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KU-RING-GAI MUNICIPAL COUNCIL SEPP 65 ASSESSMENT 15-04-13

DA: 28-32 DUMARESQ STREET, GORDON

URBAN DESIGN COMMENTS

This report evaluates the design proposal for 28-32 Dumaresq Street, Gordon in terms of the ten SEPP 65 Principles.

THE CONTENT

Description of the Proposal

SEPP 65 Criteria

Principle No 1: Context

- the precinct
- street and block pattern
- density and form
- the subdivision pattern
- relationship with the street
- the spatial system
- the natural features

Principle No 2: Scale

- the form and spatial system
- the resolution of the form

Principle No 3: Built Form

Principle No 4: Density

Principle No 5: Resource, Energy and Water Efficiency

Principle No 6: Landscape

- retain and reveal the natural features
- the relationship between the ground floor and the ground plane
- the relationship of the interior and exterior spaces
- plant species

Principle No 7: Amenity

- entrances
- circulation
- communal open space
- the apartment design
- private open space

Principle No 8: Safety and Security

Principle No 9: Social Dimensions

Principle No 10: Aesthetics

- the relationship of the building form to the site
- the relationship of the building form to other buildings
- the resolution of the building form

Conclusion

DESCRIPTION OF THE PROPOSAL

The proposal is for a residential flat building to be located on an amalgamated site at 28-30 and part site 32 Dumaresq Street Gordon. The building contains 34 apartments with 43 car spaces; 12 bicycle parking spaces and storage.

The Proponent is: Australia Wenzhou Group Property Pty Ltd.

The Architect is: Tzannes Associates Pty Ltd

The Landscape Architect is: Jane Irwin Landscape Architecture

Drawings

Architecture: Project 110039.

Drawing Numbers 0001 /2/3 Rev A; 1001/2/3 Rev B; 1101 Rev B; 1102 /3/4/5/6 Rev

A; 2000 /1/2/3 Rev A; 3001/2 Rev A

Landscape:

Drawing Numbers L01/2/3/4/5.

DEVELOPMENT APPLICATION HISTORY

Pre DA

A pre DA meeting was held with the proponent on 3rd November 2011. The proposal at that time was deficient in many respects. In particular the proposal was a poor response to the site in terms of the location of the entrances; the location within the lot and the lack of amenity of the apartments. The site with two street frontages had the potential for a building to address both streets and achieve high levels of internal amenity in the apartments in terms of light, aspect, orientation and ventilation. The building form was not well articulated. The proposal did not respond to objectives of KMC or make the most of the qualities of the site and the two street frontages.

This was conveyed to the applicant who has taken on board the comments made at the pre DA meeting and in the subsequent information KMC provided. A new architect, design and planning team have been appointed and the current proposal is a completely new design response to the site.

Compliance

The site is zoned Residential 2[d3] and the proposal is to comply with the following Council Codes and Planning Instruments:

- Ku-ring-gai Planning Scheme Ordinance [KPSO]
- DCP 55 Ku-ring-gai Development Control Plan (Town Centres) 2010

- State Environmental Planning Policy No. 65 Design Quality of Residential Development
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

The Site

The apartment site is composed of two approximately rectangular lots augmented by an additional strip of land from Lot 32. Lot 32 has been acquired by KMC for a road reservation. The Dumaresq Street frontage faces a northerly direction and the rear of the site faces south. The site slopes steeply from the front to the rear. Mature trees are located in the rear of the site. The consolidated site has an area of 2424.5 m².

A new local street is proposed to the west of the site on the west boundary. This new street runs between the two existing streets Dumaresq and Moree Street. The proposed apartment building has a frontage to Dumaresq Street and the new cross street. Two vehicle access ways are proposed from the new street and two pedestrian paths to the entry lobbies.

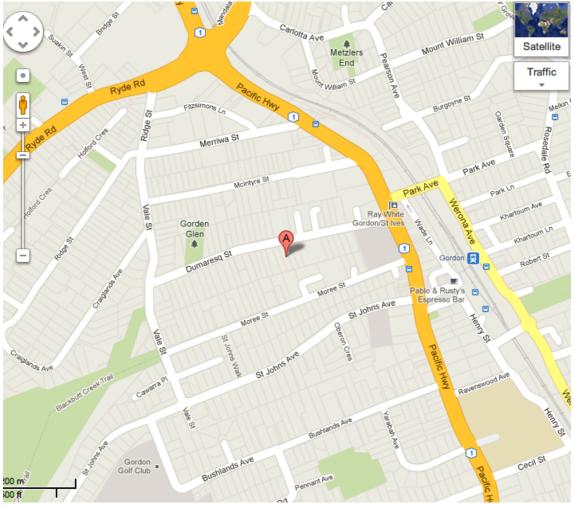


Figure 1 - Locality map

The Building

The proposal locates a 5-6 storeys apartment building on the site above one and a half levels of basement car parking. The front elevation is set back 10 - 12.8 metres from Dumaresq Street; 10-12 metres from the proposed new street [To be confirmed by drawings]; 6 metres from the eastern boundary and 7.65 - 9.37 metres from the rear boundary.

The building is composed of three vertical elements separated and served by two access cores. These access cores have no external walls on the western elevation and so act as covered but open entrance lobbies. On a typical floor the two end elements contain two apartments and the central element contains 3 apartments per floor. This combination varies at the topmost and lowest levels. The composition of the units is 3 x three bedroom 22 x two bedroom and 9 x one bedroom. Four units are "manageable". The units range in size from 53.85 sq metres for a one bedroom to 135.86 sq metres for one of the three bedroom units.

The building steps down the site. It has three changes in the overall levels. These relate to the fall in the site and the required set backs in the controls. The proposal has 5 storeys at the front to Dumaresq Street and a 5 storey elevation at the rear. The fifth storey in both cases is set back on the upper levels. As the building steps down the site from Dumaresq Street there are two overlapping sections where it is six storeys high. This occurs mid way through the building and is visible on the elevation to the new street.

