Concept Plan Application

CARDINAL FREEMAN VILLAGE

137 Victoria Street, Ashfield NSW 2131

Volume 2/3 Village Green and Care Precinct Drawings

October 2012

Prepared for
NSW Department of Planning

Proponent
Stockland Development Pty Ltd

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Design Verification Statement – Development Application

State Environmental Planning and Assessment Policy No. 65
Design Quality of Residential Flat Development.

To: NSW Department of Planning
Prepared by: Peter Ireland, Registered Architect (NSW ARB registration number #6661)
Project: Cardinal Freeman Village, Victoria Street, Ashfield
Stage 1 independent Living Units
Date: 16 October 2012

In accordance with the SEPP 65 requirements:

- I hereby verify that I designed and supervised the preparation of the Development Application which seeks consent for the construction of 141 seniors Independent Living Units and associated facilities in the Village Green at the Cardinal Freeman Village, Victoria Street, Ashfield.

- I hereby verify that the proposal has been designed in accordance with the Design Quality Principles of the SEPP 65 and, as the designer responsible, I hereby verify that the proposed design meets the principles of the SEPP 65. An explanation of how the design achieves these principles forms part of the application.

Yours Faithfully

P. Ireland

Peter Ireland
Principal
Allen Jack+Cottier

Beijing
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Photomontages

View 1 looking southwest

View 2 looking south along Queen Street

View 3 looking southeast towards the corner of Clissold and Queen Streets

Principle 1: Context

'Cardinal Freeman Village' occupies 4 hectares, an entire suburban block, in Ashfield, approximately 7 km west of the Sydney CBD and 1 km from Ashfield Town Centre.

Ashfield was first established in the Victorian era, following the building of the railway from Sydney to Parramatta, which included Ashfield station. Most of the early houses were of 'Victorian Georgian' style. Only a small number of these houses remain.

The area houses care and health services alongside residential dwelling houses being both multi-storey and individual houses (pre-war through to contemporary). Sydney Private Hospital is within close proximity, only 1 km to North and Bethel Lodge, a low-care facility to the west.

Development of the site dates back to the 1880's with the building of 'Glentworth House' and the later addition of the Chapel in the 1930's. These two structures dominate the South Western quadrant of the site.

'Cardinal Freeman Village' was established in 1977 and ad hoc development has taken place up to the present time and the site currently accommodates close to 350 residents in a variety of accommodation styles. These include studio, one and two bedroom apartments, smaller serviced apartments and low care hostel rooms. The village also contains a 59 bed residential aged care facility.

Following previous approval of a master plan prepared by Hill Thalis, a modified master plan has been developed for the entire Cardinal Freeman Village site by Allen Jack+Cottier (AJ+C). The master plan proposes a mix of independent accommodation along with low and high care residential aged care accommodation and a progressive upgrade and/ or replacement of existing building stock, whilst sensitively addressing existing heritage items.

In determining the form and scale of the current proposal, Aevum Ltd (Stockland Developments Pty Ltd) has assessed the requirements of residents and the range of accommodation available in the wider district. The current proposal builds on the strengths of the existing village self-care accommodation, supplemented by the provision of a new RACF and additional Independent Living units (ILUs) ensuring the highest quality of long term care for existing and new residents of the village.

The Stage 1 development will see the replacement of the existing 1970's aged care building with a new facility providing 133 new aged care beds. In addition, 141 ILUs will be added in four buildings as well as centralised community facilities for residents in ground level of building 4 adjacent to the principal communal open spaces on site. Parking and service functions are located in the basement level below. The RACF building is 3/ 4 storey's high with a basement under utilising space created by the sloping topography. The ILU buildings are a maximum of 4/5 storeys plus basement/podium.

Principle 2: Scale

The density of the retirement village development is believed to be appropriate for the site and context and is consistent with the bulk and scale established by the AJ+C master plan.

The topography of the site has a fall from south to north of approximately 7 m, with the lowest point being the intersection of the proposed 'Clissold Lane' and Clissold Street. These site levels allow the built form to step with buildings ranging from 5 storey to 3/4 storeys. The buildings are lower where they address the buildings in the residential streets and higher where appropriate to references the height of the eaves of the chapel. Varying heights add interest to the buildings and avoid an unrelieved 'bulky' appearance. Upper storeys are set back from the formal edge of the building to reduce the perceived height.

