

JRPP REF NO DEVELOPMENT APPLICATION NO PREMISES: PROPOSAL: APPLICANT: OWNER: DESIGNER REPORT BY	2010SYW009 0022/10 728-730 PACIFIC HIGHWAY, GORDON DEMOLITION OF TWO EXISTING DWELLINGS AND ANCILLARY BUILDINGS AND CONSTRUCTION OF A RESIDENTIAL FLAT BUILDING COMPRISING 45 UNITS WITH BASEMENT CAR PARKING AND LANDSCAPING. GORDON UNIT TRUST A AND C THORBURN, P AND C WOTTON MA ARCHITECTS KU-RING-GAI COUNCIL
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EXECUTIVE SUMMARY

PURPOSE OF REPORT:	<p>To consider the amended plans lodged with Council in respect of Development Application No.0022/10 for demolition of two existing dwellings and ancillary buildings and construction of a residential flat building comprising 45 units with basement car parking and landscaping, in accordance with the decision of the JRPP to allow the applicant to further amend the DA and provide additional information to address the reasons for refusal contained in the supplementary report.</p>
BACKGROUND:	<p>An assessment report was prepared and presented to the JRPP for its determination of Development Application No.0022/10 at the meeting of 29 April 2010. The applicant submitted amended plans to the JRPP prior to the meeting. The JRPP resolved to defer consideration of this matter pending assessment of the amendments by Council officers.</p> <p>A supplementary report was prepared and presented to the JRPP for its determination of Development Application No.0022/10 at the meeting of 24 June 2010. The JRPP again resolved to defer consideration of this matter to allow the applicant to further amend the DA and provide additional information to address the reasons for refusal contained in the supplementary report.</p>
COMMENTS:	<p>The amended plans have been assessed and the matter is reported back to the JRPP for determination. The amended plans and additional information are now satisfactory.</p>

RECOMMENDATION:

Approval

PURPOSE OF REPORT

To consider whether amended plans submitted in respect of DA0022/10 have satisfactorily addressed the reasons for refusal contained in the previous report considered at the JRPP meeting of 24 June 2010.

BACKGROUND

An assessment report for the subject development application with a recommendation of refusal was provided to the Joint Regional Planning Panel (JRPP) meeting of 29 April 2010. The JRPP deferred consideration of this matter pending an assessment of the amended plans by Council officers.

The amended plans were assessed and the matter was referred back to the JRPP in the form of a supplementary report for determination at the meeting of 24 June 2010. The JRPP again deferred consideration of the matter to allow the applicant to further amend the DA and provide additional information to address the reasons for refusal contained in the supplementary report.

It should be noted that although the Ku-ring-gai Local Environmental Plan (Town Centres) 2010 was gazetted on 25 May 2010, the savings provision within the LEP under Clause 1.8A states:

"If a development application has been made before the commencement of this Plan in relation to land to which this Plan applies and the application has not been finally determined before that commencement, the application must be determined as if this Plan had not commenced."

As the development application was made prior to 25 May 2010, the principal statutory instrument for the assessment of the application remains the Ku-ring-gai Planning Scheme Ordinance.

Substantial amendments have been made to the internal configuration of the building resulting in a reduction in the number of dwellings from 45 units to 37 units. In summary, the amendments consist of the following:

Car-park/ Basement Level 3

- Reallocation of car parking spaces due to reduction from 45 to 37 units and northern wall setback increased to provide more deep soil landscaping.

Car-park/ Basement Level 2

- Reallocation of car parking spaces due to reduction from 45 to 37 units and northern wall setback increased to provide more deep soil landscaping.

Car-park/ Basement Level 1 & Lower ground floor

- Reallocation of car parking spaces due to reduction from 45 to 37 units and northern wall setback increased to provide more deep soil landscaping.
- Lobby walls amended to delete indentations.
- Garbage store 2 deleted due to reduction in unit numbers.
- Visitor spaces reduced and resident spaces increased.

Upper ground floor

- Two (2) units deleted.
- Units 4, 5, 6 and 7 reconfigured as a result of the reduction in units.
- Planterbox removed from the lobby area.
- Private courtyards reconfigured as a result of the reduction in units.
- Unit 8 modified to improve solar access to unit 9.
- Blade wall adjacent to unit 9 reduced in length to improve solar access to living areas.
- Courtyard adjacent to bedroom in unit 9 added and courtyard to unit 10 modified.
- Location and size of pits in front setback zone modified.

First floor

- Two (2) units deleted.
- Central void deleted.
- Units 12, 13, 14, 15 and 16 reconfigured as a result of the reduction in units, with units 14 and 15 now being cross-through units.
- Planter boxes added to southern elevation.
- Unit 17 modified to improve solar access to Unit 18.
- Blade wall adjacent to Unit 18 reduced in length to improve solar access to living areas.

Second floor

- Two (2) units deleted.
- Central void deleted.
- Units 20, 21, 22, 23 and 24 reconfigured as a result of the reduction in units, with Units 22 and 23 now being cross-through units.
- Unit 25 modified to improve solar access to Unit 26.
- Blade wall adjacent to Unit 26 reduced in length to improve solar access to living areas.

Third floor

- Two (2) units deleted.
- Central void deleted.
- Units 29, 30, 31 and 32 reconfigured as a result of the reduction in units, with Units 30 and 31 now being cross-through units.
- Unit 33 modified to improve solar access to Unit 34.
- Blade wall adjacent to Unit 34 reduced in length to improve solar access to living areas.
- Louvres added above terrace to Unit 34.

Penthouse floor

- One (1) unit deleted.
- Central void deleted.
- Terraces to Units 36 and 37 reduced in depth.
- Southern terrace to Unit 37 deleted.
- Air conditioning plant added to plans

Site/ roof plan

- Central void deleted.

General and elevation

- Minor facade modifications corresponding with the reduction in units and internal reconfiguration.
- Use of frosted glazing to balustrades.
- Unit mix modified to 19 x studio/1 bedroom, 12 x 2 bedroom and 6 x 3 bedroom.
- Revised FSR of 1.28:1
- 52 resident and 10 visitor car spaces, reduced from 63 spaces

CONSULTATION – COMMUNITY

In accordance with Council's Notification DCP 56, owners of surrounding properties were given notice of the amended plans for a period of two weeks

from 16 July 2010 to 30 July 2010. In response, submissions from the following were received:

- P & L Holdsworth – 21 Yarabah Avenue, Gordon
- D & TF Bao – 32 Lennox Street, Gordon
- T & N Packer – 9 Yarabah Avenue, Gordon
- R G Anderson & K Anderson – 2A Bushlands Avenue, Gordon
- Ravenswood School for Girls
- J & J Johnston - 7 Yarabah Avenue, Gordon
- S Langelaar & D Hyndman - 724 Pacific Highway, Gordon
- J & D Llewelyn – 25 Yarabah Avenue, Gordon
- J & J Cooper - 726 Pacific Highway, Gordon
- BH & RA Watson – 14 Yarabah Avenue, Gordon

The submissions raised the following issues:

Traffic and safety impacts

There is no change to traffic and safety circumstances in relation to the amended design from the previously considered design and traffic and safety were not raised as issues or reasons for refusal in the previous report to the JRPP on 24 June 2010. As such, traffic and safety remain satisfactory and this issue does not require reconsideration, in accordance with the decision of the JRPP to allow the applicant to address only the previous reasons for refusal.

Council's Team Leader, Development Engineers has assessed the amended proposal and raises no objections or concerns on traffic or safety grounds, subject to conditions of consent.

Lack of parking

Council's Development Engineer has assessed the amended proposal and the development provides in 62 spaces, being in excess of the required off-street parking provision of 53 spaces. The proposal is satisfactory in this regard.

Stormwater problems

Council's Team Leader, Development Engineering has assessed the amended proposal and additional information with regard to stormwater impact and raises no objection to the proposal, subject to conditions.

Overshadowing of surrounding properties

There is no change to the extent of overshadowing from the previously considered amended design. Overshadowing was not raised as an issue or reason for refusal in the previous report to the JRPP on 24 June 2010 (see excerpt below). As such, the extent of overshadowing remains satisfactory

and this issue does not require reconsideration, in accordance with the decision of the JRPP to allow the applicant to address only the previous reasons for refusal.

The following is an excerpt from the previous report to the JRPP in relation to overshadowing of surrounding properties:

“The additional information has provided details of the extent of overshadowing, particularly to the adjoining property to the south at 724-726 Pacific Highway which is the property most affected by the proposal. The information demonstrates that the dwelling’s northern orientated windows and principle open space will receive a minimum 3 hours of solar access during mid winter, which is compliant with DCP 55 requirement.”

Excessive number of apartments when so many are unoccupied / excessive one bedrooms units

No concerns are raised in relation to the number of units within the development, however, the amended design has reduced the number of units from 45 to 37. Additionally, the unit mix has been adjusted to include 19 x studio/1 bedroom, 12 x 2 bedroom and 6 x 3 bedroom, which is now satisfactory.

Latest LEP requires height reduction as buildings come down the street slope

The provisions of Ku-ring-gai Local Environmental Plan (Town Centres) 2010, while not applicable to the subject application, allow for development consistent with that proposed on the subject site.

Height should be reduced to 3 storeys

There is no statutory or planning basis on which the current development proposal could be required to be reduced to 3 storeys.