SEPP 65 Criteria Assessment

PRINCIPLE NO. 1: CONTEXT

Good design responds and contributes to its context. Context can be defined as the key natural and built features of the area.

The Requirement

To ensure that a development responds to its context it needs to:

- Be considered as part of the overall precinct / street not as an individual stand alone building
- Respond to the street and block pattern
- Be an appropriate density
- Be an appropriate form
- Reflect the existing and / or proposed subdivision pattern
- Relate to the street /streets.
- Set up a positive spatial system with appropriate spacing between buildings
- Reveal the natural features. In this case, the fall in the land and vegetation

The Response

The Precinct

The proposal complies with the objectives of the Ku-ring-gai Planning Scheme Ordinance (KPSO) and DCP No 55. The site is close to the Gordon Town Centre and to Gordon Railway Station to the East. The area was rezoned under the Ku-ring-gai Local Environmental Plan [Town Centres] 2010 and there are blocks of apartments constructed on the opposite side of Dumaresq Street that were built according to this instrument. Since the repeal of this LEP the area has reverted to the Ku-ring-gai Planning Scheme Ordinance [KPSO] and DCP 55

The proposal responds to the characteristics of the precinct in the following ways.

- The building generally reflects the controls in the KPSO, and DCP55 in terms of the location of the site. The controls envisage five storey apartment buildings with underground car parking located in a landscape garden setting. There are similar apartment buildings already in Dumaresq Street. There are small discrepancies in the front set back distances for both the building and the basement car parking. These impact on the percentage of area considered deep soil but do not affect the relationship of the proposal to the street and its neighbours adversely.
- The proposed development is well integrated with the site topography, the natural bushland features and the exotic plant species. The rear gardens of this site and within this block are the traditional areas of natural bush and gullies. Exotic species have also been introduced usually in the front and side gardens.
- The building is designed to create a positive arrangement of space with neighbouring buildings through its alignment to the new street frontages and side boundaries. It also aligns with the development along the street For this reason it does not stand out as an "object building" but forms an end to the street block and an edge to both streets.

Street and Block Pattern

The street and block pattern of Dumaresq Street, The Pacific Highway, Moree Street and Vale Street is large, about 800 metres by 180 metres. This reflects the pattern related to the low density single detached house lots that were previously located on these lots. The proposed cross new street on the west side of this development site will reduce the overall size of the street block to approximately 300 metres by 180 metres. It enables better connectivity and has the potential to provide a variation in street type.

The traditional street and block pattern along the Pacific Highway in Ku-ring-gai consists of Pacific Highway along the main north south ridge from Sydney Harbour to Hornsby. Cross streets run off the Highway at the minor ridges so that they form

street blocks connected by streets approximately parallel to the Pacific Highway. Gullies are located along the mid block position of the blocks at the rear of sites.

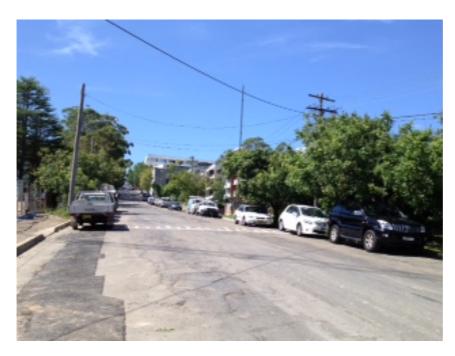
Dumaresq Street runs down a minor ridge from the Pacific Highway. The land tends to fall away from Dumaresq Street in some places. Certainly on the three lots of this proposal it falls to a gully at the rear in the mid block position

The addition of a new street in that location as specified within the Ku ring gai Town Centre Public Domain Plan 2010 is to be applauded as the increase in density warrants a smaller street and block pattern. This is a fact often overlooked where changes to density and building typologies are introduced.

The proposed street will be different from the existing streets in the area because of the topography and the fact that it is a short cross street. The topography is such that the new street will slope down from Dumaresq Street to the mid block position and rise up to Moree Street. This is unlike the long streets from the Pacific Highway that have a long incline from the Highway.

The nominated street boundary set back of 10 metres from the new street although complying fails to capitalise on the ability of this new street to engender a complementary but different feel to the precinct. It is complementary in terms of its ability to reveal the landscape / topography but different in that it could be tighter spatially thereby providing meaningful variety. The contrasting north / south orientation of this street also creates an additional point of difference in terms of sun and shade. This could be reinforced by the street tree planting spacing and species.

It is considered that a lesser street set back could be explored. This would still provide adequate separation across the street between opposing buildings but would create a different spatial relationship in the new street from the spatial relationships in the existing streets. This reinforces it as a different street type from the east / west streets.





Figures 2 +3 - Illustrate the two types of street profile. Dumaresq Street the long ridge road and the potential profile of the New Cross Street that will have a low central point . These could be defined differently by the built form and planting

Density

The proposal responds to the density requirements .The density of the development is 1.29:1 FSR. The permissible density is 1.3:1.

Form [Footprint and Height]

The Response

The footprint of the proposal consists of a rectangular plan aligning with the side and rear boundaries. There are two cores serving three building elements. The roof is flat.

The permissible height is 5 storeys. The height line is 13.4 metres to the perimeter ceiling height of the fourth floor. There is an allowance of one additional floor that is set back from the lower levels. The proposal breaches the height limit control by an additional storey in two places. This is where the building changes levels in response to the falls in the site. The additional height from 5 to 6 storeys occurs at the lift cores. The proposed height however is considered acceptable for the following reasons.

