

JRPP No.	2010STH034
DA No.	DA-2010/1415
Proposal	The application proposes a mixed use development involving the construction of two (2) x nine (9) level buildings over one (1) level of basement carparking and two (2) x eight (8) level buildings over one level of basement parking. Each building consists of ground floor commercial with residential above comprising a total of 9 commercial units and 207 residential units with 316 carparking spaces. The development will be constructed in two (2) stages but is not staged for the purposes of the Act.
Property	22-30 Gladstone Avenue, WOLLONGONG NSW 2500 32 Gladstone Avenue, WOLLONGONG NSW 2500 6 Rowland Avenue, WOLLONGONG NSW 2500
Applicant	ADM Architects
Responsible Team	City Planning City Centre Team

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Joint Regional Planning Panel

The proposal has been referred to Joint Regional Planning Panel pursuant to clause 13B as the development has a capital investment value in excess of \$10 million (\$38,114,450).

Proposal

The proposal is for a large mixed use development comprising four residential towers, two 9 storey and two 8 storey, 1485m² of ground floor commercial space, 316 car parking spaces across basement and ground floor.

Permissibility

The site is zoned B4 Mixed Use pursuant to WLEP 2009. The proposal is categorised as a *Shop top housing* and is permissible in the zone with development consent.

Consultation

The proposal was notified in accordance with Council's Notification Policy and received 13 submissions which are discussed at section 2.8 of the assessment report. The application was referred to the following external bodies and no objections have been raised:

- The RTA provided comment with regards to the proposal being Traffic Generating Development under Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007
- RailCorp were notified as a nearby landowner and provided comment that the applicant should consider reducing car parking numbers given close proximity to Wollongong Station and the CBD.
- The Director General provided concurrence for the requested variation to clause 8.6 of WLEP 2009, *Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use*

- NSW Office of Water confirmed that an approval under the Water Management Act 2000 was not deemed necessary as the development was determined to be exempt due to the watercourse currently being piped.
- Integral Energy has reviewed the proposal regarding removal of the existing padmount substation on the site, construction of a new substation as well service supply matters for the development. Conditions of consent have been provided in this regard.

Main Issues

The main issues for consideration are as follows:

- the scale of the development with regards to the surrounding context
- a requested reduction in commercial car parking numbers as required by WDCP 2009
- amenity impacts on 34 Gladstone Avenue
- traffic impacts on the local street network
- Variation to clause 8.6 of WLEP 2009 with regards to building separation

The matters are all discussed within the assessment report below.

RECOMMENDATION

It is recommended that the application be approved subject to the conditions at Attachment 7.

1. APPLICATION OVERVIEW

1.1 PLANNING CONTROLS

The following planning controls apply to the development:

- State Environmental Planning Policies:
 - SEPP (Major Development) 2005
 - SEPP (Infrastructure) 2007
 - SEPP (Building Sustainability Index: BASIX) 2004
 - SEPP No. 55 Remediation of Land
 - SEPP No. 65 – Design Quality of Residential Flat Development
- Local Environmental Planning Policies:
 - Wollongong Local Environmental Plan (WLEP) 2009
- Development Control Plans:
 - Wollongong Section 94A Development Contributions Plan 2010
 - Wollongong Development Control Plan 2009

1.2 PROPOSAL

The proposal is for a large mixed use development comprising four residential towers, two 9 storey and two 8 storey, 1485m² of ground floor commercial space, 316 car parking spaces across basement and ground floor. The development is proposed to be built in two stages (but is not staged for the purposes of the Act) as follows:

Stage one:

- 105 apartments in two residential towers, 9 and 8 storeys in height
- Ground floor commercial space and visitor and commercial car parking
- One level of basement car parking
- Communal open space area

Stage two:

- 102 apartments in two residential towers 9 and 8 storey in height
- Ground floor commercial units and car parking
- One level of basement car parking
- Communal open space area

The proposal also incorporates an overland flow path and deep soil zone through the middle of the site.

1.3 BACKGROUND

There is an extensive history of development applications for the subject site. Of relevance to the current application is pre-lodgement meeting (PL-2010/43) held in July 2010 as a precursor to lodgement of the current application. The former Dairy Farmer's factory and distribution centre that was located on the site was also recently been demolished as approved under DA-2009/1690.

Customer service actions

Council records indicate that there have been a number of complaints and customer service requests with regards to the subject site. These have however been dealt with by Council's Regulation and Enforcement Officers and there are no outstanding matters of relevance to the current application.