The Land and Environment Court has rejected 1-5 Yarabah Avenue on similar grounds

The circumstances in relation to the Land and Environment Court proceedings at 1-5 Yarabah Avenue are significantly different to the subject circumstances and the decision of the Land and Environment Court in that appeal has limited relevance to the assessment of the subject development application.

Poor design/poor amenity

The proposal has been substantially reconfigured internally, with a reduction in units from 45 to 37 and a significant improvement in the internal amenity of the development. The proposal is now satisfactory with regard to occupant amenity, subject to conditions of consent.

Construction noise

This issue can be managed through appropriate conditions of consent should the JRPP resolve to approve the application. **(Conditions 21 and 53).**

Noise from use of the development and air conditioning

The residential use of the development is satisfactory with regard to residential noise generation and a condition is recommended limiting noise from the proposed air conditioning units on the roof level **(Condition 40).**

Original design was intentionally over \$10,000,000 so JRPP would be the consent authority JRPP has been obliging and allowed applicant to have 3 bites of the cherry

The \$10,000,000 CIV is a reasonable estimate of development cost and therefore the JRPP is the consent authority. It is acknowledged that the JRPP has, in accordance with the powers conferred upon the Panel, given the applicant two opportunities to amend the proposal.

Detrimental landscaping impacts, with loss of mature vegetation and replacements do not achieve a similar mature size Impacts on trees to be retained

Council's Landscaping Assessment Officer has reviewed the amended proposal and concludes that the development is now satisfactory with regard to landscaping and impact on trees, subject to conditions of consent.

Lack of 12m separation to adjoining dwellings at 2 Bushlands Avenue and 732 Pacific Highway Privacy Impacts

There is no change to the separation distance to No.2 Bushlands Avenue and this was not a reason for refusal in the previous report to the JRPP.

The following is an excerpt from the previous report to the JRPP in relation to building separation/visual privacy:

"The proposal is compliant with the 12m separation requirement to 2 Bushlands Avenue. However, the proposal still fails to meet the separation requirement to 732 Pacific Highway."

In relation to separation to No.732 Pacific Highway, the amended proposal now has an acceptable privacy impact on No.732 with regard to the minimum building separation distances of 7.47m – 11.0m, existing and proposed landscaping adjacent to the northern boundary of the site, the reduction in the number of units to the northern elevation, the use of obscure glazing to all

balustrades and a greater living area setback of 10m, as discussed in further detail later in this report.

Heritage impacts

Council's Heritage Advisor has reviewed the amended design and now raises no objection to the proposal on heritage grounds, subject to conditions of consent. (see Heritage Comments later in this report and **Condition 1A**)

Building envelope too large / overdevelopment of site

The proposed building envelope is consistent with the overall height and setback controls applicable to the site under both LEP 194 and Ku-ring-gai Local Environmental Plan (Town Centres) 2010. It is noted that this was not a reason for refusal in the previous report to the JRPP and there has been no increase in the building envelope.

Interface not sympathetic

The proposal complies with the non-discretionary development standards under LEP194 relating to zone interface and is satisfactory in this regard. It is noted that this was not a reason for refusal in the previous report to the JRPP.

Construction impacts and damage to adjoining properties

Suitable conditions of consent are recommended relating to demolition and construction, in order to minimise impact on adjoining properties. (**Conditions 11, 12, 13, 14, 21, 49, 53, 55, 56, 57, 58, 59, 69**)

Infrastructure inadequate

The existing and proposed infrastructure will be adequate for the proposed development.

COMMENTS

In accordance with the decision of the JRPP, amended plans and additional information have been provided to Council by the applicant to address the recommended reasons for refusal. The following is an assessment of the amended plans and additional information against each of the reasons for refusal.

1. DEEP SOIL LANDSCAPING

The development does not comply with the minimum deep soil landscape area requirement of Clause 25I(2) of the KPSO.

Particulars

- (a) *By operation of clause 25I(2)(c) of the KPSO the proposal must achieve 50% deep soil landscape area. The proposal has a deep soil landscape area of approximately 48%.*
- (b) *A SEPP 1 Objection has not been submitted. The development therefore cannot be approved."*

Comment:

The landscaping and architectural plans have been amended to now comply with the deep soil landscaping requirement of a minimum of 50% of the site area. Council's Landscape Assessment Officer has indicated that the proposed landscaping is satisfactory, subject to conditions of consent.

The proposal is now satisfactory with regard to deep soil landscaping.

2. SEPP 65/RESIDENTIAL FLAT DESIGN CODE

The proposal is inconsistent with a number of the requirements and rules of thumb contained in the RFDC referenced in SEPP 65.

Particulars

Crime risk assessment

- (a) *A lighting plan for all communal open spaces and pedestrian entry points has not been provided.*

Visual privacy

- (a) *The proposal does not achieve the 12m building separation to the adjoining dwelling at No. 732 Pacific Highway and the proposal will have adverse privacy impact on this property, due to the proximity of the proposed balconies and living rooms to the adjoining dwelling.*

Apartment layout

- (a) *A total of 24 units (53%) have a depth greater than 8m resulting in poor internal amenity for occupants.*

Internal circulation

- (a) *The ground floor of the proposed development has 10 units accessed from a single corridor, being in excess of the maximum of 8 units.*

Natural ventilation

- (a) *The building depth of 19m-25m is greater than the typical range of building depths which support natural ventilation, being 10m-18m.*

(b) *Only 48.8% of units are naturally cross ventilated (excluding the units relying on the vertical light-well, which does not provide adequate cross ventilation)*

Solar access

(a) *Significantly less than 70% of the units would receive 3 hours of sunlight to the balconies and main living rooms within the development. The development fails to meet the minimum 70% requirement with only 66.6% of units achieving this requirement.*

Amenity

(a) *The amendments to Unit 22 to provide fixed opaque glazing to the bedrooms of this south facing unit will further deteriorate the poor amenity to this unit which is contrary to the design principles contained in SEPP 65.*

Comment:

The following comments relate to the individual points noted above:

Crime risk assessment:

A lighting plan has not been provided. This is an important element of the information necessary to determine impacts in terms of crime risk assessment. However, given that this is one of the few remaining issues and with regard to the circumstances of this development application to date, it is acceptable to condition the requirement of a lighting plan, to the satisfaction of Council.

Visual privacy:

The applicant has provided an analysis of the privacy impacts of the development on adjoining sites, as detailed in plans SK34B and SK35B. In addition, the applicant has put forward the following comments to address the remaining visual privacy issue raised in the reasons for refusal, which relates to No. 732 Pacific Highway:

"The amended plans have increased the setback to the northern boundary (732 Pacific Highway) to 6.5m-7.2m. The development proposal meets the setback controls contained in Part 4.3 of DCP 55. It is noted 732-736 Pacific Highway, Gordon are zoned R4 – High Density and redevelopment of this adjoining property will achieve a 12m building separation.

The privacy impacts to the rear yard of 732 Pacific Highway have been mitigated by the amended plans with the number of dwellings on the north elevation reduced, greater setback to the side boundary with the living rooms setback 10m, and the use of frosted glass balustrades.

Additionally, the landscape plan includes the planting of Cheese trees and Blueberry Ash on the northern boundary having a maturity height of 5-15m contributing to screening between properties”

As demonstrated on plans SK34B and SK35B, the proposal has an acceptable privacy impact on No.732 with regard to the minimum building separation distances of 7.47m – 11.0m, existing and proposed landscaping adjacent to the northern boundary of the site, the reduction in the number of units to the northern elevation, the use of obscure glazing to all balustrades and a greater living area setback of 10m.

In this regard, it should be anticipated that a residential flat building proposal adjoining an existing dwelling house where both properties are zoned for high density residential development is likely to have a degree of impact on the privacy of that dwelling. Further, achieving the required 12m separation (which is intended to apply between two adjoining residential flat buildings) may not be practical or reasonable if high density development consistent with the desired future character of the zone and consistent with the built form controls for residential flat buildings, is to be achieved on a development site that adjoins a dwelling house. In this instance, the amended design results in an acceptable degree of impact on adjoining dwellings despite not achieving a 12m separation, as discussed above, and with regard to the adjoining property being zoned for high density residential development.

Apartment layout:

The reconfigured apartment layouts have greatly improved the amenity of the units and the proposal is now satisfactory with regard to apartment layout and occupant amenity.

Internal circulation:

The amended design has successfully addressed this issue and a maximum of 4 dwellings are now serviced from a single corridor. The proposal is satisfactory with regard to internal circulation.

Natural ventilation:

The amended proposal now provides cross ventilation to 67% of units (25 units). This is a significant improvement on the original design which relied (unsuccessfully) on a central light and ventilation “well”. The proposal is now satisfactory with regard to natural ventilation.

Solar access:

Solar access plans relating to the amended design have been provided. The proposal now results in adequate solar access to 78% of units (29 units) and is satisfactory in this regard.

Amenity:

As a result of the internal amendments to the building design, that part of the building in which Unit 22 was located (on the southern elevation of the First Floor) is now occupied by Units 14 and 15 and the amenity to these units is satisfactory. The amenity issue relating to the use of obscure glazing to the windows of the bedrooms to Unit 22 has therefore been satisfactorily resolved.