- The height is similar to many of the apartment blocks in the area.
- The height relates to and is a result of [to some degree] the falls in the topography. If the building height had a greater number of steps to exactly align with the topography it would create an overly stepped form. Buildings that have an excessive number of steps are always visually dominant. In this case the development would present poorly to the new street and the building would appear like a wedding cake.
- The height relates to the size of the footprint, length and width; the apartment building typology and the overall proportions of the building as conceived into the three elements.
- The height relates to the other controls of density, set backs and site coverage. The removal of the additional partial 6 storeys with the same density while conforming to the other set-back/ site coverage controls may "force" the architecture in terms of its form. Alternatively the development may breach to a larger extent other controls e.g. set back or site coverage in an attempt to achieve the permissible floor space. The density is not "a right" but on this site ideally the development should achieve the density permitted. The site is so close to Gordon Town Centre and it has the ability to accommodate the maximum FSR given the two street frontages and the minimal on site constraints.
- The two small areas of additional height do not have any adverse impacts on development adjacent to the site on the north, west and south. The northern and western boundaries are street frontages and any adjacent development is approximately 40 metres away. The southern elevation complies in height. There is a small impact on the eastern boundary in terms of outlook from any adjacent development to the east. The impact of overshadowing is minimal.
- The height creates a building that is in proportion to both street frontages. 5 storeys to Dumaresq Street and 5 /6 storeys to the new cross street.
- There is always a need to balance the slope of the land with the form of a building It is particularly important to maintain height on Dumaresq Street because the site slopes away from the street. Ideally the development on this side of the street should balance the falls in the site.
 - Likewise the building form along the new cross street needs to edge the street and balance the topography. Any building on the site should not be overly stepped as this will present an inappropriate profile to the new street.

In strictly urban design terms the building would be better related to the new street if Level 3 extended the full length of the Level 2. Being a corner site this would also provide a better visual "cut off" of the other buildings further east in Dumaresq Street.

- The spaces created around the building have the ability to relate to the potential adjacent development and the street frontages.
- The roofline presents a relatively clear profile with the sky.

The Subdivision Pattern

The Requirement

Reflecting the spacing and building pattern of an earlier subdivision in a new subdivision configuration can be a key way of integrating new development into an area. This can be achieved through the organisation of the form; footprint; alignments and spacing of new buildings to reflect the previous subdivision.

The Response

The site at Dumaresq Streets is an amalgamation of 2 sites and part of a 3rd site. The traditional subdivision pattern of development in this precinct is a relatively narrow site frontage with a front garden; relatively small side set backs and a large rear set back reflecting the depth of the lots..

The proposed development responds to the subdivision pattern by locating a building facing both streets with front gardens and access ways [car and pedestrian] to the street together with alignment to the side boundaries.

There is a garden at the rear and the rear set back complies. The rear set back however is the most compromised set back. In the traditional development pattern the rear set backs have been the largest set backs and this is where the majority of large mature trees and watercourses are located.

The proposal does reflect the previous division of the site into 2 main lots. This is achieved by the division of the Dumaresq Street elevation into two parts for the first four levels. This division relates to the two apartments per floor in this location and is expressed by the vertical concrete framing elements that link to the concrete slab edges. The division created by the two pedestrian entrances to the ground floor apartments into two parts reflects the original subdivision pattern.

Only limited reflection of the subdivision pattern is possible due to the DCP controls which mandate the set-backs. The side set backs are wider than the set backs that related to single dwelling houses. This results in a certain dimension that has to relate to the internal requirements of the new building typology as well as establishing the overall area in which a building can be built.

The proposed new apartment building therefore reflects the boundary alignments and access relationships to the street and the two lots in terms of the articulation of the building. It does not reflect the traditional large rear garden.

Relationship with the Street

The Requirement

To ensure that a building [and / or group of buildings] has a positive impact at the interface with a street the building needs to:

- Have a clear, level and generous relationship between the ground floor and the ground plane
- Have entrances and / or openings / balconies facing the street or have clearly visible entries
- Have discrete access to underground car parking garages.
- Place vertical blade walls so that don't create the appearance of a "solid wall" when the building is viewed obliquely along the street
- Organise balconies so that all balconies do not all sit proud of the façade.
 This creates the appearance of a "solid wall" when the building is viewed from the street. This can be achieved with fully recessed or partially recessed balconies
- Have all plumbing concealed including drainage from balconies

The Response

The proposal responds to the street interfaces in the following ways.

Ground Floor and Ground Plane.

The ground level of the building is stepped and the site terraced so that there is a strong relationship between the ground plane and the ground floor.

<u>Entrances</u>

Dumaresq Street Frontage and New Cross Street

There are two pedestrian entrances from the new street to the main entry cores. The pedestrian entrances are located in a direct line from the street to the open generous entrance lobbies. The most northerly one is by a ramp parallel to the street and / or a short set of stairs and a level path into the entry lobby. There is a clear view to the lift lobby and staircase from the street in both cases. There are two direct alternative entrances to Apartments 09 and 15 from Dumaresq Street.

The building therefore has entrances; windows; balconies and courtyards facing Dumaresq Street and the main entrances to garage and lobbies; windows; balconies and courtyards facing the new street.

The pedestrian entrance paths could be slightly wider. Their narrow width is domestic in scale and better suited to a house rather than an apartment building. There is nice distinction however between these continuous entrance paths and the two casual stepping paths to the ground floor apartments from Dumaresq Street.

The possibility of bringing one or both of the front courtyards to Dumaresq Street with their private entrances should be explored on Dumaresq Street. Although this adds to the non-compliance this may also slightly diversify the mix of people moving into these apartments. Local residents down sizing and may be used to very large private gardens and enjoy more than a small courtyard. Mix of apartments applies to both the internal and external qualities.

Terracing of the front set back to the new street creates a good relationship between the building, the street and the entrance paths. A 1.2 metre high open timber fence is proposed to screen the courtyards facing the streets.

