window, only non habitable rooms are located further that 8.0m from a window and cross ventilation, although not fully compliant, is considered to be acceptable as discussed above.

#### Landscape

Council's Landscape Assessment Officer, commented on the amended proposal as follows:

#### Tree impacts

The proposed development will result in the removal of numerous trees located on site, including three within the Bobbin Head Road nature strip. The most significant trees associated with the site are proposed to be retained. The nominated tree removal is considered acceptable.

Tree 3 Eucalyptus saligna (Sydney Bluegum) located adjacent to the north-eastern corner of the site. The consulting arborist has provided further statements regarding the impact of the substation. It is noted that the substation has been relocated with a greater setback from Tree 3. The arborist's statements are not totally correct as substations are not constructed on slab. They are constructed on piers with an excavated area underneath (which is later backfilled with sand) to enable the installation of cabling on all sides as required. While the report is not truly accurate, it would appear that the relocated substation, subject to compliance with consent conditions, will not adversely impact on the ongoing health and viability of Tree 3. Tree 9 Eucalyptus saligna (Sydney Bluegum) located within the Bobbin Head Rd nature strip. The tree is dead. The tree has been removed by Council.

Tree 16 Eucalyptus saligna (Sydney Bluegum) located adjacent to the south-eastern corner of the site. The arborist's amended comments are noted and this matter will be conditioned.

Trees 19 – 35 are various species located adjacent to the Pacific Hwy site frontage. The development proposes the removal of existing weed species and the retention of a row of Cypress Pines in fair health and condition. Although the trees provide some visual amenity, they are in poor health and fair condition and a better medium to long term solution is to replace them with advanced specimens of Blue Gum High Forest species to complement neighbouring development sites. The tree removal will be conditioned and an amended landscape plan required prior to the issue of a CC.

#### Landscape Plan/Tree replenishment

The following comments are made; Refer principal communal open space comments. Refer Tree Impacts comments regarding Tree's 19-35 (this can be conditioned, although an amended landscape plan is preferred).

Any other concerns are minor and can be conditioned.

#### Stormwater plan

No landscape concerns raised.

#### BASIX

The BASIX certificate #356814M\_04, dated 07/12/2011, submitted with the application has made numerous landscape area commitments for private and common areas. The proposed landscape works are consistent with the BASIX certificate.

#### Deep soil

By the applicant's revised calculations, the proposed development will result in a deep soil landscape area of 2017.88sqm or 52.63% of the site area which has been assessed as being correct.

#### Other issues and comments

Principal communal open space It is noted that the principal communal open space is located between the two buildings which during the winter months will be heavily overshadowed from the northern building. Shadow diagrams submitted indicate that there will be no direct sunlight within the principal communal open space during the winter solstice. This results in poor amenity for residents and does not encourage residents to utilise and socialise within the space.

### CONCLUSION

The application is considered to be acceptable on landscape grounds.

#### Ecology

Council's Ecological Assessment Officer, commented on the proposal as follows:

During the site inspection Remnant Blue Gum High Forest (BGHF) listed as a Critically Endangered Ecological Community (CEEC) under the Threatened Species Conservation Act 1995 was identified.

The BGHF community within the site is comprised of remnant canopy trees 3, 8, 9 & 16 - Eucalyptus saligna (Sydney Blue Gums) and sub-canopy trees 7, 10, & 19 Pittosporum undulatum (Sweet Pittosporum).

No native shrubs species were identified within the site. Native ground covers were sparse to absent throughout the site. The road verge along Bobbin Head Road contained a number of native groundcovers which forms part of Blue Gum High Forest, these groundcovers are to be retained and will protected by tree protection fencing surrounding tree 8 – Sydney Blue Gum.

As well as the CEEC Blue Gum High Forest suitable foraging habitat (foraging trees only) for threatened fauna species listed under the aforementioned act were also observed.

The proposal will result in the removal of one (1) tree T7 Pittosporum undulatum (Sweet Pittosporum) which forms part of remnant Blue Gum High Forest upon the site.

The Blue Gum High Forest impact assessment prepared by Keystone Ecological has adequately assessed the proposal in accordance with section 5A of the Environmental Planning and Assessment Act 1979.

The 7-part test prepared by Keystone Ecological is considered to be sufficient and provided suitable ameliorative measures to ensure the protection of Blue Gum High Forest and habitats for threatened fauna species known from the locality.

On this basis the development application is deemed satisfactory and is unlikely to compromise the existing Blue Gum High Forest within the site.

### Engineering

Council's Development Engineer, commented on the proposal as follows:

#### Water management

The amendments previously requested have not been made. The recommended conditions require these amendments to be made prior to issue of the Construction Certificate.

It is proposed to capture roof runoff collected from 327 square metres of roof area in a 13,600 litre in a rainwater reuse tank, with re-use will be for toilet flushing in Building B.

The site has gravity drainage to the street drainage pit in Bobbin Head Road. Two on site detention tanks are proposed, with a total volume of 90 cubic metres, which is consistent with the site storage requirement under DCP 47.

The pumped system notes on Drawing DA3.04 still specify a design based on a 10 year Average Recurrence Interval, whereas Section A7.1.1 of Council's DCP 47 Water management requires an ARI of 100 years to be used. This volume does not include the likely groundwater seepage flows which will be collected by the subsoil drainage system. The recommended conditions require the design to be in accordance with Council's DCP.

The on site detention tank may not have the capacity to accommodate subsoil flows. Therefore, the recommended conditions require that the rising main should not be connected to the detention tank.

There is a kerb inlet pit in Bobbin Head Road and it is considered desirable for the outlet from the development to be connected to it rather than to the gutter. This is also conditioned.

Water quality targets are intended to be achieved by the provision of pollutant filters, a vegetation buffer and a proprietary treatment device. These are satisfactory.

#### Parking and traffic

The site is zoned 2(d3), so under the KPSO 50 resident and 13 visitor parking spaces are required.

DCP 55 requires 5 manageable units to be provided, so 5 disabled resident and 1 disabled visitor space are required. The drawings show that the required number of spaces has been provided. Carpark dimensions comply with AS2890.1:2004, as well as AS2890.6:2009 for disabled parking. The parking arrangements are satisfactory.

The architectural drawings contain details of the required lowering of the footpath and nature strip at the new entry driveway. Although two additional steps are proposed in the public footpath, there are already steps in this section of footpath, so the accessibility of the path would not be made worse by the works. A Roads Act application is needed for these works, requiring the submission of detailed design drawings and approval by Council prior to the issue of a Construction Certificate.

#### Construction traffic management

The traffic engineer's report contains a section "Construction Traffic Management Plan".

A Works Zone will be required in Bobbin Head Road and this has been conditioned. Construction vehicle routes will be directly from the Pacific Highway for all directions.

Due to the school opposite the site, restrictions on construction vehicle movements are recommended, with the exception of large concrete pours, which will require notification to Council, the school and residents in advance. This is conditioned.

#### Waste management

Section B-B' on Drawing SK13 shows that at least 2.6 metres of clear headroom will be available for the small waste collection vehicle to enter the basement. A waste storage area is provided, which is adequate for the required number of containers, and the service vehicle bay nearby is suitable for the small waste collection vehicle to stand during collection.

#### Geotechnical investigation

Excavation of about 5-8 metres is proposed. The site is underlain by deeply weathered shale., which will necessitate the use of anchored pile walls for excavation support. A water level was recorded in one borehole, at 7.5 metres depth, but this may not be truly indicative, and further monitoring is required for the final design of the subsoil drainage system and pump-out well.

The report states "Joints and bedding planes within the completed cut faces may be subject to localised groundwater seepage flows, particularly after periods of rainfall. Appropriate waterproofing requirements are therefore recommended for external building walls close to or in contact with the excavated areas." This would be expected to form part of the Construction Certificate design for the basement structure, however, this has been conditioned.

The report recommends further investigation after demolition, dilapidation survey of neighbouring structures, and possibly vibration monitoring. These recommendations are conditioned.

#### Recommendation

From an engineering perspective there are no objections to approval of this application, subject to conditions.

### Building

Council's Building Officer, commented on the proposal as follows:

The proposed building design in general compiles with the Building Code of Australia requirements.

### **Planning assessment**

As noted previously in this supplementary report, the JRPP deferred this matter for the applicant to address outstanding issues. This assessment will specifically address those outstanding issues.

1. Demonstration that the architectural plans are consistent with the Basix Certificate.

The applicant has submitted an amended Basix Certificate (certificate number 356814M\_04) which is consistent with the submitted landscape, architectural and stormwater plans. The applicant has therefore satisfied this requirement.

2. A lighting plan that complies with the Residential Flat Design Code and DCP 55.

A lighting plan (SK40, dated 06.12.2011, prepared by Mackenzie Architects) has been submitted which demonstrates compliance with the RFDC and the relevant Australian Standards.

#### 3. Demonstration that the stormwater design complies with DCP47.

As noted within Council's Development Engineers comments, the amended stormwater design although non-compliant, is able to be conditioned to comply with the requirements of DCP 47. It is therefore considered to be satisfactory, subject to appropriate conditions.

4. Modification of the plans demonstrating satisfactory compliance with the requirements of the Residential Flat Design Code and KPSO for the matters spelt out in the recommendation for refusal No 2 in Council's report entitled Particulars (a), (b), (c), (e) and (g) with the particulars (a) and (b) amended in

each case after the words "poor residential amenity" add "in relation to daylight and ventilation".

*"2. The proposal does not comply with apartment layout, building depth, daylight access, apartment mix and natural ventilation requirements of the Residential Flat Design Code (RFDC) and Clause 25C (2) and 25D (2) of the Ku-ring-gai Planning Scheme Ordinance* 

#### Particulars

(a) Single aspect apartments within the development have an overall depth greater than 8 metres, resulting in a poor residential amenity (in relation to daylight and ventilation).

The development has maintained unit lengths of greater than 8m. In response to this issue the applicant has argued that the proposal achieves compliance with cross ventilation and solar access controls and has amended the floor plans such that the kitchens are located within 8.0m of an acceptable window. The concerns raised by Council's Urban Design Consultant are valid, however, the issue is not considered to warrant further amendment or refusal of the application.

(b) Single aspect apartments within the development have their associated kitchens located at a depth greater than 8.0 metres from an acceptable window resulting in a poor residential amenity (in relation to daylight and ventilation).

The applicant has made amendments to the plans such that the kitchens are now located within 8.0m of a window. This aspect of the proposal is considered to be satisfactory.

## (d) The proposal has not demonstrated that compliant solar access and cross ventilation is achieved.

The applicant has provided a revised solar access report which has included 3d modelling and elevation shadow's on the facade of the proposed buildings. The report is considered to have adequately demonstrated that the proposal complies with the requirements of the RFDC and DCP 55 with 72% of units achieving the minimum 3 hours.

As discussed previously, the proposal is non-compliant with the cross ventilation provisions as 58% of units are considered to achieve satisfactory levels of cross ventilation being less than the 60% requirement of the RFDC (a shortfall of one unit). To achieve compliance in this respect, significant amendment would be required to the proposal and it is considered that this issue is not of an extent to warrant refusal of the application. The proposal is therefore accepted.

(e) The study rooms located within Units 47, 48 and 49 do not have access to adequate natural light or ventilation which results in poor residential amenity.

The study rooms of Units 47, 48, and 49 have been deleted from the proposal.

(g) The extensive use of highlight windows, particularly in the penthouse apartments, results in poor amenity to those apartments."

The applicant has amended the plans to have larger windows with external privacy screens. As noted within the Urban Design Consultant's comments, this issue is considered to have been satisfactorily addressed.

## 5. Modification of the drawings so as not to allow studies to be used as bedrooms.

The plans have been amended to ensure that the study rooms are open and not able to be closed off from the primary dwelling to create a bedroom. As noted above, the study rooms associated with Units 47, 48, and 49 have been deleted.

6. Modification of the position and treatment of the lift shaft and overrun to reduce visual impact to the Pacific Highway.

The lift in the southern most building has been relocated further within the building footprint which has resulted in an improved streetscape appearance from the Pacific Highway. As noted within Council's Urban Design Consultant's comments, the proposal now presents satisfactorily to Pacific Highway.

## STATUTORY PROVISIONS

The amended documentation has resulted in changes to the compliance tables reported to the JRPP on 10 November 2011. A revised assessment of the statutory provisions and compliance tables is provided below:

#### **Roads and Maritime Service**

The NSW Roads and Maritime Service (RMS previously RTA) responded to Council's letter indicating no objection to the proposal. The RMS have required conditions be included see **Condition 116**.

#### State Environmental Planning Policy (Infrastructure) 2007

The property has a frontage to a classified road, being Pacific Highway, and consideration is required pursuant to Division 17 Clause 101 and 102 of the SEPP. Clause 101 of the SEPP states:

### 101 Development with frontage to classified road

(1) The objectives of this clause are:

(a) to ensure that new development does not compromise the effective and ongoing operation and function of classified roads, and

(b) to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads.

(2) The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that:

(a) where practicable, vehicular access to the land is provided by a road other than the classified road, and

(b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of:

(i) the design of the vehicular access to the land, or
(ii) the emission of smoke or dust from the development, or
(iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and

(c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.

The proposed development is considered to be consistent with the above requirements. As noted previously, a traffic report (which includes a Construction Traffic Management Plan) prepared by has been submitted with the application and is considered acceptable by Council's Development Engineer.

Vehicular access to the development is from Bobbin Head Road.

Clause 102 of SEPP states:

#### 102 Impact of road noise or vibration on non-road development

(1) This clause applies to development for any of the following purposes that is on land in or adjacent to the road corridor for a freeway, a tollway or a transitway or any other road with an annual average daily traffic volume of more than 40,000 vehicles (based on the traffic volume data published on the website of the RTA) and that the consent authority considers is likely to be adversely affected by road noise or vibration:

- (a) a building for residential use,
- (b) a place of public worship,

(c) a hospital,

(d) an educational establishment or child care centre.

(2) Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Director-General for the purposes of this clause and published in the Gazette.

(3) If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:

(a) in any bedroom in the building—35 dB(A) at any time between 10 pm and 7 am,

(b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

(4) In this clause, **freeway**, **tollway** and **transitway** have the same meanings as they have in the <u>Roads Act 1993</u>.

To address the above requirements, the applicant has submitted an acoustic assessment prepared by Acoustic Logic. The report includes recommended construction techniques and states that the proposal will achieve the above mentioned noise guideline requirements, subject to those construction techniques. The proposal is therefore considered to be satisfactory in this respect. (Condition 38)

## State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development RFDC)

SEPP 65 aims to improve the design quality of residential flat buildings across NSW and provides an assessment framework, the Residential Flat Design Code (RFDC), for assessing 'good design'.

Clause 50(1A) of the EPA Regulation 2000 requires the submission of a design verification statement from the building designer at lodgement of the development application. This documentation has been submitted and is satisfactory.

The SEPP requires the assessment of any development application for residential flat development against 10 principles contained in Clauses 9-18 of the SEPP which has been undertaken by Council's Urban Design consultant. The SEPP also requires consideration of the matters contained in the publication "Residential Flat Design Code".

