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| <b>JRPP</b>                                   | 2010SYW036   |
| <b>REPORT TITLE:</b>                          | 165 – 167 Rosedale Road, St Ives   |
| <b>LOT &amp; DP</b>                           | Lot 1 in DP 214782 (165 Rosedale Rd)<br>Lot Y in DP383003 (167 Rosedale Rd)  |
| <b>PROPOSAL (AS AMENDED):</b>                 | Demolition of existing dwellings, erection of 2 x 5 storey residential flat buildings containing 51 units, basement carparking and associated landscaping works.   |
| <b>DEVELOPMENT APPLICATION N<sup>o</sup>:</b> | DA0408/10  |
| <b>WARD:</b>                                  | ST IVES  |
| <b>APPLICANT:</b>                             | Greenbox Architecture  |
| <b>OWNER:</b>                                 | Our Field Pty Ltd and Celina Chiu-Ju Chan  |
| <b>DATE LODGED:</b>                           | 17 June 2010   |
| <b>ESTIMATED COST OF DEVELOPMENT:</b>         | \$11,500,000<br>Application requires determination by JRPP as the development has a capital investment value (CIV) over \$10 million   |
| <b>ISSUES:</b>                                | <p><b>Original application</b><br/>Building separation, entrance arrangements to buildings, design of the southern building (building length and south-east corner) and impacts to adjoining properties, solar access, height, deep soil landscaping, top storey design, internal amenity, visitor parking, air conditioning plant, BCA, inadequate and unsatisfactory information.</p> <p><b>Amended application</b><br/>Single driveway and associated traffic, access and safety issues, balcony sizes, adaptable housing, number of storeys, building length, overshadowing to adjoining property.</p> |
| <b>PRE-DA MEETING:</b>                        | Yes  |
| <b>SUBMISSIONS:</b>                           | Yes  |
| <b>LAND &amp; ENVIRONMENT COURT:</b>          | N/A  |
| <b>RECOMMENDATION:</b>                        | Refusal  |

## LEGISLATIVE REQUIREMENTS:

|                               |   |
|-------------------------------|---|
| <b>Zoning</b>                 | R4 – High Density Residential under Town Centres LEP  |
| <b>Permissible under</b>      | Ku-ring-gai LEP (Town Centres) 2010   |
| <b>Relevant legislation</b>   | SEPP 1 – Development standards<br>SEPP 6 – No. of storeys in a building<br>SEPP 55 – Remediation of land<br>SEPP 65 – Design quality of residential flat development<br>SEPP (Sydney Harbour Catchment) 2005<br>SEPP (BASIX)<br>Ku-ring-gai LEP (Town Centres) 2010<br>Ku-ring-gai DCP (Town Centres) 2010<br>Ku-ring-gai Contributions Plan 2010 |
| <b>Integrated development</b> | No  |

## HISTORY

### Rezoning history:

The site was previously zoned 'Residential 2(c)' under the KPSO.

On 28 May 2004, Local Environmental Plan 194 was gazetted, rezoning the site to Residential 2(d3) which permits five storey residential flat development.

On 25 May 2010, Ku-ring-gai Town Centres LEP was gazetted, rezoning the site to R4 – High Density Residential which also permits five storey residential flat development.

### Development application history:

|               |  |
|---------------|--|
| 31 March 2010 | <b>PRE0032/10</b><br>A Pre-DA consultation took place for a proposal involving demolition of existing dwellings and construction of a five storey residential flat development (2 buildings) comprising 55 units and basement parking for 69 vehicles. A two-way driveway was proposed as part of the design.<br><br>Issues raised included building separation and building length, impacts to adjoining development south, overshadowing impacts within and to adjoining development, deep soil landscaping, access to communal open space and tree impacts. |
|---------------|--|

|                   |  |
|-------------------|--|
| 17 June 2010      | <b>DA0408/10</b> was lodged.   |
| 1 July 2010       | The application was notified.  |
| 8 September 2010  | Council requested the applicant to submit a section through the junction between the development and the adjoining down slope R2 zoned dwelling house at 28A Shinfield Avenue.   |
| 9 September 2010  | A briefing was held with the Sydney West JRPP.   |
| 10 September 2010 | The applicant submits required section.  |
| 15 September 2010 | Council sends an assessment letter to the applicant. Issues raised include entrance arrangements, safety and security, building separation, visual bulk and overshadowing impacts to 26A Shinfield Avenue, height non-compliance, deep soil landscaping, tree impacts, design of private courtyards and access arrangements to communal open space, unsatisfactory landscape plan, absence of a environmental site management plan, excessive building length associated with Building B (south elevation), internal amenity (bedroom sizes), shortfall of visitor parking, lack of information regarding plant and air conditioning, failure of the heritage impact statement to address relevant controls and BCA and fire egress. |
| 28 September 2010 | The applicant submits a written response and conceptual amendments.  |
| 14 October 2010   | A meeting took place between Council staff and the applicant. Key issues discussed included entrance arrangements, building separation, solar access, re-design of the southern building including the south-eastern corner in relation to impacts to 26A Shinfield Avenue and building length (south elevation), front setback, tree retention and landscape issues.  |
| 25 October 2010   | The applicant submits further conceptual amendments in response to the issues raised at the 14 October meeting. Changes include revised front setback and re-distribution of floor space associated with the northern building, increased building separation between the northern and southern building (8.3m) and amendments to the south-east corner and building length of the southern building.  |
| 3 November 2010   | The applicant submits further conceptual amendments including an increased building separation of 12m  |

|                                       |   |
|---------------------------------------|---|
|                                       | between the two buildings.  |
| 8-9 & 30 Dec 2010 &<br>13-14 Jan 2011 | Amended plans and documentation submitted.  |
| 17 January 2011                       | The amended plans were notified.  |
| 10 February 2011                      | Council emails the applicant advising that the amended proposal remains unsatisfactory in relation to the 70% solar access requirements under the RFDC.   |
| 11 February 2011                      | The applicant submits revised solar access information.   |
| 15 February 2011                      | Council's Urban Design Consultant requests further plan view detail to assess the revised solar access information.   |
| 18 and 21 February 2011               | The applicant submits additional solar access information.  |
| 22-23 February 2011                   | Council advises that the proposal still remains unsatisfactory in relation to solar access.   |
| 2 March 2011                          | The applicant submits further conceptual amendments in response to solar access issues.   |
| 8 & 14 March 2011                     | Council advises the applicant that the solar access issues are now resolved, however outstanding issues include deep soil non-compliance, private courtyard design, excessive gradients to the south-eastern corner of the site, absence of an environmental site management plan, insufficient roof RLs to assess the height of the buildings, south facing terrace not supported due to privacy impacts, non-compliance with balcony areas, top storey non-compliance, and visibility of air conditioning plant on the roof of the buildings. |
| 22 March 2011                         | <p>Council advises the applicant that the proposed single width vehicular access point to the basement is not satisfactory for a development of this size and scale (51 units and 72 spaces), and requires a two way driveway.</p> <p>Council officers advanced an alternative design solution and offered to schedule a further meeting with the applicant to assist with re-design.</p>   |
| 25 March 2011                         | The applicant and applicant's traffic consultant submit   |

written correspondence that the single width driveway complies with Australian Standards and suggest a traffic signal control to facilitate vehicular movement. No amended proposal was submitted.

Council advises the applicant that the single width driveway is not supported, is contrary to the recommendations contained in the RTA Guidelines and that traffic signal control for an internal access road for this type of development is strongly discouraged.

Council invites the applicant to re-consider their position and to amend the driveway design, noting Council's suggested design solution.

25 March 2011      The applicant emails amended plans including changes to landscaping, solar access, balconies, top storey and air conditioning. However, no change to the driveway is proposed.

30 March 2011      The applicant confirms via email that they do not wish to change the single width driveway.

## **THE SITE AND SURROUNDING AREA**

### **The site:**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Visual character study category:    | 1945-68                       |
| Easements/rights of way:            | No                            |
| Heritage Item:                      | No                            |
| Heritage conservation area:         | No                            |
| In the vicinity of a heritage item: | Yes (9 Porters Lane, St Ives) |
| Bush fire prone land:               | No                            |
| Endangered species:                 | No                            |
| Urban bushland:                     | No                            |
| Contaminated land:                  | No                            |

The site is located on the western side of Rosedale Road, between Shinfield Avenue and Porters Lane, St Ives. The site is rectangular in shape, with a frontage of 64.465m to Rosedale Road and a depth of 65.835m. The total site area is 4243sqm. The site falls from the front north-western corner (RL161.26) to the rear south-western corner (RL154.12) with a cross fall of 7.18m at an average gradient of approximately 8%.

Existing development on 165 Rosedale Road includes a dwelling house, pool, tennis

court and carport. 167 Rosedale Road includes a dwelling house and carport.

### **Surrounding development:**

Surrounding residential development consists of single and two storey dwelling houses, dual occupancy development and seniors living development.

No.9 Porters Lane is a battle axe allotment to the rear of the site (east) and contains a single storey dwelling house. This property is listed as an item of local heritage significance in the Town Centres LEP.

The future context is subject to a transition to high density residential development as a result of re-zoning which has occurred as part of LEP194 and the Town Centres LEP (**Attachment X**).

## **THE PROPOSAL**

The application as amended proposes 2 x 5 storey residential flat buildings containing a total of 51 units with a communal basement providing parking for 72 vehicles.

Basement parking: 59 residential spaces (including residential disabled (2 – 3 levels) parking), 13 visitor spaces (including 1 visitor disabled space), residential and visitor bicycle parking, residential and garbage storage, plant area and OSD tank

Vehicular access: Single width driveway to the south-west of the site and extending beneath the southern building. A waiting space is proposed on the front boundary.