Car Parking Garages

The basement car parking entrances are located at lower level points on the site and provide direct access into the basement garages. These are parallel to the pedestrian entrances and at right angles to the new street. The entry from the new street to the driveway and the garages will have minimal impact on the street because the level differences and the direct alignment The set backs and use of levels have been used to minimise the amount of cut and fill. This will also lessen the impact of the driveways on the street.

Blade Walls

There are no blade walls to dominate the view from along the street. There are horizontal protruding concrete slab ends on each level. These are designed as part of the building and will not be overly dominating in the view from the street. This is because of the set backs, the proportion of the projections and the balance with the vertical design elements including the glazing and the sun shading devices.

The angled timber sun shading devices on the western elevation are not large elements and they are clustered in groups. The impact of these from the street will be as a part of the building and not as elements that dominate the view along the street.

Balconies

The balconies are semi recessed and there will not be a dominating view of their underside from the street. KMC can condition the requirement for concealed services.



Figure 4 - Illustrates the site of the proposal. This shows the fall of the site to the west and south away from Dumaresq Street



Figure 5 - Illustrates Dumaresq Street with the site of the proposal on the right

The Spatial System

The Requirement

Urban areas are as much about the spacing between and around buildings as they are about the resolution of the building.

The spatial system in an urban area has both public and private spaces. It comprises the street network; front; side and rear set backs and how those spaces link to internal communal and private courtyards. The subdivision pattern and the spaces around new buildings will change as a result of any new building typology and new set backs being introduced. To ensure the dominance of the spatial network, the reading of the land and the need to minimise the overall impact of larger buildings when new building typologies are introduced the spatial system must have spaces that are:

- Well defined by the building forms and not "left over"
- Related in scale to the proposed buildings on and around the site.

It is very difficult to create a successful relationship between one "object" building and another. Ideally the building mass should balance the topographical features, and define a readable spatial system with the adjacent buildings.

The Response

Proportion and Size of Spaces

The proposed building reflects the new spatial pattern and new building typology. The building has a 6 metres set back to the east boundary. If the site to the east is developed to the KPSO and DCP 55 standards the distance will be 12 metres between the adjacent buildings on the eastern side boundary; approximately 40 metres across the public streets and there would be a 12-14 metres between any two buildings at the rear if the rear site was ever developed in a similar way. There is a greater set back with the existing dwelling. The side separation and generous front set back reflects the relationship on the sides and front of the former pattern. This rear set back is satisfactory given that the building is facing the new street and is forming a street edge although, as noted, it does impact on the gully.

The front elevation to Dumaresq Street is not parallel to the street but the building is parallel with the buildings further to the east. The new street alignment and the east boundary is parallel. The rear boundary is also slightly off alignment due to the angles of the lots in plan.

The front set back to Dumaresq Street is slightly less than the development to the east. Because this is a corner lot and the ground slopes away from the street it is preferable to have the building slightly proud of the buildings further up Dumaresq Street. The building form identifies the corner and "holds" the space.

Shape of Spaces General

The regular shapes of the proposed building in plan and section and the use of a flat roof ensure that there is the potential for a "positive" spatial system to be created with adjoining development.



Figure 6 – Illustrates a typical example as to how when buildings are parallel to each other and the side boundaries they create a positive space between

The building faces both street frontages. It aligns with the side boundaries and new street. The small deviation in alignment to Dumaresq Street reflects the slight irregularity in the shape of the lot. This deviation will not adversely affect its relationship with other buildings along Dumaresq Street. The importance of both public streets is addressed.

The building maintains 5 storeys to Dumaresq Street but is stepped along the new street. The building provides a clear regular edge in section to both street frontages and a clear roof profile against the sky when the buildings are viewed from along the street. This will ensure that the overall appearance of the buildings is minimised and that the reading of the space around the buildings is maximised.

The Natural Features

The Requirement

The response to the natural features of any proposal depends on the ability of that building and / or group of buildings to:

- Reveal the site and not to obliterate it.
- Ensure that the natural features of site are enhanced as important elements

To do this, buildings need to:

 Be designed so that they are not "object" buildings but are buildings that define a spatial system. In this way the spaces created around them and with

- adjacent buildings are "positive" spaces in which the shape of the land is understood and the other natural features are key elements.
- Ensure that the ground level of the building sits appropriately on the ground plane. This can be done in a range of ways. Internal / external levels should be related with platforms / terracing of the site; and / or open spaces and retaining walls should relate to the footprint and height of the building.
- Create internal spaces and elevations that address the external spaces including the street. This ensures that the street and other spaces read as important places

The Response

The proposal responds to the natural features in the following ways:

- The proposed building is designed [in so far as possible under the code] as a
 "space defining" building and not as an "object" building. In this way the
 spaces are integrated as important elements and not left over. Because of
 this the remaining natural features of the site particularly the topography, will
 be able to be read.
- The building steps internally and the site terraces so that the interior relates to a series of external terraces. This reinforces the dominance of the spatial system and a reading of the topography.
- The building has open lobbies that run from the street entrance to the lift core. This design device breaks up the overall form of the building in its presentation to the new street and along its longest elevation.
- The roof edges are lined with planting boxes so that the building will blend with the natural environment.

PRINCIPLE NO. 2: SCALE

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

The Requirement

Successful resolution of the scale of a building is complex and needs to be resolved in two ways. Firstly, the resolution of the mass of building into a particular form; and secondly, the resolution of that form into the detailed architecture, fenestration etc. It is not a two step linear process but an iterative design process in which one the overall massing of the building is related to how the elevations are resolved.

Firstly a building needs to be resolved at the larger scale as a balance between building form and the spatial system of the precinct / city. In this context the design deals with the shape of the building; footprint; height of the building relative to its typology and together with the spatial system around it including the street. This is where the major elements ie the overall mass is organised into a particular building form. Plan forms such as curving; sections that are heavily stepped; roofs that are pitched or hipped on large footprint buildings such as the apartment typology create

building forms with which neighbouring buildings cannot relate In order to minimise the impact of large buildings even if they are in a landscaped setting, they need to relate to each other. Simple flat and / or skillion roofs together with plans that have straight walls are more likely to achieve a successful outcome.