As such, the following consideration has been given to the requirements of the Residential Flat Design Code.

## **Residential Flat Design Code Compliance Table**

Pursuant to Clause 30(2) of SEPP 65 in determining a development application for a residential flat building the consent authority is to take into consideration the Residential Flat Design Code (RFDC). The following table is an assessment of the proposal against the guidelines provided in the RFDC. Changes to the original compliance table reported to the JRPP of 10 November 2011 appear in **bold** for convenience.

	Guideline	Compliance
PART 02		
SITE DESIGN		
Site		
Configuration		
Deep Soil Zones	A minimum of 25 percent of the open space area of a site should be a deep soil zone; more is desirable. Exceptions may be made in urban areas where sites are built out and there is no capacity for water infiltration. In these instances, stormwater treatment measures must be integrated with the design of the residential flat building.	YES - 2017.88m <sup>2</sup> or 52.63%
Open Space	The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger sites and brown field sites may have potential for more than 30 percent. (150.2m <sup>2</sup> )	YES - 1250.0m <sup>2</sup> or 32%
Planting on Structures	In terms of soil provision there is no minimum standard that can be applied to all situations as the requirements vary with the size of plants and trees at maturity. The following are recommended as minimum standards for a range of plant sizes: Medium trees (8 metres canopy diameter at maturity) - minimum soil volume 35 cubic metres - minimum soil depth 1 metre - approximate soil area 6 metres x 6 metres or equivalent	YES

## COMPLIANCE TABLE

	than 8 metres from a window.	_
	window. The back of a kitchen should be no more	YES
Apartment layout	Single-aspect apartments should be limited in depth to 8 metres from a	NO
Configuration		
BUILDING DE Building		
PART 03		
	Locate vehicle entries away from main pedestrian entries and on secondary frontages.	YES
Access	a maximum of six (6) metres.	NE0
Vehicle	Provide barrier free access to at least 20 percent of dwellings in the development. Generally limit the width of driveways to	NO
	Follow the accessibility standard set out in Australian Standard AS 1428 (parts 1 and 2), as a minimum.	YES
Access	street or car parking area to the apartment entrance.	
Pedestrian	Identify the access requirements from the	YES
Visual Privacy	Refer to Building Separation minimum standards	NO
	Control access to the development.	YES
	Minimise opportunities for concealment	YES
	Improve the opportunities for casual surveillance.	YES
	Optimise the visibility, functionality and safety of building entrances	YES
	Reinforce the development boundary to strengthen the distinction between public and private space	YES
Safety	Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings.	YES

	The width of cross-over or cross-through apartments over 15 metres deep should	YES
	be 4 metres or greater to avoid deep narrow apartment layouts.	
Apartment Mix	Provide a diversity of apartment types, which cater for different household requirements now and in the future	NO
Balconies	Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context-noise, wind – can be satisfactorily mitigated with design solutions.	YES
Ceiling Heights	The following recommended dimensions are measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and do not preclude higher ceilings, if desired. in residential flat buildings or other residential floors in mixed use buildings: in general, 2.7 metres minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non- habitable rooms, however 2.25 metres is permitted. for two storey units, 2.4 metres minimum for second storey if 50 percent or more of the apartment has 2.7 metres minimum ceiling heights	YES
Ground Floor Apartments	Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.	NO
	Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	YES

Internal Circulation	In general, where units are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor should be limited to eight. Exceptions may be allowed: for adaptive reuse buildings where developments can demonstrate the achievement of the desired streetscape character and entry response where developments can demonstrate a high level of amenity for common lobbies, corridors and units, (cross over,	YES
	dual aspect apartments).	
Storage	In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates: - studio apartments 6m <sup>3</sup> - one-bedroom apartments 6m <sup>3</sup> - two-bedroom apartments 8m <sup>3</sup> - three plus bedroom apartments 10m <sup>3</sup>	YES
Building Amenity		
Daylight Access	Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.	YES - 72%
	Limit the number of single-aspect apartments with a southerly aspect (SW- SE) to a maximum of 10% of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed (see Orientation and Energy Efficiency).	YES
Natural Ventilation	Building depths, which support natural ventilation typically range from 10 to 18 metres.	NO

	Sixty percent (60%) of residential units should be naturally cross ventilated.	NO - 58%
	Twenty five percent (25%) of Kitchens within a development should have access to natural ventilation	YES
Building Performance		
Waste Management	Supply waste management plans as part of the development application submission as per the NSW Waste Board.	YES
Water Conservation	Rainwater is not to be collected from roofs coated with lead- or bitumen-based paints, or from asbestos- cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.	

The amended design results in one additional non-compliance associated with cross ventilation. This issue has previously been discussed within this supplementary report.

Visual privacy

The proposal still fails to meet the building separation requirements contained in the Residential Flat Design Code and required by DCP 55 between the development itself and associated with Unit 48 in relation to the adjoining development at 4-8 Bobbin Head Road. The proposal does, however, include privacy techniques such as strategic positioning of windows, privacy screens, frosted glass, and landscape treatment, including fencing for ground floor apartments, which will result in a satisfactory level of privacy for each of the units and surrounding properties.

## Vehicular access

The proposal has a minor non-compliance in that the proposed driveway width is 6.1m as opposed to 6.0m. The proposal is considered acceptable in this instance due to the angle at which the driveway is required to meet the street front. It is not considered any adverse impacts will result from the non compliance.

## Apartment layout

The proposal includes single aspect apartments with a length of greater than 8.0m (11.2 -12.2m depths proposed). As noted above, the proposal has been amended such that the kitchens are now located within 8.0m of an acceptable window and all habitable rooms are located within 8.0m of a window. Areas of the proposed units which do not meet this requirement relate to non-habitable

rooms. Whilst not a preferred design and given daylight and natural ventilation requirements are considered acceptable, it is not considered that further amendments or refusal are warranted in this regard.

### Apartment mix

The RFDC requires a diversity of apartment types and indicates that a better design practice is to include studio, one, two, three, and three plus bedroom apartments to maintain equitable access to new housing by cultural and socio-economic groups. The proposal includes one and two bedroom apartment types. This issue was previously reported to the JRPP, however, by virtue of the issue having not being required to be addressed in the terms of deferral, no amendments have been made.

### Ground floor apartments

The proposed development does not provide separate entries for ground floor units. As there are minimal units fronting the street in terms of access and the access points provided are well defined, the proposal is considered to be acceptable in this instance.

## State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

A valid BASIX certificate which is consistent with the architectural and landscape plans has been submitted within the amended documentation as discussed above.

# State Regional Environmental Planning 2005 – (Sydney Harbour Catchment)

Matters for consideration under SREP 2005 include biodiversity, ecology and environmental protection, public access to and scenic qualities of foreshores and waterways, maintenance of views, control of boat facilities and maintenance of a working harbour. The proposal is not within close proximity to any waterways and the scope of works is such that the proposal is considered to meet the requirements of the SREP.

## **KU-RING-GAI PLANNING SCHEME ORDINANCE (KPSO)**

## Zoning, permissibility and aims and objectives for residential zones

Under Clause 25B (definitions) of KPSO – LEP 194, a residential flat building is defined as '*a building containing three or more dwellings*'. The residential flat buildings proposed on the site satisfy this definition and are permissible with consent. The development is considered to satisfy the zone aims and objectives under clause 25C and 25D of the KPSO. Changes to the original compliance table reported to the JRPP of 10 November 2011 have been made in **bold** for convenience.

COMPLIANCE TABLE		
Development standard	Proposed	Complies
Site area (min): 1200m <sup>2</sup>	3834m2	YES
Deep landscaping (min): 50% (2526.55m²)	2017.88m² (52.63%)	YES
Street frontage (min): 30m (SA>1800m²)	62.52m Pacific Highway 84.33m Bobbin Head Road	YES
Number of storeys (max): 5	5	YES
<b>Site coverage (max):</b> 35% (1341.9m <sup>2</sup> )	33%	YES
Top floor area (max): 60% of level below	59.9% <b>59.77%</b>	YES YES
Storeys and ceiling height (max): 4 storey and 13.4m	4 storey and 13.4m	YES
Car parking spaces (min): 1 per 4 dwg = 13 (visitors) 1 per dwg + 2.0 per 3 & 4 bed (residents) = 50	13 visitor 53 residential Total 63	YES
Manageable housing (min): 10% = 5 Dwellings	5 dwellings	YES
Lift access: required if greater than three storeys	Lifts have been provided in each of the buildings	YES

## Part B: Residential zone objectives:

The development is considered to satisfy the objectives for residential zones as prescribed in clause 25D as discussed above.

## Clause 33 – Aesthetic appearance

The subject site fronts Pacific Highway which is a main road. The clause requires consideration of the aesthetic appearance of the proposed building when viewed from the Pacific Highway. It is noted that Council's Urban Design Consultant has indicated that the amendments to the proposal in relation to the lift location has resulted in an improvement to the façade and the proposal is considered acceptable in this regard.

## Clause 61E – Development in the vicinity of heritage items

The proposal is within proximity of heritage items located at 11 Bobbin Head Road and 1228, 1161 and 1163 Pacific Highway. The application has been considered by Council's Heritage Advisor who has raised no concerns regarding the proposed development it's and impact on these heritage items. The proposal is therefore considered satisfactory in this respect.

## DRAFT BIODIVERSITY AND RIPARIAN LAND LEP

In accordance with Section 79C (1) (ii) of the Environmental Planning and Assessment Act 1979, the consent authority is to take into consideration any relevant matter under the above mentioned draft LEP as it is currently on public exhibition (January 30 – February 27 2012. The subject site is identified within the Draft Natural Resource –Biodiversity Map as being subject to the Biodiversity provision of the planning proposal. The Biodiversity provisions within draft document are as follows:

### "Biodiversity Protection

(1) The objective of this clause is to protect, maintain and improve the diversity and condition of native vegetation and habitat, including:

(a) protecting biological diversity of native flora and fauna, and
(b) protecting the ecological processes necessary for their continued existence, and
(c) encouraging the recovery of threatened species, communities, populations and their habitats, and
(d) protecting, restoring and enhancing biodiversity corridors.

(2) This clause applies to development on land that is identified as "Areas of Biodiversity Significance" on the Natural Resources -Biodiversity Map.

(3) Before granting development consent for development on land to which this clause applies, the consent authority must consider:

(a) the impact of the proposed development on the following:

(i) any native vegetation community,

(ii) the habitat of any threatened species, population or ecological community,

(iii) any regionally significant species of plant, animal or habitat, (iv) any biodiversity corridor,

(v) any wetland,

(vi) the biodiversity values within any reserve,

(vii) the stability of the land, and

(b) any proposed measure to be undertaken to ameliorate any potential adverse environmental impact, and

(c) any opportunity to restore or enhance remnant vegetation, habitat and biodiversity corridors.

(4) Development consent must not be granted for development on land to which this clause applies unless the consent authority is satisfied that the development:

(a) is consistent with the objectives of this clause, and

(b) is designed, and will be sited and managed, to avoid any potential adverse environmental impact or, if a potential adverse environmental impact cannot be avoided:

*(i) the development minimises disturbance and adverse impacts on remnant vegetation communities, habitat and threatened species and populations, and* 

(ii) measures have been considered to maintain native vegetation and habitat in parcels of a size, condition and configuration that will facilitate biodiversity protection and native flora and fauna movement through biodiversity corridors, and (iii) the development avoids clearing steep slopes and facilitates the stability of the land, and

*(iv) measures have been considered to achieve no net loss of significant vegetation or habitat.* 

(5) In this clause:

**biodiversity corridor** means an area to facilitate the connection and maintenance of native flora and fauna habitats. Within the urban landscape, biodiversity corridors may be broken by roads and other urban elements and may include remnant trees and associated native and exotic vegetation."

The proposal has been considered by Council's Ecologist and Landscape Officer. It has been identified that the site contains specimens of the Sydney Bluegum High Forest Endangered Ecological Community. The applicant submitted an ecological assessment including a 7 part test and it has been concluded that the proposal will result in any adverse impacts in this regard. The proposal is therefore considered to meet the objectives and provisions of the Draft LEP as listed above.

## **POLICY PROVISIONS**

## Development Control Plan No. 55 - Railway/Pacific Highway Corridor & St Ives Centre

Changes to the original compliance table reported to the JRPP of 10 November 2011 have been made in **bold** for convenience.

COMPLIANCE TABLE		
Development control	Proposed	Complies
Part 4.1 Landscape design:		
Consolidated Deep soil	2017.88m <sup>2</sup> 52.63%	YES
landscaping (min) 50% or		
1921.5m <sup>2</sup>		
$150m^2$ per $1000m^2$ of site area =		YES
450m <sup>2</sup>	>750m²	

No. of tall trees required (min):	23	YES
14		
Private outdoor space	1.2m timber fencing utilised	YES
differentiation		0
Up to 1.2m solid wall with at		
least 30% transparent		
component		
Part 4.2 Density:		
Building footprint (max):		
35% of total site area	35%	YES
Floor space ratio (max): 1.3:1	1.11:1 (4270.43m²)	YES
(4984.2m2)		
Part 4.3 Setbacks:		
Street boundary setback	10-12m Pacific Highway	YES
(min): 10-12m Pacific Highway		
13-15m Bobbin Head Road		
	13-15m Bobbin Head Road	YES
Side and rear boundary	West 6.0m	YES
setback (min):6.0m	North 6.0m	0
Maximum 40% of building	39.9%	YES
within setback zone		•
	No	
Setback of ground floor	No private open space fronting Pacific	YES
courtyards to street boundary	Highway	VEO
(min):8.0m Pacific Highway 11.0m Bobbin Head Road	11.0m Bobbin Head Road	YES
% of total area of front		
setback occupied by private		
courtyards (max):		
15%	<15	YES
Part 4.4 Built form and articulati	on:	
Façade articulation:	•	
Wall plane depth	>600mm minimum	YES
>600mm		
Wall plane area <81m <sup>2</sup>	<81m²	YES
•		
Built form:		VEO
Building width < 36 metres	33.5m to Pacific Highway	YES
	33m and 26.7m Bobbin Head Road	
Balcony projection < 1.2 metres	0.5m	YES
Part 4.5 Residential amenity		
Solar access:		
>70% of units receive 3+ hours	72% of units receive 3+ hours direct	YES
direct sunlight in winter solstice	sunlight in winter solstice	

>50% of the principle common open space of the development receives 3+ hours direct sunlight in the winter solstice	The submitted documentation has not adequately verified compliance with the control.	NO YES
<15% of the total units are single aspect with a western orientation <b>Visual privacy:</b>		TE3
Separation b/w windows and balconies of a building and any neighbouring building on site or adjoining site: Storeys 1 to 4	Ground floor private open space area within 12.0m.	NO
12 metres b/w habitable rooms 9 metres b/w habitable and non habitable	Proposed building separation is within 12m between habitable rooms.	NO
6m b/w two non habitable 5 <sup>th</sup> storey	The proposal is within 18.0m of the adjoining	NO
18 metres b/w habitable 13 metres b/w habitable and non habitable	residential flat building at 4-8 Bobbin Head Road	
9 metres b/w two non habitable		
Internal amenity: Habitable rooms have a minimum floor to ceiling height	2.7m	YES
of 2.7 metres Non-habitable rooms have a minimum floor to ceiling height of 2.4m	2.7m	YES
1-2 bedroom units have a minimum plan dimension of 3m in all bedroom	Minimum dimensions achieved	YES
3+ bedroom units have a minimum plan dimension of 3m in at least two bedrooms	Minimum dimensions achieved	YES
Single corridors: - serve a maximum of 8 units	Maximum of 6 units accessed via single corridors.	YES
1.8m wide at lift lobbies Outdoor living:	Minimum dimensions met for lift lobbies	
Ground floor apartments have a terrace or private courtyard greater than 25m <sup>2</sup> in area	All ground floor apartments meet minimum 25m <sup>2</sup>	YES

		I
Balcony sizes:	10 2	
$-10m^2 - 1$ bedroom unit	>10m <sup>2</sup>	YES
- 12m <sup>2</sup> – 2 bedroom unit	>12m <sup>2</sup>	YES
NB. At least one space >10m <sup>2</sup>	>2.4m	YES
primary outdoor space has a		
minimum dimension of 2.4m		
Common Open space (30%)		
Of the site area 1150.20m <sup>2</sup>		
Private open space adjoining	Fences has been limited to 1.2m in height	YES
common open space not to be	and are constructed of timber	. 20
enclosed with high solid fences		
Part 4.7 Social dimensions:		
Visitable units (min):		
70%	88% (44 units)	YES
Housing mix:		
Mix of sizes and types	14 x 1 bedroom	NO
	8 x 1 bedroom with study	
	25 x 2 bedroom	
	3 x 2 bedrooms with study	
Part 5 Parking and vehicular ac	cess:	
Car parking (min):		
50 resident spaces	50 resident spaces	YES
13 visitor spaces	13 Visitor spaces	
	Total spaces 63	

The amended plans have not resulted in any further non-compliances other than those previously reported to the JRPP on 10 November 2011.