3. DCP 55 - MULTI UNIT HOUSING

The proposal does not comply with a number of the requirements contained in DCP 55.

Particulars

- (a) *Section 4.7 of DCP 55 requires that a range of unit types, sizes and layouts are provided in order to provide housing choice. The proposed development includes 40 studio and one bedroom units out of a total of 45 units. This is unsatisfactory with regard to housing mix, given the excessive number of studio and one bedroom apartments.*
- (b) *The development is contrary to the aim of Part IIIA set out in Clause 25C(2)(g) of the KPSO which requires development to achieve a high level of residential amenity in building design for the occupants of the building through sun access, acoustic control, privacy protection, natural ventilation, passive security design, outdoor living, landscape design and indoor amenity.*

Comment:

The amended proposal now includes an acceptable range of units types, sizes and layouts, comprising 19 x studio/1 bedroom, 12 x 2 bedroom and 6 x 3 bedroom units. The proposal is now satisfactory with regard to housing mix.

The amended proposal is now satisfactory with regard to clause 25C(2)(g) of the KPSO, as the substantially modified internal design achieves a high level of residential amenity for building occupants. The proposal has satisfactorily addressed the issues of solar access, acoustics, privacy, natural ventilation, passive security, outdoor living, landscaping and internal amenity.

4. LANDSCAPING

The proposed landscaping is unsatisfactory with regard to the provisions of the KPSO and DCP 55.

Particulars

- (c) *The BASIX certificate has nominated 226.2m² of indigenous low water use species to common areas. A BASIX Plan has been submitted. There are no areas of indigenous low water use species nominated for individual units. The low water use plan is unsatisfactory for the following reasons:*

Areas of low water use species at the front of planting areas of moderate to high water use, west of Unit 3, are not supported. Garden beds are not clearly defined as areas of high or low water use.

Comment:

A satisfactory BASIX plan has now been submitted and the proposal is satisfactory with regard to indicating on the landscape plan an area of 226.2m² of indigenous low water use species and with regard to clearly defining areas of high and low water use. The proposal is satisfactory with regard to the provisions of the KPSO and DCP 55.

5. HERITAGE IMPACT

The proposal is unsatisfactory with regard to heritage impact on the surrounding items at Nos. 724-726 Pacific Highway and 17 Yarabah Avenue, Gordon.

Particulars

The external materials, finishes, colours and design of the proposed building are unsatisfactory with regard to adverse impacts on the adjoining and nearby heritage items, the adjoining Conservation Area and the UCA. Further amendments to the design of the development need to be made. Amendments would include the proportion of window and door openings, detailing particularly window and door reveals, the design of balustrades, its external materials, textures and colours particularly more extensive use of face brickwork and timber rather than metal elements to achieve an appropriate relationship with the heritage context of the site.

Comment:

Council's Heritage Advisor raises no objection to the amended design, subject to conditions requiring modifications to window proportions, window and door reveals and the colour scheme (**Conditions 1A, 10, 31**).

6. STORMWATER DRAINAGE

The proposal is unsatisfactory with regard to stormwater drainage.

Particulars

- (a) *The rainwater tank is located directly adjoining Unit 3, Unit 12 and the liftwell. This relies on a high level of waterproofing. In places the rainwater tank is less than 1 metre across and almost 4 metres deep (scaled from the drawings as not dimensioned). It is unclear as to how waterproofing would be maintained.*
- (b) *Two discharge control pits are provided. The reason for this is not clear.*
- (c) *The drawings do not indicate how the rainwater tank overflows into the detention storage.*
- (d) *SK01/1 – the scale is wrong and it appears that the location of the orifice plate is shown incorrectly. Insufficient levels and dimensions are shown.*
- (e) *The extent of the on site detention tank is not clear. It seems to extend under the water feature and part of the planter. The volume is given as 23.8 cubic metres but this seems a large overestimate. The plan area scale off the architectural plans as 15 square metres and even if the depth is 1.1 metres as shown on Drawing DA01, that only gives a volume of 16.5 cubic metres, not 23.8 cubic metres as shown on the plans.*
- (f) *The drawing still shows floor wastes connected to the rainwater tank – stormwater cannot be re-used inside the building without treatment and no treatment is indicated.*
- (g) *A rainwater tank volume of 96 000 litres is still shown – this is excessive.*
- (h) *The access to the rainwater tank is in a fire stair, which is acceptable, but this tank is intended to be 4 metres deep and step irons or a ladder would require fixing to the wall of Unit 12, which is likely to compromise any water proofing.*

Comment:

Council's Team Leader, Development Engineers has assessed the amended design and the Concept Stormwater Management Plan and raises no objections to the proposal, subject to conditions of consent (See stormwater comments below).

7. INADEQUATE INFORMATION

The proposal is deficient in a number of respects with regard to the information submitted.

Particulars

- (a) *Proposed levels to external hard and soft landscape areas have not been provided, particularly in the vicinity of existing trees to be retained.*
- (b) *The landscaping plan is practically illegible. Plant symbols prevent legibility of levels and finishes and should be revised or a separate hardworks plan should be submitted.*
- (c) *The trunk Tree 16 has not been shown at its correct size.*
- (d) *Spot levels at the base of existing trees to be retained have not been provided.*
- (e) *The canopy spread of Tree 6 and Tree19 have not been shown correctly.*
- (f) *The Fire Stairs 3 and 4 that exit from south of building have no access to Pacific Highway due to a 1.2m high wall along driveway and front boundary. A gate would be required.*
- (g) *Clarification of impacts of pruning and demolition of lower part of existing retaining wall to Tree 19 - The proposed amount to be removed differs from the arboricultural report (1.5m) and on the architectural/landscape plans (5.5m) This should be clarified.(Section 5.0, Arboriculturist Report, Advanced Treescape Consulting, 14/01/10). Pruning required to allow for building clearance should be detailed in arborist report.*
- (h) *Further investigation is required on the following tree to identify degree of risk in accordance with arborist recommendation (Appendix 5, Arboriculturist Report, Advanced Treescape Consulting, 14/01/10): Tree/Location - Eucalyptus paniculata (Grey Ironbark)Tree 20, southern boundary, rear yard.*
- (i) *There are no details of the proposed air conditioning units to be located on the roof. The application fails to provide any dimensioned elevations or plans including any screening of the plant and equipment. As a result of the lack of information, the impacts of the location of air conditioning units cannot be determined.*
- (j) *Accurate solar diagrams/ electronic information including a compliance table are necessary to determine the percentage of*

units that receive adequate sunlight access in accordance with SEPP 65 RFDC Rule of Thumb.

Comment:

The amended design and additional information provided by the applicant has satisfactorily addressed this issue.

8. PUBLIC INTEREST

The proposal is not in the public interest

Particulars

A number of objections have been received from surrounding properties raising a range of concerns with the proposal and on this basis, the proposal is not in the public interest.

Comment:

As reasons for refusal Nos. 1-7 have been satisfactorily addressed, the proposal is now satisfactory with regard to the public interest.

ADDITIONAL PLANNING COMMENT

The amended proposal represents a substantial improvement over the previous two designs and has been achieved with minimal external modifications to the building envelope. Internal amenity has been greatly improved and privacy impacts to surrounding properties reduced.

REMAINING NON-COMPLIANCES

The amended plans have addressed all non-compliances with the KPSO and SEPP 65, with the exception of a technical non-compliance with the 5 storey height control as a result of Basement Level 1 & Lower Ground Floor being defined as a “storey”, resulting in the building being partly 6 storeys in height.

This technical non-compliance with the storeys height development standard was identified in the initial report to the JRPP and a SEPP 1 objection was subsequently lodged and considered in the Supplementary Report to the JRPP (refer to pages 14-16 of Supplementary Report). The SEPP 1 objection was assessed and considered to be well founded and consequently was not an issue or reason for refusal. The amended plans do not alter the extent of the non-compliance or the circumstances and arguments put forward in relation to the previously considered SEPP 1 objection.

As discussed in detail in the Supplementary Report, requiring compliance with the development standard is both unreasonable and unnecessary in the circumstances of the case and the SEPP 1 objection is considered to be well

founded. On this basis, the proposal is satisfactory with regard to height in storeys.

CONSULTATION WITHIN COUNCIL

Heritage

Council's Heritage Advisor, commented on the amended plans and information as follows:

Comments

The amended scheme makes little change to the exterior appearance of the development. The internal layout is very different with most smaller dwellings amended to larger dwellings but these do not alter the relationship of the building to the nearby items, the HCA or UCA.

The main change to the exterior of the proposed development is removal of a privacy screen and additional setback on the south side of the first floor where it adjoins the heritage item. In my opinion, this is an improvement and this aspect is now considered satisfactory.

The application relies upon landscape screening to mitigate impacts between the nearby heritage items, the HCA and the proposed development. The revised application does not amend the external materials or colours, the proportion of window and door openings, detailing of the window and door reveals or the design of balustrades.

In my opinion the heritage issues could be mitigated by a series of conditions requiring further modification to the development including window proportions on all elevations, window and door reveals on all elevations, and colour scheme.

Conclusions and recommendations

Demolition of the existing houses is acceptable, provided archival photographic recording is undertaken.