Where hipped roofs are used on buildings with large footprints over 2 storeys in height the building reads more as an "object" building Excessive stepping also creates a "wedding cake" effect. Buildings therefore with curvilinear plans, dominant roof forms and multiple steps will appear more dominant than simple building forms that relate to each other and allow the topography to be perceived. These complex forms diminish the value of the spatial system.

Secondly, a building needs to be resolved in how that form is articulated. In this context the design resolution deals with the placement of openings; organisation of balconies; walls; use of materials; and roof form. These are the minor elements.

Buildings of a similar size may appear to be very different in scale as a result of the way that they are articulated. Too much articulation will make a building appear more dominant. Equally little articulation can also make a building appear more dominant. The design of any building will be iterative and a combination of how the major and the minor elements are related to each other and the materials.

All external walls need "depth". Depth in a wall is achieved by the actual thickness of the wall; where the openings are located in that depth i.e. on the outer face or inner face or centre. Depth makes an important contribution to the apparent scale of a building as it eliminates the potential "flatness" of the facade without contorted articulation. It provides shadow lines and strengthens the relationship between the building and the outside.

The apparent scale of the building depends on:

- The actual size of the building, height and footprint.
- The shape of the building and the shape and proportion of the space/s that are left around the building and between that building and other buildings.
- The way in which the mass is articulated into a particular form of larger scale vertical and horizontal elements. These are the "major" elements.
- The way in which the mass is further articulated by the size, shape and organisation of the smaller elements such as openings; balconies; screens; blade walls and other elements. These are the "minor" elements
- The selection, scale and organisation of the materials
- The "depth" in the external wall.

The Response

Building Size

The actual height and overall size of the building is in large part dictated by the planning controls The height control that prevails in the KSPO states that the height

is 13.4 metres to the underside of the utmost ceiling. In this case Level Four. One additional floor can be set back above this height. This results in a five storey building. The proposal contravenes the 5 storey permissible height limit in two places however it is considered that this height deviation does not adversely impact on the overall scale of the building and in fact is necessary to avoid an excessively stepped profile.

The Shape of the Building and Spatial System

The articulation of the building form as outlined above will contribute to the impact of the building in the landscape setting; its relationship to neighbouring buildings and the requirements and quality of the internal amenity of apartments.

This proposal responds to the spatial system and the neighbouring buildings in the following ways:

- The proposed building has a simple regular plan form and vertical walls It is well scaled in both form and articulation. This will minimise the dominance of the building on the site and assist in relating the building to the street and potential neighbours
- The building has minor non-compliances with the Dumaresq Street set backs. It complies with the density. The size and form of the proposal is in keeping with the new and proposed adjacent properties.
- The five storeys relates to the scale of Dumaresq Street.
- The five/ six storeys to the New Street creates a well proportioned street Although a slightly smaller front set back may have resulted in this street having a greater sense of definition in contrast to Dumaresq Street and the longer streets in the precinct. The street set back could be introduced in a range of ways. The building does not have to be set closer to the street for its full length Areas can be organised so that large planting can be included. The urban design value of varying the street set back is in the ability of a new structure to optimise the different spatial and topographical qualities of the new street thereby adding to the overall variety within the precinct and minimising the impact of the buildings.
- The building will be visible as a corner building from Dumaresq Street. This is an additional reason for minimising the number of "steps" in the new street elevation. The building can then provide greater "cut off" of the buildings behind.
- The parallel alignment of the building with the side boundaries enables adjacent buildings and those across the street in Dumaresq Street to reflect that alignment and create a positive spatial relationship.
- The simple flat roof also enables adjacent development to be designed in a
 way that the buildings along the street can be read as a suite and not as one
 building standing out from another. This positive contribution contrasts with
 the impacts of buildings that are irregular in plan and / or section and / or roof
 profile. The regular plan shape is articulated into three discrete vertical
 elements related to the service/ access cores. The proportion of these three

- divisions in the form relates the overall height of the building and the length of the elevation to the new street.
- There is a horizontal base consisting of glazed elements and openings. This is related to the terracing of the site. The building has a recessed top level so that the arrangement of the major elements create a subtle base, middle and top without the need to employ arbitrary horizontal and/or banding elements.



Figure 7 – Illustrates the scale of the existing buildings facing Dumaresq Street on the southern side of the street.

The Resolution of the Form

The overall form of the building is well proportioned. This is the result of how the building is organised into three solid sections around two full height cores and relating these to the ground plane.

The solid elements use the extension of the concrete slabs as framing around brickwork and together with the full height glazing they create a balance of horizontal and vertical elements.

The Resolution of the Articulation

The form is then further articulated into simple facades that address the site, the orientation and the locality. There are no "hole in the wall" openings and the success of the design depends on maintaining this simplicity of articulation.

- The western elevation introduces sun-shading elements.
- The roof is flat and integrated with the treatment of the elevations.
- The organisation of the form, materials; openings and walls will create "depth" in the external walls. The use of panels of glazing to the underside of the ceiling and location of windows on the internal skin all assist in this modulation.

 The design is sophisticated and relies on implementation that respects quality of the detailing.

Material Selection

The selection of materials includes concrete; grey coloured face brick; timber sunshading louvers and brick balustrades and timber courtyard walls. This is an appropriate palette for the landscape setting and building typology. The materials can be maintained easily and will weather well .The materials selected are in keeping with the scale of the building and are in scale with the way in which they are organised in the building.

Wall Depth

Depth within the overall exterior of the building is achieved by the use of the entrance "slots"; the projecting concrete framing elements; and the use of the fully glazed panels in contrast to the solid wall elements.