1.4 SITE DESCRIPTION

The site is located at 22-30 Gladstone Avenue, Wollongong NSW 2500 on the following lots:

Lot 37 DP 10704, Lot 38 DP 10704, Lot 39 DP 10704, Lot 40 DP 10704, Lot 41 DP 10704, Lot 42 DP 10704, Lot A DP 340379, Lot C DP 348551, Lot 2 DP 395582, Lot A DP 411527

The site is situated within the Wollongong Central Centre approximately 800m south west of the main town centre and approximately 200m west of Wollongong railway station. The site is bounded by Osborne Street to the north, Gladstone Avenue to the east and Rowland Avenue to the south and residential dwellings to the west.

The locality is largely characterised by a mixture of low and medium density residential and commercial developments. In addition, other nearby land uses include the Lighthouse church (to the east), Illawarra Institute of TAFE Wollongong West Campus (to the south) and South Coast Agencies light industry (to the east).

Site constraints

A piped watercourse in the form of a balloon pipe runs directly through the site and is reflected on the deposited plan.

Council records list the site as being affected by flooding.

1.5 CONSULTATION

1.5.1 INTERNAL CONSULTATION

Geotech

Council's Geotechnical Engineer considers that the submitted geotechnical report gives a good preliminary assessment of soil and rock conditions and demonstrates that the project is feasible from a geotechnical perspective. The proposal was considered to be satisfactory subject to appropriate conditions.

Stormwater

Council's Stormwater Engineer has reviewed the application and has provided a satisfactory referral subject to conditions of consent.

Landscaping

Council's landscape architect considered the proposed landscape plan to be satisfactory subject to appropriate conditions.

Traffic

Council's Traffic Engineer has given a satisfactory referral with regards to traffic matters subject to appropriate conditions of consent.

Strategic

Council's Strategic Officer provided comments with regards to the possible incorporation of number 34 Gladstone Avenue into the proposed development site. Council is satisfied that genuine attempts have been made to achieve this however were unsuccessful. This is further discussed at section 2.3.1 of this report.

Environment

Council's Environmental officer considered the application to be satisfactory subject to appropriate conditions.

Safer Community Action Team (SCAT)

Council's SCAT Officer has reviewed the application with regards to CPTED principles and has raised concern over the safety of resident car parking within stage 2 due to the roller door being open to the public within working hours. Conditions have been recommended with regard to CCTV within this area in this regard.

Civil Works in the Road Reserve

Council's Works Officer considered the application to be satisfactory subject to conditions.

Heritage

Council's Heritage Officer has reviewed the application and is satisfied that the proposal will not detrimentally impact on the nearby Wollongong railway station group, which is listed in both the LEP 2009 and the State Heritage Register.

1.5.2 EXTERNAL CONSULTATION

Department of Planning

Concurrence from the Director General of the Department of Planning has been granted on 12 January 2011 in accordance with Clause 4.6 of WLEP 2009 in regards to the variation to clause 8.6 of WLEP 2009.

RTA

The RTA provided comment on 24 February 2011 following consideration of the application at the Southern Regional Development Committee held on the 22 February 2011 and a number of concerns were raised. However, it was recommended that the concerns could be addressed without further comment from the RTA as they relate to Council matters or to unclassified roads. The matters raised are considered to have now been resolved as outlined in the traffic discussion of this report.

Railcorp

Railcorp were notified as an adjacent landholder and were of the view that the current provision of parking should be reduced to reflect a minimal approach to car parking provision and promotion of sustainable modes of transport. Notwithstanding they suggested that the car parking provision be adjusted to a lower level, noting relevant local development controls and plans.

The development complies with the relevant controls for the area with regards to the applicable parking controls for residential development.

NSW Office of Water

The NSW Officer of Water have confirmed that the application is exempt from the need to obtain a Controlled Activity Approval due to the watercourse being piped.

Integral

Integral Energy has reviewed the proposal regarding removal of the existing padmount substation on the site, construction of a new substation as well service supply matters for the development. Conditions of consent have been provided in this regard.

2. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 SECTION 79C ASSESSMENT

(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) <i>the provisions of:</i>	
(i) <i>any environmental planning instrument, and</i>	See section 2.1

(ii) <i>any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and</i>	See section 2.2
(iii) <i>any development control plan, and</i>	See section 2.3
(iiia) <i>any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and</i>	See section 2.4
(iv) <i>the regulations (to the extent that they prescribe matters for the purposes of this paragraph), that apply to the land to which the development application relates,</i>	See section 2.5
(v) <i>any coastal zone management plan (within the meaning of the Coastal Protection Act 1979)</i>	See section 2.6
(b) <i>the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,</i>	See section 2.7
(c) <i>the suitability of the site for the development,</i>	See section 2.8
(d) <i>any submissions made in accordance with this Act or the regulations,</i>	See section 2.9
(e) <i>the public interest.</i>	See section 2.10

2.1 SECTION 79C 1(A)(I) ANY ENVIRONMENTAL PLANNING INSTRUMENT

2.1.1 STATE ENVIRONMENTAL PLANNING POLICY (MAJOR DEVELOPMENT) 2005

The application is Major Development to be determined by the Joint Regional Planning Panel as the development has a capital investment value of greater than \$10 million.

2.1.2 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

The application is classified as traffic generating development that is to be referred to the RTA as specified in Schedule 3 of this policy as outlined below.

Schedule 3 Traffic generating development to be referred to the RTA

<i>Size or capacity—site with access to any road</i>	
<i>Area used exclusively for parking or any other development having ancillary parking accommodation</i>	<i>200 or more motor vehicles -</i>

As part of the RTA referral, the application was reviewed by the Southern Regional Development Committee on 22 February 2011 and a number of issues were raised. These matters have now been satisfactorily resolved.

Integral Energy were referred the application pursuant to *Subdivision 2 Development likely to affect an electricity transmission or distribution network*. There is an existing electricity substation located on the land which is proposed to be relocated. Integral Energy has reviewed the proposal in this regard and have provided conditions of consent.

2.1.3 STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

SEPP BASIX applies to the development. In accordance with Schedule 1 of the Regulations and SEPP 2004 a BASIX Certificate has been submitted in support of the application demonstrating that the proposed scheme achieves the BASIX targets.

2.1.4 STATE ENVIRONMENTAL PLANNING INSTRUMENT NO. 55 – REMEDIATION OF LAND

Under Clause 7 of State Environmental Planning Policy No.55 – Remediation of Land, a consent authority is required to consider whether a proposed development site is affected by soil or other contaminants before granting consent. The subject site is zoned for the proposed development and there is no previous history of other uses that could be considered to be potentially contaminating. It is considered that the subject site has a low contamination risk. The site is considered unlikely to be contaminated and is suitable for the proposed development. Therefore the proposal is considered to be consistent with SEPP 55

2.1.5 STATE ENVIRONMENTAL PLANNING POLICY NO. 65 – DESIGN QUALITY OF RESIDENTIAL FLAT DEVELOPMENT

The proposal comprises development that meets the definition of a ‘residential flat building’ and as such, the provisions of SEPP 65 apply.

Part 2 of the Policy sets out design quality principles for residential flat development. These must be considered in the assessment of the proposal pursuant to clause 30(2)(b) of the Policy. The development is considered to be satisfactory with regards to the design quality principles for residential flat development as outlined at Appendix 1 to this report.

Further in determining a development application for consent to carry out residential flat development, a consent authority is to take into consideration the Residential Flat Design Code. The application is considered to be satisfactory with regards to this code. A full discussion and compliance table is contained at Appendix 1 of this report.

2.1.6 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

Part 2 Permitted or prohibited development

Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned *B4 Mixed Use*

Clause 2.3 – Zone objectives and land use table

The objectives of the zone are as follows:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*
- *To support nearby or adjacent commercial centres without adversely impacting on the viability of those centres.*

The proposal provides a mixture of commercial and residential land uses in close proximity to transport, services and the city centre that are considered compatible with the locality. The proposal is satisfactory with regards to the above objectives.

The land use table permits the following uses in the zone.

Zone B4 permitted uses

*Advertisements; Advertising structures; Amusement centres; Boarding houses; Bulky goods premises; Business premises; Car parks; Child care centres; Community facilities; Educational establishments; Entertainment facilities; Environmental facilities; Exhibition homes; Function centres; Funeral chapels; Funeral homes; Hostels; Hotel or motel accommodation; Information and education facilities; Landscape and garden supplies; Multi dwelling housing; Office premises; Passenger transport facilities; Places of public worship; Recreation areas; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Retail premises; Roads; Self-storage units; Seniors housing; Service stations; **Shop top housing**; Tourist and visitor accommodation; Vehicle body repair workshops; Vehicle repair stations; Vehicle sales or hire premises; Veterinary hospitals; Wholesale supplies*

The proposal is categorised as a *shop top housing* as described below and is permissible in the zone with development consent. Business and retail premises are also permissible uses in the zone.