*As proposed the revised scheme can be supported with conditions that ensure the proposed building will have an acceptable relationship with the adjoining Heritage Conservation Area and nearby Heritage Items.
(Conditions 1A and 10)*

Engineering

Council's Team Leader, Development Engineers, commented on the amended plans and information as follows:

The following amended documentation has been used for the assessment:

- *Northrop Stormwater Management Report dated 17 September 2009 and Concept Stormwater Management Plans Sheets DA01/6, DA02/4, DA03/1 and DA04/2;*
- *Chapman Planning Statement of Environmental Effects, dated 15 January 2010;*
- *Varga Traffic Planning Traffic and Parking Assessment report, dated 12 January 2010 and letter dated 12 April 2010;*
- *Jeffery and Katauskas Report on Geotechnical Investigation, dated 14 September 2009 and letter, dated 13 January 2010;*
- *BASIX Certificate 290281M_02, dated 13 July 2010;*
- *MA Architects Drawings SK01B – SK11B, SK33B and SK29.*

Water management

The BASIX water commitments are for a 20 000 litres rainwater tank collecting runoff from 520 square metres of roof area, with re-use for toilet flushing in units 1-15 and irrigation of 150 square metres of landscaping.

The Stormwater Concept Plan shows 50 000 litres of rainwater storage, with re-use for toilet flushing, clothes washing and irrigation. The BASIX commitments set out the minimum retention and re-use requirements for the development but if the applicant wishes to achieve a higher level of retention and re-use, this is supported.

The operation of the system is clearer – roofwater is piped into the rainwater tank, which overflows into the detention tank along a weir at RL121.75. The detention tank is located beneath the water feature in the lobby area. Sealed lids are to be provided to the system, to prevent light causing algae to form. Floor waste from terrace areas will be connected directly to the detention basin in front of the building, to prevent any mixing of rainwater and stormwater, so that only rainwater will be re-used inside the building.

Water stored in the detention tank flows through an orifice plate into the overflow chamber and then via five pipes to the second detention storage, an above ground landscaped basin in front of the building. The use of this number of smaller pipes instead of one large one is to maintain headroom in the carpark.

Controlled discharge from the second detention storage passes through a water quality control device and then to the gutter in the Pacific Highway. The outflow from the development is approximately equivalent to the flow from the site which currently drains to the Pacific Highway and this has been demonstrated by the designer, as required by the Roads and Traffic Authority.

The refusal of the downstream neighbours to grant a drainage easement is accepted. Assuming that the proposed system is constructed as

intended, an improvement should be noted with regard to surface runoff from the subject property.

If the development is approved, then the stormwater plans should be stamped with the DA stamp and listed in Condition 1.

With regard to the items raised in my previous report, the following have been resolved:

- 1. The rainwater storage volume has been reduced to 50 000 litres by the inclusion of a floor at RL118.85.*
- 2. A false wall and void are shown between the rainwater storage and the adjacent units and lift. Waterproofing of the wall and drainage of the void are to be provided. This is considered acceptable.*
- 3. The Stormwater Concept plan still shows floor wastes connected to the rainwater tank. This will be conditioned.*
- 4. The architectural plans still state under BASIX Requirements: "The development must have a central water tank – rainwater or stormwater of about 2000 litres", which should actually read "...a central tank – rainwater or stormwater of minimum 20 000 litres." This will be conditioned to be amended before the issue of a Construction Certificate.*

Parking and traffic

The applicant has relocated the waste storage area, which has shifted the basement excavation back from the front boundary. Therefore, the only actual new structure remaining within the proposed road widening is the entry structure, which can be deleted or moved by condition. It appears that the entry driveway grades need not be adversely affected by future road works, as the drive is on the southern side of the property frontage. The RTA has recommended changes to the front fence and hedge to improve sight distance and this will be included in the recommended conditions, since it has not been done on the amended plans.

The site is further than 400 metres from Gordon Station. The application, for 37 units (19x1br, 12x2br and 6x3br), requires 43 resident and 10 visitor parking spaces. Adequate parking is provided, with some two bedroom units having two parking spaces.

The carparking spaces are adequate in dimension and the manoeuvring areas comply with the Australian Standard in regard to dimensions and gradients.

The development is expected to generate 10 to 16 vehicle trips per peak hour. This is not likely to adversely affect traffic flows in the vicinity.

Waste management

The garbage store is located at the end of Basement Level 1. Space is available for the correct number of containers. This arrangement will be satisfactory if headroom is available for the entire path of travel of the small waste collection vehicle.

A longitudinal section along the driveway (SK33B) demonstrates that adequate headroom is available at the entry to the Basement 1 carpark. This is dependent on an upturned beam which is shown in a detail. The minimum headroom of 2.6 metres must also be provided as far as Garbage Store 1, which will require careful placement of beams and services. There is 3 metres available between finished floor levels so this should be feasible.

SK33B should be stamped with the DA stamp if approval is to be given. Conditions are recommended to reinforce the above dimensional requirements.

Construction management

A detailed Construction Traffic Management Plan will be required prior to the commencement of works. Access to the site will be from the Pacific Highway, but conditions will be recommended to prevent heavy vehicles from using nearby residential or busy streets (eg around Ravenswood).

Geotechnical investigation

Excavation to achieve basement level will be to a maximum of 10 metres. The site is expected to be underlain by weathered shale, possibly with some stronger bands. The report contains recommendations for excavation methods and support, vibration monitoring, inspection and replacement where necessary of existing retaining walls which are to remain, and for further investigation following demolition of the structures. These recommendations can be incorporated into conditions of consent.

Landscaping

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

Deep soil

Numerical compliance is achieved at 50.88%

Tree & vegetation removal & impacts

An arboriculturist report, prepared by Advanced Treescape Consulting, dated 14/01/10, has been submitted as part of the original application. Tree numbers refer to this report.

Significant trees to be removed

Cupressus sempervirens (Italian Cypress) Tree 4/12H/2S – removed to provide site access.

Jacaranda mimosifolia (Jacaranda) Tree 28/11H/8S, 520DBH – described as in good health and condition. Removed due to central location within the site.

The following trees, *Celtis sinensis* (Chinese Hackberry), are considered urban environmental weeds under Council's weed policy. Their removal will have a beneficial environmental impact and is recommended.

Trees 13, 17, 21, 23 and 31

Trees to be retained

Jacaranda mimosifolia (Jacaranda) tree 1/6h/6s/multi - proposed new front fence is 3.9m from tree. Retaining wall for on site detention basin and flow filter filtration system are 5m from tree and permeable gravel path is 3m from the tree. Arborist considers impacts are acceptable, subject an AQF level 5 arborist being on site during excavation. This will be conditioned.

Jacaranda mimosifolia (Jacaranda) tree 3/6h/6s/multi – existing levels to be retained within TPZ of tree.

Cupressus macrocarpa 'Brunniana' (Golden Cypress) Tree 8/15H/3S – proposed driveway 4 metres from tree. Impact considered acceptable with appropriate tree protection.

Cupressus macrocarpa 'Brunniana' (Golden Cypress) Tree 9/15H/3S – proposed driveway 4 metres from tree. Impact considered acceptable with appropriate tree protection.

Cupressus macrocarpa 'Brunniana' (Golden Cypress) Tree 10/15H/3S – proposed driveway 4.5 metres from tree. Impact considered acceptable with appropriate tree protection.

Cupressus macrocarpa 'Brunniana' (Golden Cypress) Tree 12/15H/3S – proposed driveway 4.5 metres from tree. Impact considered acceptable with appropriate tree protection.

Citharexylum spinosum (Fiddlewood) tree 16/15h/3s/410/4s – proposed retaining wall and associated fill to private courtyard of Unit 12 is 2.2m from tree and within the tree's structural root zone. To preserve the health and condition of this tree, the private courtyard wall should be set back a minimum of 3m from the tree. Similarly, to preserve the health of the tree and allow sufficient area for screen planting, the proposed path should be set back a minimum of 3 metres from the site boundary. This will be conditioned.

Eucalyptus paniculata (grey ironbark) tree 19/18h/10s/850/10s (north) – proposed building is 4.5m from tree. Canopy extends approx 7 metres to north of tree. Pruning is required to allow for building clearance and should be detailed in the arborist's report. Levels within the canopy spread of the tree are to be shown on the landscape plan. The lower section of an existing retaining wall is to be removed as the 'ground level is similar on both sides of the wall to be removed'. A separate letter dated 19/04/10 from the above arborist has verified that the removal of the section of wall would be 'beneficial'. The amount of the existing retaining wall proposed to be removed within the canopy spread of the tree differs from the arboricultural report (1.5m) and as shown on the architectural/landscape plans (5.5m) (section 5.0, arboriculturist report, advanced treescape consulting, 14/01/10). A further inspection by the arborist concludes that the tree is compromised by the existing retaining wall according to as4970-2009. This is incorrect without further investigation. As4970-2009 states that if there is encroachment 'inside the srz', the project arborist must demonstrate that the tree would remain viable by root investigation by non-destructive measures and consideration of relevant factors (clause 3.3.3). Unsubstantiated claims are not supported as reasons for the trees removal. Removal is not supported.