PRINCIPLE NO. 3: BUILT FORM

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and manipulation of building elements

The Requirement

An appropriate building form for a residential flat building in this locality that is part of an area undergoing a comprehensive change needs to:

- Follow the desired building alignment. The building alignment may vary from the existing in areas undergoing change. Any alignment requirements should endeavour to create a "positive" spatial system with the street and between buildings. In this case the building alignment is informed by the set back controls although they do not stipulate a specific alignment or "build to" line
- Use plan and section resolution to articulate the form into a series of well proportioned elements which can be further articulated
- Use openings; projections; balconies etc to further articulate the elements that create the overall building.
- Create clear edges and a clear roof line profile against the sky

The Response

The proposal resolves the building mass into an appropriate built form in the following ways:

It creates a building that aligns with the new street, side boundary and with its
existing and potential neighbours so that the space becomes the dominant
element

- It distributes the floor space into three solid elements linked by two cores.
 These elements are then articulated at a detail scale in keeping with their overall scale.
- It is well articulated by openings, screening, projections and the use of materials [see aesthetics]
- It uses flat roofs with set backs and screening to form a building top that is regular in shape and provides a clear profile against the sky

PRINCIPLENO. 4: DENSITY

Good design has a density appropriate for a site and its context in terms of floor space yields (or numbers of units or residents).

The Response

The proposal reflects the objectives in the KSPO and DCP 55 in terms of the location of the site. The objectives are to create a specific area of medium to high density development that is close to the rail station and Gordon town centre. The proposal achieves the maximum density in a well designed residential flat building.

PRINCIPLE NO. 5: RESOURCE, ENERGY AND WATER EFFICIENCY

Good design makes efficient use of natural resources, energy, and water throughout its full life cycle including construction.

The Requirement

All buildings should meet the BASIX targets and extend these where possible. Buildings should minimise the use of natural resources by employing a range of measures. These include

- Passive solar design / shading etc
- Maximising natural light
- Optimising cross ventilation
- Water reuse
- Using materials with low embodied energy

The Response

The proposal meets the targets set out in BASIX.

Northern solar access is provided to some apartments. 20 of the apartments have two or more orientations. 14 have only easterly or westerly aspects. There are no apartments that have only a south facing aspect.

There are fixed timber sun shading devices to the western facing bedrooms. The sun shading devices on the western elevation need to be tested to ensure that they work internally and externally. Given the sheltered location of this site they may not

all be necessary on the lower levels. It may be more useful to use moveable shutters as these may provide better internal amenity and improved outlook.

There is a central heating and cooling system. Ideally the development should provide an option to install ceiling fans. Water is heated from a gas-fired boiler. There are indoor clothes drying lines.

PRINCIPLE NO. 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 the residents and for the public domain.

The Requirement

To ensure that a development responds to its landscape context it needs to:

- Retain, reveal and enhance the natural features. In this case, the fall in the land and the mature trees.
- Seat the building so that it establishes a strong direct relationship between the ground floor and the ground plane.
- Integrate the interiors and exteriors of the building with the planting; levels and open space into a cohesive whole
- Use the appropriate plant species

The Response

Retain and Reveal the Natural Features

The underground car parking and the size of the building footprint will result in changes to the topography but the terracing of the site, internally and externally, and location and form of the building enables the topography to be clearly read.

The building footprint and the set back requirements have resulted in a number of existing mature trees being removed. From an urban design perspective [not an arboricultural opinion] it would be better to reduce the front set back and move the building slightly closer to Dumaresq Street. This may or may not enable more existing trees to be retained. Regardless of the ability to retain more trees the long rear set back is in keeping with the pattern of urban/ suburban development throughout Ku-ring-gai in all the precincts that link to the Pacific Highway. The rear gardens are often located in the gullies, have more prevalent natural bush and often contain water courses and natural drainage systems.

The building will be the end building in the newly created street block so that protruding into the Dumaresq street space will subtlety define the end of the new block while the length will give definition to the new street. This is a reason for not reducing the rear set back.

The arrangement and the scale of the planting and gardens are in keeping with the scale of the building. The overall landscape design is a welcome change from the often overly domestic feel of many proposals.





Figures 8+ 9 - Illustrate the characteristics of the neighbouring Gordon Glen Riparian Corridor and Park

The relationship between the ground floor and the ground plane

The proposed development integrates the building with the ground plane by:

- Stepping the building so that the ground floors of the building relate to the natural ground plane and the terracing of the site. On the western side of the building the terracing reduces the impact of the development on the new street
- Creating a direct link from the street into the buildings

The Relationship between the Interior and Exterior Spaces

The proposed development integrates the external and internal spaces in a range of ways.

The predominately glazed ground level steps directly to the strong solid horizontal base. The entrance lobbies are conceived as full height open spaces. Both these design interventions bring the exterior space into the building. The glazing on the lower level has the potential to enable reflections. The courtyards on the ground levels link the internal spaces with the external communal gardens

Green roof planters on the upper levels give definition and an edge to the buildings top level. They visually integrate the building with its landscape setting.

Plant Species

The proposed landscaping uses plant species from the Blue Gum High Forest and Sydney Turpentine / Ironbark Forest vegetation. A fernery has been created in the drainage channel at the rear of the site under the existing tree canopy. It will be rehabilitated with plants designed to define the watercourse, prevent erosion, and enhance the aesthetic appeal of the area.

The planting around the building at the front of the site has been designed to create the feel of the bush and integrate the site with the neighbouring natural bush. Planting is proposed or will be retained to side boundaries to protect the amenity of adjacent residents.

On the roof gardens and courtyards native and exotic species are used. Some herbs and edible species are introduced.