Clause 1.4 Definitions

shop top housing means one or more dwellings located above (or otherwise attached to) ground floor retail premises or business premises.

Part 4 Principal development standards

Clause 4.3 Height of buildings

The proposed building height of 30.655m does not exceed the maximum of 32m permitted for the site.

Clause 4.4A Floor space ratio – Wollongong city centre

(4) The maximum floor space ratio for a building on land within a business zone under this Plan, that is to be used for a mixture of residential purposes and other purposes, is:

$$(NRFSR \times NR/100) + (RFSR \times R/100):1$$

where:

NR is the percentage of the floor space of the building used for purposes other than residential purposes.

NRFSR is the maximum floor space ratio determined in accordance with this clause if the building was to be used only for purposes other than residential purposes.

R is the percentage of the floor space of the building used for residential purposes.

RFSR is the maximum floor space ratio determined in accordance with this clause if the building was to be used only for residential purposes.

The maximum floor space is calculated as follows:

Site area: 9,275

Residential GFA: 21,143

Commercial GFA: 1,485

Total GFA: 22,628

$NR = 1485/22628 = 6.56\%$

$R = 93.43\%$

$NRFSR = 3.5$

$RFSR = 2.5$

$$FSR = (NRFSR \times NR/100) + (RFSR \times R/100):1$$

$$= (3.5 \times 6.56 / 100) + (2.5 \times 93.44/100): 1$$

$$= 0.2296 + 2.336:1$$

$$= 2.5656:1$$

The floor space proposed is 2.44:1

Clause 4.6 Exceptions to development standards

The proposal seeks to vary the development standard contained within clause 8.6 of WLEP 2009. Clause 8.6 is as follows:

- (1) *The objective of this clause is to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access.*

- (2) *Buildings on land within Zone B3 Commercial Core or B4 Mixed Use must be erected so that:*
 - (a) *there is no separation between neighbouring buildings up to the street frontage height of the relevant building or up to 24 metres above ground level whichever is the lesser, and*
 - (b) *there is a distance of at least 12 metres from any other building above the street frontage height and less than 45 metres above ground level, and*
 - (c) *there is a distance of at least 28 metres from any other building at 45 metres or higher above ground level.*
- (3) *Despite subclause (2), if a building contains a dwelling, all habitable parts of the dwelling including any balcony must not be less than:*
 - (a) *20 metres from any habitable part of a dwelling contained in any other building, and*
 - (b) *16 metres from any other part of any other building.*
- (4) *For the purposes of this clause, a separate tower or other raised part of the same building is taken to be a separate building.*
- (5) *In this clause:*

street frontage height means the height of that part of a building that is built to the street alignment.

The proposal requires an unobstructed overland flow path through the site for flooding purposes. As such, there is a discontinuous frontage to Gladstone Avenue. Further, there is an 8m separation between the development and 34 Gladstone Avenue on the Gladstone Avenue frontage and a separation of approximately 8m on the Rowland Avenue frontage. 34 Gladstone Avenue contains a residential dwelling and the separation distances are required to preserve amenity for this development.

- (1) The objectives of clause 4.6 are:
 - (a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development, and*
 - (b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*
- (2) Consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.
- (3) Consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:
 - (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case,*

Comment: A written request to vary the requirements of clause 8.6 has been provided (see the Statement of Environmental Effects at Attachment 5). Strict application of the building separation requirement is considered unnecessary in the circumstances to achieve the objectives of the clause. Block C cannot abut 34 Gladstone Avenue as the residential dwelling is required to be separated from the proposal. The proposed separation distance also accommodates a deep soil zone and provides adequate separation to ensure the objectives of clause 8.6 are achieved. The proposed separation distance between Block D and 34 Gladstone Avenue is to provide sufficient separation between the building to preserve the amenity of the residential dwelling, and also to provide a driveway into the basement car park of the development.

- (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

Comment: The intent of this control is to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access. The site adjoins a residential development at 34 Gladstone Avenue. The noncompliant building separation at this interface provides for better preservation of amenity to this property by way of reducing overshadowing and overlooking.