Northern building (28 units):

|                    |  |
|--------------------|--|
| Ground level (L1): | 2 x 1 bedroom and 4 x 2 bedroom                |
| Level 2:           | 1 x 1 bedroom, 4 x 2 bedroom and 1 x 3 bedroom |
| Level 3:           | 1 x 1 bedroom, 4 x 2 bedroom and 1 x 3 bedroom |
| Level 4:           | 1 x 1 bedroom, 4 x 2 bedroom and 1 x 3 bedroom |
| Level 5:           | 1 x 1 bedroom and 3 x 2 bedroom                |

Southern building (23 units):

|                    |  |
|--------------------|--|
| Ground Level (L1): | 1 x 1 bedroom, 3 x 2 bedroom and 1 x 3 bedroom |
| Level 2:           | 3 x 2 bedroom, 2 x 3 bedroom                   |
| Level 3:           | 4 x 2 bedroom and 1 x 3 bedroom                |
| Level 4:           | 4 x 2 bedroom and 1 x 3 bedroom                |
| Level 5:           | 3 x 2 bedroom                                  |

External finishes

|        |  |
|--------|--|
| Walls: | Facebrick finish, Austral Bowral 50 – Gertrudis Brown<br>Metal Cladding Alpolic 'Monotone Slate (G30)' or similar<br>Metal Cladding Alpolic 'Sparkling Dark Grey' or similar |
|--------|--|

Metal Cladding Alpolic 'Medium Bronze metallic' or similar  
Rendered Facebrick - white Render

Windows: Aluminium framed  
Balconies: Glass balustrades  
Fence: Timber slat fence

**Pedestrian access:** Two gatehouse structures are proposed along the front boundary with associated pedestrian path access to each building.

**Vehicular access:** A single width driveway is proposed from Rosedale Road with the access point below the southern building which then connects to a communal basement area beneath both buildings.

**Landscaping:** A total of 9 trees are to be removed and 7 trees are to be retained, additional tree planting is proposed as part of the landscape design. The principal area of communal open space is located to the rear, north-eastern, corner of the site (incorporating a large oak tree).

## COMMUNITY CONSULTATION

In accordance with Council's Notification DCP, owners of surrounding properties were given notice of the original proposal and amended plans.

1 July 2011                      Notification of original application. In response, 10 submissions were received.

17 January 2011              Notification of amended plans. In response, 36 submissions were received.

Submissions to the original and amended plans were received from the following:

| <b>Submissions</b>   | <b>Original DA</b> | <b>Amended plans<br/>June 2010</b> |
|--|--------------------|------------------------------------|
| J Burrows, 9 Porters Lane, St Ives   | *                  |                                    |
| CJ Pacey, Secretary Strata Plan 33618, 120-124 Rosedale Road, St Ives                            | *                  | *                                  |
| S & J Hearne, 1/120-124 Rosedale Road, St Ives   | *                  | *                                  |
| T and C Summers, 3/120 Rosedale Road, St Ives  | *                  |                                    |
| SPE Whisker, 5/120 Rosedale Road, St Ives  | *                  |                                    |
| I & S Grimmond, 6/120-124 Rosedale Road, St Ives   | *                  | *                                  |
| RE Brear, 9/120 Rosedale Road, St Ives   | *                  | *                                  |
| Mrs Golnaz Yassini, 70 Kedumba Crescent, North Turrumurra (owner of 169 Rosedale Road)           | *                  |                                    |
| Terence J Smith, Colonial State Properties Pty Ltd, PO Box 29 Horsley Park (purchaser of 161-163 | *                  | *                                  |

|   |   |   |
|---|---|---|
| Rosedale Road and applicant of DA0656/10)   |   |   |
| C & N Blumenthal, 163 Rosedale Road, St Ives  | * | * |
| Jan Hedge, 2/120 Rosedale Road, St Ives   |   | * |
| T & C Fitzgerald, 8/120 Rosedale Road, St Ives  |   | * |
| G & J Deudekom 10/120 Rosedale Road, St Ives  |   | * |
| S Corbett, 16/20 Rosedale Road, St Ives   |   | * |
| Mr & Mrs O'Brien, 22/120 Rosedale Road, St Ives   |   | * |
| F Smyth, 23/120 Rosedale Road, St Ives  |   | * |
| K Ratanawongprasat, 19A Shinfield Avenue, St Ives   |   | * |
| C & S McKindlay, 23 Shinfield Avenue, St Ives   |   | * |
| W & H Georgans, 25 Shinfield Avenue, St Ives  |   | * |
| Mei Lam, 28 Shinfield Avenue, St Ives   |   | * |
| J Clark, 28A Shinfield Avenue, St Ives  |   | * |
| Yan Gong, 30B Shinfield Avenue, St Ives   |   | * |
| Branda Lo, 30A Shinfield Avenue, St Ives  |   | * |
| GM Whipps, 33 Shinfield Avenue, St Ives   |   | * |
| R&D Berman, 34 Shinfield Avenue, St Ives  |   | * |
| H Mounts, 36 Shinfield Avenue, St Ives  |   | * |
| R Glass, 42 Shinfield Avenue, St Ives   |   | * |
| Combined submission from 28, 28A, 30 and 30A Shinfield Avenue, St Ives  |   | * |
| I Moore & M Atayde, 155 Rosedale Road, St Ives  |   | * |
| Garry and Pauline Smith, 153 Rosedale Road, St Ives   |   | * |
| I and J Keenan, 108 Rosedale Road, St Ives  |   | * |
| B & S Sedlmeier, 159 Rosedale Road, St Ives   |   | * |
| N & M Baskin, 161 Rosedale Road, St Ives  |   | * |
| A & G Irving, 145 Rosedale Road, St Ives  |   | * |
| R & R Staib 143 Rosedale Road, St Ives  |   | * |
| A & G Aarons, 169 Rosedale Road, St Ives  |   | * |
| Terence Smith, National Australia Management Pty Ltd, Po Box 29 Horsley Park NSW 2175, on behalf of Mrs Blumenthal 163 Rosedale Road, St Ives |   | * |
| S O'Donnell, 4 Dorset Drive, St Ives  |   | * |
| L & J Osmond, 2 Dorset Drive, St Ives   |   | * |
| I & J Keenan, 1A Pentecost Avenue, St Ives  |   | * |

The submissions raised the following issues:

### ***Overshadowing impacts on 163 Rosedale Road***

On June 21, the majority of overshadowing would occur during the morning to midday period, with overshadowing to the north-eastern corner of 163 Rosedale Road during the afternoon. Overshadowing is exacerbated by virtue of the east-west orientation of the site, combined with the sloping topography downslope of the site.

Under DA0656/10 (161-163 Rosedale Road), the building includes multiple north facing units. The development fails to comply with the 70% requirement. The



development has been designed without satisfactory consideration of the overshadowing impacts from the development under DA0408/10.

Council's Urban Design Consultant has undertaken modelling of alternative design proposals for 161 – 163 Rosedale Road. A development incorporating communal open space to the north-eastern corner (similar to DA0408/10) would achieve a reasonable development outcome on the adjoining site in relation to SEPP65 (including the solar access provisions), having regard to apparent contextual constraints.

### ***Overshadowing impacts on 28 and 28A Shinfield Avenue***

During the morning period (June 21), existing overshadowing occurs to the private open space of 28A Shinfield Avenue by virtue of the 3.7 metres level difference at the boundary between the site and adjoining property. The proposed southern building would overshadow 28A Shinfield in the late morning and the overshadowing would progressively increase throughout the afternoon.

It is acknowledged that the amendments to the southern building (recessing the upper levels and increasing setbacks to the south-eastern corner) will assist in reducing visual bulk and scale impacts. However, the amendments are not sufficient enough to ensure that at least 3hrs of sunlight are maintained between 9am and 3pm on 21 June (based on the solar access diagrams submitted).

### ***Privacy impacts on 163 Rosedale Road, 28 and 28A Shinfield Avenue***

The amended building design involves progressive set backs to the south-eastern corner of the southern building. The units within the southern building have a northern orientation, with primary living areas to the northern side of the building and bedrooms to the south. Tree planting is also proposed to the side and rear boundaries of the site to assist in mitigating amenity impacts.

### ***Bulk and scale, in particular impacts on 163 Rosedale Road, 28 and 28A Shinfield Avenue***

The development complies with the overall height control and presents as a 5 storey development. There is a technical storey non-compliance to the south-eastern corner of the southern building where the ceiling of the basement is approximately 1.2 above ground (instead of 1m). However, the building recess to the upper levels of the south-eastern corner reduces bulk and scale impacts and adequately compensates for this departure. The proposal complies with the maximum 1.3:1 FSR requirement.

### ***Excessive building length (south elevation) and associated impacts on 163 Rosedale Road***

The building length to the southern elevation is 37 metres and then steps back at the south-eastern corner. Satisfactory articulation and visual interest is provided to this façade and the development would not result in unreasonable bulk and scale impacts on 163 Rosedale Road having regard to the amendments made and the

circumstances of the case.

It is noted however, that the design changes to the south-eastern corner of the southern building are not sufficient enough to ensure a reasonable level of solar access is maintained to 28A Shinfield Avenue as discussed above. The impacts are exacerbated by the overall length of the southern building (even with the additional setbacks) extending beyond the western boundary of 28A Shinfield Avenue.

### ***Traffic, access and safety***

The single width driveway is not supported as discussed in this report.

### ***Construction noise, dust and associated amenity impacts***

In the event of an approval, construction management issues would be dealt with via a condition of consent.

### ***Loss of trees***

Council's Landscape Officer raises no objection to the landscape design.

### ***Impacts on heritage item at 9 Porters Lane***

Council's Heritage Advisor raises no objection the proposal in relation to impacts to the heritage item (refer comments elsewhere in this report).