PRINCIPLE NO. 7: AMENITY

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

The Requirement

To ensure that an apartment building has a high level of amenity it needs to:

- Provide clear safe visible places which create a sense of entry
- Good vertical and horizontal circulation throughout the buildings

- Have adequate useable communal open space
- Have apartments which:
 - are the right size for the number of occupants
 - o are well planned for circulation and furniture placement
 - o have a good relationship between the exterior and the interior
 - o have aural and visual privacy
 - o have a pleasant outlook
 - o have adequate useable private open space
 - meet the requirements re solar access; cross ventilation etc [see Resource Energy and Water Efficiency]

The Response

The overall quality of the apartments and the interior of the building are very high.

Entrances

- The pedestrian entrances to the apartment blocks from the street are generous and direct. The only exception to this is the width of the pedestrian paths to the entrance lobbies. Additional width could increase the stronger sense of entry to the lobbies. The width maybe a result of the need to exclude the pathway area from the deep soil calculations.
- The mail boxes are located at the street but given that much of the access to and from the building will be from the basement garages it maybe more useful to locate the mail boxes in the open lobby entry area. This does not adversely affect the pedestrians. They would also benefit from the shelter provided by the ceiling/ roof in inclement weather.
- The entrances to the garage basements are discrete and use the site slope to maximum advantage in achieving a visual cut off.

Circulation

- The vertical circulation from the car park and throughout the building is legible and direct.
- The open entrance lobbies are generous and able to accommodate furniture removal.

Communal Open Space

An area of communal space is located on the Level 4. This is accessed directly from the lift core and is not directly adjacent to a unit. The area is landscaped to form some intimate spaces. How useable the space would be is difficult to say given that it is a roof location. Use of communal open space often depends on the particular residents in the building at any one time. Key considerations are that the communal open space it is not located so close to an apartment and / or private courtyard that it feels like a private area and that the space is relatively sheltered and receives some sun. The area proposed is clearly communal. It is not overlooked and will not

appear "private". It is located so that noise would not impact unreasonably on the adjacent apartments and it is designed to have a sense of enclosure. It is also only on Level 4 [5 storeys above the ground] and consequently not so high from the ground that wind is a problem. There will be some overshadowing from the buildings on the northern side.

There are other garden spaces around the building although there are no areas specifically designated for communal space. It may be possible to create a ground level area that is suitable for a communal space on the site facing the new street. The set backs, the two street frontages, the topography and falls to the rear, an area that is effectively a water course, make the provision of ground level communal open space on this site difficult. There may be opportunities for some seating at the rear of the site or along the new street frontage.

The issue of communal space in small apartment buildings in Sydney is generally unresolved. There is no monitoring of which I am aware of how "communal spaces" are used in Ku-ring-gai or generally in Sydney. Where buildings are located in the centre of a site, by definition in the case of Ku ring gai, areas designated as open space are often relatively close to the ground floor apartments. This inhibits people from using them. Very minor physical cues will impact on how people use space. This can often be further exacerbated by cultural differences.

There is a small local park further down Dumaresq Street, Gordon Glen. This is suitable and easily accessible for children's play.

The Apartment Designs

The apartment plans are well resolved.

- The apartments have well considered plans that are well sized to relate to the number of bedrooms / number of residents.
- All rooms are able to be appropriately furnished
- Apartment circulation is generally well resolved throughout. The use of the two vertical cores has enabled direct access into the apartments without the need for corridors, direct access to the car parking an; the bin storage and the bike parking.
- The services are logically grouped to minimize noise to adjacent apartments.
- All the entries open into wide hallways within the apartment.
- The simple planning of the units has enabled the useable area within the apartments to be maximized.
- There are no issues with adjacency of apartment windows. Where windows are in close proximity, this occurs around the vertical circulation elements, they are secondary windows and are off set one from another.
- Most apartments have an outlook to the street and front gardens or to the rear garden. The apartments on the east have an outlook to the gardens but will also face adjacent development. The upper levels will have district views.

- There is a reasonable mix of apartments and 4 manageable units. No 4 is three bedroom; No 7 is two bedroom. They are located on the ground floor. No 14 is two bedroom and located on Level 1; No 21 is two bedroom and located on level 2. There is sufficient variety in the plans and aspects of these apartments.
- All apartments have large robes associated with the bedrooms. There are 21-22 storage areas provided in the basement adjacent to the car parking. 8 units have very large laundry areas that accommodate general storage. Storage cupboards are identified. They are separate from the living room and bedroom cupboards etc
- The bike and the bin storage are well located in relation to the vertical circulation.

Private Open Space

- Every unit has useable and generous open space. Many above the basic requirements of SEPP 65.
- The courtyards to the ground floor apartments are generous and link to the adjacent common garden spaces. The apartments on the upper levels have large terrace areas, all landscaped.
- The open space areas are in many apartments accessed from two of the internal rooms.
- The plan shape of the balconies and courtyards enable the placement of outdoor furniture.
- The balconies are all recessed, semi recessed and / or screened to preclude issues of overlooking. This design solution also assists in limiting the potential of noise transmission. The interior living areas are designed with full width and height glazing so that the external spaces are an extension to the internal living
- The balustrades are all brick. This is acceptable in terms of the overall design and aesthetics of the building and the privacy on the balconies however the solid balustrades do impact on the views out of the units. This impact is most notable from living room seating.
- Some of the courtyards on the east may offer better amenity to the apartments if the area to the boundary fence was included as courtyards possibly split level, rather than as a strip of open space along the boundary. [Excluding fire egress paths] A similar strategic approach related to specific apartments and their levels could be taken to the north so that side of the development could engage with Dumaresq Street. This provides an additional choice in terms of residents who want to have a more generous garden area. Extending courtyards does increase non-compliances however done properly it would improve the relationship of the building to its site and the street. The concept of "buildings in a landscape setting" is complex in this suburban setting where every building is read against the adjacent buildings. Courtyard areas can still incorporate large scale and coordinated planting given that there is no change to the foundations, basements and position of external walls. Furthermore creating larger flat terraces around a building at the level of the ground floor of the building and bringing them to the street

edge can reduce the visual impact of a building. This technique will ensure that the landscape is more dominant.