Further, Council requires an unobstructed overland flow path through the development to prevent undesirable offsite flooding impacts from the development. This prevents the provision of an uninterrupted façade along Gladstone Avenue.

(4) *Consent must not be granted for development that contravenes a development standard unless:*

(a) *the consent authority is satisfied that:*

(i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3),*

Comment: See above.

(ii) *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*

Comment: As outlined above, the variation is considered satisfactory with regards to the objectives of the standard. The development is further considered satisfactory with regards to the objectives of for development within the zone. This is further discussed at clause 2.3 above.

(b) *the concurrence of the Director-General has been obtained.*

Comment: The applicant's submission has been considered by the DoP and the concurrence of the Director-General was granted on 12 January 2011 (Attachment 4).

The proposed variation to clause 8.6 is supported in this instance as it is considered to satisfy the objectives and requirements of clause 4.6.

It is further noted that the Department of Planning has advised in their letter dated 12 January that in almost all cases concurrence has been granted to variation to this clause and it is timely that the effectiveness of this clause be reviewed.

Clause 5.10 Heritage conservation

The subject site is not individually listed as a heritage item in Schedule 5 of the Wollongong City Centre Local Environmental Plan 2009 (LEP) however Gladstone Avenue is adjacent to the Wollongong railway station group which is listed in both the LEP 2009 and the State Heritage Register.

Given the size and the nature of the heritage item in the vicinity, and the nature of the proposal, it is deemed that there will not be any potentially adverse impact on the heritage values. Council's Heritage Officer has given a satisfactory referral in this regard.

Local provisions – general

Clause 7.1 Public utility infrastructure

The objective of this clause is to ensure that sufficient infrastructure is available to service development. Development consent must not be granted for development on land unless the consent authority is satisfied that any public utility infrastructure (water, electricity and sewage) that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when it is required.

Conditions are recommended in relation to the applicant presenting plans to the relevant service providers in relation to any specific requirements they may have prior to the issuing of a Construction Certificate.

Integral Energy has reviewed the proposal regarding removal of the existing padmount substation on the site, construction of a new substation as well service supply matters for the development. Conditions of consent have been provided in this regard.

Clause 7.3 Flood planning area

Council's Stormwater Engineer has reviewed the application and has recommended appropriate conditions of consent with regards to flooding.

Clause 7.4 Riparian lands

The objective of this clause is to ensure that development does not adversely impact upon riparian lands. The land is identified as being affected by riparian land as show in the Riparian Land Map. However, the affectation is due to a piped watercourse through the site. The land is cleared of vegetation and the proposal is not expected to impact on any opportunities for rehabilitation of aquatic and riparian vegetation and habitat on that land.

Clause 7.6 Earthworks

(1) *The objectives of this clause are as follows:*

- (a) *to ensure that any earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features surrounding land,*
- (b) *to allow earth works of a minor nature without separate development consent.*

(2) *Development consent is required for earthworks, unless:*

- (a) *the work is exempt development under this Plan, or*
- (b) *the consent authority is satisfied the work is of a minor nature.*

(3) *Before granting development consent for earthworks, the consent authority must consider the following matters:*

- (a) *the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality, -*
Satisfactory referrals have been received from Council's Stormwater and Geotechnical Engineers in regards to drainage and stability.
- (b) *the effect of the proposed development on the likely future use or redevelopment of the land,*
The proposed earthworks are required as part of the development of the land.
- (c) *the quality of the fill or of the soil to be excavated, or both,*
Conditions will be attached to the consent in relation to excavated material
- (d) *the effect of the proposed development on the existing and likely amenity of adjoining properties,*
There is expected to be disruption to adjoining owners during excavation works which is an unavoidable outcome of development of this type. Conditions will be attached to the consent however to mitigate these impacts. It is recommended in a condition of consent that a dilapidation report be obtained prior to works commencing.
- (e) *the source of any fill material or the destination of any excavated material,*
Conditions are recommended in this regard.
- (f) *the likelihood of disturbing Aboriginal objects or other relics,*
The site is not listed as being subject to Aboriginal heritage and has an extensive development history.
- (g) *proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.*

The land is categorised as being affected by riparian land however this is in the form of a historical creek bed that is now piped underground.