## **INTERNAL REFERRALS**

### **Urban design**

Council's Urban Design Consultant has assessed the proposal against the provisions of SEPP 65 and has provided the following comments:

#### ***Executive summary***

*This report has been prepared to provide architectural and urban design comment on the development application DA408/10 lodged with Ku-ring-gai Council. The following will comment on the amendments made in response to Revision A of this report and the concerns by Council.*

*This report does not provide any assessment against the Ku-ring-gai Local Environmental Plan (Town Centres) 2010 or the DCP. The scope is based around the ten principles provided by State Environmental Planning Policy No 65: Design Quality of Residential Flat Buildings.*

*The proposal generally provides a good response to the site conditions and the future context of the area – being an area zoned for residential flat buildings. The built form and the apartment design generally provide a good level of amenity. The principal areas of concern are:*

- *the entrance to the southern building that is currently located from the side setback and is not visible from the street; and*

- *the building form in the south-eastern corner that encloses the courtyard and reduces solar access to apartments with a northern aspect.*

*The amendments submitted in December 2010 relevant to this report include:*

- *Building separation*
- *Building footprint*
- *The entrance to Building B, (the southern building)*
- *Solar access to the south-eastern corner of Building B, and*
- *Solar access to 26A Shinfield Avenue.*

### **Principle 1: Context**

*This site is a square shaped and has its street frontage to the west. The site is zoned R4 and is surrounded by R4 zoned land. The site is located within walking distance of St Ives Town Centre.*

*A heritage listed single storey dwelling is located to the north east. This dwelling has a frontage to Porters Lane. The proposed development does not provide any significant constraints to the development of the adjoining sites.*

*The proposal provides for a well articulated design solution and a palette of materials that is suitable for the existing and stated desired future context.*

### **Principle 2: Scale**

*The scale of the development is appropriate to the site. The stepping between building A and B is commended and assists to reduce the overall impact of the development.*

*The scale of the building is articulated appropriately by the variety in roof form, the use of materials in a cohesive manner and the recesses and separation of the building forms.*

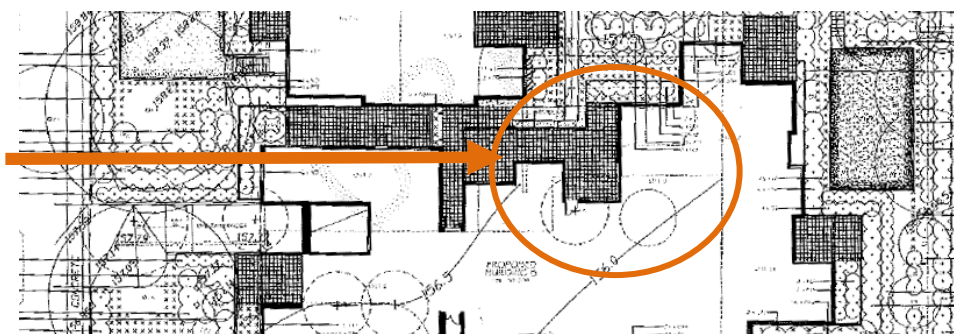
*A more detailed solar study on the adjoining property 28A Shinfield Ave should be provided to ensure that 3 hours of sunlight is obtained for the private open space and living areas of this dwelling. The upper levels of the south east part of the dwelling development should be reduced in height or increased in setback if this cannot be achieved. The sharp change in level caused by the benching of the site at 28A Shinfield Avenue, increases the bulk and scale impacts of the development on the adjoining site. It is recognised that the application has attempted to reduce the impacts by an increased setback on the eastern boundary and an increased setback at the upper level. If an increased setback results from improving the solar access to 28A, this will only benefit the overall scale impacts on the adjoining dwelling.*

*The amendments have provided greater setback from the south-eastern corner and therefore from 28A Shinfield Avenue. This assists in mitigating privacy and overlooking issues and overshadowing to 28A Shinfield. The orientation of balconies to the north also assists in this regard.*

### **Principle 3: Built form**

*The original development presented as two buildings that front Rosedale Road. The northern most building is approximately 32m in length and the southern building is about 17m in length and returns back along the southern boundary. The two buildings were separated by 3.0-3.5m.*

*The narrow gap between the two buildings would be improved if the gap provided a view through to a courtyard and was not obstructed by the south-eastern part of the building.*



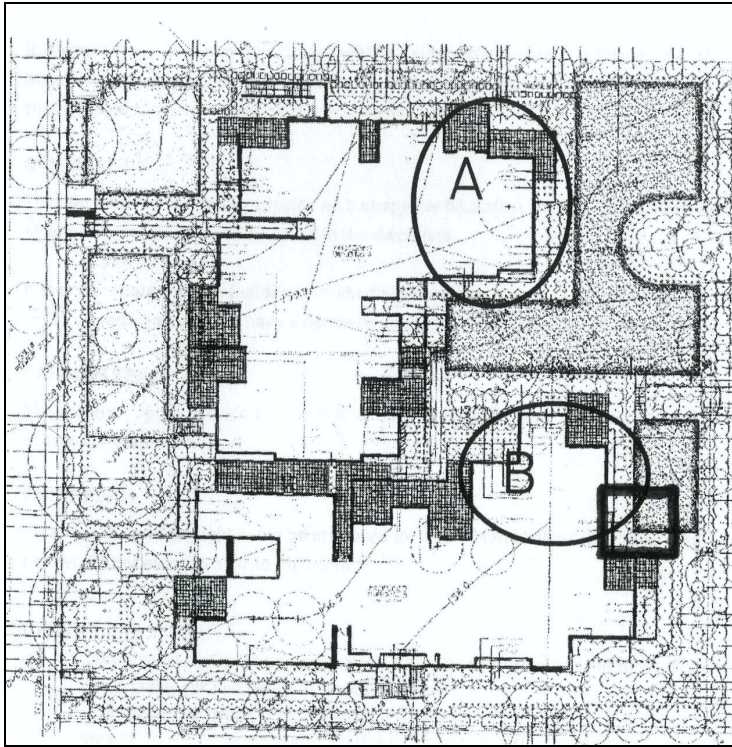
*Figure 1: Sight line blocked*

*Building A and B have now been separated by 12 metres in compliance with Council's DCP. This provides better access to the site, improved solar access and better sight lines from the street into the rear of the site.*

*With regard to the original proposal, it is unfortunate that the two 'legs' shown highlighted in **Figure 2** (below) result in the overshadowing of other apartments and the open space within the development. In particular the area marked B results in the overshadowing of unit 42 (and below) and begins to enclose the courtyard space unnecessarily.*

*It is noted that the setback to the eastern boundary is only 9m. Extending the building further to the east (with only a 6m setback) and removing the northern extension would be a more appropriate solution, however this should not be at the expense of increased overshadowing of 28A Shinfield and should be well set back from the southern boundary. This is shown in **Figure 2**.*

*This building form could be repeated on the adjoining R4 zoned site at the corner of Shinfield Avenue and Rosedale Road.*



*Figure 2: Original proposal - Areas of the building that overshadow other apartments. Floor area could be relocated to the area shown with the blue rectangle.*

- *Address to public domain*

*Both buildings provide a positive contribution to the public domain. The private courtyards provide some activation at street level. The reduction in the driveway width at the building entrance is commended and reduces the visual impact on the driveway on the street [note this is not supported by Council's Traffic Engineer as discussed elsewhere in this report].*

*The entrance to the northern building is highly visible from the street. However:*

- *a minimum clear width of 1600 should be provided clear of any handrails or obstructions. It would be preferred if the width was closer to 2m as the space presents quite a deep and narrow canyon.*
- *there does not appear to be any canopy over the entrance. This is important for weather protection.*

*In the original application, the entrance to the southern building is concealed on the side boundary. This is generally not considered an appropriate solution. It would be preferable if the entrance was visible from the street. A single storey glazed entry foyer could be provided on the southern side of the building so that the front door is visible from the street. Although this would result in a non-compliance with the side setback control, it would be a small structure and would not create any amenity impacts on adjoining properties or reduce the potential for landscaping on the boundary [this scheme was not supported by Council].*

*With regard to the amended application, the separation between the buildings of 12 metres provides a main address for the development and the entry from the southern boundary to the southern building is a secondary entrance.*

- **Orientation**

*The two buildings generally provide an L shape configuration, affording definition of the street and maximising solar access to the dwellings.*

*It is unfortunate that the building overshadows itself and results in apartments that have a northern aspect not receiving 3 hours of solar access.*

*This situation has been improved by reducing the building bulk at this point, however Unit 11 on the ground floor and similar units above will be overshadowed and receive sunlight only from the east.*

- **Common space**

*The common space provided at the rear of the property has good solar access and good access for the residents.*

- **Built form**

*Solar access and daylight could be improved to Unit 42 (and below) if Unit 43 (and below) did not extend so far to the north.*

**Principle 4: Density**

*The density of the development is almost at the maximum permissible on the site.*

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

*It is noted that the development complies with the landscape requirements. Landscaping is generally provided around the perimeter of the site. Solar access has been improved to the southern building.*

**Principle 6: Landscape**

*It is noted that the development complies with the landscape requirements. Landscaping is generally provided around the perimeter of the site. The planting layout is generally appropriate to the site and the internal layout*

**Principle 7: Amenity**

- **Separation and visual impact**

*The separation of the proposed buildings from dwellings on the adjoining site is considered acceptable. The separation of the proposed development on the site is generally satisfactory, however, the following areas could be improved:*

- *The privacy screen to Bed 1 in Unit 39 (and in a similar location below) is not considered necessary.*
- *Amendments to the area marked B in Figure 2 may result in the privacy screen to unit 39 (and below) not being necessary.*

- **Daylight and solar access**

*Only 57% of apartments receive 3hrs or more sunlight to living areas and private open spaces. Solar access is claimed to Units 8, 18, 19, 29, 30, 40 and 41, however, this is not achieved as illustrated by the shadow diagrams supplied by the applicant.*

*It is difficult to see how the 3 hours of solar access can be gained in the units listed above, although it is recognised that the applicant has now provided a solar access report to support claims of 70% solar access. This needs to be checked by Council's planner to verify these claims.*

*An alternate layout may provide solar access to Units 18, 29 and 40.*

*The privacy screen to Unit 39 (and similar on other levels) will reduce the opportunity for solar access in the winter. A vertical blade projecting from the building may be more appropriate.*

- *Natural ventilation*

*The development consists of a large number of units that have dual aspect as a result of a corner configuration. This will generally provide good ventilation for the apartments.*

- *Carparking*

*The basement car parking is satisfactory.*

#### **Principle 8: Safety and security**

*With the adoption of the recommendation to the entrance to the southern building there will be good surveillance for a pedestrian entering the proposed development, down the entry pathway along the western edge of the proposal.*

*The amendments allow for good surveillance into the development and out to the street.*

#### **Principle 9: Social dimensions**

*The development provides for a good mix of dwelling types and is an appropriate housing type for the area and for the need to increase housing choice and density within the area. The site is in close proximity to existing and proposed infrastructure and local services. It is noted that adaptable and visitable apartments are provided as part of the development.*

#### **Principle 10: Aesthetics**

*The aesthetics of the building are appropriate for the context.*

*The composition of building elements, textures and materials is appropriate and well mannered. The use of sandstone for the garden walls is appropriate for the context. Some of the lines indicated on the perspective indicate some further articulation of the rendered elements. This is encouraged and will break up the expanse of the rendered areas.*

In relation to internal solar access, the applicant submitted additional information as well as minor changes to unit design to ensure the development complies with the 70% solar

access requirements. Council's Urban Design Consultant has advised that this issue has now been satisfactorily resolved.