## 4.5.1 Solar access

The proposal remains non-compliant with the above mentioned solar access control within DCP 55. This issue is apparent as it has not been demonstrated that at least 50% of the principal area of the communal open space will receive direct sunlight for at least 3 hours between 9:00am and 3:00pm on June 21.

The proposal will receive approximately one and a half hours of direct sunlight to an area of greater than 50% of the principal communal open space during the morning period of the day and approximately half an hour of direct sunlight to an area of greater than 50% of the principal communal open space during the afternoon period. In terms of the control, this is a shortfall of one hour of direct sunlight (to an area of greater than 50% of the principal communal area). The proposal will receive additional direct sunlight to the principal communal area throughout the day but not to an area of at least 50%. It is further noted that other communal areas on the site will receive direct sunlight throughout the day. In considering the site constraints of a residential flat building being located to the north, north-west, and west of the site, the front setback controls for Pacific Highway to the south and Bobbin Head Road to the east pushing the building into the north-west corner of the site and that 72% of units will received more than 3 hours of direct sun into their private open space and living rooms during the winter solstice, the proposal is considered to be generally acceptable in this regard.

## 4.5.2 Visual privacy

The proposal is non-compliant with the building separation requirements of DCP 55 in relation to the adjoining developments at 4-8 Bobbin Head Road in relation to Unit 48 being at the penthouse level which requires a setback of 18.0m (14.3 metres minimum). As previously discussed, the applicant has utilised privacy screens in this location which result in a satisfactory outcome.

The proposal is also non-complaint in terms of the building separation between the northern and southern buildings of the proposal at all levels. Where the non-compliances occur the applicant has provided highlight and frosted windows, privacy screens, landscape treatments and fencing. The proposal is considered to result in a satisfactory outcome in this respect.

## 4.7 Housing mix

The proposal does not include any 3 bedroom units as previously discussed and therefore limits the available housing choice within the development.

## **Development Control Plan No. 31 Access**

Matters for assessment under DCP 31 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

## Development Control Plan No. 40 - Construction and Demolition Waste Management

Matters for assessment under DCP 40 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

## **Development Control Plan No. 43 - Car Parking**

Matters for assessment under DCP 43 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

## **Development Control Plan No.47 - Water Management**

Matters for consideration under DCP 47 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

### Section 94 plan

The development is subject to Section 94 Contributions should consent be granted. Refer to **Condition 50**.

### **CONSULTATION – COMMUNITY**

The additional information and works proposed by the applicant in response to the issues raised by the JRPP did not require notification to owners of neighbouring properties under Council's notification provisions as the impacts of the amendments are considered to be less than the previous design.

### LIKELY IMPACTS

The likely impacts of the development have been considered within this report and it is considered that the proposal will result in a development which has satisfactory impacts in terms of what is anticipated through the applicable development controls.

## SUITABILITY OF THE SITE

The site is zoned 2(d3). The proposed development is considered suitable for the site as it is permissible within the zone and is compliant with height, setbacks and density controls and considered satisfactory in relation to amenity controls.

#### ANY SUBMISSIONS

The matters raised in the submissions have been addressed in the previous report to the JRPP within **Attachment 8**. No further submissions have been received.

## **PUBLIC INTEREST**

The public interest is best served by the consistent application if the requirements of the relevant Environmental Planning Instruments and by ensuring that any adverse impacts on the surrounding area are minimised. The proposal has been assessed against the relevant Environmental Planning Instruments and policy provisions and is deemed satisfactory in its amended form.

This application has been assessed under the heads of consideration of Section 79C of the Environmental Planning and Assessment Act 1979 and all relevant instruments and policies.

The proposal complies with height, front and side setbacks, FSR, deep soil and car-parking/traffic requirements. Non-compliances associated with buildings separation/privacy are apparent, however, these issues are not considered to result in an unsatisfactory outcome given the proposed design and how it relates to the site.

## RECOMMENDATION

That the Joint Regional Planning Panel Sydney West Region grant development consent to DA0091/11 for the demolition of existing structures and construction of a residential flat buildings consisting of 50 units, basement car parking and landscaping at 1147-1149 Pacific Highway and 2 Bobbin Head Road Pymble, for a period of 2 years from the date of the Notice of Determination, subject to the following conditions.

## CONDITIONS THAT IDENTIFY APPROVED PLANS:

## 1. Approved architectural plans and documentation (new development)

The development must be carried out in accordance with the following plans and documentation listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Drawn by	Dated
SK03B, SK04B, SK05B,	Mackenzie	06.12.11
SK06B, SK07B, SK08B,	Architects	(SK18B) 16.12.11
SK09B, SK10B, SK11B,		
SK12B, SK13B, SK15B,		
SK16B, SK17B, SK18B,		
SK20B, SK29B, SK40B		
LPDA 11-275/1 Issue D, LPDA	Conzept	07/12/11 (Issue C and D)
11 -275/2 Issue D, LPDA 11-	Landscape	20/7/11 (Issue B)
275/4 Issue C, LPDA 11 -275/5	Design	
Issue B		
DA1.01 Revision 4, DA2.01	Northrop	Revision 3 - 15.7.11
Revision 3, DA3.01 Revision 4,	-	Revision 4 - 6.12.11
DA3.02 Revision 4, DA3.03		
Revision 4, DA3.04 Revision 4,		
DA3.11 Revision 3, DA3.12		
Revision 3, DA3.21 Revision 3,		
DA3.22 Revision 4		

Document(s)	Dated	
Colours and finishes schedule, prepared by	Undated	
Mackenzie Architects		
Basix certificate No. 356814M_04	07 December 2011	
Stormwater Management Plan, Revision 2,	8.12.12	
prepared by Northrop		
Solar Impact Report ref:	December 8th 2011	
4197_Bobbin_Head_Road		
Access Report, prepared by Accessibility	15 July 2011	
Solutions		
Addendum to arborist report, prepared by	12 July 2011	
Advanced Treescape Consulting		

Arborist Report prepared by Advanced Treescape Consulting	16 February 2011
Traffic and Parking Assessment, Ref: 10293, prepared by Varga Traffic Planning	23 February 2011
Heritage Impact Statement, prepared by Weir Phillips	February 2011
Preliminary Geotechnical Investigation, Ref: 24583Vrpt.revPymble, prepared by Jeffery and Katauskas Pty Ltd	9 February 2011
Acoustic Report, Revision 1, prepared by Acoustic Logic	24/01/2011
Ecological Impact Assessment, Ref KMC 11-440, prepared by Keystone Ecological Pty Ltd	February 2011

**Reason:** To ensure that the development is in accordance with the determination.

## 2. Inconsistency between documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

**Reason:** To ensure that the development is in accordance with the determination.

### 3. Approved landscape plans

Landscape works shall be carried out in accordance with the following landscape plan(s), listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Drawn by	Dated
LPDA 11-275/1 Rev D (Landscape Plan)	Conzept	07/12/2011
LPDA 11-275/2 Rev D (Hardscape/BASIX)	-	
LPDA 11-275/4 Rev C (Penthouse planters)		
LPDA 11-275/5 Rev B Landscape details)		20/07/2011

**Reason:** To ensure that the development is in accordance with the determination.

## CONDITIONS TO BE SATISFIED PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION:

#### 4. Road opening permit
The opening of any footway, roadway, road shoulder or any part of the road reserve shall not be carried out without a road opening permit being obtained from Council (upon payment of the required fee) beforehand.

**Reason:** Statutory requirement (Roads Act 1993 Section 138) and to maintain the integrity of Council's infrastructure.

#### 5. Notice of commencement

At least 48 hours prior to the commencement of any development (including demolition, excavation, shoring or underpinning works), a notice of commencement of building or subdivision work form and appointment of the principal certifying authority form shall be submitted to Council.

Reason: Statutory requirement.

#### 6. Notification of builder's details

Prior to the commencement of any development or excavation works, the Principal Certifying Authority shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.

**Reason:** Statutory requirement.

#### 7. Dilapidation survey and report (public infrastructure)

Prior to the commencement of any development or excavation works on site, the Principal Certifying Authority shall be satisfied that a dilapidation report on the visible and structural condition of all structures of the following public infrastructure, has been completed and submitted to Council:

Public infrastructure

- Full road pavement width, including kerb and gutter, of Pacific Highway southbound and Bobbin Head Road over the site frontage, including the full intersection.
- All driveway crossings and laybacks opposite the subject site.

The report must be completed by a consulting structural/civil engineer. Particular attention must be paid to accurately recording (both written and photographic) existing damaged areas on the aforementioned infrastructure so that Council is fully informed when assessing any damage to public infrastructure caused as a result of the development.

The developer may be held liable to any recent damage to public infrastructure in the vicinity of the site, where such damage is not accurately recorded by the requirements of this condition prior to the commencement of works.

- **Note:** A written acknowledgment from Council must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Principal Certifying Authority prior to the commencement of any excavation works.
- **Reason:** To record the structural condition of public infrastructure before works commence.

#### 8. Archival recording of buildings

Prior to the commencement of any development or excavation works on site, the Principal Certifying Authority shall be satisfied that an archival report has been submitted to Council's Heritage Advisor.

The report must consist of an archival standard photographic record of the building (internally and externally), its garden and views of it from the street illustrating its relationship to neighbouring properties and the streetscape. Recording shall be undertaken in accordance with the guidelines for "Photographic Recording of Heritage Items Using Film or Digital Capture (2006)" prepared by the New South Wales Heritage Office.

Information shall be bound in an A4 report format. It shall include copies of photographs, referenced to plans of the site. Two (2) copies (one (1) copy to include negatives or CD of images shall be submitted to Council's Heritage Advisor. The recording document will be held in the local studies collection of Ku-ring-gai Library, the local historical society and Council's files.

- **Note:** A written acknowledgment from Council must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Principal Certifying Authority prior to the commencement of any works.
- **Reason:** To ensure the proper management of historical artefacts and to ensure their preservation.

#### 9. Dilapidation survey and report (private property)

Prior to the commencement of any demolition or excavation works on site, the Principal Certifying Authority shall be satisfied that a dilapidation report on the visible and structural condition of all structures upon the following lands, has been completed and submitted to Council:

Address

 4-8 Bobbin Head Road - two buildings closest to the boundary of the subject site

The dilapidation report must include a photographic survey of adjoining properties detailing their physical condition, both internally and externally, including such items as walls ceilings, roof and structural members. The report must be completed by a consulting structural/geotechnical engineer as determined necessary by that professional based on the excavations for the proposal and the recommendations of the submitted geotechnical report.

In the event that access for undertaking the dilapidation survey is denied by a property owner, the applicant must demonstrate in writing to the satisfaction of the Principal Certifying Authority that all reasonable steps have been taken to obtain access and advise the affected property owner of the reason for the survey and that these steps have failed.

- **Note:** A copy of the dilapidation report is to be provided to Council prior to any excavation works been undertaken. The dilapidation report is for record keeping purposes only and may be used by an applicant or affected property owner to assist in any civil action required to resolve any dispute over damage to adjoining properties arising from works.
- **Reason:** To record the structural condition of likely affected properties before works commence.

#### 10. Construction and traffic management plan

The applicant must submit to Council a Construction Traffic Management Plan (CTMP), which is to be approved prior to the commencement of any works on site.

The plan is to consist of a report with Traffic Control Plans attached.

The report is to contain commitments which must be followed by the demolition and excavation contractor, builder, owner and subcontractors. The CTMP applies to all persons associated with demolition, excavation and construction of the development.

The report is to contain construction vehicle routes for approach and departure to and from all directions.

The report is to contain a site plan showing entry and exit points. Swept paths are to be shown on the site plan showing access and egress for an 11 metre long heavy rigid vehicle.

The Traffic Control Plans are to be prepared by a qualified person (red card holder). One must be provided for each of the following stages of the works:

- Demolition
- Excavation
- Concrete pour
- Construction of vehicular crossing and reinstatement of footpath
- Traffic control for vehicles reversing into or out of the site.

Traffic controllers must be in place at the site entry and exit points to control heavy vehicle movements in order to maintain the safety of pedestrians and other road users.

Because of the School Zone in Bobbin Head Road, no deliveries to the site or heavy vehicle movements are permitted between 8 and 9.30am and 2.30 and 4pm on school days, with the exception of large concrete pours, which requires notification to Council and neighbouring properties including Mount St Bernard School. This must be incorporated into the CTMP.

When a satisfactory CTMP is received, a letter of approval will be issued with conditions attached. Traffic management at the site must comply with the approved CTMP as well as any conditions in the letter issued by Council. Council's Rangers will be patrolling the site regularly and fines will be issued for any non-compliance with this condition.

**Reason:** To ensure that appropriate measures have been considered during all phases of the construction process in a manner that maintains the environmental amenity and ensures the ongoing safety and protection of people.

#### 11. Work zone

A Works Zone is to be provided in Bobbin Head Road subject to the approval of the Ku-ring-gai Local Traffic Committee.