PRINCIPLE NO. 8: SAFETY AND SECURITY

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

The Response

The basic principles of CPTED are evident throughout the proposal.

The building addresses both streets and provides overlooking of entrances.

The building is secure and there is controlled access to basements and entrance gates. There is a clear delineation of public and private domain.

PRINCIPLE NO. 9: SOCIAL DIMENSIONS

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability and access to social facilities.

The Response

The location of the precinct provides excellent access to shops; services; railway station; bus routes and open space in a lovely part of Sydney as for the previous scheme.

The introduction of quality apartments in this area provides the opportunity for people to buy at a more affordable level or to downsize from the larger houses and gardens in the surrounding suburbs. It also adds to the housing mix and enables people without cars or who can no longer drive to be able to live here with reasonable access to immediate facilities and other parts of Sydney including facilities in the City; Chatswood; St Leonards and Hornsby, all these centres are on a direct train line. Although hilly, the site is accessible by foot to public transport.

PRINCIPLE NO. 10: AESTHETICS

Quality aesthetics require the appropriate composition of building elements, texture, materials and colours and reflect the use, internal design and structure of the development.

The Requirement

Successful resolution of the aesthetics of a building is related to how he building is scaled and articulated and the use of materials.

Firstly, a building needs to be resolved at the larger scale as a balance between building form and the spatial system. This needs to reflect the context of the precinct / city. In this context it encompasses the shape; footprint; height of the building together with the spaces between and around the buildings.

Secondly, a building needs to be resolved in how the particular form is articulated. In the case of an apartment building it deals with the placement of openings; organisation of balconies; walls; use of materials; roof form etc.

To ensure that a development has a high level of aesthetics in relation to the level of massing and form it needs to:

- Relate the building form to the site dimensions; shape; topography and natural vegetation
- Relate the building form to the other buildings on the site and those in the precinct by creating a positive spatial system around it

To ensure that a development has a high level of aesthetics at the detail level of articulation it needs to:

- Ensure that the openings; projections and materials relate in proportions to the overall massing and arrangement of the form
- Organise the openings; projections and materials into a cohesive whole
- Use materials that relate to the building typology and the precinct

The Response

The proposal is aesthetically well considered in terms of the massing arrangement of the overall form to the site, the street frontages and the potential neighbours. It is also well considered in terms of the detailed architectural resolution.

The Relationship of the Building Form to the Site

- The division of the building into three elements with connecting cores has enabled the proposal to sit well on the site.
- The use of level differences internally and external ensure that the building relates to the ground plane levels and natural attributes of the site including vegetation.
- The location and number of direct pedestrian access to the entrances from the street engage the building with the street system.
- The use of the two cores as organising elements of space and light enable the building to relate to its site

The Relationship of the Building Form to other Buildings

 The simple form in plan and in section enables any proposed adjacent development to from a positive spatial relationship with this apartment block either on the sites adjacent or across the streets.

The Resolution of the Detail Articulation

- The internal design and planning of the units is reflected in the modulation and articulation of the facade.
- The materials selected are grey brickwork, glazing, concrete and timber. These will weather naturally and blend with the colours of the bush. The combination, scale and selection of materials relates to the precinct and to the overall form and composition of the building.
- The organisation of the windows and openings relative to the overall proportions and scale of the building of the building has produced a pleasing harmonious result.

Conclusion

The proposed development at 28-32 Dumaresq Street Gordon is for Australia Wenzhou Group Property Pty Ltd. The documentation, drawings and planning report are of the highest standard.

The proposal consists of a residential flat building containing 34 apartments The density and form are appropriate for the location and reflect the aspirations of the Council as expressed in the KPSO and DCP 55

Designed by Tzannes Associates Pty Ltd the proposed development responds to its context; is an innovative solution to complex topography and exhibits a high level of architectural sophistication, skill and understanding. The apparent simplicity of the design belies the range of issues that have been successfully addressed.

The floor space is organised into a building that reveals and respects the street and the natural features of the site. The site is terraced so that the building sits on a series of platforms. These relate to the slope of the natural ground. The form reveals the natural and topographical features of the site through the changes of levels and the open entry spaces. Levels, entrances, glazing, courtyards and planting link the internal and external spaces. There is a clear public and private spatial system.

The height relates to the size of the footprint of the building; the apartment blocks in the area and the other controls of density, set backs and site coverage. The height exceeds slightly the KPSO but the additional height of six storeys in two places has minimal adverse impacts on other development within or around the site.

The apartments themselves are well designed and maximize the use of space. Circulation is direct and legible through the building and within the apartments. The selection of materials, the disposition of the openings, entrances and detail

arrangements reflect the overall form, the scale and proportions as well as the internal design.

The planting and landscape design reinforces the quality of the building and responds to the natural bushland character of the area.

The proposal is developed around a strong idea about space and the organisation of the buildings on the ground coupled with considered resolution of the details. Because of this a key factor in the successful implementation of this development is that the current architectural consortium is retained to detail the proposal through to construction. It is the kind of proposal that could lose much of its quality with unsympathetic detailing and poor construction. Ideally the architects would take this building through the construction stage.

The changes that could be considered or may have been explored more fully are:

- The location of the building to be closer to Dumaresq Street and new street with a greater set back to the rear and eastern boundaries. However this would affect the levels of the whole building and may introduce greater contravention of the height plane and other unforseen level issues. Alternative set back options should be explored in the initial concept stages of the design development. The evaluation of this proposal may provide insight to variations to setbacks on sites facing new streets in other locations.
- The extension of the courtyards at ground level on the east, west and north to Dumaresq Street.
- A reduction in height of part of the solid balustrades to improve views from living areas.
- Relocation of the mail boxes from the street entrance to the entrance lobbies.

Recommendation

The proposed development is of the highest standard and should be approved