## **Heritage**

Council's Heritage Advisor commented on the proposal as follows:

### ***Amended scheme***

*The key amendment to the scheme is a redesign of the layout of both buildings. The redesign is a response to several issues raised by Council in its assessment of the application. The key changes are a reduction in width of the northern building facing Rosedale Road with the space between the two blocks being increased, a revised landscape plan and some amendments to the elevations. The room layout of the majority of apartments is similar and the external materials and façade elements are similar.*

### ***Heritage issues***

*The key heritage issue is the impact of the development on the adjacent heritage item at 9 Porters Lane. The eastern façade of the northern building does not step down in accordance with the heritage provisions in DCP Town Centres and the length of the southern elevation exceeds 36m along the southern boundary of the site.*

*The Applicant has not provided any further heritage advice and relies upon the original heritage report. The heritage report was based on assessment against DCP 55, not DCP Town Centres. DCP 55 does not require a building to be stepped down in scale where it adjoins a heritage item it only requires a minimum building separation to be achieved.*

### ***Discussion***

*The intent in the DCP to step a building down where it adjoins a heritage item is based on an objective to;*

- respect the significance of the item; and*
- ensure it does not visually dominate the item*

*The control is designed to limit the visual impact of a taller building on a smaller scale heritage item by setting it back and designing it so that the scale is reduced above an 8m height. The 8m height relates to the maximum ceiling height a building in a low density zoning can achieve.*

*For this site, the northern building is set back from the boundary with the heritage item about 17m and achieves a building separation of about 27m. This is well in excess of the minimum building separation of 12m and well inside any setback required as a result of 9.3-4 of the DCP. The larger setback appears to be a response to the existing site and a desire to retain an existing mature tree which provides screening between the site and the heritage item.*

*Considering the site constraints, the large setback is considered to be an appropriate way of dealing with the scale and visual impacts. Retention of the mature tree and additional tree screening will mitigate the scale and visual impacts of the development on the adjoining heritage item. New plantings should be selected from trees that will achieve a minimum height of 4m to assist in mitigating the scale of new development.*



*The non-compliance with the building length along the southern boundary has no direct impacts on the nearby heritage items.*

*The former Head Masters Cottage on the corner of Porters Lane and Rosedale Road is separated from the site by a considerable distance and is not directly within its curtilage. The proposed development is considered to have minimal impacts on it.*

### **Conclusions and recommendations**

*Demolition of the existing buildings is considered acceptable, provided archival photographic recording is undertaken.*

*The design of the proposed development is considered to be generally acceptable when considering the heritage objectives and controls in the Town Centres DCP.*

*The proposed development is located on the western side of the item. The development would result in minimal overshadowing of the item, its garden or pool area but there would be some overlooking of the item from the proposed building, particularly overlooking of the pool area which is close to the common boundary. Given the separation of the development from the item, the existing and future tree screening this impact is minimised and considered acceptable.*

*The heritage non-compliance with the DCP is considered to be acceptable given the large setback and the screening from landscaping.*

*It is recommended that screen planting along the common boundary with the heritage item is amended to achieve a minimum height of 4m.*

### **Landscaping**

Council's Landscape and Tree Assessment Officer commented on the proposal as follows:

#### **Deep soil**

*The applicant states that the numerical compliance is 50.07% and this is concurred with.*

#### **Tree and vegetation removal & impacts**

*An arboriculturist report, prepared by Stuart Pittendrigh, dated May 2010, has been submitted as part of the original application. Tree numbers refer to this report. The following abbreviations have been used to describe the size of existing trees: height (H), canopy spread(S), diameter at breast height (DBH), tree protection zone (TPZ) and structural root zone (SRZ). An amended report assessing the amended plans has not been submitted.*

#### **Significant trees to be removed**

*Tree 4/Liriodendron tulipifera (Tulip Tree) 12H/18S/700DBH, TPZ 8.4, SRZ 3.3. The tree is located in the centre of the site and is in good condition. Proposed to be removed as the tree is within the building footprint.*

*Tree 19/Liquidambar styraciflua (Liquidambar) 18H/14S/600DBH, TPZ 7.8, SRZ 3.1. The tree is located in the centre of the site and is in good condition. Proposed to be removed as the tree is to be removed for construction.*

*All other trees on site are considered to be of low landscape significance and their removal is supported - Trees 12, 18, 19, 19A, 25, 26*

***Trees to be retained***

*Tree 1/Populus deltoides (Cottonwood) 16H/9S/475DBH, TPZ 5.7, SRZ 2.7. The tree is located on the eastern boundary on adjoining site and is in good condition. The tree adjoins the principal communal open space.*

*Tree 2/Pittosporum undulatum (Sweet Pittosporum) 9H/8S/500DBH, TPZ 6.0, SRZ 2.6. The tree is located on the eastern boundary and is in good condition. As the tree is within canopy spread of Tree 3 it provides screening amenity to the adjoining heritage property.*

*Tree 3/Quercus robur (English Oak) 12H/18S/700DBH, TPZ 8.4, SRZ 3.3. The tree is located on the eastern boundary, is in good condition and is visually prominent from the adjoining heritage property. The proposed building will be 10m from the tree which is considered acceptable.*

*Tree 11/Platanus x hybrida (Plane Tree) 17H/15S/895DBH, TPZ 10.6, SRZ 3.3. The tree is located in the south-western corner in the front setback to Rosedale Road, north of the proposed driveway, is visually prominent and in good condition. There are surface roots evident and the existing driveway is within the tree protection zone. The proposed gateway structure, pedestrian path and driveway is within the tree protection zone. The impact is considered acceptable, subject to conditions.*

*Tree 14/Liquidambar styraciflua (Liquidambar) 18H/15S/890DBH, TPZ 10.6, SRZ 3.3. The tree is located in the south-western corner in the front setback to Rosedale Road, south of the proposed driveway. The tree is visually prominent, in good condition and the existing driveway is located within its structural root zone. The proposed gateway structure, pedestrian path and driveway are located within the tree protection zone. The impact is considered acceptable, subject to conditions.*

*Tree 16/Cupressus macrocarpa 'Conybeari Aurea' (Weeping Golden Cypress) 17H/10S/650DBH, TPZ 7.8, SRZ 3.1. The tree is located on the southern boundary, is in good condition and provides effective screening to the adjoining property. The proposed basement excavation is 4m from this tree. The impact is considered acceptable, subject to conditions.*

*Tree 17/Cupressus macrocarpa (Monterey Cypress) 18H/10S/3650/450DBH, TPZ 8.0, SRZ 3.0 The tree is located on the southern boundary, is in good condition and provides effective screening to the adjoining property. The proposed basement excavation is 4m from this tree. The impact is considered acceptable, subject to conditions.*

***Street trees to be retained***

*Tree 21/Melaleuca quinquenervia (Broad Leaved Paperbark)*

*Tree 22/Franklinia axillaris (Gordonia)*

***Street trees to be removed***

*Tree 23/Franklinia axillaris (Gordonia) The proposed truck access will require the removal of this 3m high tree. The removal of the tree is considered acceptable subject to replacement (Environmental Site Management Plan, dwg no. A006/A Greenbox Architecture, 10/03/11)*

Tree 24 identified on Landscape Plan on Heritage property conflicts with Tree 24 located in the north-western corner of the site and is to be altered to avoid confusion.

### **Landscape plan**

#### **Common open space**

The proposal provides the major communal open space at the rear, north-eastern, corner of the site. The area consists of gently sloping lawn in association with existing mature trees including a significant *Quercus robur* (English Oak) Tree 3. The communal open space backs onto the heritage property at 9 Porters Lane. A secondary communal open space is provided between Building A and B providing access to Building B. The central entry area of communal open space provides opportunities for seating amongst raised planters that support deciduous trees.

#### **Screen Planting**

Northern boundary – *Syzigium australe* 'Resilience' 3m, *Pittosporum revolutum* (Yellow Pittosporum) 3m, *Elaeocarpus reticulatus* (Blueberry Ash) 8m, *Lagerstroemia indica* (Crepe Myrtle) 7m

Eastern boundary– *Syzigium australe* 'Resilience' 3m, *Syzigium paniculatum* 'Dwarf' 3m, *Breynia oblongifolia* 2m, *Pittosporum revolutum* (Yellow Pittosporum) 3m, *Elaeocarpus reticulatus* (Blueberry Ash) 8m, *Allocasuarina torulosa* (Forest Oak) 13m

Southern boundary – *Breynia oblongifolia* 2m, *Syzigium australe* 'Resilience' 3m, *Elaeocarpus reticulatus* (Blueberry Ash) 8m

### **Basix**

The Basix certificate has nominated 1032.9m<sup>2</sup> of indigenous low water use species to common areas. An Indigenous/Low Water Use Plan has been submitted.

