

JRPP No	2010/SYW063
Property	161 - 163 Rosedale Road ST IVES NSW
Lot & DP	Lot 11 and Lot 12 in DP 733648
Proposal	Demolition of existing dwellings, construction of a residential flat building containing 36 units, basement car parking, associated landscape works and strata subdivision
Development application no.	DA0656/10
Ward	ST IVES
Applicant	Colonial State Properties Pty Ltd
Owner	Mr N Baskin
Date lodged	10/09/2010
Estimated cost of works	\$10,287,448 Application requires determination by JRPP as the development has a capital investment value (CIV) over \$10 million
Pre-DA meeting	Yes
Issues	SEPP65/urban design, height, floor space, basement encroachments, deep soil landscaping, tree impacts, landscape design, BASIX, building facades and building entries, top storey design, fencing, private open space, communal open space, solar access, storage, stormwater, driveway profile, BCA non-compliance, inconsistent, inaccurate plans and unsatisfactory documentation.
Submissions	Yes
Land & Environment Court	N/A
Recommendation	Refusal

LEGISLATIVE REQUIREMENTS:

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

HISTORY

Re-zoning 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:

28 June 2010

PRE0063/10

On 28 June 2010, a Pre-DA consultation took place for a proposal involving demolition of existing dwellings and construction of a five storey residential flat building containing 36 units and basement parking for 57 vehicles on the site.

Issues raised included setbacks, number of storeys (6) excessive wall plane, building entry, apartment depth and width, daylight access and natural ventilation, residential storage, materials & finishes, tree impacts, fencing, traffic and stormwater.

10 September 2010

DA0656/10 was lodged.

23 September 2010	The application (Issue A Plans) was notified.
25 October 2010	The applicant submits a quantity surveyors report, confirming the CIV for the project as >\$10 million.
8 December 2010	<p>A preliminary assessment letter was sent to the applicant. Issues raised included building height/storeys, floor space, impact on trees, deep soil and landscape design, communal open space, solar access, residential amenity, building presentation and visual bulk to Shinfield Avenue, top storey design, design response to surrounding context and constraints of the site, BASIX, inadequate stormwater documentation, inadequate information regarding driveway design, BCA issues, absence of strata subdivision plans, inconsistent and inaccurate plans and documentation.</p> <p>Due to the multiple issues raised and inadequacies of the information, Council officers recommended that the application be withdrawn and that the issues raised be more thoroughly considered and addressed in a fresh application facilitated by Council's pre-DA service.</p>
9 December 2010	The applicant advises they do not wish to withdraw DA0656/10.
22 December 2010	Briefing with JRPP.
31 January & 24 February 2011	Applicant lodges a written submission and draft conceptual amendments (Issue B plans) in response to issues identified in Council's preliminary assessment letter of 8 December 2010.
24 March 2011	Council officers met with the applicant to discuss conceptual design changes submitted 24 February 2011. Issues discussed included building entrances, internal access arrangements, balcony design, presentation to Shinfield Avenue, ground level units, internal unit layouts, communal open space top storey design, lift location, tree impacts and landscaping, cut and fill and aesthetics to the building.
31 March 2011	Applicant lodges a written submission and further draft conceptual amendments (Issue C plans, Attachment 6).
21 April 2011	Council officers advised the applicant that the

amendments remained unsatisfactory and do not adequately address multiple issues, in particular the design of the built facades.

Accordingly, the draft conceptual amendments are not supported. Substantial re-design is required to overcome the issues raised which should be addressed via a fresh development application. No formal amended application has been supported in this regard.

3 May 2011

The applicant emailed Issue C plans seeking to formally amend the application. The plans were not accepted as they did not satisfactorily overcome the issues previously raised.

Accordingly, the assessment is based on the original application (Issue A Plans).

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 south-eastern corner of Rosedale Road and Shinfield Avenue. The site is rectangular in shape, with frontages of approximately 46metres to Rosedale Road and Shinfield Avenue. The total site area is 2729sqm. The site falls from the front north-western corner (RL156), to the rear south-western corner (RL147.49), with a cross fall of 7.18 metres and an average gradient of approximately 11.5% (moderately sloping).

The existing development on 161 Rosedale Road includes a dwelling house and swimming pool. 167 Rosedale Road includes a dwelling house, swimming pool and tennis court.

The site is characterised by an established landscape setting, with mature trees and shrubs within formal garden beds and grassed areas. Numerous mature trees are located primarily adjacent to the site boundaries, with the most dominant being located adjacent to the Shinfield Avenue frontage.

Surrounding development:

The surrounding development consists of single and two storey dwelling houses, dual occupancy development and a seniors living development.

No.9 Porters Lane is a battle axe allotment adjoining 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 under the Town Centres LEP.

The local context is subject to a transition between low to high density residential development as a result of re-zoning which has occurred as part of LEP194 and the Town Centres LEP (**Attachment 3**).

THE PROPOSAL

The proposal includes:

Basement Level 3	24 residential parking spaces (including 2 disabled residential spaces) Residential storage and mechanical plant
Basement Level 2	10 visitor spaces including 1 disabled/car wash/loading bay visitor space 11 residential spaces (including 1 disabled residential space) Residential and visitor bicycle parking Stormwater detention tanks Mechanical plant
Basement Level 1/ Lower Ground level (Shinfield Ave)	12 residential parking spaces (including 1 adaptable) 2 x 1 bedroom and 2 x 2 bedroom units
Ground Level	2 x 1 bedroom, 5 x 2 bedroom and 1 x 3 bedroom units
First floor	2 x 1 bedroom, 5 x 2 bedroom and 1 x 3 bedroom units
Second floor	2 x 1 bedroom, 5 x 2 bedroom and 1 x 3 bedroom units

Third floor	1 x 1 bedroom, 4 x 2 bedroom and 1 x 3 bedroom units
Top floor	2 x 3 bedroom units and communal swimming pool

External finishes:

Face brick walls – boral ‘silver shadow’ dry pressed brick

Rendered walls – dulux ‘dieskau’

Walls in garden – sandstone

Steel pergolas and shutters – powder coated pain colorbond ‘dune’

Aluminium window frames – anodised aluminium

Balustrading - white coloured glass balustrading with stainless steel handrail

Feature rendered walls – dulux tamed Texan

Pedestrian access: The pedestrian entrance is via a pathway from Rosedale Road.

Vehicular access: Vehicular access is via a two way driveway to the basement carpark from Shinfield Avenue

Landscape works: The majority of the existing trees are to be retained including prominent trees along the Rosedale Road frontage.

Strata subdivision: Approval is also sought for strata subdivision, however no strata plans have been submitted.

COMMUNITY CONSULTATION

In accordance with Development Control Plan No. 56, the development application was notified and submissions from the following were received:

- Mr and Mrs L & M Beilby, 29 Shinfield Avenue (159A Rosedale Road), St Ives
- Sandra Van Eck, 9 Dorset Drive, St Ives
- Stephen and Julia Hearne, 1/120-124 Rosedale Road, St Ives
- Barry & Margaret Summersgill, 1 Dorset Drive, St Ives
- John Hayes, 14 Pildra Avenue, St Ives
- Mei Lam, 28 Shinfield Avenue, St Ives
- JL Clark, 28A Shinfield Avenue, St Ives
- Branda Lo, 30A Shinfield Avenue, St Ives
- Yan Gong, 30B Shinfield Avenue, St Ives
- Mr and Mrs R and D Berman, 34 Shinfield Avenue, St Ives

The submissions raised the following issues:

Excessive scale of the building, out of character with the area

The site is zoned R4 which permits five storey residential flat development. However, the proposal is excessive in height and building bulk and the design results in multiple urban design issues as discussed in this report.

The driveway entrance is directly opposite the pedestrian entrance of 29 Shinfield Avenue (159A Rosedale Road) with resultant noise and night light impacts

A certain degree of vehicular movement and associated noise and night light impacts are anticipated given the medium density zoning of the site. However, these impacts are not unreasonable in this instance given the carriage-way width which separates the site from the down slope property and that the majority of the northern front boundary of 159A Rosedale Road includes a 1.8m high hedge and retaining wall.

Traffic access and safety

Adequate carparking has been provided within the basement. A long section has not been provided in respect of the driveway.

Overlooking and privacy impacts

With regard to potential amenity impacts to the adjoining R2 zoned properties to the east, the building complies with the zone interface setback requirements. In the event of any approval, it would be recommended that the balustrades to the east facing balconies be non-transparent to mitigate overlooking impacts.

The proposed location of communal open space, hard to the north-eastern corner of the site is unacceptable and results in unreasonable amenity impacts to 28A Shinfield Avenue as well as to the ground level unit to the rear north-eastern corner of the building.

Overshadowing impacts in particular to down slope properties

The proposal maintains in excess of 3 hours of solar access to adjoining properties east of the site as well as to downslope properties to the southern side of Shinfield Avenue.

Excessive building height Poor architectural design as a corner building

These issues are well founded as discussed in this report.

Provision of footpath

A footpath would be required to the frontage of the development and this would be required via condition were the application to be recommended for approval.

Construction traffic, noise, amenity impacts

Construction management matters would be dealt with via condition were the application to be recommended for approval.

INTERNAL REFERRALS

Urban design

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

Executive summary

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 in its current form has inherent issues driven by the chosen layout for the proposed RFB being a deep square footprint, the change in level of the existing site, the use of a single lift core and that the communal open space is the residual site area and has not been designed as a consolidated part of the proposal.

1. Context

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

This site is square shaped and has a street frontage to the south and west. The site is zoned R4 and is surrounded by R4 zoned land to the north and west and R2 zoned land to the east and south. The site is located in walking distance to the St Ives Town Centre.

The site is appropriate for a residential flat building (RFB) however, it must consider the merits of the site in any proposal. The current proposal has a deep square footprint and a single lift core which inherently makes it difficult to design an RFB of high amenity.

The proposal seems to have been designed without any consideration of the fact that there will be a new 5 storey RFB on the adjacent site, (165-167 Rosedale) and up hill of this development site.