No loading or unloading must be undertaken from the public road or nature strip unless within a Works Zone which has been approved and paid for.

In the event the work zone is required for a period beyond that initially approved by the Traffic Committee, the applicant shall make a payment to Council for the extended period in accordance with Council's schedule of fees and charges for work zones prior to the extended period commencing.

**Reason:** To ensure that appropriate measures have been made for the operation of the site during the construction phase.

#### 12. Temporary construction exit

A temporary construction exit, together with necessary associated temporary fencing, shall be provided prior to commencement of any work on the site and shall be maintained throughout the duration and progress of construction.

**Reason:** To reduce or eliminate the transport of sediment from the construction site onto public roads.

#### 13. Sediment controls

Prior to any work commencing on site, sediment and erosion control measures shall be installed along the contour immediately downslope of any future disturbed areas.

The form of the sediment controls to be installed on the site shall be determined by reference to the 'NSW Department of Housing manual 'Managing Urban Stormwater: Soils and Construction'. The erosion controls shall be maintained in an operational condition until the development activities have been completed and the site fully stabilised. Sediment shall be removed from the sediment controls following each heavy or prolonged rainfall period.

**Reason:** To preserve and enhance the natural environment.

# 14. Erosion and drainage management

Earthworks and/or demolition of any existing buildings shall not commence until an erosion and sediment control plan is submitted to and approved by the Principal Certifying Authority. The plan shall comply with the guidelines set out in the NSW Department of Housing manual "Managing Urban Stormwater: Soils and Construction" certificate. Erosion and sediment control works shall be implemented in accordance with the erosion and sediment control plan.

**Reason:** To preserve and enhance the natural environment.

# 15. Tree protection fencing

To preserve the following tree/s, no work shall commence until the area beneath their canopy is fenced off at the specified radius from the trunk/s to prevent any activities, storage or the disposal of materials within the fenced area. The fence/s shall be maintained intact until the completion of all demolition/building work on site.

Schedule	
Tree/Location	Radius from trunk
#3 Eucalyptus saligna (Sydney Bluegum)	6.0m
Adjacent to Bobbin Head Rd site frontage	
#8 Eucalyptus saligna (Sydney Bluegum)	6.0m maintaining
Bobbin Head Rd nature strip	public pedestrian
	access
#11 Magnolia campbelii (Campbell's Magnolia)	2.0m
Adjacent to southern site corner	
#16 Eucalyptus saligna (Sydney Bluegum)	14.5m
Adjacent to southern site corner	
#19 Pittosporum undulatum (Native Daphne)	2.4m
Adjacent to pacific Hwy frontage	
#47 Fraxinus augustifolia (Ash)	2.0m maintaining
Bobbin Head Rd nature strip	public pedestrian
	access

**Reason:** To protect existing trees during the construction phase.

# 16. Tree protective fencing type galvanised mesh

The tree protection fencing shall be constructed of galvanised pipe at 2.4 metre spacing and connected by securely attached chain mesh fencing to a minimum height of 1.8 metres in height prior to work commencing.

**Reason:** To protect existing trees during construction phase.

#### 17. Tree protection signage

Prior to works commencing, tree protection signage is to be attached to each tree protection zone, displayed in a prominent position and the sign repeated at 10 metres intervals or closer where the fence changes direction. Each sign shall contain in a clearly legible form, the following information:

Tree protection zone.

- This fence has been installed to prevent damage to the trees and their growing environment both above and below ground and access is restricted.
- Any encroachment not previously approved within the tree protection zone shall be the subject of an arborist's report.
- The arborist's report shall provide proof that no other alternative is available.
- The Arborist's report shall be submitted to the Principal Certifying Authority for further consultation with Council.
- The name, address, and telephone number of the developer.

**Reason:** To protect existing trees during the construction phase.

#### 18. Tree protection mulching

Prior to works commencing and throughout construction, the area of the tree protection zone is to be mulched to a depth of 100mm with composted organic material being 75% Eucalyptus leaf litter and 25% wood.

**Reason:** To protect existing trees during the construction phase.

#### **19.** Tree protection – avoiding soil compaction

To preserve the following tree/s and avoid soil compaction, no work shall commence until temporary measures to avoid soil compaction as per AS4970-2009Protection of Trees on Development Sites (eg rumble boards) within the specified radius of the following tree/s is/are installed where other tree protection measures are not installed:

Schedule	
Tree/Location	Radius from trunk
#3 <i>Eucalyptus saligna</i> (Sydney Bluegum) Adjacent to Bobbin Head Rd site frontage	6.0m on western side
	10.0m elsewhere

14.5m

**Reason:** To protect existing trees during the construction phase.

### 20. Tree fencing inspection

Upon installation of the required tree protection measures, an inspection of the site by the Principal Certifying Authority is required to verify that tree protection measures comply with all relevant conditions.

**Reason:** To protect existing trees during the construction phase.

### 21. Construction waste management plan

Prior to the commencement of any works, the Principal Certifying Authority shall be satisfied that a waste management plan, prepared by a suitably qualified person, has been prepared in accordance with Council's DCP 40 – Construction and Demolition Waste Management.

The plan shall address all issues identified in DCP 40, including but not limited to: the estimated volume of waste and method for disposal for the construction and operation phases of the development.

**Note:** The plan shall be provided to the Certifying Authority.

**Reason:** To ensure appropriate management of construction waste.

# 22. Noise and vibration management plan

Prior to the commencement of any works, a noise and vibration management plan is to be prepared by a suitably qualified expert addressing the likely noise and vibration from demolition, excavation and construction of the proposed development and provided to the Principal Certifying Authority. The management plan is to identify amelioration measures to achieve the best practice objectives of AS 2436-2010 and NSW Department of Environment and Climate Change Interim Construction Noise Guidelines. The report shall be prepared in consultation with any geotechnical report that itemises equipment to be used for excavation works.

The management plan shall address, but not be limited to, the following matters:

- identification of the specific activities that will be carried out and associated noise sources
- identification of all potentially affected sensitive receivers, including residences, churches, commercial premises, schools and properties containing noise sensitive equipment

- the construction noise objective specified in the conditions of this consent
- the construction vibration criteria specified in the conditions of this consent
- determination of appropriate noise and vibration objectives for each identified sensitive receiver
- noise and vibration monitoring, reporting and response procedures
- assessment of potential noise and vibration from the proposed demolition, excavation and construction activities, including noise from construction vehicles and any traffic diversions
- description of specific mitigation treatments, management methods and procedures that will be implemented to control noise and vibration during construction
- construction timetabling to minimise noise impacts including time and duration restrictions, respite periods and frequency
- procedures for notifying residents of construction activities that are likely to affect their amenity through noise and vibration
- contingency plans to be implemented in the event of non-compliances and/or noise complaints

**Reason:** To protect the amenity afforded to surrounding residents during the construction process.

# 23. Support for Council roads, footpaths, drainage reserves

Council property adjoining the construction site must be fully supported at all times during all excavation and construction works. Details of shoring, propping and anchoring of works adjoining Council property, prepared by a qualified structural engineer or geotechnical engineer, must be submitted to and approved by the Principal Certifying Authority (PCA), before the commencement of the works. A copy of these details must be forwarded to Council. Backfilling of excavations adjoining Council property or any void remaining at completion of construction between the building and Council property must be fully compacted prior to the completion of works.

**Reason:** To protect Council's infrastructure.

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

#### 24. Lot consolidation

Prior to the issue of the Construction Certificate, the applicant is to consolidate the existing lots. Evidence of the consolidation, in the form of a plan registered with Department of Lands, is to be submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.

# **Reason:** To ensure that development does not occur across property boundaries.

### 25. Amendments to approved landscape plan

Prior to the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that the approved landscape plans, listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

Plan no.	Drawn by	Dated
LPDA 11-275/1 Rev D	Conzept	07/12/2011

The above landscape plan(s) shall be amended in the following ways:

- Tree removal as depicted on plan is to be amended to reflect the conditions of consent.
- The proposed planting of Eucalyptus paniculata (Grey Gum) adjacent to the Pacific Hwy site frontage is to be amended to be seven Eucalyptus saligna (Sydney Bluegum) evenly spaced at 8m intervals as an avenue planting within the proposed planting of Lomandra longifolia 'Tanika'.
- The proposed planting of four Eucalyptus paniculata (Grey Gum) adjacent to the Bobbin Head Rd site frontage are to be replaced with Eucalyptus pilularis (Blackbutt).
- The proposed planting of Pittosporum revolutum (Yellow Pittosporum) adjacent to the Bobbin Head rd site frontage are to be replaced with Lagerstroemia indica (Crepe Myrtle) for seasonal interest.
- The proposed planting of Ceratopetalum gummiferum (NSW Christmas Bush) adjacent to the Pacific Hwy site frontage is to be amended to be Lagerstroemia indica (Crepe Myrtle) for seasonal interest.

To ensure the preservation and enhancement of the Blue Gum High Foerst within the site he proposed landscape planting within the canopy drip line of trees 3 & 16 - *Eucalyptus saligna* (Sydney Blue Gums) which comprise part of the onsite Blue Gum High Forest are to be species characteristic of Blue Gum High Forest in accordance with the Scientific Determination. Plantings are to be randomly spaced instead of formal monocultures/ groupings. No exotic cultivars or native varieties are to be planted within the dripline of BGHF canopy species. Plantings are to be sourced locally within (10km).

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that the landscape plan has been amended are required by this condition.

**Note:** An amended plan, prepared by a landscape architect or qualified landscape designer shall be submitted to the Certifying Authority.

**Reason:** To ensure adequate landscaping of the site

#### 26. Amendments to approved engineering plans

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that the approved engineering plan(s), listed below and endorsed

with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

Drawings 11010 DA1.01/4,	Northrop	Revision 3, 15.07.11 and
2.01/3, 3.01/4, 3.02/4,	Consulting	Revision 4, 06/12/11
3.03/4, 3.04/4, 3.11/3,	Engineers	
3.12/3, 3.21/3, 3.22/4.		

The above engineering plan(s) shall be amended as follows:

- Section A7.1.1 of Council's DCP 47 Water management requires an ARI of 100 years to be used for design of the basement pump-out system wet well. The volume is to be adjusted accordingly.
- The rising main from the pump-out system wet well is to be connected to the main drainage system downstream of the on site detention tank.
- The outlet from the site is to be connected to the kerb inlet pit, not directly to the street gutter. The arborist is to advise on the installation of the pipe.

The above amendments are required to ensure compliance with the following:

- Ku-ring-gai Council Water Management Development Control Plan 47.
- **Note:** An amended engineering plan, prepared by a qualified engineer shall be submitted to the Certifying Authority.
- **Reason:** To ensure that the development is in accordance with the determination.

#### 27. Long service levy

In accordance with Section 109F(i) of the Environmental Planning and Assessment Act a Construction Certificate shall not be issued until any long service levy payable under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 (or where such levy is payable by instalments, the first instalment of the levy) has been paid. Council is authorised to accept payment. Where payment has been made elsewhere, proof of payment is to be provided to Council.

Reason: Statutory requirement.

#### 28. Builder's indemnity insurance

The applicant, builder, developer or person who does the work on this development, must arrange builder's indemnity insurance and submit the certificate of insurance in accordance with the requirements of Part 6 of the Home Building Act 1989 to the Certifying Authority for endorsement of the plans accompanying the Construction Certificate.

It is the responsibility of the applicant, builder or developer to arrange the

builder's indemnity insurance for residential building work over the value of \$12,000. The builder's indemnity insurance does not apply to commercial or industrial building work or to residential work valued at less than \$12,000, nor to work undertaken by persons holding an owner/builder's permit issued by the Department of Fair Trading (unless the owner/builder's property is sold within 7 years of the commencement of the work).

Reason: Statutory requirement.

#### 29. Outdoor lighting

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that all outdoor lighting will comply with AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

- **Note:** Details demonstrating compliance with these requirements are to be submitted prior to the issue of a Construction Certificate.
- **Reason:** To provide high quality external lighting for security without adverse affects on public amenity from excessive illumination levels.

#### 30. Air drying facilities

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that a common open space area dedicated for open air drying of clothes is provided. This area is to be located at ground level behind the building line and in a position not visible from the public domain.

In lieu of the above, written confirmation that all units will be provided with internal clothes drying facilities prior to the Occupation Certificate is to be submitted to the Certifying Authority prior to the issue of the Construction Certificate.

**Reason:** Amenity & energy efficiency.

#### 31. External service pipes and the like prohibited

Proposed water pipes, waste pipes, stack work, duct work, mechanical ventilation plant and the like must be located within the building. Details confirming compliance with this condition must be shown on construction certificate plans and detailed with construction certificate specifications. Required external vents or vent pipes on the roof or above the eaves must be shown on construction certificate plans and detailed with construction certificate specifications. External vents or roof vent pipes must not be visible from any place unless detailed upon development consent plans. Where there is any proposal to fit external service pipes or the like this must be detailed in an amended development (S96) application and submitted to Council for determination.

Vent pipes required by Sydney Water must not be placed on the front elevation of the building or front roof elevation. The applicant, owner and builder must protect the appearance of the building from the public place and the appearance of the streetscape by elimination of all external services excluding vent pipes required by Sydney Water and those detailed upon development consent plans.

**Reason:** To protect the streetscape and the integrity of the approved development.

### 32. Access for people with disabilities (residential)

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that access for people with disabilities to and from and between the public domain, residential units and all common open space areas is provided. Consideration must be given to the means of dignified and equitable access.

Compliant access provisions for people with disabilities shall be clearly shown on the plans submitted with the Construction Certificate. All details shall be provided to the Principal Certifying Authority prior to the issue of the Construction Certificate. All details shall be prepared in consideration of the Disability Discrimination Act, and the relevant provisions of AS1428.1, AS1428.2, AS1428.4 and AS 1735.12.

**Reason:** To ensure the provision of equitable and dignified access for all people in accordance with disability discrimination legislation and relevant Australian Standards.

#### 33. Adaptable units

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that the nominated adaptable units within the development application, [minimum five (5) required], are designed as adaptable housing in accordance with the provisions of Australian Standard AS4299-1995: Adaptable Housing.

**Note:** Evidence from an appropriately qualified professional demonstrating compliance with this control is to be submitted to and approved by the Certifying Authority prior to the issue of the Construction Certificate.