### **Stormwater**

The proposed on-site detention tank and rainwater tank are located within the basement at the southwest corner of the site. To preserve the following trees, the access pits are not to be located within the specified radius.

| <b>Schedule</b>  |                          |
|--|--------------------------|
| <b>Tree/location</b>   | <b>Radius from trunk</b> |
| Tree 16/ <i>Cupressus macrocarpa</i> 'Conybeari Aurea' (Weeping Golden Cypress) located on southern boundary | 7.8m                     |
| Tree 17/ <i>Cupressus macrocarpa</i> (Monterey Cypress) located on southern boundary                         | 8m                       |

### **Heritage landscape assessment**

The proposed northern building is approximately 17.5 metres from the eastern boundary adjoining the garden of the listed item at 9 Porters Lane. The Heritage Statement describes the heritage item as having a garden that was 'planned making use of native plantings and is considered to be an integral component of the item'(p12). To preserve views to and from the heritage item additional evergreen shrubs that can attain 4 metres in height have been located along the western boundary to the north and south of Trees 1 and 2. A 5 metres wide garden bed west of the pool has been provided. This will allow in winter sun and provide privacy during the months when the pool is in use.

### **Other issues and comments**

Front Fence

*No front fence is proposed. The existing gateway piers to 165 Rosedale Road are constructed of a fine rough cut sandstone blocks. The piers are typical of many fences in the area and should be retained and/or reconstructed as part of the development.*

### **Conclusion**

*There are no landscaping objections to the proposal, subject to the imposition of appropriate conditions.*

## **Engineering**

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

### **Stormwater disposal**

*The stormwater plans submitted detail a system which complies with Council's Development Control Plan (Town Centres) 2010 Part 5 (KDCP) in relation to on-site detention and retention, water quality and discharge from the site. The design has incorporated a combined detention/retention tank comprising 85m<sup>3</sup> and 150m<sup>3</sup>, respectively, which has been designed well in excess of the Council's site storage requirements and BASIX water commitments. The detention volume has been offset based on Council's DCP for the rainwater retention, which is slightly under the required volume permitted, however, due to the significant retention system provided, it is considered acceptable as an offset.*

*It is proposed to have the site discharge by gravity to Council's drainage system at Rosedale Road via a new 200x100 RHS. The permitted site discharge (PSD) has been restricted to 25l/s to drain into Council's drainage system by increasing the on-site detention volume.*

*A pump-out system with storage capacity of 14.5m<sup>3</sup> has been provided within the basement carpark to drain the driveway and basement subsoil drainage. Dual alternative pumps have been provided with the rising main directed to the on-site detention tank. A separate pump-out system has also been provided for the carwash area with the discharge directed to the sewer, which is acceptable.*

*The BASIX commitments are for re-use of stored rainwater for irrigation of common landscaped areas. A central rainwater tank of 50m<sup>3</sup> is proposed.*

*Water quality measures have been addressed using Council's MUSIC Modelling Guidelines. The captured stormwater has been treated by using a 'Humes – HydroFilter Model' which has satisfied the pollutant load standards set out in Section 5F.2 of the KDCP. It is my opinion that a GPT is not required upstream of the system as the stormwater flow is captured for treatment within the detention system prior to discharge to the 'HydroFilter'.*

*The stormwater disposal system for the site is considered a satisfactory system for this development.*

### **Traffic generation**

*The traffic report submitted predicts a traffic generation potential of approximately up to 27 vehicle trips per hour during peak periods. During the evening peak hour, it is estimated that 5 trips would be outbound and 22 trips would be inbound and is assumed to be the reverse in the morning peak.*

The traffic signal controls at the intersection of Mona Vale Road with Rosedale Road and Shinfield Avenue provide suitable and direct access to the arterial road network. The increase in traffic flows in Rosedale Road is not expected to have a significant effect on traffic flows or on the operation of the intersection with the arterial road network. The study does justify that the projected increase in traffic activity is minimal and would not have any unacceptable traffic implications in terms of road network capacity.

### **Vehicle access and accommodation arrangements**

The proposed development comprises 51 units. The plans submitted show a total of 72 parking spaces, including 13 visitor parking spaces. The parking provisions have been determined using Council's LEP194 and Council's 'Carparking' DCP No.43 and not under the new DCP (Town Centres).

In accordance with Ku-ring-gai Development Control Plan (Town Centres) 2010 Part 3 & 4 the following parking provisions have been adopted:

#### **KDCP 3C.25 Car Parking Provisions**

| <b>Apartment size</b>  | <b>Parking space requirement per apartment</b> |
|------------------------|--|
| Studio                 | 0 – 0.5 spaces                                 |
| One bedroom            | 0.7 – 1 spaces                                 |
| Two bedroom            | 1 – 1.25 spaces                                |
| Three or more bedrooms | 1 – 2 spaces                                   |
| Visitor car spaces     | 1 space for every 4 apartments                 |

In comparison, the parking space provision satisfies the minimum total 64 spaces to maximum 94 spaces required.

The requirements for Adaptable Units as referred to in Part 3C.27 of Ku-ring-gai DCP (Town Centres) 2010 require at least 1 apartment for each 10 apartments and at least 1 disabled car parking space. The proposal incorporates six (6) adaptable apartments with eight (8) corresponding accessible parking spaces which also comply with the AS2890.1.

Vehicle access to the carparking facility is to be provided via a new combined 3.6m entry / exit driveway located in Rosedale Road. The driveway gradients comply with Australian Standard 2890.1 (2004) "Off-Street car parking" as do the dimensions of the parking bay, ramp grades and aisle widths.

### **Waste collection**

The development allows a garbage truck to enter and exit the garbage/room recycle storage area located on basement 1(B). The swept paths to access the waste collection area are in accordance with the 6m small waste collection vehicle. The driveway grades and turning manoeuvrability are suitable for the small waste collection vehicle. A clear head height in excess of 2.6m has been provided to access the basement area as per Council's Development Control Plan (Town Centres) 2010 Part 4.16.

### **Construction management**

*Based on the scale of works and expected construction vehicle movements, a detailed construction traffic management plan (CTMP) must be submitted for review by Council Engineers prior to the commencement of any works on site.*

*Parking is permitted outside the subject site on both sides of Rosedale Road at present. It has been conditioned that a work zone shall be provided along the street frontage. Council will then consider introducing 'No Parking' restrictions on the opposite side of the road if the development at 161-163 Rosedale Road is being constructed at the same time.*

### **Impacts on Council infrastructure**

*The condition of the existing footpath along the site frontage of Rosedale Road is satisfactory. All redundant driveway crossovers are to be reinstated. Detailed design drawings for these works will be assessed by Council's Development Engineer for approval under the Roads Act. No final certificate would be issued until the works are completed to the satisfaction of Council.*

### **Geotechnical Investigation**

*The submitted geotechnical assessment report is based on the foundation conditions that involve open excavation for the basements to depths of approx. 6m. Five boreholes were drilled with subsurface conditions encountering residual clays that grades into decomposed shales at depths of 0.6 to 2.4m below existing surface levels. The soil/rock interface is a gradational zone of clays and decomposed shale and TC auger bit refusal in highly weathered shale ranged from 1.5 to 2.7m below existing surface levels.*

*Suitable conditions have been placed giving recommendations for vibration monitoring and dilapidation survey of adjacent structures. Survey of dwellings and outbuildings at 169 Rosedale Road and 3 Porters Lane, including the pool within 9 Porters Lane will be required.*

*Dilapidation reporting for works in the public road reserve should include:*

- Full road pavement width, including kerb and gutter, footpath of Rosedale Road over the site frontage,*
- All driveway crossings and laybacks in Rosedale Road opposite the subject site.*

*Approval must be obtained from all affected property owners, including Ku-ring-gai Council where rock anchors (both temporary and permanent) are proposed below adjacent private or public property.*

*A more detailed assessment will be required for the excavation of the basement layout. All other recommendations during the construction phase should be carried out as specified within the report.*

### **Strategic Traffic Engineer**

Council's Strategic Traffic Engineer commented on the proposal as follows:

#### **St Ives town centre - transport improvements**

*During the planning of the St Ives town centre (which culminated in the gazettal of the Ku-ring-gai LEP (Town Centres) 2010), Council engaged consultants Transport and Urban Planning to undertake an area-wide traffic study of the St Ives town centre. This study examined the existing traffic situation, and considered the cumulative traffic generating impacts of all redevelopment under the LEP, which includes retail, commercial and residential land uses. It also considered various traffic flow and intersection improvement options around the town centre.*

*A number of intersections were found to be currently operating at Level of Service E or F (at capacity/requires additional capacity). This includes the intersection of Mona Vale Road and Link Road as well as the intersection of Killeaton Street and Link Road. The study also found that additional traffic from the LEP194 sites alone would also impact on the intersection of Mona Vale Road and Memorial Avenue/Rosedale Road, and the intersection of Mona Vale Road and Stanley Street.*

*Although limited opportunities became evident during the study, the following traffic improvement measures in the vicinity of the site were recommended to cater for the additional growth in the St Ives town centre:*

- Modifications to the intersection of Mona Vale Road and Memorial Avenue/Rosedale Road: An additional right turn lane from Memorial Avenue into Mona Vale Road would provide additional capacity particularly from the Memorial Ave leg, and combined with a proposed one-way movement in Rosedale Road (southbound between Mona Vale Road and Porters Lane) would improve overall intersection operation;*
- Introduce one way movement in Porters Lane (easterly) between Rosedale Road and Lynbara Avenue, and (westerly) between Rosedale Road and Mona Vale Road;*
- Modifications to the intersection of Mona Vale Road and Stanley Street: Extension of right turn bay on Mona Vale Road, and an additional right turn lane from Stanley Street into Mona Vale Road;*
- New signalised intersection on Mona Vale Road at new entrance to St Ives shopping village (approximately opposite 187-189 Mona Vale Road).*