A heritage listed single storey dwelling is located to the north-east. This dwelling has a frontage to Porters Lane. This heritage item is approximately 60 metres away from the subject site.

The site is appropriate for an RFB and well located to existing services and amenities, subject to the consideration of the opportunities and constraints of the subject site and its immediate context.

2. Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings.

Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

The scale of the development is appropriate to the site. The stepping of the building at the Rosedale Road street frontage assists in breaking down the bulk and scale.

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.

As there is currently a DA for 165-167 Rosedale with Council, the scale of this proposal together with this DA should be considered in tandem rather than separately in order to achieve a quality and high amenity outcome for the site. The proposed layout, a deep square footprint when set against the proposal on 165-167 Rosedale, which is uphill of the subject site has negative amenity impacts for the subject proposal. Although the proposed units are north facing along the northern façade of the proposed RFB, due to the scale of the RFB proposed on 165-167 Rosedale, many of the proposed units will be overshadowed, particularly at the lower levels.

3. Built form

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

The proposed development presents a stepped form that commendably follows and reinforces the topography on the Rosedale frontage and a less successful elevation, although generally well articulated to the secondary street frontage on Shinfield Avenue.

The proposed built form defines the street well. Appropriately at the Rosedale Road frontage there is provision for direct pedestrian entry from the street which is central to the proposed floor plan.

It is unfortunate that a square footprint has been selected for the RFB as inherently this typology in the immediate context and with the particular site constraints produces a building with less than optimal amenity outcomes. The site is large enough to achieve a quality built form outcome with high amenity. The built form that seems to present as a positive outcome for this site is an L-shaped footprint, where the built form addresses both street frontages and a consolidated useable communal open space is formed between them at the north-eastern corner of the site.

- *Orientation*

The square shaped footprint inherently makes it difficult to achieve good solar/daylight access, good cross ventilation and amenity generally.

If the proposed residential flat building had an L-shaped footprint, northern sun and daylight penetration into units would increase substantially, the communal open space forms the central element of the proposal, as a courtyard to the built form, the proposed units have a green outlook and the unit layouts are more regular subject to the location of any proposed fire stairs as required by the BCA.

Many of the proposed units within the current scheme are located away from solar and daylight access, (particularly at the Basement 3/ Ground floor Plan) due to the square footprint and the living areas face due south, south-west and south-east as a result, which is not ideal.

- *Common space*

The common open space which is essential for larger RFBs to function well is unfortunately part of the residual site area. As such, much of this space is elongated and unusable for residents and visitors.

The only consolidated area for common space is unfortunately located at the Shinfield Avenue street frontage facing due south and adjacent to the main basement car park entry. As such, it is unlikely to be well used.

4. Density

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

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

5. Resource, energy and water efficiency

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

As discussed under Built Form, if the RFB layout was different, many substantial benefits could result. These include better solar and daylight access, consolidated and useable communal open space, better unit layouts, good cross ventilation, better outlook for units to a green open space area and as a result better energy and resources efficiency.

A large consolidated common open space would be beneficial in terms of creating a localised microclimate, a green outlook and promoting water reuse on proposed landscaping.

6. Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.

Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character.

Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

It is noted that the development just 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. Further discussion is provided under Built Form in regards to integrating common open space with the built form for the site.

7. Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development.

Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy,

storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

- *Building layout*

As discussed under Built Form the chosen square layout for the proposal has inherent issues which have a significant impact on the amenity of the proposed apartments.

Refer to Built Form comments.

- *Daylight and solar access*

Refer to Built Form comments. It seems that the solar and shadowing calculation have ignored the proposed development at 165-167 Rosedale Road.

The proposed Issue A plans have been reviewed in conjunction with the development proposed at 165-167 Rosedale Road (DA0408/10) to determine what the solar access may be in terms of a % (it is noted for an accurate assessment, full modelling would need to be undertaken). It is estimated that 22% of the proposed apartments would receive the 3 hours.

All apartments on lower ground, ground floor and first floor do not received the 3 hours. On the second and third floors units 2.04,2.03, 2.02 and 3.04, 3.03 and 3.02 DO get the 3 hours. Top floor both units achieve 3+ hours of sunlight.

Therefore, 8 apartments out of a total 37 receive the 3 hours.

This solar figure should be viewed in the context that this is a corner site with generous front setbacks and that the orientation makes it difficult to achieve the 3 hours. However, if the development was an L-shaped, the solar and amenity generally would be better even if the 70% wasn't reached. This site cannot support the full yield that is proposed.

- *Natural ventilation*

As the layout is a square form, ventilation can only be achieved across the corners of the proposed units or not at all as illustrated by proposed units on the basement 3 level which generally face south-west, south and south-east.

- *Carparking*

The basement car parking is satisfactory.

- *Common open space*

The currently proposed space(s) are discussed under Built Form.

8. Safety and security

Good design optimises safety and security, both internal to the development and for the public domain.

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

Generally, surveillance will be adequate for pedestrians using the main entry from Rosedale Road.

9. Social dimensions and housing affordability

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

The 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. New housing forms and types provide a choice for prospective residents. The proposed mix is appropriate for the context.

10. Aesthetics

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

The aesthetics of the building are appropriate for the context. The composition of building elements, textures and materials is appropriate and well mannered.

Comments in response to the draft conceptual amendments (Issue C plans) include:

We recognise that there has been a reasonable effort in responding to a number of the concerns raised, however, the amendments still result in an application that does not adequately address a number of issues, in particular the design of the built facades are not adequately developed.

The suggested amendments to the plan layout, which include permitting access through to the communal open space and re-jigging of units layouts as suggested, have generally been responded to, although the clarity in plan and accessibility that was present in the original documents is no longer evident.

The concerns with the overall architectural expression of the proposal have not been satisfactorily resolved.

The original documentation provided for a building design that had significantly greater architectural merit than the amended plans. It appears that the amendments to the building form to improve the orientation of the apartments and the communal open space have not resulted in the same level of architectural resolution.

Principle 10 - Aesthetics under SEPP relates to the design quality of the residential flat building.

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

The proposal is on a prominent corner site, the design quality of the external facades become even more critical as more of the proposal is in view of the public domain.

- *The street elevations lack consistent shape, proportion and articulation of openings.*
- *The street elevations have lost the base to the proposed building which assists in articulating the building and connecting it to the ground.*
- *The angled Rosedale Road façade, provides for additional sunlight into the apartments, however this part of the building remains unresolved. The balcony treatment with the round columns does not provide for a quality outcome.*
- *There are a substantial number of windows on the western elevation that are unshaded.*
- *The amended drawings indicate a strong vertical articulation in the Rosedale and Shinfield Road elevations, the original plans provided for a more considered approach with a base that helped resolve the manner in which the building meet the ground, and the articulation of the balconies that provided greater enclosure and privacy.*

It is recognised that the development standards for the landscape and floor area, the controls for setbacks, combined with a corner site provide for a significant constraint to development on the site. Given the reduced building footprint available, a solution that provides satisfactory resolution of amenity, form and scale issues would be difficult to achieve with a proposal that is near the maximum permissible floor space.

Heritage

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

Heritage status

The site does not contain any heritage items. The site is not in a Heritage Conservation Area or National Trust UCA. The site is located within the vicinity of a listed item at No 9 Porters Lane, St Ives.

Demolition of existing houses

Given that the site has been rezoned, demolition of the houses was anticipated and there is no heritage objection to demolition.

DCP Town Centres

Council has prepared specific objectives and controls to assist applicants in preparing applications for medium density development within the vicinity of heritage items in the Town Centres DCP.

Comments

The site is separated from the heritage item by a reasonable distance and it is considered that the development would have minor impacts on the nearby heritage item. The nearby heritage item is a modern period flat roofed house located on a large battle axe lot. It is architecturally significant and designed to relate to a private garden setting which is now mature. The building is sited to take advantage of a northerly orientation and achieves a high level of privacy due to its isolated setting and mature garden. It has a second orientation to a pool on its western side.

The subject site is located to the south-west of the item and separated by two lots. There is considerable tree screening on the heritage item and on other adjoining sites that would assist in screening the development from the heritage item. While it would be seen in the background, considering the objectives and controls in the Town Centres DCP, the proposed development would have minimal impacts on the heritage item at No 9 Porters Lane.

Conclusions and recommendations

Due to the physical separation of the site from the nearby heritage item, it is considered that the proposed development would have negligible impacts on its heritage significance.

Landscaping

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

Tree impacts

- **Removal**

The development proposes the removal of numerous trees on site to accommodate the proposed works. Subject to tree replenishment being undertaken on site, Landscape Services can support the nominated tree

removal as the trees proposed for removal are not considered significant within the broader landscape setting.

- **Setbacks/excavation/construction**

Tree 6 *Quercus robur* (English Oak) located adjacent to the western (Rosedale Rd) site boundary. Impacts to Tree 6 have not been assessed by the consulting arborist. Development works including retaining walls, excavation, private courtyard, and pedestrian paths are proposed within the trees secondary root zone (SRZ) and primary root zone (PRZ). It is noted that the existing driveway is located to the north and east of the tree, with the proposed works to the south and east, where it is currently soft landscape area which is favourable for root growth and development. As per AS4970-2009 it is required that the arborist assess the impacts of the works to Tree 6 as the encroachment within the tree protection zone (TPZ) is greater than 10% of the TPZ (on two sides) which is likely to impact the ongoing health and viability of the tree. Retention of the tree is preferred as it provides amenity to both the site and streetscape character.

Tree 10 *Corymbia citriodora* (Lemon Scented Gum) located adjacent to the western (Rosedale Rd) site boundary. Landscape Services concurs with the arborist's comments that any root severance as a result of excavation works for the basement will be minimal. Recommendations for hand excavation and no over excavation can be conditioned. However, the arborist has not assessed the impacts of the proposed drainage works which are located within the tree's SRZ and TPZ. As per Tree 6 it is required that as the development works encroachment within the TPZ is greater than 10% of the TPZ, that the arborist assess the impacts of the additional development works and provide recommendations to minimise any adverse tree impacts. It is recommended, to overcome these issues that the drainage plan be amended relocating proposed pipes and pits outside of the TPZ.