**Reason:** Disabled access & amenity.

#### 34. Stormwater management plan

Prior to issue of the Construction Certificate, the applicant must submit, for approval by the Principal Certifying Authority, scale construction plans and specifications in relation to the stormwater management and disposal system for the development. The plan(s) must be based on Northrop Drawings 11010 DA1.01/4, 2.01/3, 3.01/4, 3.02/4, 3.03/4, 3.04/4, 3.11/3, 3.12/3, 3.21/3, 3.22/4 as amended by another condition of this consent, and must include the following detail:

- exact location and reduced level of discharge point to the public drainage system
- layout of the property drainage system components, including but not limited to (as required) gutters, downpipes, spreaders, pits, swales, kerbs, cut-off and intercepting drainage structures, subsoil drainage, flushing facilities and all ancillary stormwater plumbing - all designed for a 235mm/hour rainfall intensity for a duration of five (5) minutes (1:50 year storm recurrence)
- location(s), dimensions and specifications for the required rainwater storage and reuse tanks and systems and where proprietary products are to be used, manufacturer specifications or equivalent shall be provided
- specifications for reticulated pumping facilities (including pump type and manufacturer specifications) and ancillary plumbing to fully utilise rainwater in accordance with Ku-ring-gai Council Development Control Plan 47 and/or BASIX commitments
- details of the required on-site detention tanks required by Ku-ring-gai Water Management DCP 47, including dimensions, materials, locations, orifice and discharge control pit details as required (refer Chapter 6 and Appendices 2, 3 and 5 of DCP 47 for volume, PSD and design requirements)
- the required basement stormwater pump-out system is to cater for driveway runoff and subsoil drainage (refer appendix 7.1.1 of Development Control Plan 47 for design)

The above construction drawings and specifications are to be prepared by a qualified and experienced civil/hydraulic engineer in accordance with Council's Water Management Development Control Plan 47, Australian Standards 3500.2 and 3500.3 - Plumbing and Drainage Code and the Building Code of Australia.

**Reason:** To protect the environment.

# 35. Sydney Water Section 73 Compliance Certificate (Part 1)

Prior to the issue of a Construction Certificate, a Compliance Certificate under Section 73 of the Sydney Water Act 1994 must be obtained. Application must be made through an authorised Water Servicing Co-ordinator. For details see the Sydney Water web site www.sydneywater.com.au, or telephone 13 20 92.

Following application, a notice of requirements will be forwarded, detailing water and sewer extensions to be built and charges to be paid. Early contact with the coordinator is advisable since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design. Details of any requirements of Sydney Water are to be provided with the Construction Certificate documentation.

Reason: Statutory requirement.

#### 36. Excavation for services

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that no proposed underground services (ie: water, sewerage, drainage, gas or other service) unless previously approved by conditions of consent, are located beneath the canopy of any tree protected under Council's Tree Preservation Order, located on the subject allotment and adjoining allotments.

**Note:** A plan detailing the routes of these services and trees protected under the Tree Preservation Order shall be submitted to the Principal Certifying Authority.

**Reason:** To ensure the protection of trees.

#### 37. Recycling and waste management

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that the development provides a common garbage collection/separation area sufficient in size to store all wheelie garbage bins and recycling bins provided by Council for the number of units in the development in accordance with DCP 40. The garbage collection point is to be accessible by Council's Waste Collection Services.

The responsibility for:

- the cleaning of waste rooms and waste service compartments; and
- the transfer of bins within the property, and to the collection point once the development is in use;

shall be determined when designing the system and clearly stated in the Waste Management Plan.

**Note:** The architectural plans are to be amended and provided to the Certifying Authority.

Reason: Environmental protection.

#### 38. Noise from road and rail (residential only)

Prior to the issue of the Construction Certificate, the Certifying Authority shall submit evidence to Council demonstrating that the development will be acoustically designed and constructed to ensure that the following LAeq levels are not exceeded:

(a) in any bedroom in the building—35 dB(A) at any time between 10

pm and 7 am,

(b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

Plans and specifications of the required acoustic design in accordance with the approved Acoustic report prepared by Acoustic Logic, dated 24/01/2011 shall be prepared by a practicing acoustic engineer and shall be submitted to the Principal Certifying Authority.

**Reason:** To minimise the impact of noise from the adjoining road or rail corridor on the occupants of the development.

#### 39. Noise from plant in residential zone

Where any form of mechanical ventilation equipment or other noise generating plant is proposed as part of the development, prior to the issue of the Construction Certificate the Certifying Authority, shall be satisfied that the operation of an individual piece of equipment or operation of equipment in combination will not exceed more than 5dB(A) above the background level during the day when measured at the site's boundaries and shall not exceed the background level at night (10.00pm –6.00 am) when measured at the boundary of the site.

- **C1. Note:** A certificate from an appropriately qualified acoustic engineer is to be submitted with the Construction Certificate, certifying that all mechanical ventilation equipment or other noise generating plant in isolation or in combination with other plant will comply with the above requirements.
- **Reason:** To comply with best practice standards for residential acoustic amenity.

#### 40. Location of plant (residential flat buildings)

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that all plant and equipment (including but not limited to air conditioning equipment) is located within the basement.

- **C1.** Note: Architectural plans identifying the location of all plant and equipment shall be provided to the Certifying Authority.
- **Reason:** To minimise impact on surrounding properties, improved visual appearance and amenity for locality.

#### 41. Driveway grades – basement carparks

Prior to the issue of the Construction Certificate, longitudinal driveway sections are to be prepared by a qualified civil/traffic engineer and be submitted for to and approved by the Certifying Authority. These profiles are

to be at 1:100 scale along both edges of the proposed driveway, starting from the centreline of the frontage street carriageway to the proposed basement floor level. The traffic engineer shall provide specific written certification on the plans that:

- vehicular access can be obtained using grades of 20% (1 in 5) maximum and
- all changes in grade (transitions) comply with Australian Standard 2890.1

   "Off-street car parking" (refer clause 2.5.3) to prevent the scraping of the underside of vehicles.

The longitudinal sections must incorporate the driveway crossing levels as shown on the design drawings approved by Council.

**Reason:** To provide suitable vehicular access without disruption to pedestrian and vehicular traffic.

### 42. Basement car parking details

Prior to issue of the Construction Certificate, certified parking layout plan(s) to scale showing all aspects of the vehicle access and accommodation arrangements must be submitted to and approved by the Certifying Authority. A qualified civil/traffic engineer must review the proposed vehicle access and accommodation layout and provide written certification on the plans that:

- all parking space dimensions, driveway and aisle widths, driveway grades, transitions, circulation ramps, blind aisle situations and other trafficked areas comply with Australian Standard 2890.1 – 2004 "Offstreet car parking"
- a clear height clearance of **2.6 metres** (required under DCP40 for waste collection trucks) is provided over the designated garbage collection truck manoeuvring areas within the basement
- no doors or gates are provided in the access driveways to the basement carpark which would prevent unrestricted access for internal garbage collection at any time from the basement garbage storage and collection area
- the vehicle access and accommodation arrangements are to be constructed and marked in accordance with the certified plans
- **Reason:** To ensure that parking spaces are in accordance with the approved development.

#### 43. Car parking allocation

Car parking within the development shall be allocated in the following way:

Resident car spaces	50
Visitor spaces	13
Total spaces	63

Each adaptable dwelling must be provided with car parking complying with the dimensional and location requirements of AS2890.1 – parking spaces for people with disabilities.

At least one visitor space shall also comply with the dimensional and location requirements of AS2890.1 – parking spaces for people with disabilities.

Consideration must be given to the means of access from disabled car parking spaces to other areas within the building and to footpath and roads and shall be clearly shown on the plans submitted with the Construction Certificate.

**Reason:** To ensure equity of access and appropriate facilities are available for people with disabilities in accordance with federal legislation.

#### 44. Number of bicycle spaces

The basement car park shall be adapted to provide 15 bicycle spaces in accordance with DCP 55. The bicycle parking spaces shall be designed in accordance with AS2890.3. Details shall be submitted to the satisfaction of the Certifying Authority prior to the issue of a Construction Certificate.

**Reason:** To provide alternative modes of transport to and from the site.

#### 45. Design of works in public road (Roads Act approval)

Prior to issue of the Construction Certificate, the Certifying Authority shall be satisfied that engineering plans and specifications prepared by a qualified consulting engineer have been approved by Council's Development Engineer. The plans to be assessed must be to a detail suitable for construction issue purposes and must detail the following infrastructure works required in Bobbin Head Road:

- Lowering of footpath and nature strip to provide satisfactory vehicular access to the basement carpark.
- New driveway crossing.

Development consent does not give approval to these works in the road reserve. The applicant must obtain a separate approval under sections 138 and 139 of The Roads Act 1993 for the works in the road reserve required as part of the development. The Construction Certificate must not be issued, and these works must not proceed until Council has issued a formal written approval under the Roads Act 1993.

The required plans and specifications are to be designed in accordance with the General Specification for the Construction of Road and Drainage Works in Ku-ring-gai Council, dated November 2004. The drawings must detail existing utility services and trees affected by the works, erosion control requirements and traffic management requirements during the course of works. Survey must be undertaken as required. Traffic management is to be certified on the drawings as being in accordance with the documents SAA HB81.1 – 1996 – Field Guide for Traffic Control at Works on Roads – Part 1 and RTA Traffic Control at Work Sites (1998). Construction of the works must proceed only in accordance with any conditions attached to the Roads Act approval issued by Council.

A minimum of three (3) weeks will be required for Council to assess the Roads Act application. Early submission of the Roads Act application is recommended to avoid delays in obtaining a Construction Certificate. An engineering assessment and inspection fee (set out in Council's adopted fees and charges) is payable and Council will withhold any consent and approved plans until full payment of the correct fees. Plans and specifications must be marked to the attention of Council's Development Engineers. In addition, a copy of this condition must be provided, together with a covering letter stating the full address of the property and the accompanying DA number.

**Reason:** To ensure that the plans are suitable for construction purposes.

# 46. Energy Australia requirements

Prior to issue of the Construction Certificate, the applicant must contact Energy Australia regarding power supply for the subject development. A written response detailing the full requirements of Energy Australia (including any need for underground cabling, substations or similar within or in the vicinity the development) shall be submitted to the Principal Certifying Authority for approval prior to issue of the Construction Certificate.

Any structures or other requirements of Energy Australia shall be indicated on the plans issued with the Construction Certificate, to the satisfaction of the Principal Certifying Authority and Energy Australia. The requirements of Energy Australia must be met in full prior to issue of the Occupation Certificate.

**Reason:** To ensure compliance with the requirements of Energy Australia.

# 47. Utility provider requirements

Prior to issue of the Construction Certificate, the applicant must make contact with all relevant utility providers whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained. All utility services or appropriate conduits for the same must be provided by the developer in accordance with the specifications of the utility providers.

**Reason:** To ensure compliance with the requirements of relevant utility providers.

#### 48. Underground services

All electrical services (existing and proposed) shall be undergrounded from

the proposed building on the site to the appropriate power pole(s) or other connection point. Undergrounding of services must not disturb the root system of existing trees and shall be undertaken in accordance with the requirements of the relevant service provided. Documentary evidence that the relevant service provider has been consulted and that their requirements have been met are to be provided to the Certifying Authority prior to the issue of the Construction Certificate. All electrical and telephone services to the subject property must be placed underground and any redundant poles are to be removed at the expense of the applicant.

**Reason:** To provide infrastructure that facilitates the future improvement of the streetscape by relocation of overhead lines below ground.

# Conditions to be satisfied prior to the issue of the construction certificate or prior to demolition, excavation or construction (whichever comes first):

#### 49. Infrastructure restorations fee

To ensure that damage to Council Property as a result of construction activity is rectified in a timely matter:

- All work or activity taken in furtherance of the development the subject of this approval must be undertaken in a manner to avoid damage to Council Property and must not jeopardise the safety of any person using or occupying the adjacent public areas.
- b) The applicant, builder, developer or any person acting in reliance on this approval shall be responsible for making good any damage to Council Property, and for the removal from Council Property of any waste bin, building materials, sediment, silt, or any other material or article.
- c) The Infrastructure Restoration Fee must be paid to the Council by the applicant prior to both the issue of the Construction Certificate and the commencement of any earthworks or construction.
- d) In consideration of payment of the Infrastructure Restorations Fee, Council will undertake such inspections of Council Property as Council considers necessary and also undertake, on behalf of the applicant, such restoration work to Council Property, if any, that Council considers necessary as a consequence of the development. The provision of such restoration work by the Council does not absolve any person of the responsibilities contained in (a) to (b) above. Restoration work to be undertaken by the Council referred to in this condition is limited to work that can be undertaken by Council at a cost of not more than the Infrastructure Restorations Fee payable pursuant to this condition.
- e) In this condition:

"Council Property" includes any road, footway, footpath paving, kerbing, guttering, crossings, street furniture, seats, letter bins, trees, shrubs, lawns, mounds, bushland, and similar structures or features on any road or public road within the meaning of the Local Government Act 1993 (NSW) or any public place; and

"Infrastructure Restoration Fee" means the Infrastructure Restorations Fee calculated in accordance with the Schedule of Fees & Charges adopted by Council as at the date of payment and the cost of any inspections required by the Council of Council Property associated with this condition.

Reason: To maintain public infrastructure.

#### 50. Section 94 Contributions - Centres. (For DAs determined on or after 19 December 2010)

This development is subject to a development contribution calculated in accordance with Ku-ring-gai Contributions Plan 2010, being a s94 Contributions Plan in effect under the Environmental Planning and Assessment Act, as follows:

Key Community Infrastructure	Amount
Turramurra TC Local parks and Sporting Facilities	\$453,913.49
LGA Wide Local Recreational & Cultural	\$72,449.68
Turramurra TC New Roads and Road Mods	\$113,549.59
Turramurra TC Townscapes Transport & Pedest Fac	\$379,610.29
Total:	\$1,019,523.05

The contribution shall be paid to Council prior to the issue of any Construction Certificate, Linen Plan, Certificate of Subdivision or Occupation Certificate whichever comes first in accordance with Ku-ring-gai Contributions Plan 2010.

The contributions specified above are subject to indexation and will continue to be indexed to reflect changes in the consumer price index and housing price index until they are paid in accordance with Ku-ring-gai Contributions Plan 2010 to reflect changes in the consumer price index and housing price index. Prior to payment, please contact Council directly to verify the current payable contributions.

Ku-ring-gai Contributions Plan 2010 may be viewed at <u>www.kmc.nsw.gov.au</u> and at the Council Chambers.

**Reason:** To ensure the provision, extension or augmentation of the Key Community Infrastructure identified in Ku-ring-gai Contributions Plan 2010 that will, or is likely to be, required as a consequence of the development.

#### 51. Tree protection bond

Prior to the commencement of any development or excavation works or prior to the issue of the Construction Certificate (whichever comes first) the applicant must lodge a \$4 000.00 tree protection bond with Council. This bond is to provide security that the following trees are maintained in a healthy condition as found prior to commencement of work upon the site:

### Schedule

#### **Tree/Location**

#8 *Eucalyptus saligna* (Sydney Bluegum) Bobbin Head Rd nature strip **Bond value** \$4 000.00

The bond shall be lodged in the form of a deposit or bank guarantee. The bond will be returned following issue of the Occupation Certificate, provided the trees are undamaged and are in a healthy condition.

In the event that any specified trees are found damaged, dying or dead as a result of any negligence by the applicant or its agent or as a result of the construction works at any time during the construction period, Council will have the option to demand the whole or part therefore of the bond.