*These improvements are shown in the St Ives Town Centre Traffic Improvement Concept Plan (Trim 2009/111405).*

*Also, the RTA has indicated that at some point in the future, it may seek to introduce peak and contra-peak Cleaways on Mona Vale Road through St Ives, to improve general traffic flow along Mona Vale Road but also to assist in the operation of the Strategic Bus service between Mona Vale and Macquarie (via St Ives and Gordon railway station).*

*Apart from the new signalised intersection on Mona Vale Road at new entrance to St Ives shopping village, the the works listed in the dot points above have been costed and scheduled in the Ku-ring-gai Contributions Plan (2010). Other transport improvement works costed and scheduled in the Contributions Plan includes new and upgraded bus stop facilities, new on/off road cycleways, bicycle parking in the public domain and modifications to existing streets and laneways to improve pedestrian accessibility and general amenity.*

### **Access point**

*The amended plans show a roadway/ramp connecting the access point with the car park that is wide enough only for one way flow, and there is the potential that 2 vehicles could meet on the ramp, which is undesirable. The car park has a capacity of 72 spaces and would be accessed off a local road. According to the Ku-ring-gai DCP (Town Centres) 2010, car parks with 25-100 spaces accessed off a local road would require an access point between 3.7m and 6m wide. Given that the number of proposed car spaces in the car park tends towards the upper limit of the range in the DCP, the width of the access point should be increased to at least 5.5m and the roadway/ramp width should be also at least 5.5m, to maintain simultaneous 2-way flow into and out of the car park. The plans are to be amended to have two-way driveway access similar to the basement car parks in other similar developments in close proximity.*

The issues relating to the access arrangements were communicated to the applicant on 22 March 2011. A suggested design alternative was recommended to the applicant (including sketch plan) and Council staff were made available for a meeting to facilitate resolving the matter.

In response, the applicant submitted a letter from Transport and Traffic Planning Associates (TTA) stating the driveway design complies with the Australian Standards and that a traffic signal control would assist with 'larger development projects'.

Council's response to the letter by TTP is:

*The proposed car park has a capacity of 72 spaces and would be accessed off a local road. According to the Ku-ring-gai DCP (Town Centres) 2010, car parks with 25-100 spaces accessed off a local road would require an access point between 3.7m and 6m wide. Given that the number of proposed car spaces in the car park tends towards the upper limit of the range in the DCP, the width of the access point and internal road should be increased to maintain simultaneous 2-way flow into and out of the car park in accordance with AS2890.1. The 2-way driveway access would be similar to the basement car parks in other similar developments in close proximity.*

*The proposed driveway width is still considered to be undesirable, and Council's position is supported by Section 6.3 of the RTA Guide to Traffic Generating Developments October 2002 which provides further guidance to Australian Standards AS2890.1 in relation to internal road design. Refer to attachment for relevant section from RTA guide. Based on Table 6.4 of the RTA guide, the recommended roadway width (two-way traffic) for a car park of the size in the proposal, is actually 6.0-6.5m wide. In fact, according to the RTA guide if garbage collection is undertaken in the basement car park (service bay), then the minimum width would be 5m, irrespective of the number of car spaces served.*

*In response to the comments by Transport & Traffic Planning Associates (Ref 10092 dated 24 March 2011) regarding traffic signal control of the internal access road, this type of controlled access is strongly discouraged.*

The proposal advanced in the pre-DA plans (PRE0032/10), involved a double width driveway. The pre-DA minutes suggest tree impacts were to be considered in the design of the development, however there was no recommendation of a single width driveway. The applicant changed the driveway design between PRE0032/10 and DA0408/10 from a double width to a single width driveway.

Council staff provided a design solution for a double width driveway and offered a meeting with the applicant to facilitate resolving the matter. On 30 March 2011, the applicant advised



they would not change the driveway and are satisfied the design of the driveway is in accordance with the Australian Standards.

A single width driveway is not supported for reasons outlined above. A traffic signal control to manage the access into/out of basement carparks (where the restricted visibility prevents direct line of sight), is not considered appropriate as it detracts from high quality outcomes and should be discouraged.

## **Building**

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

*I have reviewed the revised architectural plans. I also note that no Building Code of Australia (BCA) report has been submitted with the documentation provided.*

### Part A

*Class: 2 and 7 car parking.*

### Part B

*Structural engineer's details will be submitted and reviewed at the construction certificate stage.*

### Part C

*Class: 2 and 7 car parking.*

*Type of Construction: A, details can be assessed at the construction certificate stage.*

### Part D

*Travel distances within the units are generally acceptable when assessed against the deemed to satisfy (DTS) provisions of the BCA. Furthermore, an alternative solution can be used at the construction certificate (CC) stage.*

*Concern is raised regarding the discharge point of one of the exits (opposite unit 2) as the exit discharges within the unit block. However, an alternative solution can be used at the CC stage.*

*The travel distances within the basement areas appear to exceed the DTS provision of the BCA. However, an alternative solution can be used at the CC stage.*

*Concern is raised regarding the internal stair on A1 basement level and the path of travel. It appears to enter into the dwelling (opposite unit 2) therefore not complying with D2.4 of the BCA. However, an alternative solution can be used at the CC stage.*

### Part E

*Details to be assessed at CC stage.*

### Part F

*It is noted that the following units do not appear to have a laundry noted on the floor plans: 40, 41, 39, 8, 5, 2, 19, 18, 17, 28, 29, while all other units have a laundry noted on the floor plans.*

*This should be addressed at DA stage as the BCA (Part F2) requires clothes washing facilities be provided for each unit or a separate laundry for each 4 SOU, or part thereof.*

*Furthermore, while no facilities are shown for the cleaner as required by the BCA, there is room in the basement level for these facilities.*

Part G

N/A

Part H

N/A

Section I

N/A

Section J

*Details may be assessed at cc stage.*

Recommendation

*It is recommended that the issue of the laundries be addressed. However, this matter is capable of being addressed via condition in the event of an approval.*

## **STATUTORY PROVISIONS**

### **State Environmental Planning Policy No. 55 – Remediation of Land**

The provisions of SEPP 55 require consideration of the potential for a site to be contaminated. The subject site has a history of residential use and as such, it is unlikely to contain any contamination and further investigation is not warranted in this case.

### **State Environmental Planning Policy No. 65 - Design quality of residential flat development and the Residential Flat Design Code (RFDC)**

In accordance with Clause 50 of the EP&A Regulation 2000, a Design Verification Statement has been submitted by Greenbox Architecture (dated 15 April 2011) which submits that the amended application has been designed in accordance with the design quality principles under Part 2 of the SEPP.

Council's Urban Design Consultant has reviewed the further amended proposal in relation to SEPP65 and the proposal is satisfactory, refer to comments elsewhere in this report.

## **SEPP (Sydney Harbour Catchment) 2005**

The site is located within the Sydney Harbour Catchment area (Clause 3(1) of the SREP). The proposal will not have a detrimental impact on the catchment. The planning principles of the SREP are generally satisfied and the site is not in close proximity to or within view of any waterway, wetland or riparian zone.

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

A valid BASIX certificate has been submitted (September 2010), Certificate No.354859M, dated 12 January 2011. The certificate demonstrates compliance with the provisions of the SEPP and adequately reflects all amendments to the application.

## **Ku-ring-gai Local Environmental Plan (Town Centres) 2010**

### **Part 2: Permissibility**

The site is zoned R4 High Density Residential. Under Clause 1.4 (definitions) of the KLEP Town Centres, a residential flat building is defined as '*a building containing three or more dwellings, but does not include an attached dwelling or multi dwelling housing*'. The proposal satisfies this definition and is permissible with consent pursuant to Part 2 of the LEP.

### **Part 4: Principal Development standards**

| <b>Development standard</b>                             |         | <b>Complies</b> |
|---|---------|-----------------|
| <b>Minimum subdivision lot size</b><br><b>1200sqm</b>   | 4243sqm | <b>YES</b>      |
| <b>Height of buildings</b> 17.5m<br>(max)               | <17.5m  | <b>YES</b>      |
| <b>Floor space ratio (FSR)</b> 1.3:1<br>(max) 5515.9sqm | <1.3:1  | <b>YES</b>      |

### **Part 5.10: Heritage conservation**

Clause 5.10 under KLEP Town Centres requires consideration of the impact of any development upon the significance of a heritage item in the vicinity of the site. The site adjoins a local heritage item, 9 Porters Lane, St Ives. Council's Heritage Advisor has assessed the development in context with the item and considers the impacts acceptable.

## **Ku-ring-gai Development Control Plan (Town Centres) 2010**

| <b>Part 3 Specific Building Type Controls under Ku-ring-gai Town Centres DCP</b><br><b>3C Residential flat building</b> |                 |                 |
|---|-----------------|-----------------|
| <b>Development Control</b>  | <b>Proposed</b> | <b>Complies</b> |

|   |   |   |
|---|---|---|
| <b>3C.1 Building Separation</b><br>4storeys over podium<br>• 12m between habitable room/balconies<br>5 to 8 storeys over podium<br>• 18m between habitable room/balconies | 12 metres   | <b>YES</b>  |
| <b>3C.2 Building Setbacks</b><br>Street setbacks: 10 – 12m (40%)  | 10-12m<br><40%  | <b>YES</b>  |
| Side & rear setbacks: 6m  | 6m  | <b>YES</b>  |
| Zone interface setbacks: 9m to the 4 <sup>th</sup> storey   | 9m  | <b>YES</b>  |
| Setback to the 5 <sup>th</sup> storey 9m  | 6m to terrace<br>9m to building proper  | <b>NO</b>   |
| Encroachments (basement encroachments into street, side and rear setbacks, ground floor terrace/courtyard encroachments within front setback)                             | Fire egress stairs extending from the basement (located within the north and to a lesser degree south side setback) | <b>NO</b>   |
| <b>3C.3 Site coverage</b><br>Site coverage: 35%   | <35%  | <b>YES</b>  |
| <b>3C.4 Deep soil landscaping</b><br>50%<br>Tree replenishment & planting   | >50%  | <b>YES</b>  |
| <b>3C.7 Building storeys</b><br>Max building height: 17.5m<br>Maximum no. of storeys: 5   | < 17.5m<br>6 storeys  | <b>YES</b><br><b>NO</b>                               |
| <b>3C.8 Building facades</b><br>Building width < 36m  | Fronting Rosedale Road: <36m<br><br>North and South elevation of buildings: >36m                                    | <b>YES</b><br><br><b>NO</b>                           |
| Balcony projection < 1.2m   | 1.2m  | <b>YES</b>  |
| <b>3C.9 Building entries</b>  | Separate gatehouse and entry for each building.   | <b>YES</b>  |
| <b>3C.10 Top storey design and roof forms</b>   | Physical top storey of each building is 60% of the storey below.  | <b>YES</b>  |
| <b>3C.12 Private open space</b><br>ground floor apartments have a terrace or private courtyard greater than 25m <sup>2</sup> in area<br>Balcony sizes:                    | <25sqm<br><br><10sqm<br><12sqm<br>15sqm   | <b>NO</b><br><br><b>NO</b><br><b>NO</b><br><b>YES</b> |