Tree 11 *Syncarpia glomulifera* (Turpentine) located adjacent to the south-western site corner. The tree is the only endemic species on site and is considered to be 'remnant' in that it predates existing development on the site and therefore has not been planted as part of previous landscape works on site. The proposed building is located within 3.0m of the tree, resulting in the tree being exempt under Council's Tree Preservation Order (TPO). This is unacceptable and cannot be supported. It is required that the setback for the development works be increased to ensure that: (a) the tree is protected under Council's TPO; and (b) the increased setback be sufficient to allow for scaffolding and access for the construction of the development. The arborist's comment regarding a consent condition requiring the retention of the tree despite the exemption under the TPO is impractical, as future residents would not be aware of the existence of such a condition, nor would Council's Customer Service staff if queried.

The arborist states that root loss would be minor where the proposed basement extends beyond the footing of the existing dwelling and there would not be significant impact and the encroachment would be offset by the additional deep soil landscape area that is currently under the existing dwelling. Landscape Services is not satisfied that the root loss within the encroached area would be minimal as it is likely that as the tree has grown after the construction of the

dwelling, developing roots would have followed the line of the footing parallel to the dwelling and therefore it is likely that there are some significant roots. It is requested that some root investigation works be undertaken (preferably non invasive) to determine the extent of root growth in this area. However, if the building setbacks is increased as required, and excavation taken behind the existing line of the dwelling, no root mapping is necessary.

If the tree is to be retained it is necessary to increase the development setbacks.

Tree 18 *Eucalyptus grandis* (Flooded Gum) located adjacent to the eastern site boundary, within the neighbouring property. No specific development impact assessment has been undertaken by the arborist, who has assumed that development works have a minimum 5.0m setback from the site boundary. The drainage plan proposes a substantial drainage pit (Pit 17, 900x900) and an upgrading of the existing drainage pipes within the easement within the tree's TPZ and SRZ. It is required that the arborist assess the impacts of the proposed development to the tree's ongoing health and viability and provide recommendations as to how to minimise development impacts. If the arborist finds that proposed development impacts warrant the removal of the tree, written consent is required from the neighbouring property owner/s.

Hydrology (Tree 13)

*The development will result in significant excavation for the multi level basement upslope of the mature *Eucalyptus grandis* (Flooded Gum), Tree 13, located adjacent to the Shinfield Ave site frontage. The Flooded Gum is the dominant tree on site and visually significant within the broader landscape setting.*

It is noted within the Geotechnical Report that no groundwater was encountered, and that a standpipe was left in situ for future groundwater monitoring by others. The applicant's arborist has stated that any concerns regarding changes to groundwater are resolved as no groundwater was encountered during the geotechnical excavations (boreholes) and that no substantial groundwater flows into the excavation will occur. The geotechnical report also states that seepage is likely to occur along the bedrock surface which is approximately 1.4m below existing ground level, particularly during periods of heavy or prolonged rainfall. The arborist considers the bedrock to be below the general depth of the root system.

In addition, it is noted that the geotechnical report recommends monitoring of groundwater flows and depending upon the findings of this monitoring arrangements should be made to compensate for any groundwater loss through irrigation within the root zone. No further monitoring results have been submitted with the application despite the borehole drilling being undertaken on 07/06/10, three months prior to the application being lodged. As modifications are required to the submission it is requested that the standpipe (for groundwater monitoring) be inspected for groundwater levels and an addendum to the report/s be provided as to the findings.

Landscape Services concurs with the arborist that the Flooded Gum will not be significantly impacted by the proposed excavation for the basement, particularly

as the existing dwelling and garage is excavated below existing ground levels, and the proposed excavation for the basement is at a greater setback.

- **Pruning**

Tree 11 Syncarpia glomulifera (Turpentine) located adjacent to the south-western site/building corner. The consulting arborist has stated that the building above ground level will intrude into the crown spread but pruning would be limited to a few small branches. Landscape services disagrees with this statement as it is evident from other residential flat building development sites that additional clearance is required for construction scaffolding (approximately 1.5m) and access. This would have a significant impact to the tree's canopy and structure, which cannot be supported. As per previous comments, it is required that the development setback be increased to allow sufficient area for the construction of the development.

- **Substation**

A substation kiosk is proposed adjacent to the south-eastern site corner/Shinfield Ave site frontage within the TPZ of Tree 13. It is noted that the substation is located within the footprint of the existing driveway. No arboricultural assessment has been undertaken. Further detail and information is required regarding proposed and existing levels for the substation area to determine the extent of excavation required. In addition, it is required that the arborist assess the potential impact to the tree's root system and provide recommendations for minimum setback and construction requirements to minimise adverse impacts. It is preferred that the substation be located outside of the TPZ of existing trees to be retained.

- **Drainage**

Stormwater Drainage Plan #75990-1 'A', proposes stormwater pipes and pits within the structural root zones and tree protection zones of existing significant trees to be retained. The impacts of these drainage works have not been assessed by the consulting arborist. It is required that: (a) the consulting arborist view the drainage plan and provide comments/recommendations as to minimum setbacks; and (b) it is preferred that the proposed drainage lines and pits be located outside of the TPZ as defined by AS4970-2009, particularly as other development works are located within the TPZ.

- **Construction Management Plan**

The CMP, DA-14 indicates the use of existing single driveway crossovers/locations for construction access and vehicle (truck) manoeuvring within the TPZ and SRZ of existing trees to be protected retained. This will have an adverse impact to the ongoing health and viability of existing trees which cannot be supported. It is required that the CMP be amended to propose vehicle access points outside of the TPZ of existing trees to be retained.

Landscape plan/tree replenishment

- *The landscape design to the north of the site does not correspond with the designated private courtyard and communal open space areas. As proposed, the private courtyard areas are expanded within the nominated communal open space, and exclude access from other residents. It is*

required that the private courtyard areas for Units G.03 and G.04 be consistent with the identified areas on DA05.

- A communal garden seat and seating area has been proposed beneath the canopy of Tree 6. No notation has been provided for the proposed surface treatment. While no objection is raised regarding having a seating area in this location, the necessity for the surface treatment is related to compliance with deep soil provisions across the site.*
- Tree 11 Syncarpia glomulifera (Turpentine) is identified within the Tree Schedule to be removed. To avoid conflicts/confusion it is required that the plan specify the tree to be retained.*
- Pedestrian pathways are proposed within the SRZ and TPZ of existing trees to be retained. It is required to enable assessment of potential impacts that existing and proposed levels be shown. It is preferred that wherever possible proposed paths be located outside of the SRZ and setbacks from existing trees maximised.*
- The landscape plan is non compliant with the BASIX certificate. The non compliances include; lawn areas, and enlarged private courtyard areas. It is required that the landscape plan and the BASIX certificate be consistent. As this is a SEPP it cannot be conditioned.*
- A new pedestrian pathway is proposed within the TPZ of tree 13. Further detail is required for proposed and existing levels and how the cross fall within Council's nature strip is to be resolved to enable disabled access.*
- Water commitments within the BASIX certificate include landscape irrigation from the alternate water source. It is required that the landscape plan detail and calculate the areas to be irrigated and these are to be specified on the landscape plan and landscape notes.*
- No tall canopy trees have been proposed within the northern side setback. To enhance landscape amenity and to reduce the visual bulk of the development it is required that tall canopy trees (can be exotic deciduous species) be proposed within the northern side setback.*
- The choice of Omalanthus populifolius (Bleeding Heart) is not supported. The species is a bushland 'pioneer' species that is short lived. As the site has no connection to bushland and is within an urban setting undergoing increased densification it is preferred that longer lived traditional (exotic) small tree species be utilised to maintain and enhance the landscape character. This can be conditioned, but as other modifications to the landscape plan are required, it is requested for the species to be modified. It is noted that Bleeding Heart prefer free draining sandy soils. The soil type on site is heavy clay over weathered shall which is not free draining.*
- The location of drainage pits adjacent to the north-western site corner and within the western side setback do not correspond with the Stormwater drainage Plan #75990-1 'A'. As a result proposed tree plantings spatially*

conflict. It is required that all plans be consistent to avoid conflicts and confusion.

Tree replenishment numeric requirements have been satisfied, however, it is required that proposed canopy tree replenishment planting be included within the northern side setback.

Stormwater plan

The Stormwater Drainage Plan #75990-1 Issue A, proposes stormwater pipes and pits within the SRZ and TPZ of existing trees to be retained. The location of this drainage infrastructure will have adverse impacts to the ongoing health and viability of existing trees, which has not been assessed by the applicant's arborist. It is required that drainage works be relocated outside of the TPZ of existing trees to be retained. An amended stormwater plan is required. Wherever possible, it is required that drainage lines be strapped or located immediately adjacent to the basement wall to maximise the available deep soil within setback areas.

BASIX

BASIX certificate #326630M dated 01/09/10 has made numerous landscape commitments, including:

Common areas

1311sqm of common garden area

0sqm of common lawn area

Dwelling areas

<i>Unit Number</i>	<i>Area of garden and lawn</i>
<i>3.06</i>	<i>4.8sqm</i>
<i>G.01</i>	<i>89.7sqm</i>
<i>G.02</i>	<i>34sqm</i>
<i>G.03</i>	<i>16sqm</i>
<i>G.04</i>	<i>8sqm</i>
<i>T.01</i>	<i>14sqm</i>
<i>T.02</i>	<i>14sqm</i>
<i>LG.01</i>	<i>5sqm</i>
<i>LG.02</i>	<i>8sqm</i>
<i>LG.03</i>	<i>5sqm</i>
<i>LG.04</i>	<i>6sqm</i>

No landscape commitments have been made for low water use/indigenous species within either the common or private landscape areas.