**Reason:** To ensure that the trees are maintained in the same condition as found prior to commencement of work.

# CONDITIONS TO BE SATISFIED DURING THE DEMOLITION, EXCAVATION AND CONSTRUCTION PHASES:

#### 52. Prescribed conditions

The applicant shall comply with any relevant prescribed conditions of development consent under clause 98 of the Environmental Planning and Assessment Regulation. For the purposes of section 80A (11) of the Environmental Planning and Assessment Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:

- The work must be carried out in accordance with the requirements of the Building Code of Australia
- 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, that such a contract of insurance is in force before any works commence.

#### Reason: Statutory requirement.

#### 53. Hours of work

Demolition, excavation, construction work and deliveries of building material and equipment must not take place outside the hours of 7.00am to 5.00pm Monday to Friday and 8.00am to 12 noon Saturday. No work and no deliveries are to take place on Sundays and public holidays. Excavation or removal of any materials using machinery of any kind, including compressors and jack hammers, must be limited to between 7.30am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon 1.00pm.

Where it is necessary for works to occur outside of these hours (ie) placement of concrete for large floor areas on large residential/commercial developments or where building processes require the use of oversized trucks and/or cranes that are restricted by the RTA from travelling during daylight hours to deliver, erect or remove machinery, tower cranes, pre-cast panels, beams, tanks or service equipment to or from the site, approval for such activities will be subject to the issue of an "outside of hours works permit" from Council as well as notification of the surrounding properties likely to be affected by the proposed works.

- **Note:** Failure to obtain a permit to work outside of the approved hours will result in on the spot fines being issued.
- **Reason**: To ensure reasonable standards of amenity for occupants of neighbouring properties.

### 54. Approved plans to be on site

A copy of all approved and certified plans, specifications and documents incorporating conditions of consent and certification (including the Construction Certificate if required for the work) shall be kept on site at all times during the demolition, excavation and construction phases and must be readily available to any officer of Council or the Principal Certifying Authority.

**Reason:** To ensure that the development is in accordance with the determination.

#### 55. Engineering fees

For the purpose of any development related inspections by Ku-ring-gai Council engineers, the corresponding fees set out in Councils adopted Schedule of Fees and Charges are payable to Council. A re-inspection fee per visit may be charged where work is unprepared at the requested time of inspection, or where remedial work is unsatisfactory and a further inspection is required. Engineering fees must be paid in full prior to any final consent from Council.

**Reason:** To protect public infrastructure.

#### 56. Statement of compliance with Australian Standards

The demolition work shall comply with the provisions of Australian Standard AS2601: 2001 The Demolition of Structures. The work plans required by AS2601: 2001 shall be accompanied by a written statement from a suitably

qualified person that the proposal contained in the work plan comply with the safety requirements of the Standard. The work plan and the statement of compliance shall be submitted to the satisfaction of the Principal Certifying Authority prior to the commencement of any works.

**Reason:** To ensure compliance with the Australian Standards.

### 57. Construction noise

During excavation, demolition and construction phases, noise generated from the site shall be controlled in accordance with the recommendations of the approved noise and vibration management plan.

**Reason:** To ensure reasonable standards of amenity to neighbouring properties.

### 58. Site notice

A site notice shall be erected on the site prior to any work commencing and shall be displayed throughout the works period.

The site notice must:

- be prominently displayed at the boundaries of the site for the purposes of informing the public that unauthorised entry to the site is not permitted
- display project details including, but not limited to the details of the builder, Principal Certifying Authority and structural engineer
- be durable and weatherproof
- display the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice
- be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted

**Reason:** To ensure public safety and public information.

#### 59. Dust control

During excavation, demolition and construction, adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood. The following measures must be adopted:

- physical barriers shall be erected at right angles to the prevailing wind direction or shall be placed around or over dust sources to prevent wind or activity from generating dust
- earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed
- all materials shall be stored or stockpiled at the best locations

- the ground surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs
- all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust
- all equipment wheels shall be washed before exiting the site using manual or automated sprayers and drive-through washing bays
- gates shall be closed between vehicle movements and shall be fitted with shade cloth
- cleaning of footpaths and roadways shall be carried out daily

Reason: To protect the environment and amenity of surrounding properties.

### 60. Post-construction dilapidation report

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 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:

- compare the post-construction dilapidation report with the preconstruction dilapidation report
- have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads.

A copy of this report is to be forwarded to Council at the completion of the construction works.

**Reason:** Management of records.

#### 61. Further geotechnical input

The geotechnical and hydro-geological works implementation, inspection, testing and monitoring program for the excavation and construction works must be in accordance with the report by Jeffery and Katauskas dated 9 February 2011. Over the course of the works, a qualified geotechnical/hydro-geological engineer must complete the following:

- further geotechnical investigations and testing recommended in the above report(s) and as determined necessary
- further monitoring and inspection at the hold points recommended in the above report(s) and as determined necessary
- written report(s) including certification(s) of the geotechnical inspection, testing and monitoring programs

**Reason:** To ensure the safety and protection of property.

# 62. Compliance with submitted geotechnical report

A contractor with specialist excavation experience must undertake the excavations for the development and a suitably qualified and consulting geotechnical engineer must oversee excavation.

Geotechnical aspects of the development work, namely:

- appropriate excavation method and vibration control
- support and retention of excavated faces
- hydro-geological considerations

must be undertaken in accordance with the recommendations of the geotechnical report prepared by Jeffery and Katauskas and any subsequent reports. Approval must be obtained from all affected property owners, including Ku-ring-gai Council, where rock anchors (both temporary and permanent) are proposed below adjoining property(ies).

**Reason:** To ensure the safety and protection of property.

#### 63. Use of road or footpath

During excavation, demolition and construction phases, no building materials, plant or the like are to be stored on the road or footpath without written approval being obtained from Council beforehand. The pathway shall be kept in a clean, tidy and safe condition during building operations. Council reserves the right, without notice, to rectify any such breach and to charge the cost against the applicant/owner/builder, as the case may be.

**Reason:** To ensure safety and amenity of the area.

#### 64. Guarding excavations

All excavation, demolition and construction works shall be properly guarded and protected with hoardings or fencing to prevent them from being dangerous to life and property.

**Reason:** To ensure public safety.

#### 65. Toilet facilities

During excavation, demolition and construction phases, toilet facilities are to be provided, on the work site, at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

**Reason:** Statutory requirement.

#### 66. Protection of public places

If the work involved in the erection, demolition or construction of the

development is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place.

If necessary, a hoarding is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place.

The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place.

Any hoarding, fence or awning is to be removed when the work has been completed.

Reason: To protect public places.

### 67. Recycling of building material (general)

During demolition and construction, the Principal Certifying Authority shall be satisfied that building materials suitable for recycling have been forwarded to an appropriate registered business dealing in recycling of materials. Materials to be recycled must be kept in good order.

**Reason:** To facilitate recycling of materials.

#### 68. Construction signage

All construction signs must comply with the following requirements:

- are not to cover any mechanical ventilation inlet or outlet vent
- are not illuminated, self-illuminated or flashing at any time
- are located wholly within a property where construction is being undertaken
- refer only to the business(es) undertaking the construction and/or the site at which the construction is being undertaken
- are restricted to one such sign per property
- do not exceed 2.5m<sup>2</sup>
- are removed within 14 days of the completion of all construction works

**Reason:** To ensure compliance with Council's controls regarding signage.

#### 69. Approval for rock anchors

Approval is to be obtained from the property owner for any anchors proposed beneath adjoining private property. If such approval cannot be obtained, then the excavated faces are to be shored or propped in accordance with the recommendations of the geotechnical and structural engineers. **Reason:** To ensure the ongoing safety and protection of property.

### 70. Maintenance period for works in public road

A maintenance period of six (6) months applies to all work in the public road reserve carried out by the applicant - after the works have been completed to the satisfaction of Ku-ring-gai Council. In that maintenance period, the applicant shall be liable for any section of the public infrastructure work which fails to perform in the designed manner, or as would reasonably be expected under the operating conditions. The maintenance period shall commence once the applicant receives a formal letter from Council stating that the works involving public infrastructure have been completed satisfactorily.

**Reason:** To protect public infrastructure.

# 71. Road reserve safety

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works. Construction materials must not be stored in the road reserve. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site. Where public infrastructure is damaged, repair works must be carried out when and as directed by Council officers. Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (1996) "Traffic Control Devices for Work on Roads". If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may undertake proceedings to stop work.

**Reason:** To ensure safe public footways and roadways during construction.

# 72. Road repairs necessitated by excavation and construction works

It is highly likely that damage will be caused to the roadway at or near the subject site as a result of the construction (or demolition or excavation) works. The applicant, owner and builder (and demolition or excavation contractor as appropriate) will be held responsible for repair of such damage, regardless of the Infrastructure Restorations Fee paid (this fee is to cover wear and tear on Council's wider road network due to heavy vehicle traffic, not actual major damage).

Section 102(1) of the Roads Act states "A person who causes damage to a public road is liable to pay to the appropriate roads authority the cost incurred by that authority in making good the damage."

Council will notify when road repairs are needed, and if they are not carried out within 48 hours, then Council will proceed with the repairs, and will invoice the applicant, owner and relevant contractor for the balance. **Reason:** To protect public infrastructure.

#### 73. Services

Where required, the adjustment or inclusion of any new utility service facilities must be carried out by the applicant and in accordance with the requirements of the relevant utility authority. These works shall be at no cost to Council. It is the applicants' full responsibility to make contact with the relevant utility authorities to ascertain the impacts of the proposal upon utility services (including water, phone, gas and the like). Council accepts no responsibility for any matter arising from its approval to this application involving any influence upon utility services provided by another authority.

**Reason:** Provision of utility services.

#### 74. Temporary rock anchors

If the use of temporary rock anchors extending into the road reserve is proposed, then approval must be obtained from Council and/or the Roads and Traffic Authority in accordance with Section 138 of the Roads Act 1993. The Applicant is to submit details of all the work that is to be considered, and the works are not to commence until approval has been granted. The designs are to include details of the following:

- How the temporary rock anchors will be left in a way that they will not harm or interfere with any future excavation in the public road
- That the locations of the rock anchors are registered with Dial Before You Dig
- That approval of all utility authorities likely to use the public road has been obtained. All temporary rock anchors are located outside the allocations for the various utilities as adopted by the Streets Opening Conference.
- That any remaining de-stressed rock anchors are sufficiently isolated from the structure that they cannot damage the structure if pulled during future excavations or work in the public road.
- That signs will be placed and maintained on the building stating that destressed rock anchors remain in the public road and include a contact number for the building manager. The signs are to be at least 600mm x 450mm with lettering on the signs is to be no less than 75mm high. The signs are to be at not more than 60m spacing. At least one sign must be visible from all locations on the footpath outside the property. The wording on the signs is to be submitted to Council's Director Technical Services for approval before any signs are installed.

Permanent rock anchors are not to be used where any part of the anchor extends outside the development site into public areas or road reserves.

All works in the public road are to be carried out in accordance with the Conditions of Construction issued with any approval of works granted under Section 138 of the Roads Act 1993.

Reason: To ensure the ongoing safety and protection of property.

### 75. Erosion control

Temporary sediment and erosion control and measures are to be installed prior to the commencement of any works on the site. These measures must be maintained in working order during construction works up to completion. All sediment traps must be cleared on a regular basis and after each major storm and/or as directed by the Principal Certifying Authority and Council officers.

**Reason:** To protect the environment from erosion and sedimentation.

### 76. Drainage to street

Stormwater runoff from all new impervious areas and subsoil drainage systems shall be piped to the street drainage system. New drainage line connections to the street drainage system shall conform and comply with the requirements of Sections 5.3 and 5.4 of Ku-ring-gai Water Management Development Control Plan No. 47.

**Reason:** To protect the environment.

# 77. Sydney Water Section 73 Compliance Certificate

The applicant must obtain a **Section 73 Compliance Certificate** under the *Sydney Water Act 1994*. An application must be made through an authorised Water Servicing CoOrdinator. The applicant is to refer to "Your Business" section of Sydney Water's web site at <u>www.sydneywater.com.au</u> then the "e-develop" icon or telephone 13 20 92. Following application a "Notice of Requirements" will detail water and sewer extensions to be built and charges to be paid. Please make early contact with the CoOrdinator, since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design.

Reason: Statutory requirement.

#### 78. Arborist's report

The tree/s to be retained shall be inspected, monitored and treated by a qualified Arborist during and after completion of development works to ensure their long term survival. Regular inspections and documentation from the Arborist to the Principal Certifying Authority are required at the following times or phases of work:

Schedule		
Tree/Location	Time of inspection	
#3 Eucalyptus saligna (Sydney Bluegum)	* Immediately prior to the	
Adjacent to Bobbin Head Rd site frontage	commencement of ANY works	

#8 <i>Eucalyptus saligna</i> (Sydney Bluegum)	on site.
Bobbin Head Rd nature strip	* At the completion of
#16 <i>Eucalyptus saligna</i> (Sydney Bluegum) Adjacent to southern site corner	demolition works and prior to regrading of the site. * At the completion of excavation works on site. * At four monthly intervals during development works * At the completion of ALL works on site prior to the issue of the Occupation Certificate.

**Reason:** To ensure protection of existing trees.

### 79. Trees on nature strip

Removal/pruning of the following tree/s from Council's nature strip to permit vehicular access shall be undertaken at no cost to Council by an experienced tree removal contractor/arborist holding public liability insurance amounting to a minimum cover of \$10,000,000:

Schedule
Tree/Location
#4 Fraxinus excelsior (Ash)
Bobbin Head Rd nature strip
#5 Arbutus unedo (Irish Strawberry Tree)
Bobbin Head Rd nature strip

**Reason:** To ensure protection of existing trees.

# 80. Treatment of tree roots

If tree roots are required to be severed for the purposes of constructing the approved works, they shall be cut cleanly by hand, by an experienced Arborist/Horticulturist with a minimum qualification of Horticulture Certificate or Tree Surgery Certificate. All pruning works shall be undertaken as specified in Australian Standard 4373-2007 – Pruning of Amenity Trees.