|  |   |                                    |
|--|---|------------------------------------|
| <ul style="list-style-type: none"> <li>- 10sqm – 1 bedroom unit</li> <li>- 12m<sup>2</sup> – 2 bedroom unit</li> <li>- 15m<sup>2</sup> – 3 bedroom unit</li> </ul> <p>primary outdoor space has a minimum dimension of 2.4m</p>                            | 2.4m  | YES                                |
| <b>3C.13 Communal open space</b>   | To the rear north-east corner of the site   | Satisfactory                       |
| <b>3C.14 Apartment depth and width</b><br>1. 18m maximum internal plan depth<br><br>2. 8m maximum depth to single aspect apartments<br><br>3. 4m minimum width to dual aspect apartments over 15m<br><br>4. 8m maximum distance from kitchen to an opening | 19m (Northern building: Units 6, 17, 28, 30)<br><br>9m (Southern building: Units 9, 20, 31, 42, 50 (however include northern orientation))<br><br>>4m<br><br>8m | NO<br><br>NO<br><br>YES<br><br>YES |
| <b>3C.15 Ground floor apartments</b><br>Finished ground level outside living area not more than 0.9m below existing ground level   | <0.9m   | YES                                |
| <b>3C.16 Natural ventilation</b><br>60% natural cross ventilation<br>25% of all kitchens to be naturally ventilated  | >60%<br>>25%  | YES                                |
| <b>3C.17 Solar access</b><br>70% apartments to receive min of 3+ hours direct sunlight to living and private outdoor   | >70%  | YES                                |
| >50% of the principle common open space of the development receives 3+ hours direct sunlight in the winter solstice  | >50%  | YES                                |
| <10% of the total units are single aspect with a western orientation   | <10%  | YES                                |
| 3+ hrs of sunlight between 9am – 3pm June 21 to living areas and principle private open space of any residential development adjoining R2,   | <3hrs   | NO                                 |

|   |  |            |
|---|--|------------|
| E4 and R3 zones   |  |            |
| Overshadowing impact must not compromise development potential of adjoining under- developed sites  | Refer urban design comments  | <b>YES</b> |
| <b>3C.18 &amp; 19 Visual and acoustic privacy</b>   | The development complies with required 6-9m side/rear setback controls and provides 12m building separation between buildings. The southern building includes bedrooms to the south elevation (unit orientation to the north for solar access).<br>Appropriate boundary planting incorporated to assist amenity impacts to adjoining properties. | <b>YES</b> |
| <b>3C.20 Internal ceiling heights</b><br><b>2.7m</b>  | 2.7m   | <b>YES</b> |
| <b>3C.21 Room sizes</b><br>1. living areas minimum dimension:<br>• 4m for apartments with 2+ bed<br>• 3.5m for other apartments<br>2. 3m minimum internal plan dimension for 1 and 2 bedroom apartments<br><br>3. 3m minimum internal plan dimension for 2 bedrooms in apartments with 3 or more bedrooms | Bedrooms 3m  | <b>YES</b> |
| <b>3C.22 Internal common circulation</b><br>Single corridors:<br>serve a maximum of 8 units<br>>1.5m wide<br>>1.8m wide at lift lobby   | <8 units per lift<br>>1.5m & 1.8m  | <b>YES</b> |
| <b>3C.23 Storage</b><br>1. Storage space provided as follows:<br>i. 6m <sup>3</sup> for studio apartments<br>ii. 8m <sup>3</sup> for one bedroom apartments<br>iv. 12m <sup>3</sup> for apartments with two or more bedrooms<br>2. 50% of storage space located within the apartment,                     | 13 individual storage spaces have been provided at the end of carparking spaces. 10 larger 'general storage spaces' are located within the basement.   | <b>NO</b>  |

|   |   |   |
|---|---|---|
| remaining space in basement allocated separately  |   |   |
| <b>3C.25 Car parking provision</b><br>Residential Control<br>1 bed = 0.7 – 1 spaces<br>2 bed = 1 – 1.25 spaces<br>3 bed = 1 – 2 spaces<br><br>1 bed: 4.9 – 7 spaces<br>2 bed: 36 – 45 spaces<br>3 bed: 8 – 16 spaces<br>Total: 48.9 – 68 spaces | 59 residential spaces   | <b>YES</b>                                |
| <b>Visitor parking</b>  |   |   |
| 1 space per 4 units (12.75 (13) spaces)   | 13 visitor spaces   | <b>YES</b>                                |
| 1 disabled visitor space  | 1 disabled visitor space  | <b>YES</b>                                |
| 1 service/removalist vehicle/carwash bay  | 1 carwash/visitor space provided  | <b>YES</b>                                |
| <b>3C.26 Bicycle parking</b><br>1 bicycle space per 5 units for residents (10.2)<br>1 bicycle space per 10 units for visitors (5.1)   | 14 bicycle bays identified within the basement (unallocated). The space provided for bicycle parking is sufficient to accommodate 15 bicycle bays. This matter can be addressed via condition in the event of an approval | <b>NO</b>                                 |
| <b>3C.27 Adaptable housing</b><br>1. All residential flat buildings must contain 10% of apartments as adaptable (5.1 (6) units)<br><br>2. 1 disabled car space per adaptable apartment<br>3. 70% of apartments are visitable                    | Northern building: No adaptable units<br>Southern building: Units 10, 21, 32, 43, 45 and 50<br><br>6 res/disabled spaces in basement<br>100% visitable  | <b>NO</b><br><br><b>YES</b><br><b>YES</b> |
| <b>3C.28 Apartment mix and sizes</b><br>1. Range of apartment sizes within the development<br>2. Min apartment sizes: 50m <sup>2</sup> for studios and 1 bed units<br>70m <sup>2</sup> for 2 bed units<br>95m <sup>2</sup> for 3 bed units      | 7 x 1 bedroom<br>36 x 2 bedroom<br>8 x 3 bedroom  | <b>YES</b>                                |

### **Building setbacks (3C.2)**

The definition of building line or setback under the Town Centres LEP means the horizontal distance between the property boundary and a building wall or the outside face of any balcony, deck or the like. In this regard, the setback is technically measured to the terrace balcony (6m). The external wall of the building at the fifth level complies with the 9m set back requirement. The proposal satisfies the underlying objectives of the top storey under Clause 3C.10 of the Kur-ring-gai Town Centres DCP.

The basement proper complies with the setback controls. There are fire egress stairs within the north and south side setbacks. The stair passage to the north side setback is a width of 1.5m and extends for a length of 6m. The stair passage to the south side setback is directly adjacent to the basement and is a width of 1.5m and has a length of 4m. The egress stairs are not excessive in dimension or length. The stairs do not unreasonably constrain the provision of side boundary planting with the majority of each setback well landscaped.

### **Building storeys (3C.7)**

The proposal breaches the 5 storey limit (proposing 6 storeys) by virtue of the basement exceeding the 1m requirement (1.2 metres) to the south-eastern corner of the southern building (lowest point of the site). The development does however comply with the overall 17.5m height control. The non-compliance does not result in the development being excessive in visual bulk given that the upper levels of the south-eastern corner have been recessed and the building length has also been reduced to 37 metres with progressive setbacks at the south-eastern corner.

### **Building facades (3C.8)**

Northern building: The north elevation attains a length of 37.5m. The façade is broken up by balconies and window openings. Satisfactory external materials and finishes have been incorporated within the design to break up the visual bulk, scale and perceived length of the building.

Southern building: The south elevation attains a length of 37m and then the building steps back at the south-western corner to assist in reducing visual bulk impacts to the adjoining zone interface property, 28A Shinfield Avenue. The façade includes satisfactory articulation which adds visual interest.

### **Private open space (3C.12)**

Unit 6 (northern building) includes a ground level terrace of 17.6sqm (less than the 25sqm requirement). A second terrace area extends from the rear master bedroom (7.6sqm) however is not appropriate as a functional outdoor living space which integrates with primary living areas of the unit.

The architectural plans nominate balcony areas which comply with the minimum area requirements. However, calculations based on internal dimensions within the designated balcony areas, suggest multiple balconies do not support the nominated



figures provided (Units 13, 14, 24, 25, 35 & 26)

The terrace and roof areas on Level 5 are not clear. The architectural detail between the terrace and roof areas is not clearly defined on plan and would appear to be a drafting error.

### **Solar access (3C.17)**

During the morning period (June 21), existing overshadow occurs to the private open space of 28A Shinfield Avenue by virtue of the 4m level difference at the boundary between the site and the adjoining property. The proposed southern building would not start to cast shadow on 28A Shinfield until 11am-mid-day and then progressively throughout the afternoon.

It is acknowledged that the amendments to the southern building include recessing the upper levels and increasing setbacks at the south-eastern corner. However, the amendments are not sufficient to ensure that at least 3 hours of sunlight are maintained between 9am and 3pm on 21 June (based on the solar access information submitted to date).