Landscape Services does not agree with the calculable areas within the BASIX certificate. The areas in dispute include:

- Zero common lawn area. The submitted landscape plan indicates three main common lawn areas. For consistency, the BASIX certificate is to be amended to include the combined area of these lawn areas. Note: Water use for lawn areas differs from garden beds.*

- *Unit G.03 according to DA05 has a garden area of 7sqm, which is inconsistent with the commitment of 16sqm. The landscape design implies a larger private garden area as there is no communal access and the designated private garden area traverses midway through the lawn. It is required that the private garden area and landscape design be consistent.*
- *Unit G.04 has a garden/lawn area of approximately 12sqm which is greater than the specified 8sqm. As for Unit G.03, the landscape design implies a larger private garden area, as the area adjacent to the unit has excluded communal access and the identified private garden area traverses midway through the lawn. It is required that the private garden area and landscape design be consistent.*
- *Unit LG.02 according to DA04 has a private open space of 40sqm, inclusive of a 32sqm terrace area, leaving 8sqm of garden/lawn area. While this is consistent with the commitment of 8sqm, the area has not taken into consideration the two large drainage grates that take up 2sqm. It is required that the commitment made be consistent with the area of garden/lawn that can be planted.*
- *Unit LG.03 according to DA04 has a private open space area of 25sqm inclusive of a 22sqm terrace, leaving 3sqm of garden/lawn area. This is inconsistent with the commitment made, and inconsistent with the landscape design that includes an additional soft landscape area to the south of the building which is only accessible from the unit.*
- *Unit LG.04 according to DA04 has an identified private open space of 29sqm, inclusive of a 23sqm terrace, leaving a 6sqm garden/lawn area. While this is consistent with the BASIX certificate, the landscape design proposes a much larger landscape area that is only accessible from the unit. To ensure compliance it is required that the submitted plans be consistent and that these are consistent with the BASIX certificate commitments.*

In addition, it is noted that within the water commitments for the private dwellings there is a commitment for the irrigation system for the landscape setting to be connected to the alternative water source (water tank). It is therefore required that the submitted plans (including the landscape plan) specify that external irrigation for the gardens be connected to the water tank. Likewise, the BASIX certificate specifies a requirement that 1311sqm of common landscape area on site be irrigated by the central water tank. The certificate specifies that this is to be shown on the DA plans. It is therefore required that details be provided for the irrigation system to ensure compliance with the BASIX certificate.

Deep soil

Within the applicant's Statement of Environmental Effects, the consulting planner has stated that the proposed deep soil landscape area for the site is 1382sqm or 50.65% of the site area, which is compliant with the minimum 50%

(1364.5sqm). This is based upon the applicant's calculations of the site area minus the building footprint and driveway area. This calculation has not considered other development works external to the building footprint that require exclusion from the deep soil calculable area such as the proposed substation, retaining walls, entry paths greater than 1.2m wide, as defined within the Town Centres DCP 2010.

No Deep Soil Compliance Plan has been sighted by Landscape Services to verify and assess the areas included within the applicant's calculations. A scaled deep soil compliance plan at a consistent scale with the architectural and landscape plan is required to enable an accurate assessment of the proposed deep soil landscape area.

Town Centres DCP

3C.11 Fencing

- *Not higher than 900mm if closed construction eg masonry*
- *Must step down and follow natural contours*
- *Open landscape character, ensure that fencing does not detract from visual amenity and character of area.*

The application proposes substantial sandstone walls within both street frontages, perpendicular to the site boundaries, one of each side of the driveway and another on the southern side of the pedestrian entry point. The photomontage depicts these walls as being substantial elements within the landscape setting. The limited top of wall (TOW) heights indicated on the landscape plan show that the walls exceed the DCP controls. To reduce the dominance of these proposed walls it is preferred that they comply with the DCP controls and if safety is an issue that a lightweight palisade fence be utilised.

No perimeter fencing within the site frontages is proposed, although a 1.2m high lightweight fence can be constructed without Council approval.

3C.12 Private Open Space

- *Fences max height 1.8m solid 1.2m + gate to common areas*

No details have been provided regarding private courtyard fencing. It is assumed as no fencing is shown, that proposed planting and retaining walls will provide separation between private and common open space. Unit G.04 does not have external access to the communal open space, although this could be easily done as levels are consistent.

3C.13 Communal open space

- *10% of site area with minimal dimension of 5.0m*
- *One single space with min 80sqm min dimension of 8m, at ground level behind building line, with disabled access to and from.*
- *Optimise social/recreation activities, solar access, summer shade, outlook and privacy with shared facilities eg BBQ, shade structures, play equipment and seating.*

Communal space requirements have been satisfied with the exception of one single space of 80sqm which acts as the principal open space for the development. While it is possible to physically comply with the requirements of the objectives and controls, the proposed landscape design has expanded the private courtyard areas within the nominated principal communal open space, and in doing so restricts the area for optimal opportunities for social and recreational activities. It is recommended that the BBQ area be covered and the grassed area expanded for improved amenity and recreational opportunities.

4.2 Landscape for biodiversity and bushfire management

- *conserve indigenous vegetation; (ii) retain most significant vegetation*
- *structures to be located outside of canopy spread of trees to be retained*

Only one indigenous tree exists on site. The tree is shown to be retained, however there are impacts to the tree's ongoing health and viability that have not been considered by the applicant which compromise the tree. Refer Tree Impacts–Tree 11

- *Planting (10) within 300m of bushland, planting to consist of 70% locally native trees and 30% understorey species.*

The site is located within 300m of existing bushland (Browns Forest) and remnant bushland that surrounds Sydney Water infrastructure. The SEE does not address this DCP control. The original vegetation community is transitional between Sydney Bluegum High Forest (SBGHF) and Sydney Turpentine Ironbark Forest (STIF). The landscape design does not comply with this control and neither requirement has been satisfied.

4.7 Roof terraces and podiums

- *Robust and drought tolerant species to reduce maintenance and ensure longevity*
- *Min soil depth 0.5-0.6m + drainage infrastructure.*

A mix of plant species has been selected, including high water use species (Gardenia florida) which is non compliant with this control. Planter beds are of sufficient depth (800mm) to sustain plant growth of appropriate species.

Other issues and comments

Construction Management Plan (CMP)

Tree impacts – The CMP proposes site access and manoeuvrability within the TPZ and canopy drip lines of existing trees to be retained. It is required that the CMP be amended to ensure that TPZ's and construction access points do not conflict. The CMP does not indicate the location of a crane. If a crane is proposed its location on plan is required to be detailed to assess potential tree impacts.

Sediment Control Plan – indicates stockpile site locations within the TPZ of existing trees to be retained. This cannot be supported. It is required that

stockpiles be located outside of the TPZ of existing trees to be protected and retained.

It is noted that the Sediment Control Plan assumes an excavation setback line of 1.0m around the building. The geotechnical Report recommends the use of in-situ retention system such as an anchored soldier pile wall with shotcrete infill panels or an anchored contiguous pile wall formed to support the soil profile and extremely low, very low and low strength bedrock. Landscape Services supports this method of excavation technique over battering as it retains existing soil profiles within the landscape setbacks. It can be conditioned for the above to be implemented at the proposed excavation line.

Conclusion

The application is not supported by Landscape Services due to:

- non compliance with BASIX*
- insufficient information and possible non compliance with deep soil landscape area*
- likely tree impacts*
- inadequate assessment of tree impacts*
- non compliance with DCP controls and objectives*

Engineering

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

The proposed development cannot be fully assessed due to inadequate and unsatisfactory information.

- 1. All stormwater flows are not captured for treatment prior to discharge to the stormwater drainage system. The design is to be based on MUSIC modelling and is to achieve the standards for water quality required in Part 5F of the KDCP (Town Centres).*
- 2. The inspection / access grate for the detention tank within the units terrace area is not permitted. The access opening should be installed directly over the overflow outlet and should be readily accessible from a point external to the site building (i.e. communal open area).*
- 3. Provide supporting hydraulic calculations that the pipeline within the 1.2m wide interallotment drainage easement has sufficient capacity to control the flow of stormwater.*
- 4. Pump-out controls for the basement are to be met with supporting calculations. The pump-out system shall have a visible ponding area available for temporary storage during pump failure with an absolute minimum capacity for the 100 year, 2 hour storm event.*
- 5. The submitted Stormwater Drainage Plan proposes stormwater pipes and pits within the SRZ and TPZ of the existing trees to be retained which will have adverse impacts to the ongoing health and viability of existing trees.*

Drainage works should be relocated outside of the TPZ of existing trees to be retained. Refer to Council's Landscape Officer's comments with respect to drainage works being relocated outside of the TPZ of existing trees to be retained.

6. *The applicant should submit a longitudinal section through the driveway and into the basement carpark which clearly demonstrates that there will be 2.6 metres clear headroom along the whole of the travel path required for the small waste collection vehicle. The section is to include realistic slab/beam depths, and be endorsed by a structural engineer.*

Building

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

"I have assessed the architectural plans and reviewed the BCA report prepared by Blackett Maguire & Goldsmith, and provide the following comments:

*Section A: Class 2 & 7
RIS: 7
Type of Construction: A*

Section B: Engineer's details to be provided at Construction Certificate (CC) stage.

Section C: Details can be assessed at the CC stage.

Section D: The report has identified areas of non-compliance with the Deemed to Satisfy provisions of the Building Code of Australia (BCA). It also advises that these areas of non-compliance are to be addressed by a practising Fire Engineer.

Section E: Details to be assessed at the CC stage.

Section F: Details to be assessed at the CC stage.

Section G: It is noted that the swimming pool gate is shown to swing into the pool areas instead of away from the pool areas. This can be addressed at CC stage.

Section H: Not applicable

Section I: Not applicable

Section J: Details to be submitted and assessed at the CC stage

Recommendation:

Then BCA report suggests that an alternative solution will be used for areas of non-compliance with the Deemed to Satisfy Provisions of the

BCA. Clarification may be necessary as to the nature of any physical changes required to the building.