Eucalyptus paniculata (grey ironbark) tree 20/24h/12s/1000/4s, trunk wounds at 5-6 metres, no testing carried out to determine structural stability of tree, despite a hazard rating of 10 out of 12 with associated comments by arborist recommending the need for an aerial inspection (arborist letter, advanced treescape consulting, 19/04/10). Note on landscape plan stating that trees 19 and 20 are to be retained subject to testing is insufficient as the issue remains unclear. This issue cannot be conditioned and requires appropriate testing as a matter of urgency. A further inspection and an additional arborist letter dated 21/07/10 concludes that the tree does not need testing and that it is recommended for retention.

The following trees are considered significant in terms of amenity due to their location along site boundaries – tree 11, 32, 33, 34, 35. They are shown to be retained on the landscape plan.

Street trees to be retained

Eucalyptus microcorys (tallowood) tree 6/12h,240/220dbh, sule 2b – front fence within tree protection zone. Arborist supervision recommended during excavation of footings for front fence.

Eucalyptus microcorys (Tallowood) Tree 5/poor condition, significant dieback in central leader. Recommended for removal.

Street trees to be removed

Eucalyptus microcorys (Tallowood) Tree 7/10H,200DBH, SULE 2D – 'good' condition. Proposed to be removed for driveway. Tree 6, in 'fair condition' to be retained.

Landscape Plan

Common Open Space

The proposal provides the major communal open space at the rear of the site. The area provides an area of level lawn in association with remnant trees. Planting that continues the Blue Gum High Forest community through the centre of the site shall be conditioned. Increased planting bed widths to site boundaries of the communal open space will also be conditioned.

Screen Planting

*Northern boundary – Backhousia myrtifolia (Grey Myrtle) 3m, , Notalaea longifolia (Long Leaved Mock Olive) 5m, Syzigium leumanii (Small Leaved Lilly Pilly) 5m, Elaeocarpus reticulatus (Blueberry Ash) 6-8m
Western boundary – Persoonia liniaris (Geebung) 3m, Backhousia myrtifolia (Grey Myrtle) 3m Ceratopetalum gummiiferum (NSW Christmas Bush) 4m*

Southern boundary – Syzigium leumanii (Small Leaved Lilly Pilly) 5m, Leptospermum trinervium (Flaky Barked Tea Tree) 3m

Landscape Plan shall be amended as follows,

To preserve neighbour amenity and provide sufficient area for effective screen planting, the proposed private courtyard to Unit 10 to be set back a minimum of 3 metres from Tree 16 as measured from the centre of the trunk. Path is to be set back a minimum of 3m from the southern site boundary.

Basix

The Basix certificate has nominated 222.5m² of indigenous low water use species to common areas. A Basix Plan has been submitted. There are no areas of indigenous low water use species nominated for individual units.

Other issues and comments

Front Fence

Existing front fence to no. 730 Pacific Highway is a fine rough cut sandstone block fence with shark tooth capping. This fence is typical of many fences in the area and is proposed to be retained as part of the development. This is supported.

Private open space – neighbouring heritage item (724-726 Pacific Highway Gordon)

Heritage Impact Statement does not include any discussion regarding overshadowing of garden and associated plantings on heritage property at no. 724-726 Pacific Highway. The main area of private open space for no. 726 (northern part of subdivided block) is located between the house and the pool and an area to the north of the rear of the dwelling.

Conclusion

Landscape Issues to be addressed.

1. *To preserve the health and condition of Tree 16, the private courtyard masonry and timber slat wall should be set back a minimum of 3m from Tree 16(Refer Fence Type 3, Details Plan, Concept, LPDA1—56/3B, Jan 2010). Similarly, to preserve health of the tree and allow sufficient area for screen planting, the proposed path should be set back a minimum of 3 metres from the site boundary. This is to be conditioned.*

Document inadequacies/ inconsistencies

1. *Clarification of impacts of pruning and demolition of lower part of existing retaining wall to Tree 19 - The proposed amount to be removed differs from the arboricultural report (1.5m) and on the architectural/landscape plans (5.5m) This should be clarified.(Section 5.0, Arboriculturist Report, Advanced Treescape Consulting, 14/01/10). Pruning to be in accordance with AS4373-2007 Pruning of Amenity Trees to provide clearance to the building only. This is to be conditioned.*

2. *Proposed Fence Type 1 shown as 600mm high sandstone wall with metal or timber infill with 1.2m high recon sandstone piers (Details Plan, Concept, LPDA1—56/3B, Jan 2010), is inconsistent with note on architectural plans stating 'proposed stone wall extension to match existing.' Fence Type 1 detail to be amended to be consistent with architectural plans. This is to be conditioned.*

(See Conditions 26, 71, 73, 74, 75, 76, 77)

Urban Design

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

The following are comments are provided based on amended drawings provided by the applicant dated 12th July 2010 in response to concerns raised by SEPP 65 comments, the JRPP and a meeting with Council and the applicant in July. This report is also subsequent to comments provided by email from Peter Smith (STZ) dated 12 July 2010

The following will provide brief summary comments in regards to SEPP 65 and the associated Residential Flat Design Code (RDFC) only where relevant.

Context

The proposed development is located on the western side of the Pacific Highway, between Yarabah and Bushland Ave. The development is proposed in an area that is undergoing transition from single dwelling lots to apartment buildings, which is appropriate given the proximity to the railway station. The railway station is located approx 800m to the north.

Ravenswood School is directly opposite the site. The southern boundary of the site adjoins a heritage item known as 724-726 Pacific Highway and to the immediate south west of the site is a heritage item known as Nebraska at 17 Yarabah Avenue. Also in the vicinity is a heritage item known as Lolanthe at 691 Pacific Highway.

The proposed development is well set back from the southern common boundary with the adjoining heritage item, providing satisfactory curtilage and separation in compliance with DCP 55. This separation is further enhanced through retaining the existing mature trees along this boundary.

Scale

The proposal is the first RFB within the immediate vicinity. As noted above the development does provide a setback on the southern boundary adjacent the heritage item. This does some work to reduce the scale impacts between buildings. It is noted it is difficult to achieve an appropriate scale transition between a two storey dwelling house and a 5 storey residential flat building. Above the second floor the distance between the heritage item and the proposed development is in excess of 15m.

The proposal is provided with some articulation and modulation to assist in reducing the building bulk.

The adjoining properties 732-736 Pacific Highway and 2 and 2a Bushlands Avenue are also zoned R4, which permits development of a similar scale. In the interim, before these sites are developed they will experience visual impacts from this proposal to their rear yards. Fortunately, there are existing mature trees along the boundary.

Built form

As noted above the setbacks from the heritage item are considered satisfactory.

The constraints of the site, including heritage, orientation and lot shape provide for a building form where the mass of the building is generally located to the northern boundary. This results in long and continuous facades. Considerable work has been done in order to ensure that the northern and southern elevations are articulated.

The built form ensures that the majority of apartments have a northern orientation and will receive good solar access.

The northern elevation contains mainly balconies. These balconies provide the most significant amenity impacts on adjoining properties. It is noted that the adjoining site will be developed sometime into the future, however that does not remove the need to provide privacy between adjoining properties. It is considered that solid or masonry balustrades

*(at least to a height of 750mm) should be provided along this façade.
(The vertical fins should still be expressed to ensure articulation)*

The southern elevation has been articulated, however work needs to be done to ensure that the stepping 'makes sense' and the application of materials relates to the three dimensional form of the building (see comments below on aesthetics).

The roof form provides for a low pitch which is different to the adjoining heritage item, however, given the significant difference in scale, a pitched roof form is probably not an appropriate response.

Density

In previous reports (and by the JRPP) the number of units and format of the units (being predominantly studio units) was of concern. The recent amendments have resulted in a reduction in the number of units, and the layout and amenity has improved significantly.

Resource, energy and water

Cross ventilation – satisfactory

Solar access – satisfactory

Amenity

Due to the recent amendments which reduced the numbers of units, the layout and amenity have improved significantly.

Balustrades in the centre of the northern elevation should be solid to provide privacy to existing and future neighbours. (see comments above).

Fire Stair 2 needs to be relocated to ensure there is privacy to Unit 8's Master bedroom. This could be achieved by flipping the stair or run the stair parallel to the path.

Consideration should be given to a reduction in glazing to Unit 17 and similar apartments. A substantial amount of glass fronts the highway. A reduction in glazing will assist in acoustic and environmental performance. (see also comments on aesthetics below)

Safety and security

Satisfactory.

Social dimensions

Satisfactory.

Aesthetics

The considerable site and unit planning improvements have been noted and are commended; however the same rigour has not been applied to the elevations and the materiality.

It is noted that the proposal provides a contemporary design response. DCP 55 has provisions on the materiality of the development so it has some relationship to the existing context – in this instance the context of the heritage item. The combination of the use of face brick, painted render and infill panels of alucobond (metal) cladding is considered an appropriate response.

Previous comments suggested amendments to the application of the external materials. We understand the intent of the architect, however, the rigour needs to be followed through (eg... on materials change from brick to render at the corner of a building which will look odd.) There seems to be a notional 'datum' line around the building where parts of the built form change from face brick to render or face brick to alucobond. This just adds to the complexity of the form and looks messy.

The application of different materials on the building elevations should be used as a way to articulate the built form, and the different elements. For example:

- Alucobond used as infill panels or spandrel panels at the corner elements of the building*
- Weatherboard or narrow banded render used on the top floor (it is currently noted as both) – a darker colour may be suitable for this level.*
- Face brick used for the southern elevation levels*
- Banded render is used as infill panels and upper level recessed elements*

The highlight windows to the living room of Unit 17 (and units below) should be removed.