The buildings addressing Clissold Street, being the RACF and ILU building B2, present narrow elevations to the streetscape, responding to the scale of the surrounding residential buildings. Landscaping complements the buildings, softening the interface between the new buildings and the existing buildings on the street. Facades are further broken down with balconies and sunshading devices reinforcing the residential scale of the buildings.

The Queen Street façade has been treated in a way that provides narrow vertical forms, considerate of the remaining Victorian houses on that street. Large set-backs, short wall length and a deeply stepped façade are combined with landscape elements and a varied material palette to form a visually interesting yet legible façade with elements of a residential scale.

Principle 3: Built Form

A strength of the modified site masterplan is the strong internal axes, particularly east-west and also the new Clissold Lane running to the north. This is an important device to assist residents in finding their way around the Village. The individual buildings have been designed to support these axes by maintaining the three storey 'base' throughout.

After development the impressive chapel is no longer hidden away amongst small randomly placed houses, and will be surrounded by public green spaces. In response to this, the new buildings take their cue from the tall elegance of the church but are treated in an unashamedly modern way.

Individual residential buildings have been designed with articulated and lively facades. A consistent language of elements, including expressed slabs, floor to ceiling glazing, finely grained vertical and horizontal screens and large frame-like elements is used in all the ILU buildings but in a variety of ways. Each building has a unique appearance which will assist residents in way finding, but at the same time the common architectural language makes it clear that each building belongs to the Village. Basement parking is concealed either below ground or behind stately sandstone walls with discreet openings for ventilation.

The RACF has a dedicated entry off Clissold Street. An entry courtyard gives the RACF a sense of address. Sensitive landscaping ensures the courtyard is established as a pedestrian friendly area; a shared space, and soft and hard landscaping soften the drop off zone and the large turning spaces required for vehicles. Activating this area are large windows into the services provided for the residents including the hairdresser. By its nature a RACF is a large building and strategies have been employed to create a residential feeling to the building instead of an institutional one. This has been done by breaking the building down into wings, allowing smaller forms to be presented to Clissold Street in particular. Windows are shaded by deep reveals which minimise heat admission into the rooms but allow generous natural light. The reveals and shading elements punctuate the façade and create a rhythm.

Principle 4: Density

The proposal contains the following components:

Residential Aged Care Facility:
- Split into 5 'houses' a total of 133 residents are accommodated in 133 rooms.

Independent Living Units
- Total Units: 141
- Total NLA: 12 774 m^2
- Unit Area Range: 62 m^2 - 112 m^2

The variety of unit sizes and accommodation type provide a diversity that ensure all resident needs can be met. All Independent Living Units have generous kitchen, living and bedroom space with large external decks ensuring a high level of amenity of offered.

This gives an FSR of 1.18:1 which is considered an appropriate density for the site.

Principle 5: Resource, Energy and Water Efficiency

Passive strategies have been employed to minimize the energy and resource consumption of the development including the following:

The majority of ILUs have generous glazing, many are corner apartments with two frontages allowing natural light and ventilation. All living areas and most primary bedrooms have direct access to external decks, providing natural light and ventilation, whilst the deep decks provide solar shading.

Appropriate external shading reduces solar gains to north and west facing glazing during summer, whilst allowing the low winter sun to penetrate.

Lobbies and shared corridors are all naturally ventilated and have windows to the exterior.

Active strategies include:
- The use of solar water heating reducing the use of energy consumption.
- Rainwater will be harvested stored and reused for irrigation and WC flushing.
- Water efficient products including appliances and tap ware with minimum AAA rating will assist in reducing water consumption and improving water efficiency throughout the building.
- The project has been assessed by a Basix consultant and satisfies the requirements.
- All appliances will meet the requirements of Basix for energy use.

Principle 6: Landscape

Landscaping has been fully integrated with the built form of the development and used to support and reinforce the master plan objectives. The public domain interface is reinforced with walls, fences, gateways and trees to define the village within the street framework.

Where possible landscape has been used to highlight the significant trees and buildings that give the village its character which has been picked up in the new buildings.