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 James Grant, Fortey+Grant Architecture (dated August 2010) which submits that the proposal has been designed in accordance with the design quality principles under Part 2 of the SEPP.

Council's Urban Design Consultant has reviewed the original proposal (Issue A) and the draft conceptual amendments (Issue B and C) in relation to SEPP65 and considered the proposal to be unsatisfactory (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 BASIX certificate has been submitted, Certificate Number 326630M, dated 1 September 2010. However, no landscape commitments have been made for low water use/indigenous species within either the common or private landscape areas.

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

Development standard		Complies
Minimum subdivision lot size 1200sqm	2729sqm	YES
Height of buildings 17.5m (max)	18.93m	NO
Floor space ratio (FSR) 1.3:1 (max) 3547.1sqm	1.32:1 (3599sqm, +53sqm)	NO

Height of buildings (Clause 4.3)

The site slopes from the front north-west corner (RL156) to the rear south-east corner (RL147.49) at an average gradient of 11.5% (moderately sloping). The site slope within the building footprint is also approximately 11% (moderately sloping). The site is not considered to be a steeply sloping site.

Spot levels have been interpolated between the survey plan and roof level of the building. The proposal fails to comply with the 17.5m height control towards the centre and north-eastern section of the building, proposing approximately 18.93m (at its highest point within the vicinity of central stair well and dual lift shaft).

The applicant has applied for a variation to the height control via Clause 4.6 Exceptions to development standards under the Town Centres LEP.

Clause 4.6 provides flexibility in applying development standards and enables a consent authority to vary a standard where a written request from the applicant demonstrates that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case; and that there are sufficient environmental planning grounds to justify contravening the development standard.

The applicant's justification in response to Clause 46(3) of the Town Centres LEP includes the following arguments:

4.6(3)(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

- *the site has been previously extensively cut from natural ground levels to facilitate the existing residential dwellings on the site.*
- *the non-compliant section of building would not be visible from the public*

domain

- *there are no impacts resulting from the non-compliance*
- *the provision does not have regard to localised areas of excavation which would not be perceivable once the development is completed*
- *the resultant development will be of a height and scale consistent with that envisaged by the LEP*
- *the resultant development is compatible with the size of the land*

4.6(3)(b) that there are sufficient environmental planning grounds to justify contravening the development standard

- *compliance is unreasonable and unnecessary in the circumstances of this case*
- *the non-compliance will not result in any unreasonable impacts upon adjoining properties*
- *the non-compliance will not result in any unreasonable impacts upon the public domain*
- *other than for the site having previously been excavated to accommodate the existing dwellings the proposal would be compliant.*

It is acknowledged natural ground level has been modified to accommodate the swimming pool at 161 Rosedale Road. However, the site is not classified as significantly sloping. By interpolating levels between the survey and the architectural plans, the height non-compliance extends beyond the dual lift core, but further to the north-east section of the building. The non-compliance results in excessive height and building mass concentrated to the upper half and central lift core area of the building.

It is noted that the Issue B draft conceptual plans addressed the height non-compliance including the relocation of the dual lift shaft. It has been illustrated there are alternative design solutions which are capable of complying with this development standard. However, the Issue B plans have not been supported as the changes did not satisfactorily overcome the urban design issues raised and the revised proposal remained an unacceptable outcome on the site.

The building design should respond to the topography of the site. This has not been satisfactorily achieved. Having regard to the cumulative built form and design issues raised, the proposal is an overdevelopment of the site and does not satisfactorily respond to the constraints and attributes of the site. A height variation to Clause 4.3 under the TCLEP is not supported.

Floor space ratio (Clause 4.4)

In the Statement of Environmental Effects it is stated that the FSR is 1.3:1 and that it complies with the maximum requirement under the Town Centres LEP. No FSR compliance diagrams have been submitted to verify the calculations provided.

Calculation of the gross floor area (in accordance with the definition contained under the dictionary of the Town Centres LEP) suggests the development exceeds the 1.3:1 requirement, proposing 1.32:1. In addition to the FSR non-compliance, there is no well founded rationale for the need of two lifts (side by side) centralised within the building, having regard to the proposal involving 36 units. The dual lift shaft contributes to the excessive building bulk (refer discussion under height of buildings).

The objectives of Clause 4.4 include:

- (a) *to ensure that development density is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai town centres*
- (b) *to enable development with a built form that is compatible with the size of the land to be developed*
- (c) *to provide an appropriate correlation between the extent of any residential development and the environmental constraints of a site*
- (d) *to ensure that development density provides a balanced mix of uses in building in the business zones*

The proposal does not provide an acceptable development which appropriately responds to the environmental constraints of the site, nor does it provide a satisfactory design outcome as a building which is viewed in the round. The proposal also fails to provide acceptable communal open space and residential amenity.

The proposal fails to satisfy the objective 4.4(b) and (c) under Clause 4.4 of the TCLEP and accordingly is an over-development of the site.

Part 5.10: Heritage conservation

Clause 5.10 of 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 is within the vicinity of a local heritage item, at 9 Porters Lane, St Ives. Council's Heritage Advisor has assessed the development in context with the item and considers the impact to be acceptable.

POLICY PROVISIONS

Ku-ring-gai Development Control Plan (Town Centres) 201

Part 3 Specific Building Type Controls		
3C Residential flat building		
Site Design		
Development Control	Proposed	Complies
3C.2 Building Setbacks Street setbacks: 10 – 12m (40%) Side & rear setbacks: 6m	Unsatisfactory compliance diagram submitted	NO

Side & rear setbacks: 6m	6m	YES
Zone interface setbacks: 9m to the 4 th storey	9m	YES
Setback to the 5 th storey 9m	<9m	NO
Encroachments (basement encroachments into street, side and rear setbacks, ground floor terrace/courtyard encroachments within front setback)	Basement encroachments to the north and east side setbacks	NO
3C.3 Site coverage Site coverage: 35% 1293.25sqm	unsatisfactory compliance diagram submitted	NO
3C.4 Deep soil landscaping 50% Tree replenishment and planting	Unsatisfactory compliance diagram submitted	NO
3C.7 Building storeys Maximum building height: 17.5m Maximum no. of storeys: 5	18.93m 6 storeys	NO
3C.8 Building facades Building width < 36m Balcony projection < 1.2m	<36m <1.2m	YES
3C.9 Building entries	No entrance to Shinfield Road frontage	NO
3C.10 Top storey design and roof forms	No compliance diagram submitted to assesses against the 60% control, inadequate setbacks	NO
3C.11 Fencing	>900mm	NO
3C.12 Private open space ground floor apartments have a terrace or private courtyard greater than 25m ² in area Balcony sizes: - 12m ² – 2 bedroom unit - 15m ² – 3 bedroom unit NB. At least one space >10m ² primary outdoor space has a minimum dimension of 2.4m	< 25sqm Undersized balconies	NO

3C.13 Communal open space	Fails to satisfy objectives	NO
3C.14 Apartment depth and width 1. 18m maximum internal plan depth 2. 8m maximum depth to single aspect apartments 3. 4m minimum width to dual aspect apartments over 15m 4. 8m maximum distance from kitchen to an opening	<18m <8m to a kitchen	YES
3C.15 Ground floor apartments Finished ground level outside living area not more than 0.9m below existing ground level	<0.9m	YES
3C.16 Natural ventilation 60% natural cross ventilation 25% of all kitchens to be naturally ventilated	55% (refer urban design comments) >25%	NO YES
3C.17 Solar access 70% apartments to receive min of 3+ hours direct sunlight to living and private outdoor >50% of the principle common open space of the development receives 3+ hours direct sunlight in the winter solstice <10% of the total units are single aspect with a southern or western orientation	22% (overshadow from the proposed development at DA0408/10) 22%	NO NO NO
3+ hrs of sunlight between 9am – 3pm June 21 to living areas and principle private open space of any residential development adjoining R2, E4 and R3 zones	>3hrs	YES

3C.18 & 19 Visual and acoustic privacy	Setback to boundaries acceptable. Recommend solid or semi-transparent balustrades to balconies	YES
3C.20 Internal ceiling heights	2.7m	YES
3C.21 Room sizes 1. living areas minimum dimension: <ul style="list-style-type: none"> • 4m for apartments with 2 or more bedrooms • 3.5m for other apartments 2. 3m minimum internal plan dimension for 1 and 2 bedroom apartments 3. 3m minimum internal plan dimension for 2 bedrooms in apartments with 3 or more bedrooms	3m	YES
3C.22 Internal common circulation Single corridors: serve a maximum of 8 units >1.5m wide >1.8m wide at lift lobbie	<8m >1.5m wide	YES
3C.23 Storage 1. Storage space provided as follows: i. 6m ³ for studio apartments ii. 8m ³ for one bedroom apartments iv. 12m ³ for apartments with two or more bedrooms 2. 50% of storage space located within the apartment, remaining space in basement allocated separately	Inadequate detail provided	NO
3C.24 External air clothes drying facilities 1. external drying area for each apartment 2. screened from public / common open space areas	Insufficient detail on plans, a matter that can be resolved via condition in the event of an approval	YES (subject to condition)

3. facilities to be provided if located in common areas		
3C.25 Car parking provision Residential Control 1 bed = 0.7 – 1 spaces 2 bed = 1 – 1.25 spaces 3 bed = 1 – 2 spaces 6.3– 9 spaces 21 – 26.25 spaces 6 – 12 spaces Total: 33.3 – 47.25	47 spaces	YES
Visitor parking		
1 space per 4 units (9 spaces)	10 visitor spaces	YES
1 disabled visitor space	1 disabled visitor space	YES
1 service/removalist vehicle/carwash bay	1 carwash/visitor space provided	YES
3C.26 Bicycle parking 1 bicycle space per 5 units for residents (7.2) 1 bicycle space per 10 units for visitors (3.6)	8 residential bicycle bays 4 visitor bicycle bays	YES
3C.27 Adaptable housing 1. 10% of apartment are adaptable (3.6 (4)) 2. 1 disabled car space per adaptable apartment 3. 70% of apartments are visitable	4 manageable units (Units LG02, G06, 1.06 & 2.06) 4 disabled residential spaces 100% visitable	YES
3C.28 Apartment mix and sizes 1. Range of apartment sizes within the development 2. Minimum apartment sizes: i. 50m ² for studios and one bedroom apartments ii. 70m ² for two bedroom apartments iii. 95m ² for three bedroom apartments	9 x 1 bedroom, 21 x 2 bedroom and 6 x 3 bedroom	YES

Building setbacks (3C.2)

- **Street setback**

It is not clear from the information submitted as to which areas are included or not included within the front setback 40% articulation zone calculation. A separate compliance diagram with clear calculations has not been submitted.