The balustrades on side boundaries should be masonry up to 700mm in height. This is to overcome privacy issues between properties.

Elevations have been marked up to show some suggestions for amendments.

The A/C plant has been shown behind parapet walls which is considered suitable.

Conclusion and recommendations

- 1. The reduction in units is a significant improvement to the proposal in terms of layout and amenity.*
- 2. Fire Stair 2 should be amended so that persons exiting do not pass by the bedroom window of Unit 8*
- 3. The balustrades on side boundaries should be masonry up to 700mm in height. This is to overcome privacy issues between properties.*
- 4. Further work is to be done to ensure that the application of the different materials have some relationship with the form of the building.*
- 5. Council's Heritage Advisor should consider the appropriateness of the aesthetics of the proposal.*

Comment:

It is noted that the primary urban design issues previously identified related to unit layout and occupant amenity and that these issues have now been satisfactorily addressed, as discussed in this report.

With the exception of the issue of privacy to Unit 8 (which has been addressed by **Condition 1A**), the only remaining urban design issues relate to the external appearance of the building and appropriate selection of building materials and finishes in order to improve the appearance of the development. A number of minor modifications to the external materials have been suggested, including consistent use of materials on adjoining elevations in a number of locations on the building and the use of masonry balustrades to replace translucent glazed balustrades. Suitable conditions of consent have been recommended to address these issues (**Condition 1A**).

It has also been suggested that consideration be given to a reduction in the extent of glazing to units facing Pacific Highway in order to improve acoustic and environmental performance. In this regard, due to the location of the development adjacent to Pacific Highway, the acoustic performance provisions of SEPP (Infrastructure) 2007 are applicable and have been included as conditions of consent, which will ensure adequate acoustic amenity for the unit occupants (**Condition 39**). Further, a valid BASIX certificate has been provided which certifies that the development has adequate environmental performance.

Additionally, Council's Heritage Advisor has assessed the amended proposal and considers the aesthetics satisfactory, subject to minor modifications which have been recommended as conditions of consent.

SUMMARY

The latest amended plans and information have been considered against the reasons for refusal recommended in the report to the JRPP meeting of 24 June 2010. The internal configuration has been entirely redesigned with a consequent reduction in the number of units from 45 to 37. The plans and information submitted largely addresses the issues that formed the recommended reasons for refusal and any remaining issues can be resolved through conditions of consent. As such, it is recommended that the JRPP grant consent to Development Application DA0022/10, subject to conditions.

RECOMMENDATION

PURSUANT TO SECTION 80(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

That pursuant to Section 80(1) of the Environmental Planning and Assessment Act 1979, the Sydney West Joint Regional Planning Panel as the consent authority, being satisfied that the objection under SEPP No. 1 to the maximum number of storeys development standard in Clause 25I(8) of the Ku-ring-gai Planning Scheme Ordinance is well founded, grant development consent to

DA0022/10 for demolition of two existing dwellings and ancillary buildings and construction of a residential flat building comprising 37 units with basement car parking and landscaping on land at Nos.728-730 Pacific Highway, Gordon, for a period of five (5) 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
SK01B – SK14B inclusive, SK 29A, SK33B	MA Architects	12/07/2010
LPDA 10-56 / 1C, 2B, 3C	Conzept Landscape Architects	July 2010
DA01/6, DA02/4, DA03/1 and DA04/2	Northrop	July 2010

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

1A. Amendments to approved plans

The following amendments shall be carried out to the approved plans:

- The balconies on the north-western elevation are to have solid or masonry balustrades to a minimum height of 750mm with the vertical fin elements retained.
- Fire Stair 2 is to be relocated to ensure that there is privacy to the master bedroom of Unit 8. Possible ways of achieving this includes flipping the stair, or running the stair parallel to the adjoining path.
- The materials and finishes on adjoining elevations (eg, where the north-east and north-west elevations adjoin at the penthouse level) are to be constructed of the same materials with the same finish.
- The street elevation (north-east elevation) is to be amended to be constructed of either face brick or a rendered finish but not a combination of the two finishes and the central and northern balcony balustrades are all to be constructed of alucobond cladding.
- The south-western elevation is to be amended such that the central and southern balcony balustrades are all to be constructed of alucobond cladding.
- Window proportions - the pattern of window mullions shall be modified by inserting additional vertical mullions onto the broad fixed windows. (Note: A written acknowledgement from Council's Heritage Advisor must be obtained attesting to this condition being appropriately

satisfied and submitted to the Principal Certifying Authority prior to the commencement of any works.)

- Window and door reveals - additional detail shall be submitted showing the depth of window and door reveals on all elevations. The reveals are to have a minimum depth of 75mm. (Note: A written acknowledgement from Council's Heritage Advisor must be obtained attesting to this condition being appropriately satisfied and submitted to the Principal Certifying Authority prior to the commencement of any works.)
- Colour scheme - a revised colour scheme is to be submitted for the painted and pre-finished external surfaces. The colours are to be recessive so that the upper floors are not visually dominant when seen from the nearby heritage items and HCA. (Note: A written acknowledgement from Council's Heritage Advisor 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 that the development is satisfactory with regard to the provisions of SEPP 65 and heritage considerations.

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. Roads and Traffic Authority

- The design and construction of the proposed new driveway on the Pacific Highway shall be in accordance with AS2890 - 2004 and the RTA's requirements (6m wide at the kerblines).

Details of these requirements for the proposed driveway and kerb & gutter can be obtained from the RTA's Project Services Manager, Traffic Projects Section, Parramatta (ph: 02 8849 2144).

A certified copy of the design plans shall be submitted to the RTA for consideration and approval prior to the release of a construction certificate by Council and commencement of road works.

The RTA fees for administration, plan checking, civil works inspections and project management shall be paid by the developer prior to the commencement of the works.

- The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight

distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1 - 2004 and AS 2890.2- 2002 for heavy vehicles.

- The proposed front fence and hedge would obstruct sight lines at the driveway, contrary to AS 2890.1 - 2004 Figure 3.3. The fence and hedge must be modified to comply with this standard.

Reason: Concurrence authority conditions.

Conditions to be satisfied prior to demolition, excavation or construction:

4. Roads and Traffic Authority

The part time bus stop along the property frontage is to be converted to a full time bus stop. This restriction should be implemented prior to the commencement of any demolition works relating to the proposed development. Prior to the installation of the amended bus stop restrictions, the applicant is to contact the RTA's Traffic Management Services on phone: (02) 8849 2591 for a works instruction.

Reason: Concurrence authority condition.

5. Structural adequacy (retaining walls)

Prior to commencement of any excavation works, the Principal Certifying Authority shall be satisfied that the existing retaining walls to be retained and/or altered will be structurally sound and able to withstand the excavation and construction process.

C1. Note: Evidence from a qualified practising structural engineer, demonstrating compliance with the above and detailing, where relevant, means of support for those parts of the walls shall be provided to the Principal Certifying Authority.

Reason: To ensure that the development can be undertaken in accordance with accepted construction practices as indicated on the endorsed development plans, without the need for modification of the consent.

6. 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.

7. 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.

8. 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.

9. 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

- Northbound road pavement width, including kerb and gutter, of Pacific Highway over the site frontage.

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.

10. 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.

11. 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

- 724-726 Pacific Highway
- 730 Pacific Highway (including swimming pool)
- Retaining wall(s) on the boundary with 19 and 21 Yarabah Avenue and 2a Bushlands Avenue

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.

12. Geotechnical report

Prior to the commencement of any bulk excavation works on site, the applicant shall submit to the Principal Certifying Authority, the results of the detailed geotechnical investigation comprising a minimum of six cored boreholes to at least 1 metre below the proposed basement level and three piezometer standpipes, as recommended in the report prepared by Jeffery and Katauskas Ref: 23368SPrpt dated 14 September 2009. The report is to address such matters as:

- appropriate excavation methods and techniques
- vibration management and monitoring
- dilapidation survey
- support and retention of excavated faces
- hydrogeological considerations

The recommendations of the report are to be implemented during the course of the works.

Reason: To ensure the safety and protection of property.

13. Construction and traffic management plan

The applicant must submit to Council and the RTA a Construction Traffic Management Plan (CTMP), which is to be approved by Council and the RTA 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. Only Pacific Highway, Ryde Road and Mona Vale Road may be used when approaching or departing from the site.

No construction-related traffic is to use Yarabah Avenue, Cecil Street or St Johns Avenue.

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.

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.

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. Approved tree works

Approval is given for the following works to be undertaken to trees on the site. An arboriculturist report, prepared by Advanced Treescape Consulting, dated 14/01/10, has been submitted as part of the application. Tree numbers refer to this report.

Schedule

Tree location

Trees as shown to be removed on Landscape plan prepared by Conzept Landscape Architects, dwg no. LPDA10-56/1C, dated July 2010 except for the following trees - Tree 11, 32, 33, 34 and 35 (shown as retained on Landscape Plan)

Approved tree works

Removal

Existing *Celtis sinensis* are classified as Urban Environmental Weed under Council's Weed Policy and are to be removed including Trees 21 and 23.

Removal

Eucalyptus paniculata (Grey Ironbark) Tree 19

Minor pruning to allow for building clearance.
Pruning to be in accordance with Australian Standard.