Landscape elements have been used to define the gateways for vehicles and pedestrians and encourage physical interaction between the village and surrounding areas.

Landscape reinforces the relationship between Glenworth House and the key heritage items, particularly down Victoria Street.

Deep soil planting is maximised, with the majority of basement being located below buildings.

Landscape architects, Oculus, have worked with these Masterplan Principles to guide the design development of the external public domain and these are expanded on in the EA section on Landscape.

Principle 7: Amenity

Thoughtful design of the unit layouts has resulted in apartments which will be both easy to move around and pleasant to be in. Living areas are generous and have direct access to natural light and ventilation. All units have a private deck with a minimum depth of 2.2 m.

These decks are located to take advantage of view and solar access and maintain privacy.

Consideration of window placement maximises solar access, visual privacy and acoustic privacy, while minimising heat gain.

Minimum ceiling height of 2.7 m throughout habitable areas are proposed.

All units have generous and well defined kitchens and eating areas.

The rear walls of all kitchens are within 8 m of a window.

Storage is provided within all units for ease of access. This is supplemented by basement level storage in the case of most apartment and all comply with the requirements of SEPP 65.

All layouts are designed to comply with the requirements of SEPP65 and SEPP HS AS4299.

Ramps are minimised throughout the development ensure accessibility is maximised.

70% of units have direct solar access to living areas for 3 hours between the hours of 9:00 am and 3:00 pm at the winter solstice.

More than 65% of the units have natural ventilation.

Entry lobbies naturally ventilated and lit and voids through lobbies provide connection between levels.

Principle 8: Safety and Security

ILU building basement parking and lobbies will be secure entry to residents only by swipe card.

The site layout ensures that all external areas are visible from living rooms giving the security of resident's watchfulness.

The RACF is a secure building with entry only via a secure lobby at ground floor.

External lighting levels will be designed in accordance with AS 1158.

Nursing staff and carers will further assist in observation and supervision of residents and visitors

within the premises offering added safety and security.

Refer to Masterplan Report for site wide CPTED principles.

Principle 9: Social Dimensions

There is an existing on site tradition in Cardinal Freeman Village of caring for aged people in a variety of accommodation styles.

This proposal will continue the tradition while at the same time bringing the Village in line with current expectations for accessibility for people with disabilities. An accessible network of footpaths and lifts link all parts of the site and surrounding streets.

The upgraded site layout will help residents find their way around the site and also give access to new central facilities including the cafe/kiosk, hair salon, cinema, gymnasium and recreation spaces provide opportunities for social interaction away from individual residences.

Beautifully landscaped areas provide outdoor areas encouraging interaction and will provide a connection through the site.

A wide range of unit sizes and configuration provide a choice of housing type including both generous sized three bedroom units and modest one bedroom units. This provides affordable options for a range of residents.

The proximity of ILU's to services allows for older residents to stay in place as long as possible supported by services such as delivery of food, laundry or house-keeping as required.

Principle 10: Aesthetics

A varied palette of contemporary materials has been used to create architecturally varied and lively buildings.

These include:

- Masonry elements rendered and painted.
- Sandstone walls to provide robust bases to the buildings.
- Timber-like screens.
- Alucobond or similar as a lightweight element to add muted colour to the elevations.
- Feature lightweight cladding to provide a material used to highlight entries.

These materials have been used in a 'painterly' way to create an individual appearance for each building. Large framed elements articulate the facades by stepping out past the building line. This is complemented by screens and louvres which, as well as providing privacy, give a fine grain to the facades. Generous glazing and lightweight materials are used to add texture and colour and the result is a well-articulated and engaging façade.

Conclusion

This proposal continues the tradition of providing care to the elderly which was established on the site many years ago. The renewal of the site allows this tradition to continue while providing state of the art facilities in the tranquil environment already established.

The design has been thoughtfully resolved to a high quality architectural, landscape

and urban design level. This will enable the provision of services to continue in a way that will greatly benefit the ultimate users of the Village, the residents.

The scale of the site allows for a high quality outcome where built form and landscaping can be combined to provide a high quality urban village.

The integration of macro and micro level E.S.D principals ensure the development satisfies its environmental responsibilities and provides a high level of amenity for residents.