- **Site setback**

The side setback controls under Clause 3C.2 - Control 5(ii), require a minimum of 9 metres from the side boundary up to the fifth storey. The definition of building line or setback under the Town Centres LEP is the horizontal distance between the property boundary or other stated boundary and a building wall, or the outside face of any balcony, deck or the like.

The proposed northern side setback at the fifth storey (top storey) is 6 metres to the balcony and 9.3 metres to the external face of the building. The proposal does not technically comply with the 9 metres requirement, having regard to the definition of setback.

The northern elevation of the building in relation to the top storey design controls under Clause 3C.10 of the Town Centres LEP is satisfactory in this instance, given that a setback from the outer face of the floors below has been incorporated into the design.

- **Encroachments**

The basement encroachments to the northern and eastern side setbacks, suggest that the development has not been designed from the ground up. This design issue, in combination with the multiple built form, design, amenity and environmental issues identified in this report are indicators that the proposal is an overdevelopment of the site.

Site coverage (3C.3)

The site coverage calculations (shown on plan DA-07A) are not supported. The area shown hatched (including balcony areas) is not in consistent with the definition. Whilst it is acknowledged that the development would likely comply with the 35% site coverage requirement, the submitted compliance diagram is not accurate for assessment.

Deep soil landscaping (3C.4)

The submitted Statement of Environmental Effects states that the proposed deep soil landscape area for the site is 1382sqm or 50.65% of the site area. This is based upon the applicant's calculations of the site area minus the

building footprint and driveway area. This calculation has not considered other development works external to the building footprint that require exclusion from the deep soil calculable area, such as the proposed substation, retaining walls, entry paths greater than 1.2m wide, as defined within the Town Centres DCP 2010. In this regard, an assessment of the development in accordance with the definition of deep soil reveals that the proposal fails to comply with the 50% requirement.

A deep soil compliance plan has not been submitted to verify the areas included and excluded in the deep soil calculation.

Building storeys (3C.7)

The development fails to comply with the maximum 17.5m height and 5 storey controls being 18.93m (at the highest point) and 6 storeys. The variation is not supported.

Building facades (3C.8) and Building entries (3C.9)

The objectives of Section 3C.8 include:

1. *To promote buildings of high architectural quality that contribute to the desired local character*
2.
6. *Provide distinct building articulation on corner sites that reinforce the street intersection and create landmark.*

The controls under 3C.8 include:

13. *Street corners must be emphasised by giving visual prominence to parts of the building façade, such as a change in building articulation, material or colour, roof expression or height.*
14. *Corner buildings are to address both street frontages.*

The design fails to provide a satisfactory design response to Shinfield Avenue. The site is a corner block, and in this regard, the building must be designed to be viewed in the round with the building addressing both street frontages. The vehicular access location in conjunction with the poor façade presentation to Shinfield Avenue does not satisfy the objectives above.

The building must provide a sense of address to both street frontages (for example incorporating a pedestrian entrance focal point to the façade design from both Shinfield Avenue and Rosedale Road). In addition to this issue, the design of the building (including top storey design) appears overbearing in visual bulk to Shinfield Avenue.

Top storey design and roof forms (3C.10)

The objectives under 3C.10 state:

1. *To ensure that the design of the top floor of buildings minimises visual bulk.*
2. *To provide articulation that prevents any increased overshadowing*
3. *To contribute to the overall design and environmental performance of buildings.*

Controls:

2. *The top storey of a building is to be set back from the outer face of the floors below on all sides*

No top storey compliance diagram has been submitted to verify calculations.

The top storey design fronting Shinfield Avenue is unsatisfactory (inadequate setback to the top storey) and results in overbearing visual bulk when viewed from the street and when viewed from downslope R2 zoned residential properties.

There is a concentration of building mass and bulk to the upper northern half of the development which emphasises building mass at the higher part of the site.

The provision of air conditioning plant on the roof of the building is not generally encouraged (basement location preferred). Any service elements are to be integrated into the overall design of the roof and not visible from the public domain or any surrounding development. Concern is raised over the visibility of the air conditioning plant from upslope R4 zoned residential flat development.

Fencing (3C.11)

The controls and objectives include:

- not higher than 900mm if closed construction eg masonry
- must step down and follow natural contours
- open landscape character, ensure that fencing does not detract from visual amenity and character of area

The application proposes substantial sandstone walls to both street frontages, perpendicular to the site boundaries, one on each side of the driveway and another on the southern side of the pedestrian entry point. The photomontage depicts these walls as being substantial elements within the landscape

setting. The limited top of wall (TOW) heights indicated on the landscape plan show that the walls exceed the DCP controls.

The height, size and scale of the walls are overbearing and visually dominate the streetscape when viewed from pedestrian level. The walls are not supported and fail to satisfy the controls and objectives under 3C.11.

Private open space (C3.12)

The proposal does not satisfactorily demonstrate ground level units LG.03 and 04 comply with the 25sqm private open space requirements. There is also inconsistency between the architectural plans and landscape plan with regard to the respective private open space areas.

Balconies must have a minimum internal dimension of 2.4m. This has not been satisfactorily demonstrated. The proposal also has not satisfactorily demonstrated that balconies comply with the minimum area requirements (this is an internal dimension and area calculation). A preliminary assessment using scale rule suggests the balconies are undersized.

- Fences max height 1.8m solid 1.2m + gate to common areas

No details have been provided regarding private courtyard fencing. It is assumed as no fencing is shown, that proposed planting and retaining walls will provide separation between private and common open space.

Communal open space (3C.13)

The objectives include:

1. *To provide useable, attractive and accessible communal open space that adds to the amenity of the development and facilitates social interaction*
2. *To provide communal open space that is responsive to the site and its context.*
3. *To ensure high quality communal open space that is well integrated within the development*

The controls include (but not limited to):

2. *At least one single parcel of communal open space with a minimum area of 80sqm and dimension of 8m.*
3. *The communal open space must be located at ground level behind the building line*
4. *The location and design of communal open space must optimise opportunities for social and recreation activities, solar access and orientation, summer shade, outlook and the private of residents on adjoining R3, R2 and E4 sites.*

The proposed principle area of communal open space to the north-eastern corner of the site does not satisfy the objectives and controls above.

It is noted that the communal open space 'technically' complies with the 8m x 10m area requirements. However, the location hard to the north-east corner of the site (without any setback for boundary planting) is positioned directly adjacent to the private open space area of an R2 development (26 Shinfield Avenue) and results in unacceptable amenity impacts. The purpose and intent of side setback areas is to provide boundary screen planting and common area to the surrounds of the development. The location of the communal open space does not allow the side setback design objectives to be satisfactorily achieved.

The communal open space has not been satisfactorily integrated into the building design. The space is constrained in terms of providing an area for optimal opportunities for social and recreation activities. The site also wraps around Unit G04 and compromises the amenity and privacy of this unit.

As previously raised by Council's Urban Design Consultant, an L-shaped development is considered a more appropriate design response to the constraints of the site, featuring a well designed and integrated communal open space to the north-east quadrant of the site and which also facilitates in providing an acceptable transition to adjoining R2 zoned land.

Apartment depth (3C.14) and width and natural ventilation (3C.16)

Refer to comments under the Urban Design SEPP 65 assessment.

It is also noted that within the pre-DA minutes the following comments were made:

"The proposed 'fat' floor-plate results in substandard daylight access and natural ventilation to the internal sections of a number of apartments'.

Solar access (3C.17)

The submitted solar access assessment fails to take into consideration the context of surrounding development including future redevelopment of the adjoining R4 zoned land. It is noted that DA0408/10 for a residential flat development at 165 – 167 Rosedale Road was lodged on 17 June 2010 (3 months prior to DA0656/10 lodged 10 September 2010).

This proposal and its building footprint fail to allow the development to comply with the 70% solar access requirements under 3C.17 of Council's Town Centres DCP (same control under RFDC).

In addition, the solar access information is not of a satisfactory standard. A solar access report prepared by a suitably qualified person in this field is required, including solar access diagrams/3D modelling addressing solar access requirements in the Residential Flat Design Code and Section 3C.17 under the Town Centres DCP. The report should contain information about the methodology of modelling, the date/time of the images and orientation of shadows cast. A compliance table demonstrating the performance of each individual unit referable to the solar access diagrams/3d modelling should also support the report.

The submitted 3-D modelling presented on 1 x A3 page (images too small to make an assessment) with the compliance table is unacceptable for a solar access assessment of a residential flat building and does not suffice as a solar access report. Further, the images do not take into consideration the context of existing and future surrounding development, notably the RFB at 165-167 Rosedale Road.

As referred in Council's Urban Design comments, an L-shaped development is recommended to overcome the built form and amenity and solar access issues evident in the current proposal.

Storage (3C.23)

The proposal does not demonstrate that satisfactory (functional, accessible and adequate in size) residential storage has been provided for 36 units within the basement. Individual storage areas for each unit should be detailed.

Inconsistent and inaccurate plans and documentation

During the assessment of the proposal, it was apparent that there were multiple inconsistencies and discrepancies between the model, the photomontages and architectural drawings. This is unsatisfactory. Information and documentation must be consistent with each other to enable certainty as to the works sought approval for.

There is uncertainty with the roof plan detail and levels (eg levels between the air conditioning area and adjacent terrace).