**Reason:** To protect existing trees.

# 81. Cutting of tree roots

No tree roots of 30mm or greater in diameter located within the specified radius of the trunk/s of the following tree/s shall be severed or injured in the process of any works during the construction period. All pruning works shall be undertaken as specified in Australian Standard 4373-2007 – Pruning of Amenity Trees:

Schedule	
Tree/Location	Radius from trunk

#3 Eucalyptus saligna (Sydney Bluegum) Adjacent to Bobbin Head Rd site frontage	6.0m on western side 10.0m elsewhere
#8 <i>Eucalyptus saligna</i> (Sydney Bluegum) Bobbin Head Rd nature strip	6.0m
#10 <i>Pittosporum undulatum</i> (Native Daphne) Adjacent to southern site corner in nature strip	2.4m
#11 Magnolia campbelii (Campbell's Magnolia)	2.0m
Adjacent to southern site corner #16 <i>Eucalyptus saligna</i> (Sydney Bluegum)	14.5m
Adjacent to southern site corner #19 <i>Pittosporum undulatum</i> (Native Daphne)	2.4m
Adjacent to pacific Hwy frontage #47 Fraxinus augustifolia (Ash)	2.0m
Bobbin Head Rd nature strip	

**Reason:** To protect existing trees.

### 82. Tennis Court demolition/tree protection

To minimise adverse tree impacts to Tree 16 Eucalyptus saligna (Sydney Bluegum) located adjacent to the southern site corner, the operator of ANY machinery is to be inducted by the project arborist prior to the commencement of ANY demolition works. Machinery is not to enter the structural root zone (SRZ = 3.6m) and is to keep the machine as far away from the tree as possible. The tennis court is to be removed from the southern end in a northerly direction with machinery located on the tennis court/concrete. The tennis court is to be removed in three metre sections, which as each three metre section is removed is to be replaced with suitable fill/topsoil to a depth of between 100-200mm immediately after exposure of the roots. This shall continue for the full extent of the tennis court so at the conclusion of the works there will be a large flat area covered with 100-200mm of fill/topsoil protecting any roots that are close to the surface. The area is then to be watered in and the tree protection fencing installed, as per the consent conditions. The project arborist is to directly supervise all tennis court demolition work within a 14.0m radius of Tree 16 and provide written certification of compliance with these requirements to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

**Reason:** To protect existing trees

#### 83. Approved tree works

Approval is given for the following works to be undertaken to trees on the site: ALL trees are to be clearly tagged and identified, consistent with the Arboricultural Impact Assessment report by Advanced Treescape Consulting dated 16/02/2011 prior to the removal of ANY trees on site. Written certification of correct tree identification is to be provided to the Principal Certifying Authority prior to the issue of the Construction Certificate.

Tree/Location	Approved tree works
#1 <i>Pinus patula</i> (Mexican Pine)	Removal
Bobbin Head Rd nature strip	
#2 Eucalyptus nicholii (Narrow-leaved Peppermint)	Removal
Adjacent to north-east site corner	
#4 Fraxinus excelsior (Ash)	Removal
Bobbin Head Rd nature strip	
#5 Arbutus unedo (Irish Strawberry Tree)	Removal
Bobbin Head Rd nature strip	
#6 Ligustrum lucidum (Large Leaf Privet)	Removal
Adjacent to eastern site boundary	
#7 <i>Pittosporum undulatum</i> (Native Daphne)	Removal
Adjacent to eastern site boundary	Develop
#12 Ligustrum lucidum (Large Leaved Privet)	Removal
Adjacent to southern site corner	D
#13 <i>Cupressus sempervirens</i> (Pencil Pine)	Removal
Adjacent to southern site corner	Removal
#14 <i>Syragus romanzoffianum</i> (Cocos Palm) Adjacent to southern site corner	Removal
#15 <i>Cupressus sempervirens</i> (Pencil Pine)	Removal
Adjacent to southern site corner	nemovai
#18 Ligustrum lucidum (Large Leaved Privet)	Removal
Adjacent to Pacific Hwy frontage	ricinoval
#20 Dead tree	Removal
Adjacent to Pacific Hwy frontage	
#21 Ligustrum lucidum (Large Leaved Privet)	Removal
Adjacent to Pacific Hwy frontage	
#22 Ligustrum lucidum (Large Leaved Privet)	Removal
Adjacent to Pacific Hwy frontage	
#23 Cinnamomum camphora (Camphor laurel)	Removal
Adjacent to Pacific Hwy frontage	
#24 <i>Betula pendula</i> (Silver Birch)	Removal
Adjacent to Pacific Hwy frontage	
#25 Camellia sinensis (Green Tea)	Removal
Adjacent to Pacific Hwy frontage	
#26 Cryptomeria japonica (Japanese Red Cedar)	Removal
Adjacent to Pacific Hwy frontage	
#27 <i>Cupressus sempervirens</i> (Pencil Pine)	Removal
Adjacent to Pacific Hwy frontage	Damas
#28 <i>Cupressus sempervirens</i> 'Swanes Golden'	Removal
Adjacent to Pacific Hwy frontage	Demovial
#29 <i>Cupressus sempervirens</i> 'Swanes Golden'	Removal
Adjacent to Pacific Hwy frontage	Pomovol
#30 <i>Cupressus sempervirens</i> 'Swanes Golden' Adjacent to Pacific Hwy frontage	Removal

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#31 <i>Cupressus sempervirens</i> 'Swanes Golden'	Removal
Adjacent to Pacific Hwy frontage	
#32 Cupressus macrocarpa 'Golden Aurea'	Removal
Adjacent to Pacific Hwy frontage	
#33 Dead tree	Removal
Adjacent to Pacific Hwy frontage	
#34 Cupressus macrocarpa 'Golden Aurea'	Removal
Adjacent to southwest site corner	
#35 Cupressus macrocarpa 'Golden Aurea'	Removal
Adjacent to south-west site corner	
#36 Cupressus macrocarpa 'Golden Aurea'	Removal
Centrally located on site	
#37 Cupressus sempervirens (Pencil Pine)	Removal
Adjacent to western site boundary	
#38 Cupressus sempervirens (Pencil Pine)	Removal
Adjacent to western site boundary	
#39 Cupressus sempervirens (Pencil Pine)	Removal
Adjacent to western site boundary	
#40 Brachychiton acerifolius (Illawarra Flame Tree)	Removal
Adjacent to western site boundary	
#41 Magnolia soulangeana (Saucer Magnolia)	Removal
Centrally located on site	
#42 Eucalyptus haemastoma (Scribbly Gum)	Removal
Centrally located on site	
#43 Syragus romanzoffianum (Cocos Palm)	Removal
Centrally located on site	
#44 Archontophoenix cunninghamiana (Bangalow	Removal
Palm)	
Centrally located on site	
#45 Magnolia soulangeana (Saucer Magnolia)	Removal
Adjacent to northern site boundary	
#46 Cordyline australis (Cabbage Tree)	Removal
Adjacent to northern site boundary	
· · · · · · · · · · · · · · · · · · ·	1

Removal or pruning of any other tree on the site is not approved, excluding species exempt under Council's Tree Preservation Order.

# **Reason:** To ensure that the development is in accordance with the determination.

#### 84. Hand excavation

All excavation within the specified radius of the trunk/s of the following tree/s shall be hand dug:

Schedule	
Tree/Location	Radius from trunk

#3 Eucalyptus saligna (Sydney Bluegum) Adjacent to Bobbin Head Rd site frontage	6.0m on western side 10.0m elsewhere
#8 <i>Eucalyptus saligna</i> (Sydney Bluegum) Bobbin Head Rd nature strip	6.0m
#10 <i>Pittosporum undulatum</i> (Native Daphne) Adjacent to southern site corner in nature strip	2.4m
#11 <i>Magnolia campbelii</i> (Campbell's Magnolia) Adjacent to southern site corner	2.0m
#16 <i>Eucalyptus saligna</i> (Sydney Bluegum) Adjacent to southern site corner	14.5m
#19 <i>Pittosporum undulatum</i> (Native Daphne) Adjacent to pacific Hwy frontage	2.4m
#47 <i>Fraxinus augustifolia</i> (Ash) Bobbin Head Rd nature strip	2.0m

**Reason:** To protect existing trees.

#### 85. Thrust boring/directional drilling

Excavation for the installation of any services within the specified radius of the trunk/s of the following tree/s shall utilise the thrust boring/directional drilling method. Thrust boring/directional drilling shall be carried out at least 600mm beneath natural ground level to minimise damage to tree/s root system:

Schedule	
Tree/Location	Radius from trunk
#3 Eucalyptus saligna (Sydney Bluegum)	6.0m on western
Adjacent to Bobbin Head Rd site frontage	side
	10.0m elsewhere
#8 Eucalyptus saligna (Sydney Bluegum)	6.0m
Bobbin Head Rd nature strip	
#10 Pittosporum undulatum (Native Daphne)	2.4m
Adjacent to southern site corner in nature strip	
#11 Magnolia campbelii (Campbell's Magnolia)	2.0m
Adjacent to southern site corner	
#16 Eucalyptus saligna (Sydney Bluegum)	14.5m
Adjacent to southern site corner	
#19 Pittosporum undulatum (Native Daphne)	2.4m
Adjacent to pacific Hwy frontage	
#47 Fraxinus augustifolia (Ash)	2.0m
Bobbin Head Rd nature strip	

**Reason:** To protect existing trees.

#### 86. No storage of materials beneath trees

No activities, storage or disposal of materials shall take place beneath the canopy of any tree protected under Council's Tree Preservation Order at any

time.

**Reason:** To protect existing trees.

# 87. Tree planting on nature strip

The following tree species shall be planted, at no cost to Council, in the nature strip fronting the property along (enter street). The tree/s used shall be a minimum 75 litres container size specimen/s:

Schedule	0	
<b>Tree/Species</b> <i>Eucalyptus saligna</i> (Sydney Bluegum)	Quantity 1	Location Bobbin Head Rd nature strip to replace Tree 9.
		1100 0.

**Reason:** To provide appropriate landscaping within the streetscape.

# 88. Tree removal on nature strip

Following removal of the Fraxinus excelsior (Ash) from Council's nature strip, the nature strip shall be rehabilitated to the satisfaction of Council's Landscape Assessment Officer at no cost to Council.

**Reason:** To protect the streetscape.

# 89. Removal of refuse

All builders' refuse, spoil and/or material unsuitable for use in landscape areas shall be removed from the site on completion of the building works.

**Reason:** To protect the environment.

# 90. Canopy replenishment trees to be planted

The canopy replenishment trees to be planted shall be maintained in a healthy and vigorous condition until they attain a height of 5.0 metres whereby they will be protected by Council's Tree Preservation Order. Any of the trees found faulty, damaged, dying or dead shall be replaced with the same species.

**Reason:** To maintain the treed character of the area.

# 91. Survey and inspection of waste collection clearance and path of travel

At the stage when formwork for the ground floor slab is in place and prior to concrete being poured, a registered surveyor is to:

• ascertain the reduced level of the underside of the slab at the driveway

entry,

- certify that the level is not lower than the level shown on the approved DA plans; and
- certify that the minimum headroom of 2.6 metres will be available for the full path of travel of the small waste collection vehicle from the street to the collection area.
- This certification is to be provided to Council's Development Engineer prior to any concrete being poured for the ground floor slab.
- No work is to proceed until Council has undertaken an inspection to determine clearance and path of travel.

At the stage when formwork for the ground floor slab is in place and prior to concrete being poured, Council's Development Engineer and Manager Waste Services are to carry out an inspection of the site to confirm the clearance available for the full path of travel of the small waste collection vehicle from the street to the collection area. This inspection may not be carried out by a private certifier because waste management is not a matter listed in Clause 161 of the Environmental Planning and Assessment Regulation 2000.

**Reason:** To ensure access will be available for Council's contractors to collect waste from the collection point.

### 92. On site retention of waste dockets

All demolition, excavation and construction waste dockets are to be retained on site, or at suitable location, in order to confirm which facility received materials generated from the site for recycling or disposal.

- Each docket is to be an official receipt from a facility authorised to accept the material type, for disposal or processing.
- This information is to be made available at the request of an Authorised Officer of Council.

**Reason:** To protect the environment.

# CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE:

#### 93. Easement for waste collection

Prior to issue of the Occupation Certificate, an easement for waste collection is to be created under Section 88B or Section 88E of the Conveyancing Act 1919. This is to permit legal access for Council, Council's contractors and their vehicles over the subject property for the purpose of collecting waste from the property. The terms of the easement are to be generally in accordance with Council's draft terms for an easement for waste collection and shall be to the satisfaction of Council's Development Engineer.

**Reason:** To permit legal access for Council, Council's contractors and their vehicles over the subject site for waste collection.
## 94. Compliance with BASIX Certificate

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that all commitments listed in BASIX Certificate No. 356814M\_04 have been complied with.

Reason: Statutory requirement.

#### 95. Clotheslines and clothes dryers

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that the units either have access to an external clothes line located in common open space or have a mechanical clothes dryer installed.

**Reason:** To provide access to clothes drying facilities.

#### 96. Mechanical ventilation

Following completion, installation and testing of all the mechanical ventilation systems, the Principal Certifying Authority shall be satisfied of the following prior to the issue of any Occupation Certificate:

- 1. The installation and performance of the mechanical systems complies with:
  - The Building Code of Australia
  - Australian Standard AS1668
  - Australian Standard AS3666 where applicable
- 2. The mechanical ventilation system in isolation and in association with other mechanical ventilation equipment, when in operation will not be audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the unit outside these restricted hours shall emit a noise level of not greater than 5dbA above the background when measured at the nearest adjoining boundary.
- **Note:** Written confirmation from an acoustic engineer that the development achieves the above requirements is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

**Reason:** To protect the amenity of surrounding properties.

#### 97. Completion of landscape works

Prior to the release of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that all landscape works, including the removal of all noxious and/or environmental weed species, have been undertaken in accordance with the approved plan(s) and conditions of consent.

**Reason:** To ensure that the landscape works are consistent with the development consent.

#### 98. Accessibility

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that:

- the lift design and associated functions are compliant with AS 1735.12 & AS 1428.2
- the level and direction of travel, both in lifts and lift lobbies, is audible and visible
- the controls for lifts are accessible to all persons and control buttons and lettering are raised
- international symbols have been used with specifications relating to signs, symbols and size of lettering complying with AS 1428.2
- the height of lettering on signage is in accordance with AS 1428.1 1993
- the signs and other information indicating access and services incorporate tactile communication methods in addition to the visual methods

**Reason:** Disabled access & services.

#### 99. Retention and re-use positive covenant

Prior to issue of the Occupation Certificate, the applicant must create a positive covenant and restriction on the use of land under Section 88E of the Conveyancing Act 1919, burdening the property with the requirement to maintain the site stormwater retention and re-use facilities on the property.

The terms of the instruments are to be generally in accordance with the Council's "draft terms of Section 88B instruments for protection of retention and re-use facilities" and to the satisfaction of Council (refer to appendices of Ku-ring-gai Water Management Development Control Plan No. 47). For existing titles, the positive covenant and the restriction on the use of land is to be created through an application to the Land Titles Office in the form of a request using forms 13PC and 13RPA. The relative location of the reuse and retention facility, in relation to the building footprint, must be shown on a scale sketch, attached as an annexure to the request forms.

Registered title documents showing the covenants and restrictions must be submitted to and approved by the Principal Certifying Authority prior to issue of an Occupation Certificate.

**Reason:** To protect the environment.

## 100. Provision of copy of OSD designs if Council is not the PCA

Prior to issue of the Occupation Certificate, the following must be provided to Council's Development Engineer:

- A copy of the approved Construction Certificate stormwater detention/retention design for the site
- A copy of any works-as-executed drawings required by this consent
- The Engineer's certification of the as-built system.

Reason: For Council to maintain its database of as-constructed on-site stormwater detention systems.