Removal or pruning of any other tree on the site is not approved.

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

16. 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.

17. 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.

18. 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 (eg rumble boards) beneath the canopy of the following tree/s is/are installed:

Schedule

Tree/Location

Citharexylum spinosum (Fiddlewood) Tree 16

Eucalyptus paniculata (Grey Ironbark) Tree 19

Reason: To protect existing trees during the construction phase.

19. 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.

20. 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.

21. 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 ensure the noise and vibration levels will be compliant with the relevant Australian Standards and Ku-ring-gai Council's Code for the Control and Regulation of Noise on Building Sites. 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
- 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
- compliance with Council's Code for the Control and Regulation of Noise on Building Sites

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

22. 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:

23. Consolidation of lots

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.

24. Amendments to approved site management plan

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that the approved site management plan, 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:

<i>Plan no.</i>	<i>Drawn by</i>	<i>Dated</i>
SK29 A	MA Architects	20/04/10

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

- To preserve the streetscape character, the note 'existing wall to be removed shown dotted' is to be deleted, in accordance with approved Architectural and Landscape Plans
- Proposed stockpiles to be relocated outside of canopy spread of Tree 3
- Tree protection fencing to be in accordance with conditions of consent.

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

Note: An amended site management plan shall be submitted to the Certifying Authority.

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

25. Amendments to approved plans

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that the approved plans have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

All plans shall be amended in the following way:

- Structures within the 3.5 metre public road dedication along the

site frontage shall be deleted, with the exception of minor walls and fences.

- Under "BASIX requirements", the statement "The development must have a central water tank – rainwater or stormwater of about 2000 litres", is to be amended to read "...a central tank – rainwater or stormwater of minimum 20 000 litres."
- The proposed front fence and hedge are to be modified to not obstruct sight lines at the driveway.

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that the plans have been amended as required by this condition.

Note: Amended plans shall be submitted to the Certifying Authority.

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

25A. 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:

Plan no.	Drawn by	Dated
09671 DA01/6	Northrop	9.7.10

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

- floor wastes from outdoor terraces are to be connected directly to the detention basin in front of the building to prevent mixing of rainwater and stormwater

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.

26. Amendments to approved landscape plan

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that the approved landscape plan, 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
LPDA10-56/1C, LPDA10-56/2B, LPDA10-56/3C, Details Plan, LPDA10—56/3B	Conzept Architects	Landscape July 2010
	Conzept Architects	Landscape January 2010

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

1. To preserve biodiversity and achieve the landscaping objectives of the zoning including the planting of 'tall trees in rear and front gardens' (C-3, 4.3 DCP55, 25D(2)(b)), the proposed planting of two (2) *Jacaranda mimosifolia* (Jacaranda) in front setback to north and south of proposed entry structure, is to be substituted with two (2) *Eucalyptus saligna* (Sydney Blue Gum).
2. To preserve biodiversity, the proposed planting of five (5) *Syncarpia glomulifera* (Turpentine) along southern and western boundaries is to be substituted with five (5) canopy trees representative of Blue Gum High Forest such as *Angophora floribunda* or *Eucalyptus paniculata* or similar.
3. The existing *Celtis sinensis* are classified as Urban Environmental Weed under Council's Weed Policy and are to be removed including Trees 21 and 23. These trees are to be shown to be removed.
4. Proposed Fence Type 1 detail (Details Plan, Konzept, LPDA1—56/3B, Jan 2010) shall be amended to be consistent with architectural plans showing 'proposed stone wall extension to match existing.'
5. The note on the Landscape plan, stating that Trees 19 and 20 are 'to be retained subject to testing', is to be deleted. Both trees are to be shown as being retained.
6. To preserve the health and condition of the following trees, the existing retaining wall within the specified radius of the tree, shall be shown as being retained.

Schedule

Tree/location

Eucalyptus paniculata (Grey Ironbark) Tree 19

Eucalyptus paniculata (Grey Ironbark) Tree 20

7. To preserve the health and condition of the following tree, the private courtyard wall should be setback minimum 3m from the tree (Refer Fence Type 3, Details Plan, Konzept, LPDA10—56/3B, Jan 2010). Similarly to preserve health of tree and allow sufficient area for screen planting, the proposed path should be setback minimum 3 metres from the site boundary.

Schedule**Tree/location**

Citharexylum spinosum (Fiddlewood) Tree 16

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

Reason: To ensure 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.

31. External finishes, colours and materials (heritage items and conservation areas)

Prior to the issue of a Construction Certificate, the Certifying Authority shall submit a colour scheme and or materials board to Council's Heritage Advisor for approval. A written acknowledgement from Council's Heritage Advisor must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Certifying Authority prior to the issue of the Construction

Certificate.

Note: Details of the colour, finish and substance of all external materials, including schedules and a sample board of materials and colours, are to be submitted.

Reason: To protect heritage items and conservation areas.

32. 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 Otrusive 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.

33. Access for people with disabilities (commercial)

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that access for people with disabilities from the public domain and all car parking areas on site to all tenancies within the building 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.

34. 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, [enter unit nos.], 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.

35. 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) are to be consistent with plans approved under Schedule A 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)
- water quality measures as required under Chapter 8 of DCP 47.

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.

36. Stormwater retention

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

1. A mandatory rainwater retention and re-use system, comprising storage tanks and ancillary plumbing is provided. The minimum total storage volume of the rainwater tank system, and the prescribed re-use of the water on site must satisfy all relevant BASIX commitments and the requirements specified in Chapter 6 of Ku-ring-gai Water Management Development Control Plan 47; and
2. An on-site stormwater detention system must be provided to control the rate of runoff leaving the site. The minimum volume of the required on-site detention system must be determined in accordance with Chapter 6 of the Ku-ring-gai Council Water Management Development Control Plan 47 - having regard to the specified volume concession offered in lieu of installing rainwater retention tanks. The on-site detention system must be designed by a qualified civil/hydraulic engineer and must satisfy the design controls set out in Appendix 5 of DCP 47.

Reason: To protect the environment.

37. 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.

38. 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.

39. 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 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.

40. 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.

41. 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, except as indicated on the approved

development application plans (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.

42. 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.

If a new driveway crossing is proposed, the longitudinal sections must incorporate the driveway crossing levels as issued by Council and/or RTA upon prior application.

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

42A. Driveway crossing levels

The design and construction of the proposed new driveway on the Pacific Highway shall be in accordance with AS2890.1:2004 and the RTA's requirements (6m wide at the kerblines).

Details of these requirements for the proposed driveway and kerb & gutter can be obtained from the RTA's Project Services Manager, Traffic Projects Section, Parramatta (ph: 02 8849 2144).

A certified copy of the design plans shall be submitted to the RTA for consideration and approval prior to the release of the Construction Certificate.

The RTA fees for administration, plan checking, civil works inspections and project management shall be paid by the developer prior to the commencement of the works.

Associated footpath levels for the new driveway crossing between the

property boundary and back of the layback must be obtained from Ku-ring-gai Council. Such levels are only able to be issued by Council under the Roads Act 1993. The footpath crossing is to be constructed according to Council's specifications "Construction of Gutter Crossings and Footpath Crossings".

Specifications are issued with alignment levels after completing the necessary application form at Customer Services and payment of the assessment fee. When completing the request for driveway levels application from Council, the applicant must attach a copy of the relevant development application drawing which indicates the position and proposed level of the proposed driveway at the boundary alignment.

This development consent is for works wholly within the property. Development consent does not imply approval of footpath or driveway levels, materials or location within the road reserve, regardless of whether this information is shown on the development application plans. The grading of such footpaths or driveways outside the property shall comply with Council's standard requirements. The suitability of the grade of such paths or driveways inside the property is the sole responsibility of the applicant and the required alignment levels fixed by Council may impact upon these levels.

The construction of footpaths and driveways outside the property in materials other than those approved by Council is not permitted.

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

43. 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 "Off-street 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.

44. 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.

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

45. Infrastructure restorations fee

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

- a) 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.

46. Section 94 Contribution – Residential Development (New Construction)

A contribution pursuant to section 94 of the Environmental Planning and Assessment Act as specified in Ku-ring-gai Section 94 Contributions Plan 2004-2009 (Amendment 2) for the services detailed in column A and for the amount detailed in Column B is required.

Column A	Column B
Community facilities (district)	\$22,339.29
Park acquisition and embellishment works	\$532,212.87
Park embellishment works	\$43,035.48
Sportsgrounds works	\$76,440.07
Aquatic / leisure centres	\$4,525.23
Traffic and transport	\$6,384.35
Section 94 Plan administration	\$5,723.24
Total contribution is:	\$690,660.54

The contribution shall be paid to Council prior to the commencement of any development (including demolition) or prior to the issue of a Construction Certificate (whichever comes first). The contributions may vary at the time of payment in accordance with the Contributions Plan to reflect changes in the consumer price index and the housing price index. Prior to payment, you are advised to verify the contribution amount required with Council. Copies of Council's Contributions Plans can viewed at the Council Chambers at 818 Pacific Hwy Gordon or on Council's website at www.kmc.nsw.gov.au

Reason: To ensure the provision, extension or augmentation of community facilities, recreation facilities, open space, traffic and transport, and administration that will, or are likely to be, required as a consequence of the development.