Further, it is noted that the DA form states approval is being sought for strata subdivision but not strata subdivision plans were submitted.

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 this application is recommended for refusal, a S94 contribution does not apply.

LIKELY IMPACTS

Significant design issues identified include visual bulk and height, impact on trees, deep soil and landscape design, communal open space, solar access, residential amenity, building presentation and visual bulk to Shinfield Avenue, top storey design and design response to the site constraints and surrounding context. These collectively demonstrate that the proposal is an overdevelopment of the site.

SUITABILITY OF THE SITE

The site is suitable for 5 storey residential flat development, however, due to multiple design issues and inadequacies in information, the proposal is not supported.

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.0656/10 for demolition of existing dwellings, construction of a residential flat building containing 36 units, basement car parking, associated landscape works and strata subdivision on land at 161-163 Rosedale Road, St Ives, as shown on plans DA00 – DA12 Issue A, prepared by Fortey + Grant Architecture, for the following reasons:

1. SEPP 65 Design Quality of Residential Flat Development

Particulars:

- a) The design issues resulting from the chosen layout for the proposed building being a deep square footprint, the change in level of the existing site and the siting of a centralised lift core which makes it inherently difficult to achieve good solar/daylight access, good cross ventilation and amenity generally.
- b) The proposal appears to be designed without satisfactory consideration of the fact that there will be a new five storey residential flat building on the adjacent site, (165-167 Rosedale Road) and up hill of this development site. The solar and shadowing calculation has ignored the proposed development at 165-167 Rosedale Road. The proposed building design will result in many of the northern units being overshadowed, particularly at the lower levels.
- c) The common open space which is essential for residential flat buildings to function well is presented as a residual area. As such, much of this space is elongated and unusable for residents and visitors.
- d) The proposed communal open space hard to the north-eastern corner of the site is not satisfactory and results in unreasonable amenity impacts to the adjoining zone interface property as well as the lower ground units on the subject site.
- e) As the layout is a square form, ventilation can only be achieved across the corners of the proposed units or not at all as illustrated by proposed units on the Basement level 3 which generally face south-west, south and south-east.
- f) A crime risk assessment has not been submitted as required under Part 2 (Site Design) of the Residential Flat Design Code (the development exceeds 20 units).

2. Height of buildings

Particulars:

- a) The proposal fails to comply with the 17.5m height control towards the

centre and north-eastern sections of the building, proposing approximately 18.93m (at its highest point within the vicinity of central stair well and dual lift shaft). The non-compliance creates excessive height and building bulk.

- b) The proposal is an overdevelopment of the site and does not satisfactorily respond to the constraints and attributes of the site. A height variation to Clause 4.3 under the Town Centre LEP is not supported in this regard.
- c) The proposal fails to satisfy the building storey requirements under 3C.7 of the Town Centres DCP proposing 6 storeys and building height in excess of >17.5m. A variation pursuant to Clause 4.6 of the Town Centres LEP is not supported.

3. Floor space ratio

Particulars:

- a) No floor space area compliance diagrams have been submitted to verify the calculations provided. Calculation of the gross floor area suggests the development exceeds the 1.3:1 requirement, proposing 1.32:1 (+53sqm).
- b) There is no well founded rationale for the need for two lifts (side by side) centralised within the building, having regard to the size of the development (36 units). The dual lift shaft also creates excessive building bulk.
- c) The proposal does not provide an acceptable development which appropriately responds to the environmental constraints of the site. The proposal fails to provide a satisfactory design outcome as a building which is viewed in the round nor provides acceptable communal open space and residential amenity.
- d) The proposal fails to satisfy the objectives under Clause 4.4 of the Town Centres LEP and is an overdevelopment of the site.

4. Impractical basement design for construction

Particulars:

- a) The basement encroachments to the northern and eastern setbacks are not supported and suggest the development has not been designed from the ground up. The basement design fails to satisfy Clause 3C.2 under the Town Centres DCP.

- b) Having regard to the cumulative issues raised, the impractical basement design is a further indicator that the proposal as a whole is an overdevelopment of the site.

5. Deep soil landscaping

Particulars:

- a) The proposal fails to comply with the minimum 50% deep soil landscaping requirement under the Town Centres DCP.
- b) The applicant's deep soil area calculation is not in accordance with the definition as the calculations fail to take into consideration works external to the building footprint that require exclusion from the deep soil calculable area such as the proposed substation, retaining walls, entry paths greater than 1.2m wide, as defined within the Town Centres DCP 2010.
- c) A Deep Soil Compliance Plan has not been submitted to verify the areas included and excluded in the deep soil calculation.

6. Tree impacts

Particulars:

- a) The proposal results in unacceptable impacts on the following trees:
- **Tree 6 *Quercus robur* (English Oak)** located adjacent to the western (Rosedale Rd) site boundary. Impacts on Tree 6 have not been assessed by the consulting arborist. Development works including retaining walls, excavation, private courtyard, and pedestrian paths are proposed within the trees Secondary Root Zone (SRZ) and Primary Root Zone (PRZ). Removal of the tree is not supported as the tree provides amenity to both the site and streetscape character.
 - **Tree 10 *Corymbia citriodora* (Lemon Scented Gum)** located adjacent to the western (Rosedale Road) site boundary. The arborist has not assessed the impacts of the proposed drainage works which are located within the tree's SRZ and Tree Protection Zone (TPZ). As per Tree 6 it is required that as the development works encroachment within the TPZ is greater than 10% of the TPZ, that the arborist assess the impacts of the additional development works and provide recommendations to minimise any adverse tree impacts. It is recommended, to overcome these issues that the drainage plan be amended relocating proposed pipes and pits outside of the TPZ.

- **Tree 11 *Syncarpia glomulifera* (Turpentine)** located adjacent to the south-western site corner. The tree is the only endemic species on site and is considered to be remnant in that it predates existing development on the site, and therefore has not been planted as part of previous landscape works on site. The proposed five storey building is located within 3.0m of the tree, resulting in the tree being exempt under Council's Tree Preservation Order (TPO) (could be removed at any time).

Landscape Services is not satisfied that the root loss within the encroached area would be minimal, as it is likely that as the tree has grown after the construction of the dwelling, developing roots would have followed the line of the footing parallel to the dwelling and therefore it is likely that there are some significant roots.

- **Pruning: Tree 11 *Syncarpia glomulifera* (Turpentine)** located adjacent to the south-western site/building corner. Significant pruning would be required for construction scaffolding (approximately 1.5m) and access. This would have a significant impact to the tree's canopy and structure.
- **Tree 18 *Eucalyptus grandis* (Flooded Gum)** located adjacent to the eastern site boundary, within the neighbouring property. No specific development impact assessment has been undertaken by the arborist, who has assumed that development works have a minimum 5.0m setback from the site boundary. The drainage plan proposes a substantial drainage pit (Pit 17, 900mm x 900mm) and an upgrading of the existing drainage pipes within the easement within the tree's TPZ and SRZ.
- **Tree13 *Eucalyptus grandis* (Flooded Gum):**

Hydrology impacts

The development will result in significant excavation for the multi level basement upslope of the mature *Eucalyptus grandis* (Flooded Gum), Tree 13, located adjacent to the Shinfield Ave site frontage. The Flooded Gum is the dominant tree on site and visually significant within the broader landscape setting. Hydrological impacts have not been satisfactorily addressed in relation to the long term health and vigor of Tree13.

Substation

A substation kiosk is proposed adjacent to the south-eastern site corner/Shinfield Avenue site frontage within the TPZ of Tree 13. It is noted that the substation is located within the footprint of the existing driveway. No arboricultural assessment has been undertaken to assess the potential impact to the tree's root system

and provide recommendations for minimum setback and construction requirements to minimise adverse impacts.

b) Drainage/stormwater design and impacts to trees

Stormwater Drainage Plan #75990-1 'A', proposes stormwater pipes and pits within the structural root zones and tree protection zones of existing significant trees to be retained. The impacts of these drainage works have not been assessed by the consulting arborist.

c) Construction Management Plan (CMP) & Sediment Control Plan (SCP)

The CMP, DA-14 indicates the use of existing single driveway crossovers/locations for construction access and vehicle (truck) manoeuvring within the TPZ and SRZ of existing trees to be protected/retained. This will have an adverse impact to the ongoing health and viability of existing trees.

The CMP does not indicate the location of a crane. If a crane is proposed its location on plan is required to be detailed to assess potential tree impacts.

Sediment Control Plan – indicates stockpile site locations within the TPZ of existing trees to be retained.

7. Landscape plan/tree replenishment

Particulars:

a) The Landscape plan is unsatisfactory as follows:

- The landscape design to the north of the site does not correspond with the designated private courtyard and communal open space areas. As proposed, the private courtyard areas are expanded within the nominated communal open space, and exclude access from other residents. It is required that the private courtyard areas for Units G.03 and G.04 be consistent with the identified areas on DA05.
- A communal garden seat and seating area has been proposed beneath the canopy of Tree 6. No notation has been provided for the proposed surface treatment. This information is required for the deep soil assessment.
- Tree 11 *Syncarpia glomulifera* (Turpentine) is identified within the Tree Schedule to be removed. To avoid conflicts/confusion it is required that the plan specify the tree to be retained.
- Pedestrian pathways are proposed within the Secondary Root Zone (SRZ) and Tree Protection Zone (TPZ) of existing trees to be retained, however, insufficient existing and proposed levels have been provided to enable an assessment of potential impacts that existing and proposed levels be shown.

- The landscape plan is non compliant with the BASIX certificate. The non compliances include; lawn areas, and enlarged private courtyard areas.
- A new pedestrian pathway is proposed within the TPZ of Tree 13. Insufficient detail (existing and proposed levels) have been provided to assess the cross fall within Council's nature strip, also to assess disabled access.
- Water commitments within the BASIX certificate include landscape irrigation from the alternate water source. The landscape plan fails to detail/calculate the areas to be irrigated and these are to be specified on the landscape plan and landscape notes.
- No tall canopy trees have been proposed within the northern side setback. To enhance landscape amenity and to reduce the visual bulk of the development it is required that tall canopy trees (can be exotic deciduous species) be proposed within the northern side setback.
- The choice of *Omalanthus populifolius* (Bleeding Heart) is not supported. The species is a bushland 'pioneer' species that is short lived.
- The location of drainage pits adjacent to the north-western site corner and within the western side setback do not correspond with the Stormwater drainage Plan #75990-1 'A'. As a result proposed tree plantings spatially conflict.