Clause 7.13 Ground floor development on land within business zones

- (1) *The objective of this clause is to ensure active uses are provided at the street level to encourage the presence and movement of people.*
- (2) *This clause applies to land in Zone B1 Neighbourhood Centre, Zone B2 Local Centre, Zone B3 Commercial Core or Zone B4 Mixed Use.*

- (3) *Development consent must not be granted for development for the purpose of a building on land to which this clause applies unless the consent authority is satisfied that the ground floor of the building:*
- (a) *will not be used for the purpose of residential accommodation, and*
 - (b) *will have at least one entrance and at least one other door or window on the front of the building facing the street other than a service lane.*

The ground floor street frontage of the development will be used for commercial premises.

Part 7 Local provisions—Wollongong city centre

Clause 8.1 Objectives for development in Wollongong city centre

The objectives of this Part are as follows:

- (a) *to promote the economic revitalisation of the Wollongong city centre,*
The proposal is considered to contribute to revitalisation of the Wollongong City Centre by providing efficient use of space for a mixture of compatible uses in close proximity to services.
- (b) *to strengthen the regional position of the Wollongong city centre as a multifunctional and innovative centre that encourages employment and economic growth,*
The proposal will contribute to employment and economic growth through construction and eventual use.
- (c) *to protect and enhance the vitality, identity and diversity of the Wollongong city centre,*
The proposal provides a mixture of commercial and residential uses and is considered satisfactory with regards to this objective.
- (d) *to promote employment, residential, recreational and tourism opportunities within the Wollongong city centre,*
The proposal provides employment opportunities and a range of residential dwelling types.
- (e) *to facilitate the development of building design excellence appropriate to a regional city,*
The design of the building is considered to be of high quality. It is noted that due to the large scale and significance of the development Council sought advice from the Design Review Panel as part of the assessment although it was not strictly required in this instance. Their core comments revolved around the transition between the development site and the adjoining lower density land to the west. As a result of these comments, the original design was scaled back to provide reduced height for the two towers at this interface.
- (f) *to promote housing choice and housing affordability,*
The proposal provides a mixture of 1, 2 and 3 bedroom units that are expected to contribute towards housing choice and affordability in Wollongong.
- (g) *to encourage responsible management, development and conservation of natural and man-made resources and to ensure that the Wollongong city centre achieves sustainable social, economic and environmental outcomes,*
The proposal is an efficient use of space in an accessible location that is considered to encourage use of public transport and existing services.
- (h) *to protect and enhance the environmentally sensitive areas and natural and cultural heritage of the Wollongong city centre for the benefit of present and future generations.*
The proposal is not expected to result in any negative impacts on natural or cultural heritage.

Clause 8.4 Minimum building street frontage

- (1) *The objective of this clause is to ensure that buildings have a minimum width to provide for the efficient development of land and design of buildings.*

- (2) *Development consent must not be granted to the erection of a building that does not have at least one street frontage of 20 metres or more on land within Zone B3 Commercial Core, B4 Mixed Use or B6 Enterprise Corridor.*

Following consolidation of the subject lots, the site will have a street frontage in excess of 20m. A condition is proposed that the subject lots be consolidated prior to Occupation Certificate.

Clause 8.5 Design excellence

- (1) *The objective of this clause is to deliver the highest standard of architectural and urban design.*
- (2) *This clause applies to development involving the construction of a new building or external alterations to an existing building.*
- (3) *Development consent must not be granted to development to which this clause applies unless, in the opinion of the consent authority, the proposed development exhibits design excellence.*
- (4) *In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters:*

- (a) *whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*

The proposal is considered to be of high quality design. A mixture of materials and finishes is proposed and the façade is suitably articulated. This is further supported in the comments from the Design Review Panel and subsequent amendments made to the design as outlined above.

- (b) *whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,*

The development is substantially bigger than other development in the locality however the area is in transition. The built form is broken up into four towers to interrupt the bulk of the building. Appropriate setbacks are provided from the boundaries and commercial uses are provided at street level which should activate the public domain.

- (c) *whether the proposed development detrimentally impacts on view corridors,*

The proposal is of considerable height and scale but is not considered to affect any significant view corridors.

- (d) *whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,*

The site is not included in the Sun Plane Protection Map

- (e) *how the proposed development addresses the following matters:*

- (i) *the suitability of the land for development,*

The site is appropriately zoned for the development and there are no site constraints that would prevent it. The proposal is further not expected to have any significant detrimental impacts on the locality.