SEPP No. 65 – Residential Flat Design Code –ILUs Compliance Table

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
Part 1 - Local Context			
Context	Local Context • Undertake a context analysis.	Yes	A detailed and extensive site and context analysis has been undertaken and is documented graphically and in words in the Environmental Assessment. The concept plan and the buildings for Stages 1 and 2 have evolved from this detailed consideration of the site and its context.
	Residential Flat Building Types • Hybrid groups are groups on one site responding to specific site configuration, combination of uses and adjacent site context.	Yes	A range of building types are proposed, building on the existing fabric and respecting the heritage qualities of the site.
	Building Envelopes • Establish the future bulk, height and location of buildings on the site.	Yes	The Concept Plan addresses the location of building spaces over the site with consistency and logic based on sound and clearly articulated urban design principles including achieving usable open space areas and retention of the importance of the heritage building in establishing the existing character of the site.
	Building Height • Test height controls against the FSR and the proposed number of storeys and minimum ceiling heights.	Yes	No specific height controls apply. The height of buildings is related to their location and orientation and is consistent with those defined by the concept plan.
	Building Depth • An apartment building depth of 10-18 metres is appropriate. • Developments that propose wider than 18 metres must ventilation are to be achieved.		

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Building Separation For buildings over three storeys, it is recommended that building separation increase in proportion to building height to ensure appropriate urban form, adequate amenity and privacy for building occupants. Suggested dimensions within a development, for internal courtyards and between adjoining sites are Increase building separation distances as building height increases as follows: Up to four storeys/12 metres: • 12m between habitable rooms/balconies. • 9m between habitable rooms/balconies and non-habitable rooms. • 6m between non-habitable rooms. Five to eight storeys: • 18m between habitable rooms/balconies. • 13m between habitable rooms/balconies and non-habitable rooms. • 9m between non-habitable rooms. Nine storeys and above: • 24m between habitable rooms/balconies. • 18m between habitable rooms/balconies and non-habitable rooms. • 12m between non-habitable rooms. Allow zero building separation in some contexts. Building separation controls may be varied in response to site and context constraints. Developments that propose less than the recommended distances apart must demonstrate that daylight access, urban form and visual and acoustic privacy has been satisfactorily achieved	Yes	Building setbacks of Buildings 1, 2, 3 and 4 are consistent with or exceed the recommendations of the residential flat design code. The setback between Building 1 and Building 3 is less than 12m (11m) between habitable rooms but there are no windows which are at eye level or below and therefore the distances do not cause a privacy issue. The setback between Building 1 and the RACF is less than 12m (6m). But there are no windows in the RACF facing Building 1 and so the amenity of the rooms is not compromised. The setback between 2 and 3 is less than 12m (6.5m) but the amenity of the rooms has been maintained by offsetting the windows and providing privacy screening.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Street Setbacks • Identify the desired streetscape character, the common setback of buildings in the street, the accommodation of street tree planting and the height of buildings and daylight access controls. • Relate setbacks to the area's street hierarchy. • Identify the quality, type and use of gardens and landscaped areas facing the street. • Test street setbacks with building envelopes and street sections. • Test controls for their impact on the scale, proportion and shape of building facades. • Minimise overshadowing of street and buildings. • Consider secondary upper level setbacks to reinforce desired scale of buildings on the street. • Underground parking structures, awnings and balconies may encroach on the setback.	Yes	Street setbacks are consistent with those defined by the concept plan. A consistent approach to street setbacks is adopted across the site and is assessed in Section 5.2 of the EA. The Concept Plan proposes buildings fronting the adjoining streets with a balance of landscape and building fronts. The strong site edge formed by sandstone and rendered walls will be largely retained as will the high palisade fence in the south east quadrant. All new buildings have a garden set back to match the predominant street front conditions in the neighbouring streets. The proposed setbacks 5.5 metres to Clissold Streets and 7.5 metres to Queen Street related to the building façade design. These setbacks allow the retention and reinforcing of boundary plantings. Generally new buildings present as articulated facades interspersed with courtyard gardens, while a generous new forecourt re-presents Glentworth House.
	Floor Space Ratio • • Height, setbacks and FSR are to be consistent.	Yes	Height, setbacks and Floor Space Ratios are consistent with those defined by the concept plan.