8. BASIX

Particulars:

- a) No landscape commitments have been made for low water use/indigenous species within either the common or private landscape areas.
- b) Landscape Services does not agree with the calculable areas within the BASIX certificate. The areas in dispute include:
 - Zero common lawn area. The submitted landscape plan indicates three main common lawn areas.
 - Unit G.03 according to DA05 has a garden area of 7sqm, which is inconsistent with the commitment of 16sqm. The landscape design implies a larger private garden area as there is no communal access and the designated private garden area traverses midway through the lawn.
 - Unit G.04 has a garden/lawn area of approximately 12sqm which is greater than the specified 8sqm. As for Unit G.03, the landscape design implies a larger private garden area, as the area adjacent to the unit has excluded communal access and the identified private garden area traverses midway through the lawn.
 - Unit LG.02 according to DA04 has a private open space of 40sqm, inclusive of a 32sqm terrace area, leaving 8sqm of garden/lawn area. While this is consistent with the commitment of 8sqm, the

area has not taken into consideration the two large drainage grates that take up 2sqm.

- Unit LG.03 according to DA04 has a private open space area of 25sqm inclusive of a 22sqm terrace, leaving 3sqm of garden/lawn area. This is inconsistent with the commitment made, and inconsistent with the landscape design that includes an additional soft landscape area to the south of the building which is only accessible from the unit.
 - Unit LG.04 according to DA04 has an identified private open space of 29sqm, inclusive of a 23sqm terrace, leaving a 6sqm garden/lawn area. While this is consistent with the BASIX certificate, the landscape design proposes a much larger landscape area that is only accessible from the unit.
- c) The plans (including the landscape plan) do not specify that external irrigation system for the gardens and how it will be connected to the water tank.

9. Building facades and building entries

Particulars:

- a) The design fails to provide a satisfactory design response to Shinfield Avenue. The site is a corner block and in this regard the building must be designed to be viewed in the round with the building addressing both street frontages. The vehicular access location in conjunction with the poor façade presentation to Shinfield Avenue does not satisfy the objectives under 3C.8 of the Town Centres DCP.
- b) The design of the building (including top storey design) appears overbearing in visual bulk to Shinfield Avenue.

10. Top storey design and roof forms

- a) No top storey compliance diagram has been submitted to verify calculations in relation to Clause 3C.10 of the Town Centres DCP.
- b) The top storey design fronting Shinfield Avenue is unsatisfactory (inadequate setback to the top storey) and results in overbearing visual bulk when viewed from the street and down-slope R2 residential properties.
- c) The fifth storey northern side setback does not comply with the 9m requirement.
- d) There is a concentration of building mass and bulk to the upper northern half of the development and the top storey design and roof treatment does not adequately address the objectives of the building design control

under Clause 3C.10.

- e) The provision of air conditioning plant to the roof of the building is not generally encouraged (basement location preferred). Any service elements are to be integrated into the overall design of the roof and not visible from the public domain or any surrounding development. Unsatisfactory attention to the integration of mechanical ventilation roof top plant has been made in this regard and concern is raised to visibility from upslope R4 residential flat development.

11. Fencing

Particulars:

- a) The application proposes substantial sandstone walls to both street frontages, perpendicular to the site boundaries, one of each side of the driveway and another on the southern side of the pedestrian entry point. The photomontage depicts these walls as being substantial elements within the landscape setting. The limited top of wall (TOW) heights indicated on the landscape plan show that the walls exceed the DCP controls.
- b) The height, size and scale of the walls are overbearing and visually dominate the streetscape when viewed from pedestrian level. The walls fail to satisfy the controls and objectives under 3C.11 of the Town Centres DCP.

12. Private open space

Particulars:

- a) The proposal does not satisfactorily demonstrate ground level units LG.03 and 04 comply with the 25sqm private open space requirements under C3.12 of the Town Centres DCP. There is also inconsistency between the architectural plans and landscape plan with regard to the respective private open space areas.
- b) Balconies must have a minimum internal dimension of 2.4m. This has not been satisfactorily demonstrated. The proposal also has not satisfactorily demonstrated that balconies comply with the minimum area requirements (this is an internal dimension and area calculation). A preliminary assessment using scale rule suggests balconies are undersized.
- c) No details have been provided regarding private courtyard fencing.

13. Communal open space

Particulars:

- a) The proposed principle area of communal open space to the north-eastern corner of the site does not satisfy the objectives and controls under 3C.13 of the Town Centres DCP.
- b) The location hard to the north-eastern corner of the site is positioned directly adjacent to the private open space area of an R2 zoned low density development (26 Shinfield Avenue) and results in unacceptable amenity impacts. The purpose and intent of side setback areas is to provide boundary screen planting and common area to the surrounds of the development. The location of the communal open space does not allow the side setback design objectives to be satisfactorily achieved.
- c) The communal open space has not been satisfactorily integrated into the building design. The space is constrained in terms of providing an area for optimal opportunities for social and recreation activities. The site also wraps around Unit G04 and compromises the amenity and privacy of this unit.

14. Solar access

Particulars:

- a) The submitted solar access assessment fails to take into consideration the context of surrounding development including future re-development of the adjoining R4 zoned land.
- b) This proposal and its building footprint fails to allow the development to comply with the 70% solar access requirements under 3C.17 of Council's Town Centres DCP (same control under Residential Flat Design Code).
- c) The solar access information is not of a satisfactory standard. A solar access report prepared by a suitably qualified person in this field is required including solar access diagrams/3D modelling addressing solar access requirements in the Residential Flat Design Code and Section 3C.17 under the Town Centres DCP. The report should contain information about the methodology of modelling, the date/time of the images and orientation of shadows cast. A compliance table demonstrating the performance of each individual unit referable to the solar access diagrams/3D modelling should also support the report.
- d) The submitted 3-D modelling presented on 1 x A3 page (images too small to make an assessment) with compliance table is unacceptable for a solar access assessment of a residential flat building. This does not suffice as a solar access report. Further, the images do not take into consideration the context of existing and future surrounding

development, notably the residential flat building at 165-167 Rosedale Road.

15. Storage

- a) The proposal does not demonstrate satisfactory (functional, accessible and adequate in size) residential storage has been provided for 36 units within the basement. Individual storage areas for each unit should be detailed for assessment in relation to controls under 3C.23 of the Town Centres DCP.

16. Stormwater and driveway profile

Particulars:

- a) Inadequate and unsatisfactory stormwater information has been submitted:
 - All stormwater flows are not captured for treatment prior to discharge to the stormwater drainage system. The design is to be based on MUSIC modelling and is to achieve the standards for water quality required in Part 5F of the Town Centres DCP.
 - The inspection / access grate for the detention tank within the units terrace area is not permitted. The access opening shall be installed directly over the overflow outlet and shall be readily accessible from a point external to the site building (i.e. communal open area).
 - No supporting hydraulic calculations have been submitted that the pipeline within the 1.2m wide interallotment drainage easement has sufficient capacity to control the flow of stormwater.
 - Pump-out controls for the basement have not been accompanied with supporting calculations. The pump-out system shall have a visible ponding area available for temporary storage during pump failure with an absolute minimum capacity for the 100 year, 2 hour storm event.
 - The submitted Stormwater Drainage Plan proposes stormwater pipes and pits within the Secondary Root Zone (SRZ) and Tree Protection Zone (TPZ) of the existing trees to be retained which will have adverse impacts to the ongoing health and viability of existing trees. It is required that drainage works be relocated outside of the TPZ of existing trees to be retained.
 - A longitudinal section through the driveway and into the basement carpark has not been submitted. This is required to demonstrate that there will be 2.6 metres clear headroom along the whole of the travel path required for the small waste collection vehicle. The section is to

include realistic slab/beam depths, and be endorsed by a structural engineer.

17. Building

Particular:

The applicant's BCA report suggests an alternative solution be used for areas of non-compliance with the Deemed to Satisfy Provisions of the Building Code of Australia. Clarification is necessary as to whether this would result in a physical design change to the building with attendant implications for deep soil, site coverage, FSR and other relevant built form controls.

18. Inconsistent, inaccurate plans and unsatisfactory documentation

Particulars:

- a) No satisfactory compliance diagrams (including deep soil, site coverage, FSR, top storey, setbacks) have been submitted verifying calculations provided in the Statement of Environmental Effects.
- b) Compliance diagrams should be separate plans (not duplicated over architectural floor plans) and consistent in scale with architectural, landscape, stormwater and survey plans.
- c) It is not clear from the information submitted the areas included and not included within the front setback 40% articulation zone calculation.
- d) The site coverage calculations (shown on plan DA-07A) are not supported. The area shown hatched is not in accordance with the definition (excluding balcony areas, contrary to the definition).
- e) There are multiple inconsistencies and discrepancies between the model, the photomontages and architectural drawings. Information and documentation must be consistent with each other to ensure certainty in relation to what the application seeks approval for.
- f) There is uncertainty with the roof plan detail and levels (eg levels between the air conditioning area and adjacent terrace).
- g) Strata subdivision has also been applied for but strata subdivision plans have not been submitted.

Rebecca Eveleigh
Executive Assessment Officer

Corrie Swanepoel
Manager Development Assessment

Richard Kinninmont
Team Leader Development Assessment

Michael Miocic
Director Development and Regulation

Attachments:

- 1. Location sketch**
- 2. Zoning extract**
- 3. Surrounding development (undetermined and determined development applications)**
- 4. Original architectural plans (Issue A)**
- 5. Landscape plans**
- 6. Draft conceptual amended plans (Issue C)**