#### 101. Certification of drainage works (dual occupancies and above)

Prior to issue of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that:

- the stormwater drainage works have been satisfactorily completed in accordance with the approved Construction Certificate drainage plans
- the minimum retention and on-site detention storage volume requirements of BASIX and Ku-ring-gai Water Management Development Control Plan No. 47 respectively, have been achieved
- retained water is connected and available for use
- basement and subsoil areas are able to drain via a pump/sump system installed in accordance with AS3500.3 and Appendix 7.1.1 of Ku-ring-gai Water Management Development Control Plan No. 47
- all grates potentially accessible by children are secured
- components of the new drainage system have been installed by a licensed plumbing contractor in accordance with the Plumbing and Drainage Code AS3500.3 2003 and the Building Code of Australia
- all enclosed floor areas, including habitable and garage floor levels, are safeguarded from outside stormwater runoff ingress by suitable differences in finished levels, gradings and provision of stormwater collection devices

The rainwater certification sheet contained in Appendix 13 of the Ku-ring-gai Water Management Development Control Plan No. 47, must be completed and attached to the certification. Where an on-site detention system has been constructed, the on-site detention certification sheet contained in Appendix 4 of DCP 47 must also be completed and attached to the certification.

**Note:** Evidence from a qualified and experienced consulting civil/hydraulic engineer documenting compliance with the above is to be provided to Council prior to the issue of an Occupation Certificate.

#### **Reason:** To protect the environment.

# 102. WAE plans for stormwater management and disposal (dual occupancy and above)

Prior to issue of the Occupation Certificate, a registered surveyor must provide a works as executed survey of the completed stormwater drainage and management systems. The survey must be submitted to and approved by the Principal Certifying Authority prior to issue of the Occupation Certificate. The survey must indicate:

- as built (reduced) surface and invert levels for all drainage pits
- gradients of drainage lines, materials and dimensions
- as built (reduced) level(s) at the approved point of discharge to the public drainage system
- as built location and internal dimensions of all detention and retention structures on the property (in plan view) and horizontal distances to nearest adjacent boundaries and structures on site
- the achieved storage volumes of the installed retention and detention storages and derivative calculations
- as built locations of all access pits and grates in the detention and retention system(s), including dimensions
- the size of the orifice or control fitted to any on-site detention system
- dimensions of the discharge control pit and access grates
- the maximum depth of storage possible over the outlet control
- top water levels of storage areas and indicative RL's through the overland flow path in the event of blockage of the on-site detention system

The works as executed plan(s) must show the as built details above in comparison to those shown on the drainage plans approved with the Construction Certificate prior to commencement of works. All relevant levels and details indicated must be marked in red on a copy of the Principal Certifying Authority stamped construction certificate stormwater plans.

**Reason:** To protect the environment.

#### 103. Basement pump-out maintenance

Prior to issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that a maintenance regime has been prepared for the basement stormwater pump-out system.

**Note:** A maintenance regime specifying that the system is to be regularly inspected and checked by qualified practitioners is to be prepared by a suitable qualified professional and provided to the Principal Certifying Authority.

**Reason:** To protect the environment.

## 104. OSD positive covenant/restriction

Prior to issue of the Occupation Certificate, the applicant must create a

positive covenant and restriction on the use of land under Section 88E of the Conveyancing Act 1919, burdening the owner with the requirement to maintain the on-site stormwater detention facilities on the lot.

The terms of the instruments are to be generally in accordance with the Council's "draft terms of Section 88B instrument for protection of on-site detention facilities" and to the satisfaction of Council (refer to appendices of Ku-ring-gai Council Water Management DCP 47). For existing titles, the positive covenant and the restriction on the use of land is to be created through an application to the Land Titles Office in the form of a request using forms 13PC and 13RPA. The relative location of the on-site detention facility, in relation to the building footprint, must be shown on a scale sketch, attached as an annexure to the request forms.

Registered title documents, showing the covenants and restrictions, must be submitted and approved by the Principal Certifying Authority prior to issue of an Occupation Certificate.

**Reason:** To protect the environment.

#### 105. Sydney Water Section 73 Compliance Certificate

Prior to issue of an Occupation Certificate the Section 73 Sydney water Compliance Certificate must be obtained and submitted to the Principal Certifying Authority

#### **Reason:** Statutory requirement.

#### 106. Certification of as-constructed driveway/carpark - RFB

Prior to issue of an Occupation Certificate, the Principal Certifying Authority is to be satisfied that:

- the as-constructed car park complies with the approved Construction Certificate plans
- the completed vehicle access and accommodation arrangements comply with Australian Standard 2890.1 – 2004 "Off-Street car parking" in terms of minimum parking space dimensions
- finished driveway gradients and transitions will not result in the scraping of the underside of cars
- no doors, gates, grilles or other structures have been provided in the access driveways to the basement carpark, which would prevent unrestricted access for internal garbage collection from the basement garbage storage and collection area
- the vehicular headroom requirements of:
  - Australian Standard 2890.1 "Off-street car parking",
  - The Seniors Living SEPP (as last amended) for accessible parking spaces,
  - **2.6 metres** height clearance for waste collection trucks (refer DCP 40) are met from the public street into and within the applicable

areas of the basement carpark.

- **Note:** Evidence from a suitably qualified and experienced traffic/civil engineer indicating compliance with the above is to be provided to and approved by the Principal Certifying Authority prior to the issue of an Occupation Certificate.
- **Reason:** To ensure that vehicular access and accommodation areas are compliant with the consent.

## 107. Reinstatement of redundant crossings and completion of infrastructure works

Prior to issue of the Occupation Certificate and upon completion of all works on site which could result in damage to Council's infrastructure, the Principal Certifying Authority must be satisfied that he or she has received a signed inspection form from Council which states that the following works in the road reserve have been completed:

- new concrete driveway crossing in accordance with levels and specifications issued by Council
- removal of all redundant driveway crossings and kerb laybacks (or sections thereof) and reinstatement of these areas to footpath, turfed verge and upright kerb and gutter (reinstatement works to match surrounding adjacent infrastructure with respect to integration of levels and materials)
- full repair and resealing of any road surface damaged during construction
- full replacement of damaged sections of grass verge to match existing

This inspection may not be carried out by the Private Certifier because restoration of Council property outside the boundary of the site is not a matter listed in Clause 161 of the Environmental Planning and Assessment Regulation 2000.

All works must be completed in accordance with the General Specification for the Construction of Road and Drainage Works in Ku-ring-gai Council, dated November 2004. The Occupation Certificate must not be issued until all damaged public infrastructure caused as a result of construction works on the subject site (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub contractors, concrete vehicles) is fully repaired to the satisfaction of Council. Repair works shall be at no cost to Council.

**Reason:** To protect the streetscape.

#### 108. Construction of works in public road – approved plans

Prior to issue of the Occupation Certificate, the Principal Certifying Authority must be satisfied that all approved road, footpath and/or drainage works have

been completed in the road reserve in accordance with the Council Roads Act approval and accompanying drawings, conditions and specifications.

The works must be supervised by the applicant's designing engineer and completed and approved to the satisfaction of Ku-ring-gai Council.

The supervising consulting engineer is to provide certification upon completion that the works were constructed in accordance with the Council approved stamped drawings. The works must be subject to inspections by Council at the hold points noted on the Roads Act approval. All conditions attached to the approved drawings for these works must be met prior to the Occupation Certificate being issued.

**Reason:** To ensure that works undertaken in the road reserve are to the satisfaction of Council.

#### 109. Infrastructure repair

Prior to issue of the Occupation Certificate, the Principal Certifying Authority must be satisfied that any damaged public infrastructure caused as a result of construction works (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub contractors, concrete vehicles) is fully repaired to the satisfaction of Council Development Engineer and at no cost to Council.

**Reason:** To protect public infrastructure.

#### 110. Mechanical ventilation

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that all mechanical ventilation systems are installed in accordance with Part F4.5 of the Building Code of Australia and comply with Australian Standards AS1668.2 and AS3666 Microbial Control of Air Handling and Water Systems of Building.

**Reason:** To ensure adequate levels of health and amenity to the occupants of the building.

# CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF A SUBDIVISION CERTIFICATE:

#### 111. Construction of works in public road

Prior issue of the Subdivision Certificate all road, footpath and/or drainage works in the public road must be completed in full, inspected and approved by Council. The applicant's designing engineer is to provide certification upon completion that the works were constructed in accordance with the Council approved drawings. This certification shall be provided prior to release of the linen plan/issue of the Subdivision Certificate. The completed works are to be approved by Council's Development Engineer prior to release of the linen plan/issue of the Subdivision Certificate.

**Reason:** To ensure completion of all road, footpath and/or drainage works in the public road.

#### CONDITIONS TO BE SATISFIED AT ALL TIMES:

#### 112. Outdoor lighting

At all times for the life of the approved development, all outdoor lighting shall not detrimentally impact upon the amenity of other premises and adjacent dwellings and shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

**Reason:** To protect the amenity of surrounding properties.

#### 113. No door restricting internal waste collection in basement

At all times, the basement garbage storage and collection area is to be accessible by Council's Waste Collection Services. No doors, grilles, gates or other devices shall be provided in any location which would prevent this service. Where a gate, door or the like is to be erected, unimpeded access to the garbage collection point is to be provided by other means through written agreement with Council's Waste Collection Services.

**Reason:** To facilitate access to the garbage collection point.

#### 114. Noise control – plant and machinery

All noise generating equipment associated with any proposed mechanical ventilation system/s shall be located and/or soundproofed so the equipment is not audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the unit outside these restricted hours shall emit a noise level of not greater than 5dbA above the background when measured at the nearest boundary.

**Reason:** To protect the amenity of surrounding residents.

#### 115. Car parking

At all times, the visitor car parking spaces are to be clearly identified and are to be for the exclusive use of visitors to the site. On site permanent car parking spaces are not to be used by those other than an occupant or tenant of the subject building. Any occupant, tenant, lessee or registered proprietor of the development site or part thereof shall not enter into an agreement to lease, license or transfer ownership of any car parking spaces to those other than an occupant, tenant or lessee of the building. These requirements are to be enforced through the following:

- restrictive covenant placed on title pursuant to Section 88B of the Conveyancing Act, 1919
- restriction on use under Section 68 of the Strata Schemes (Leasehold Development) Act, 1986 to all lots comprising in part or whole car parking spaces

Reason: To ensure adequate provision of visitor parking spaces.

### CONCURRENCE REFERRAL CONDITIONS:

## 116. Compliance with the requirements of the NSW Roads and Maritime Services

The proposed development is likely to increase public transport trips during peak periods. Considering that there have been several large scale residential developments in Ku-ring-gai further information and/or analysis should be sought from the developer to the satisfaction of Council and Transport NSW demonstrating that the existing public transport system can cope with the cumulative public transport demand increase.

**Reason:** To comply with the requirements of the NSW Roads and Maritime Service.

#### 117. Road traffic noise

The residential component of the proposed development should be designed so that road traffic noise from Pacific Highway is mitigated by durable materials and comply with the requirements of Clause 102 – (impact of road noise or vibration on non-road development) of State Environmental Planning Policy (Infrastructure) 2007.

Reason: To protect the amenity of the development.

#### 118. Compliance with Australian Standards

The layout of the proposed car parking areas, loading area and driveway associated with the subject development (including, grades, turn paths, sight distance requirements, aisle widths, aisle length, loading bay dimensions and parking bay dimensions) should be in accordance with AS2890.1-2004 and AS2890.2-2002 for large vehicles.

Concerns are raised that garbage and trucks will not be able to enter the building as the traffic report indicates that head height clearances will be limited to 2.5m. Also safety concerns are raised with regard to the distance of the truck turning area from the loading area which will require trucks to

reverse approximately 30m on the access driveway/main parking aisle.

The above loading issues should be resolved to the satisfaction of Council.

**Reason:** To provide safe and useable parking and manoeuvring facilities.

#### 119. Demolition and construction traffic management plan

A Demolition and Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council, for approval, prior to the issue of a construction certificate.

**Reason**: To minimise the impact on the local road network

### 120. Construction zone

All construction/demolition vehicles are to be accommodated on-site, and no "construction zone" will be permitted on Pacific highway or Bobbin Head Road

Reason: To minimise the impacts on the local road network.

### 121. Entry and exit of construction vehicles

RMS cannot allow the entry and exit of construction vehicles during peak periods and school zone times. This is due to the high volume of traffic in Pacific Highway and Bobbin Head Road during such periods, as well as the risk of crash with vehicles and pupils.

**Reason**: To minimise the impacts on the local road network and assist in safety.

#### 122. Vehicle entry and exit of the site

All vehicles must enter and exit the development in a forward direction.

Reason: To assist in the provision of safety.

#### 123. Carpark design and landscaping

Car park is to be design to Council's satisfaction and requirements of AS2890.1 (including grades and bay dimensions). Please ensure that the landscaping next to the driveway maintains clear pedestrian sight lines as per AS2890.1-2004 Figure 3.3. Furthermore, do not plant new trees in Pacific Highway road reserve, as they obstruct driver's sight line at signal and intrude into underground utility allocation, forcing utilities into RMS pavement.

**Reason**: To comply with the requirements of the NSW Roads and Maritime Service

#### 124. Removal of redundant driveways and driveway splay design

Remove all redundant driveways to Pacific Highway, with footpath, kerb and gutter reinstated according to RMS specification. At the new Bobbin Head Road driveway kerb layback, driveway splay should be designed for minimum interference with Bobbin Head Road traffic when vehicles are entering and exiting the property (all vehicles to enter and exit via the kerb lane).

**Reason:** To comply with the requirements of the NSW Roads and Maritime Service

#### 125. Carpark entrance storage

The carpark entrance must have adequate storage on site for vehicles stopped for the security door. However the location of the door intercom-car reader is not shown on the plan.

Reason: Prevention of vehicles standing on Bobbin Head Road

#### 126. Provision of queuing data

The Bobbin Head Rd driveway traffic may interfere with the traffic queue along Bobbin Head Road. Therefore the proponent needs to provide traffic and queuing data at the Bobbin Head Road leg of the Pacific Highway intersection. To address this impact to Bobbin Head Rd, "no stopping" restriction is to be provided along the property's Bobbin Head rd frontage, to provide for the extension of Bobbin Head Road right turn lane. This is related to traffic signal and therefore requires RMS final approval.

**Reason:** To minimise the impacts on the local road network

#### 127. Bicycle racks

Bicycle racks to meet AS2890.3 and NSW Bicycle guidelines

**Reason:** Provision of satisfactory bicycle storage

#### 128. Development costs

All works associated with the development shall be at no cost to RMS.

**Reason:** To comply with the requirements of the NSW Roads and Maritime Service

G Walsh Executive Assessment Officer S Segall Team Leader C Swanepoel Manager Development Assessment Services M Miocic Director Development & Regulation

Attachments: 1. Location Sketch

- 2. Ku-ring-gai Planning Scheme Zoning Extract
- 3. Amended Architectural plans
- 4. Landscape plans
- 5. Stormwater plans
- 6. Basix Certificate
- 7. Minutes from JRPP meeting of 10 November 2011
- 8. Previous report considered by the JRPP at its meeting of 10 November 2011