During the morning to midday period (June 21), there would be extensive overshadowing of the northern half of 163 Rosedale Road. During the afternoon period, overshadowing occurs to the north-eastern corner of 163 Rosedale Road. Overshadowing would be exacerbated by the east-west orientation of the site as well and the steep topography downslope of the site.

Council's Urban Design Consultants have undertaken modelling of the adjoining property (also zoned R4) and advise that an L-shaped development (incorporating communal open space to the north-eastern corner) would achieve a reasonable development outcome in terms of satisfying the principles of SEPP65, having regard to the constraints associated with the context.

### **Storage (3C.23)**

The required 51 individual storage spaces within the basement have not been satisfactorily demonstrated. A schedule of storage volume has not been provided to confirm whether storage areas are sufficient in size. It is likely that the general storage areas are capable of being divided up to provide sufficient storage space for the remaining 38 units, however further detail is required to verify this as outlined above.

### **Adaptable housing (3C.27)**

Of the total of 28 units provided within the northern building, none are designated as adaptable housing. Of the total 23 units provided within the southern building, six are designated as adaptable housing.

The proposal 'numerically' complies with the 10% requirement when applying an assessment to the development as a whole. However, the development fails to provide reasonable and equitable distribution of manageable units between both

buildings. The northern building does not provide housing choice for seniors and people with disabilities nor provides housing that allows people to stay in their home as their needs change due to aging or disability.

The designated adaptable units have not been clearly identified on the plans and have only been referenced in the Access Report.

### **Air conditioning plant**

Lift overruns and plant equipment (including air conditioning units) must be integrated into the building form and should not be visible. It is preferable that condenser units are contained and incorporated within the basement levels of the buildings as units on the roof are unsightly and undesirable.

All air conditioning plant is proposed on the roof of the buildings, including 29 air conditioning units on the roof of the northern building and 22 on the roof of the southern building. The units are proposed to be screened by a 1.3m high parapet.

No engineering certification has been submitted to verify that the proposed method of housing air conditioning plant is functional (including whether the location of units is practical for lower level units). No size and dimension specifications have been provided as to the type of system intended to be installed. This information is also required to determine whether the proposed method of screening is effective.

Concern is raised that the units will remain visible from R4 zoned development sites up-slope of the site. For this reason, air conditioning plant to the roof of buildings is discouraged. The provision of mechanical plant and appropriate screening through appropriate materials and finishes has not been well integrated with the building form. Rather, mechanical plant has been applied to the buildings after the design phase of the development.

### **Section 94 Plan**

Ku-ring-gai Contributions Plan 2010 came into force on 19 December 2010 and applies to all Development Applications determined after that date. This Contributions Plan applies to all development in Ku-ring-gai that gives rise to a net additional demand for infrastructure identified in the Contributions Plan. This includes all forms of residential development.

The plan takes a consolidated approach to providing infrastructure as a result of new development, authorising proportional contributions from new development towards the provision of infrastructure for that development. The plan also identifies situations where Council must provide a contribution on behalf of the existing population where new infrastructure will meet demand arising from the community as a whole.

However, as the application is recommended for refusal, a S94 contribution would not apply.

## **LIKELY IMPACTS**

Due to the traffic, parking and access issues associated with the single width driveway, amenity issues identified in relation to private open space, inequitable adaptable housing and overshadowing impacts, the amended proposal is not supported.

## **SUITABILITY OF THE SITE**

The site is suitable for 5 storey residential flat development.

## **ANY SUBMISSIONS**

All submissions received have been considered in the assessment of this application.

## **PUBLIC INTEREST**

The approval of the application is not considered to be in the public interest.

## **CONCLUSION**

Having regard to the provisions of section 79C of the Environmental Planning and Assessment Act 1979, the proposed development is considered to be unsatisfactory. Therefore, it is recommended that the application be refused.

## **RECOMMENDATION**

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

THAT the Sydney West Joint Regional Planning Panel, as the consent authority, refuse development consent to Development Application No.408/10 for demolition of existing dwellings, erection of 2 x 5 storey residential flat buildings containing 51 units, basement carparking and associated landscaping works, on land at 165 – 167 Rosedale Road, as shown on architectural plans A001B, A002D A003 – A005B, A006A, A007B, A010B, A012A, A095B, A096B, A097B, A098B, A099B, 100E, A101C, A102C, A103C, A104C, A105C, A200C, A201C, A202B, A300C, A301A, Sample Board A00A, A400 - 413B, A450 – A453B & A454A and A008B prepared by Greenbox Architecture, Landscape Plan One/Two and Two/Two Revision A prepared by Iscape Landscape Architecture, and Stormwater drainage/sediment control plans 1090-S1-S3/10 Revision F, S4/10 Revision G and S5 – S10/10 Revision F prepared by John Romanous & Associates Pty Ltd, for the following reasons:

#### **1. Driveway width**

Particulars:

- a) A single width driveway is not sufficient to support a residential flat

development of this scale (51 units and 72 carparking spaces).

- b) The width of the access point and internal road should be increased to maintain simultaneous two-way flow into and out of the car park in accordance with AS2890.1. Section 6.3 of the RTA Guide to Traffic Generating Developments October 2002 provides further guidance to Australian Standards AS2890.1 in relation to internal road design.
- c) A traffic signal control to manage the access into/out of basement carpark (where the restricted visibility prevents direct line of sight), is not appropriate as it detracts from high quality outcomes.
- d) The Ku-ring-gai Town Centres DCP, carpark with 25-100 spaces accessed off a local road require an access point between 3.7 – 6m wide. The proposed number of spaces (72 spaces) is at the upper limit of the range in the DCP and in this regard, the width of the access point should be increased to at least 5.5m and the roadway/ramp width should also be at least 5.5m to maintain simultaneous two-way flow into and out of the car park.

## **2. Private open space**

Particulars:

- a) The proposal does not satisfactorily demonstrate adequate private open space as required under Clause 3C.12 of the Ku-ring-gai Town Centres DCP.
- b) Unit 6 (northern building) includes a ground level terrace 17.6sqm (less than the 25sqm requirement). A second terrace area extends from the rear master bedroom (7.6sqm), however is not appropriate as a functional outdoor living space which integrates with primary living areas of the unit.
- c) The architectural plans nominate balcony areas which comply with the minimum area requirements. However, calculations based on internal dimensions within the designated balcony areas, suggest multiple balconies do not support the nominated figures provided (Units 13, 14, 24, 25, 35 & 26).
- d) The terrace and roof areas on Level 5 are not clear. The architectural detail between terrace and roof areas is not clearly defined on plan and appears to be a drafting error.

## **3. Adaptable housing**

Particulars:

- a) The development fails to provide reasonable and equitable distribution of adaptable units between both buildings
- b) Of the total 28 units provided within the northern building, no units are designated as adaptable housing. Of the total 23 units provided within southern building, six (6) are designated as adaptable housing.

- c) The proposal 'numerically' complies with the 10% requirement when applying an assessment to the development as a whole. However, The northern building does not provide housing choice for seniors and people with disabilities nor provides housing that allows people to stay in their home as their needs change due to aging or disability.
- d) The designated adaptable units have not been clearly identified on the architectural plans, with reference only provided in the Access Report.

#### **4. Overshadowing of adjoining R2 zoned land**

Particulars:

- a) The amended proposal does not satisfactorily demonstrate that at least 3hrs of sunlight are maintained between 9am and 3pm on 21 June to the adjoining zone interface property at 28A Shinfield Avenue (zoned R2 under the Town Centres LEP).
- b) The amendments to the southern building include recessing the upper levels and increasing setbacks at the south-eastern corner which assist in addressing visual bulk impacts. However, the amendments are not sufficient to ensure that acceptable levels of solar access are maintained to the adjoining down slope interface property. The impacts are exacerbated by the overall length of the southern building (even with the additional setbacks) extending beyond the western boundary of 28A Shinfield Avenue.
- c) The proposal does not satisfy Control 8 under Clause 3C.17 of the Ku-ring-gai DCP (overshadowing controls to residential development adjoining the site).

#### **5. Residential storage**

Particulars:

- a) The provision of individual storage spaces has not been satisfactorily detailed within the basement of the building. A schedule of storage volume has not been provided to confirm whether storage areas are sufficient in size.
- b) A total of 13 individual storage spaces have been provided at the end of carparking spaces. Ten larger 'general storage spaces', are located within the basement. It is likely the general storage areas are capable of being divided up to provide sufficient storage space for the remaining 38 units, however further detail is required for verification.
- c) Further information is required for assessment in relation to Clause 3C.23 (Storage) of the Ku-ring-gai Town Centres DCP as outlined above.

#### **6. Air conditioning plant**

Particulars:

- a) All air conditioning plant is proposed on the roof of both buildings, including 29 air conditioning units on the roof of the northern building and 22 air conditioning units on the roof of the southern building. The units are proposed to be screened by a 1.3m high parapet.
- b) No engineering certification has been submitted to verify that the proposed method of housing air conditioning plant is functional (including whether the location of units is practical for lower level units). No size and dimension specifications have been provided as to the type of system intended to be installed. This information is also required to determine whether the proposed method of screening is sufficient.
- c) The provision of mechanical plant and appropriate screening through appropriate materials and finishes has not been well integrated with the building form. Rather, mechanical plant has been applied to the buildings after the design phase of the development.
- d) Having regard to the sloping topographical context including R4 zoned land up-slope of the site, a parapet is a poor design solution to screen the high quantity of units proposed to the roof of the buildings.

**Rebecca Eveleigh**  
Executive Assessment Officer

**Richard Kinninmont**  
Team Leader Development Assessment

**Corrie Swanepoel**  
Manager Development Assessment

**Michael Miocic**  
Director Development and Regulation

**Attachments:**

- 1. Location sketch**
- 2. Zoning extract**
- 3. Surrounding development (undetermined and determined development applications)**
- 4. Amended architectural plans (March 2011)**
- 5. Landscape plans**