47. Section 94 Contribution – Town Centres Development

A contribution pursuant to section 94 of the Environmental Planning and Assessment Act as specified in Ku-ring-gai town Centres Development Contributions Plan for the services detailed in column A and for the amount detailed in Column B is required:

Column A	Column B
Access and transport facilities	\$32,240
Community facilities (local)	\$-
Streetscape and public domain facilities	\$132,486
Other (supporting studies)	\$330
Total contribution is:	\$165,056

The contribution shall be paid to Council prior to the commencement of any development (including demolition) or prior to the issue of a Construction Certificate (whichever comes first). The contributions may vary at the time of payment in accordance with the Contributions Plan to reflect changes in the consumer price index and the housing price index. Prior to payment, you are advised to verify the contribution amount required with Council. Copies of Council's Contribution Plans can be viewed at Council Chambers, 818 Pacific Hwy Gordon or on Council's website at www.kmc.nsw.gov.au.

Reason: To ensure the provision, extension or augmentation of community facilities, access and transport, streetscape and the public domain, and administration that will, or are likely to be, required as a consequence of the development.

Conditions to be satisfied during the demolition, excavation and construction phases:

48. 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.

49. Demolition, excavation and construction work hours

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.

50. 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.

51. 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.

52. 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.

53. 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.

54. 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.

55. 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.

56. 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 pre-construction 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.

57. 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 and the report submitted prior to commencement of bulk excavation. 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.

58. 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 the report submitted prior to commencement of bulk excavation. 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.

59. 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.

60. 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.

61. 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.

62. 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 2.5m²
- are removed within 14 days of the completion of all construction works

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

63. 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.

64. 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.

65. 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.

66. 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.

67. 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 de-stressed 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.

68. Temporary disposal of stormwater runoff

During construction, stormwater runoff must be disposed of in a controlled manner that is compatible with the erosion and sediment controls on the site. Immediately upon completion of any impervious areas on the site (including roofs, driveways, paving) and where the final drainage system is incomplete, the necessary temporary drainage systems must be installed to manage and control runoff as far as the approved point of stormwater discharge. Such measures shall be to the satisfaction of the Principal Certifying Authority.

Reason: To preserve and enhance the natural environment.

69. 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.

69A. 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.

70. 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 www.sydneywater.com.au 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.

71. Arborist’s report

The trees 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 an AQF 5 arborist to the Principal Certifying Authority are required at the following times or phases of work:

Schedule

Tree/location

Time of inspection

<i>Jacaranda mimosifolia</i> (<i>Jacaranda</i>) Tree 1	Site Establishment, Demolition, Excavation for basement and stormwater detention basin, pipes and pits
<i>Jacaranda mimosifolia</i> (<i>Jacaranda</i>) Tree 6	Same as for Tree 1
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 8	Site establishment, demolition, excavation for basement and driveway
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 9	Same as for Tree 8
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 10	Same as for Tree 8
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 12	Same as for Tree 8
<i>Citharexylum spinosum</i> (<i>Fiddlewood</i>) Tree 16	Site establishment, demolition, excavation for basement and private courtyard fencing
<i>Eucalyptus paniculata</i> (<i>Grey Ironbark</i>) Tree 19	Site establishment, demolition, and reconstruction of retaining walls
<i>Eucalyptus paniculata</i> (<i>Grey Ironbark</i>)	Site establishment, demolition, of

Reason: To ensure protection of existing trees.

72. 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

Eucalyptus microcorys (Tallowood) Tree 7

Reason: To ensure protection of existing trees.

73. Canopy/root pruning

Canopy and/or root pruning of the following tree/s which is necessary to accommodate the approved building works shall be undertaken by an experienced Arborist/Horticulturist, with a minimum qualification of the 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 the environment.

74. 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.

75. 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.

Schedule

Tree/location

Radius from trunk

Jacaranda mimosifolia (Jacaranda) Tree 1

5m

Jacaranda mimosifolia (Jacaranda) Tree 3

5m

Cupressus macrocarpa 'Brunniana' (Golden Cypress) Tree

3m

8	
<i>Cupressus macrocarpa</i> 'Brunniana' (Golden Cypress) Tree	3m
9	
<i>Cupressus macrocarpa</i> 'Brunniana' (Golden Cypress) Tree	3m
10	
<i>Cupressus macrocarpa</i> 'Brunniana' (Golden Cypress) Tree	3m
11	
<i>Cupressus macrocarpa</i> 'Brunniana' (Golden Cypress) Tree	3m
12	
<i>Citharexylum spinosum</i> (Fiddlewood) Tree 16	5m
<i>Eucalyptus paniculata</i> (Grey Ironbark) Tree 19	10m
<i>Eucalyptus paniculata</i> (Grey Ironbark) Tree 20	4m

Reason: To protect existing trees.

76. Approved tree works

Approval is given for the following works to be undertaken to trees on the site. An arboriculturist report, prepared by Advanced Treescape Consulting, dated 14/01/10, has been submitted as part of the application. Tree numbers refer to this report.

Schedule

Tree location

Trees as shown to be removed on Landscape plan prepared by Conzept Landscape Architects, dwg no. LPDA10-56/2B, dated September 2009 except for the following trees - Tree 11, 32, 33, 34 and 35 (shown as retained on Landscape Plan)

Existing *Celtis sinensis* are classified as Urban Environmental Weed under Council's Weed Policy and are to be removed including Trees 21, 23, and 31.

Approved tree works

Removal

Removal

Eucalyptus paniculata (Grey Ironbark) Tree 19

Minor pruning to allow for building clearance.
Pruning to be in accordance with Australian Standard.

Removal or pruning of any other tree on the site is not approved.

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

77. 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
<i>Jacaranda mimosifolia</i> (<i>Jacaranda</i>) Tree 1	5m
<i>Jacaranda mimosifolia</i> (<i>Jacaranda</i>) Tree 3	5m
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 8	3m
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 9	3m
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 10	3m
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 11	3m
<i>Cupressus macrocarpa</i> 'Brunniana' (<i>Golden Cypress</i>) Tree 12	3m
<i>Citharexylum spinosum</i> (<i>Fiddlewood</i>) Tree 16	5m
<i>Eucalyptus paniculata</i> (<i>Grey Ironbark</i>) Tree 19	10m
<i>Eucalyptus paniculata</i> (<i>Grey Ironbark</i>) Tree 20	4m

Reason: To protect existing trees.

78. 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.

79. 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 25 litres container size specimen(s):

Schedule

Tree/ species	Quantity	Location
<i>Eucalyptus microcorys</i> (Tallowood)	2	Nature strip

Reason: To provide appropriate landscaping within the streetscape.

80. Tree removal on nature strip

Following removal of Tree 5 and 6 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.

81. 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.

82. 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.

83. Removal of noxious plants & weeds

All noxious and/or environmental weed species shall be removed from the property prior to completion of building works.

Reason: To protect the environment.

84. 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.

85. 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:

86. Roads and Traffic Authority

- The redundant driveways along the Pacific Highway frontage of the development site shall be removed and reinstated with kerb and gutter to match existing.
- The developer shall be responsible for all public utility adjustment/relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.
- All work / regulatory signposting associated with the development will be at no cost to the RTA.

Reason: Concurrence authority conditions.

87. Easement for waste collection

Prior to issue of the Occupation Certificate, the applicant must create an easement for waste collection under Section 88B or 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.

88. 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. 29028IM_02 have been complied with.

Reason: Statutory requirement.

89. 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.

90. 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.

91. 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.

91. 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.

92. 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.

93. 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
- water quality measures have been provided as required under Chapter 8 of DCP 47.

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.

94. 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.

95. 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.

96. 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.

97. Easement drainage line construction

Prior to issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that any required interallotment drainage system has been installed and surveyed under the supervision of a designing engineer or equivalent professional.

Note: At the completion of the interallotment works, the following must be submitted to the Principal Certifying Authority for approval:

- details from the supervising engineer and arborist that the as-constructed works comply with the approved interallotment design documentation
- a full works as executed drawing of the as built interallotment drainage line (dimensions, grades, materials, invert levels) prepared by a registered surveyor, and details from the surveyor that all drainage structures are wholly contained within existing drainage easement(s)

Reason: To protect the environment.

98. 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.

99. 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”,
 - **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.

100. Reinstatement of redundant crossings and completion of infrastructure works

Prior to issue of the Occupation Certificate, the Principal Certifying Authority must be satisfied 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

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.

101. Fire safety certificate

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that a Fire Safety Certificate for all the essential fire or other safety measures forming part of this consent has been completed

and provided to Council.

Note: A copy of the Fire Safety Certificate must be submitted to Council.

Reason: To ensure suitable fire safety measures are in place.

Conditions to be satisfied at all times:

102. 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.

103. Roads and Traffic Authority

- The largest service or delivery vehicle that can enter and exit the site is a 6m long service vehicle.
- All vehicles should enter and exit the site in a forward direction.
- All vehicles should be wholly contained on site before being required to stop.

Reason: Concurrence authority conditions.

George Youhanna
Executive Assessment Officer

S Garland
Team Leader
Development Assessment - South

C Swanepoel
Manager
Development Assessment Services

M Miodic
Director
Development & Regulation

Attachments: **Location sketch**
 Zoning extract
 Architectural plans
 Supplementary report