Part 2 – Site Design			
Site Analysis	• Site analysis to include plans and sections of the existing features of the site, and written description.	Yes	Detailed site analysis presented in Volume 1 of EA.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
Site Configuration	Deep Soil Zones • Optimise provision of consolidated deep soil zones. • Support a rich variety of vegetation type and size. • Increase permeability of paved areas. • 25% of open space to be deep soil zone.	Yes	
	Fences and Walls • Respond to character of street and area. • Delineate private and public domain without compromising safety and security. • Contribute to amenity, beauty and usability of private and communal open spaces. • Retain and enhance amenity of public domain by avoiding continuous lengths of blank walls and using planting to soften the edges and reduce their scale. • • Select durable materials which are easily cleaned and graffiti resistant.	Yes	Existing sandstone wall retained except for planned openings and existing palisade fence retained.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Landscape Design • Improve amenity of open space with landscape design, including shade and screening. • Contribute to streetscape and public domain. • Improve energy efficiency and solar efficiency of dwellings and microclimate of private open spaces. • Design landscape with regard to site characteristics. • Contribute to water and stormwater efficiency. • Provide sufficient depth of soil above pavers • Minimise maintenance by robust landscape elements.	Yes	As described in EA
	Open Space • Provide communal open space which is appropriate and relevant to the context and building setting. • Facilitate the use of communal open space by solar access, site features, and minimise overshadowing. • Provide private open space for each apartment. • Locate open space to increase residential amenity. • Provide environmental benefits including habitat, microclimate, rainwater percolation, outdoor drying area. • Communal open space should be 25-30% of site area. • Minimum private open space for each apartment at ground level is 25m^2 with minimum dimension of 4m.	Part	Most ground floor apartments have generous areas of private open space and compliance with SEPP (Housing for Seniors) measures are complied with.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Stormwater Management • Retain stormwater on site. • Protect stormwater quality. • Control erosion. • Consider using grey water for site irrigation.	Yes	
Site Amenity	Safety • Delineate private and public space. • Optimise visibility, functionality, and safety of building entrances. • Improve opportunities for casual surveillance. • Minimise opportunities for concealment. • Control access to the development.	Yes	Refer to CPTED report accompanying EA
	Visual Privacy • Maximise visual privacy between adjoining buildings by separation, setbacks and site layout. • Design layouts to minimise direct overlooking of rooms and private open spaces. • Use site and building design elements to increase privacy without compromising light and air access.	Yes	Apartment and building layout has ensured that there are no overlooking apartments. In addition, operable screens are provided to balconies ensuring maximum flexibility and privacy. Ground floor units have additional screen planting ensuring appropriate physical and visual separation.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
Site Access	Building Entry • Improve presentation to street by entry treatment. • Provide as direct a physical and visual connection and clear transition between street and entry. • Ensure equal access for all. • Provide safe and secure access. • Separate building entry from car parks. • Design entries/circulation to allow furniture movement. • Provide mailboxes to be convenient, but not clutter the appearance of the development from the street.	Yes	Generous building entries are clearly defined by full height vertical openings in the facade reinforced by entry canopies. Mailboxes are located at the boundaries perpendicular to street frontage ensuring they do not dominate the streetscape.
	Parking • Determine car spaces by access to public transport, density and ability to accommodate on site. • Limit visitor spaces, where impact on landscape and open space is significant • Give preference to underground parking. • Provide bicycle parking which is easily accessible	Yes	Parking and vehicle access is addressed within the EA. Minimum residential requirements of SEPP (Housing for Seniors) are met.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Pedestrian Access • Accessible routes to public and semi-public areas. • Promote equity by entry location and ramps. • Ground floor apartments to be accessible from the street and associated open space. • Maximise number of accessible, visitable and adaptable apartments in a building. • Barrier free access to at least 20% of dwellings.	Yes	Pedestrian access is addressed within the EA. All units are accessible promoting equity.
	Vehicle Access • Ensure adequate separation between vehicle entries and street intersections. • Optimise opportunities for active street frontages and streetscape design. • Improve appearance of car parking entries. • Limit width of driveways to 6 metres. • Locate vehicle entries away from pedestrian entries and on secondary frontages.	Yes	Parking and vehicle access is addressed within the EA.
Part 3 - Building Design			

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
Building Configuration	Apartment Layout • Determine apartment sizes in relation to location, market, spatial configuration and affordability. • Ensure apartment layouts are resilient over time. • Design layouts to respond to natural and built environments and optimise site opportunities. • Avoid locating kitchen in circulation space. • Include adequate storage in the apartment. • Ensure apartments facilitate furniture removal and placement. • Single aspect apartments to have maximum depth of 8m from a window. • Kitchen to be maximum of 8m from window. • Cross over or cross through apartments >15m deep to have minimum width of 4 metres	Yes	Careful consideration has ensured apartment layouts provide clearly defined circulation which does not reduce flexibility. All apartments have full kitchens that are well defined; galley kitchens have been avoided. The incorporation of a variety of storage spaces ensures 'livability'; kitchen, linen, wardrobe, bathroom and basement storage are provided for each apartment. All kitchens are located a maximum of 8m from a window ensuring natural ventilation and natural light. Apartment depth is limited to a maximum of 11.5m throughout.
	Apartment Mix • Provide variety of apartments in larger buildings. • Refine appropriate mix by considering population trends and proximity to transport, employment and services. • Locate mix of 1 and 3 bed units on ground floor to enable access by disabled, elderly and families. • Optimise accessible and adaptable apartments.	Yes	Apartment mix provides variety having regard to the proposed seniors occupants. A mix of one and two bedroom apartments are located on ground floor.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Balconies • Provide at least one primary balcony. • Primary balconies to be adjacent to living area. • Consider secondary balconies in larger apartments, adjacent to bedrooms and for clothes drying. • Balconies to respond to local climate and context, solar access, wind and privacy. • Design balustrades to allow views and casual surveillance, while providing safety and privacy. • Coordinate and integrate building services with façade and balcony design. • Primary balcony to have minimum depth of 2m	Yes	Generously size balconies are provided to all balconies. All balconies have a minimum depth of 2.2m providing maximum flexibility and useable space.
Building Configuration	Ceiling Heights • Coordinate internal ceiling heights and slab levels with external height requirements. • Minimum floor to ceiling height of 2.7m. • Variations to demonstrate satisfactory daylight.	Yes	Ceiling Heights of 2.7m are provided.
	Flexibility • Provide robust building configurations which utilise multiple building entries and circulation cores. • Promote accessibility and adaptability by accessible and visitable apartments and pedestrian access.	Yes	It is proposed that the building be constructed utilising concrete framed construction and lightweight internal partitions within apartments. The construction technique ensure maximum flexibility for future adaption. Careful planning has considered 'liveability' and 'flexibility' by ensuring internal circulation routes do not interfere with living areas maximised usable floor area. In addition care has been taken to ensure kitchen, laundry, bathroom and bedroom areas are adequately sized to ensure the spaces can be adapted to the needs of both able bodied and disabled residents.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Internal Circulation • Increase amenity and safety in circulation spaces by generous widths, lighting, minimising lengths, avoiding tight corners, legible signage and adequate ventilation. • Support better apartment layouts by designing buildings with robust materials to be incorporated for low multiple cores maintenance. • Articulate longer corridors by using series of foyer areas and windows along or at end of window. • Minimise maintenance and maintain durability by using robust materials in common circulation areas.	Yes	Internal circulation lobbies are naturally ventilated and naturally lit by glazing.
	Storage • 50% of storage to be within apartment and accessible from hall or living area, and dedicated storage rooms on each floor and car parks. • Storage to be suitable for local area and able to accommodate larger items (e.g. bicycles). • Ensure storage is secure for individual use.	Yes	Careful consideration has ensured a variety of storage is provided. Storage in the apartment is suitably sized and located for convenient day to day access. In addition, most units are provided with further lockup storage at basement level.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
Building Amenity	Acoustic Privacy • Maximise acoustic privacy by adequate separation. • Internal layout to separate noise from quiet areas by grouping bedrooms and service areas. • Resolve conflicts between noise, outlook and views by design measures, such as double glazing. • Reduce noise transmission from common corridors • Provide seals to entry doors.	Yes	Apartment layouts have considered acoustic privacy.
	Daylight Access • Living rooms and private open space of at least 70% of apartments should receive 3 hours direct sunlight between 9am and 3pm in mid winter. • Limit single aspect apartments with a southerly aspect to a maximum of 10% of total units. • Orient building to optimise northern aspect. • Ensure daylight access to communal open space March- • September and shade in summer. • Optimise apartments receiving daylight access to habitable rooms and principal windows. • Design for shading and glare control.	Yes	Apartment and building layout has carefully considered the location of living spaces and balconies, ensuring northern, western and eastern orientation is maximised. Furthermore 70% of apartments in each building achieve 3 hours direct sunlight between 9am and 3pm in mid winter.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Natural Ventilation • 10-18m building depth recommended for natural ventilation. • 60% of units to be naturally cross ventilated. • 25% of kitchens to have access to natural ventilation. • Promote and guide natural breezes. • Utilise building layout and section to increase potential for natural ventilation. • Internal layout to minimise disruptions and group rooms with similar usage together. • Select doors and operable windows to utilise air pressure or windows to funnel breezes. • Coordinate design with passive solar design. • Explore innovative technologies to ventilate rooms.	Yes	All apartments are a maximum of 11.5m deep with the rear of kitchen being a maximum of 8m a window, ensuring excellent access to natural ventilation and natural light. A minimum of 65% of apartments are naturally cross ventilated.
	Facades • Consider relationship between building form and façade or building elements. • Facades to have appropriate scale, rhythm and proportion responding to use and desired character. • Facades to reflect orientation of site using sun shading devices. • Express important corners by giving visual prominence to parts of the façade. • Coordinate and integrate building services and utility item	Yes	Building facades have been carefully articulated to ensure appropriately scaled buildings are presented within the urban contact of the village. A varied, yet controlled material palette expresses different components of the building ensure legibility. The use of operable screens and horizontal shading elements add detail and provide layered facades that respond appropriately to orientation.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Roof Design • Relate roof design to desired built form. • Relate to size and scale of building, elevations, building form. • Respond to orientation of site. • Minimise visual intrusiveness of service elements. • Facilitate use of roof for sustainable functions.	Yes	The roof forms present a strong termination to the built form, whilst providing weather protection and shading for upper storey units. The roof form minimises downpipes of the prominent facades of the building ensure the integration of these elements.
Building Performance	Energy Efficiency • Incorporate passive solar design to optimise heat storage in winter and heat transfer in summer. • Improve control of mechanical heating and cooling. • Plan for photovoltaic panels. • Improve hot water system efficiency. • Reduce reliance on artificial lighting. • Maximise efficiency of household appliances.		As discussed. Good solar access and natural ventilation is achieved in excess of the requirements of the RFDC. This is combined with gas boosted solar water heating to ensure energy efficiency is maximised. Wherever possible bathrooms have access to natural light and ventilation.

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Maintenance • Design windows to enable internal cleaning. • Select manually operated systems, such as blinds. • Incorporate and integrate building maintenance systems into the design of the building form, roof and façade. • Select durable materials which are easily cleaned. • Select appropriate landscape elements and vegetation and provide appropriate irrigation systems. • Provide garden maintenance and storage area.		

ELEMENT	GUIDELINE	COMPLIES	COMMENTS
	Waste Management • Incorporate existing built elements where possible. • Recycle and reuse demolished materials. • Specify building materials that can be reused or recycled. • Integrate waste management into all stages of project. • Support waste management by specifying project needs and reducing waste by using standard product sizes. • Prepare waste management plan. • Locate storage areas for bins away from street frontage. • Provide waste cupboards or temporary storage area. • Incorporate on-site composting where possible. • Water Conservation • Use AAA rated appliances. • • Encourage use of rainwater tanks. • • Collect, store and use rainwater on site. • • Incorporate local native vegetation in landscape. • • Consider grey water recycling.	Yes	Waste management is addressed within the EA. Generously sized kitchens provide in apartment storage for everyday waste. Easily accessible waste storage is provided within the basement of each building.