- (ii) *existing and proposed uses and use mix,*

The proposal is one of the first major redevelopment sites in a locality earmarked for higher density and larger scale developments. As such, it is well in excess of the general densities in the locality. However, it is consistent with the desired future development in the area identified in the various planning controls including FSR and height limits set in WLEP 2009.

- (iii) *heritage issues and streetscape constraints,*

The proposal is not expected to impact on any heritage items.

- (iv) *the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*

The proposed towers provide the necessary building separation and setbacks and are not expected to result in unreasonable amenity impacts. This is further discussed at section 3.3.1. The original design was revised to provide reduced heights at the interface with the development site and the adjoining land to the west which achieved a better transition between the two zones.

(v) *bulk, massing and modulation of buildings,*

The bulk is broken up into four towers and the overall height steps down to the adjacent 16m height limit area.

(vi) *street frontage heights,*

The proposal complies with the street frontage height requirements in WDCP 2009.

(vii) *environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*

The proposal is not considered to result in unreasonable overshadowing given the permissible height and FSR for the site. This is further discussed at section 3.3.1. Properties to the west of the site are expected to receive the necessary amount of solar access. Number 34 Gladstone Avenue will be significantly overshadowed by the development however this is not considered unreasonable in the circumstances of the case. This is further discussed at section 2.3.1. BASIX Certificates were provided outlining design responses to sustainability. Glazed areas are largely setback under awnings and wind impacts are addressed under section 5.5 Chapter D13 of WDCP 2009.

(viii) *the achievement of the principles of ecologically sustainable development,*

The development incorporates sustainability measures by way of passive solar access, water and energy conservation as outlined in the submitted BASIX Certificates as well as through efficient use of land in close proximity to services and transport.

(ix) *pedestrian, cycle, vehicular and service access, circulation and requirements,*

The proposal provides the required number of resident car parking spaces. A variation is sought to the required commercial number of spaces which has been supported in this instance as outlined at Chapter E3 below. The necessary bicycle and motorcycle spaces are provided. Satisfactory manoeuvring for service vehicles and cars has been demonstrated. The supporting Traffic Report has been reviewed by Council's Traffic Engineer and reviewed with no outstanding concerns.

(x) *impact on, and any proposed improvements to, the public domain.*

The development will impact on the public domain aesthetically, through increased pedestrian and vehicular traffic and through proposed landscaping and public domain improvements.

(5) *Development consent must not be granted to the following development to which this clause applies unless a design review panel has reviewed the design of the proposed development:*

(a) *development in respect of a building that is, or will be, greater than 35 metres in height,*

(b) *development having a capital value of more than \$1,000,000 on a key site, being a site shown edged heavy black and distinctively coloured on the Key Sites Map,*

(c) *development for which the applicant has chosen to have such a review.*

(6) *In this clause:*

design review panel means a panel of 2 or more persons established by the consent authority for the purposes of this clause.

The proposal is not on a key site and is not over 35m in height. However, given the scale and significance of the development Council considered it appropriate to seek comment from the Design Review Panel. The panel considered that the design was essentially satisfactory subject to a more appropriate transition being provided between the site and the land adjacent the site to the west. The plans were subsequently satisfactorily revised in this regard.

Clause 8.6 Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use

A variation to the requirements of this clause is requested and is discussed at clause 4.6 above.

Clause 8.7 Shops in Zone B4 Mixed Use

- (1) *The objective of this clause is to limit the size of shops in Zone B4 Mixed Use to ensure that land within Zone B3 Commercial Core remains the principal retail area.*
- (2) *Development consent must not be granted for development for the purpose of a shop on land in Zone B4 Mixed Use if the gross floor area of the shop is to be more than 400 square metres.*

Ground floor commercial premises within the development do not exceed 400m².

2.2 SECTION 79C 1(A)(II) ANY PROPOSED INSTRUMENT

None applicable.

2.3 SECTION 79C 1(A)(III) ANY DEVELOPMENT CONTROL PLAN

2.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

The development has been assessed against the relevant chapters of WDCP 2009 and found to be satisfactory. The full table of compliance can be found at Appendix 2 to this report. There were a number of variations sought however these are not considered to adversely impact on the development or introduce unreasonable impacts on the locality or adjoining development. These matters are discussed below.

CHAPTER B1 – RESIDENTIAL DEVELOPMENT

9.21 Natural Ventilation

This section requires a maximum building depth of between 10 and 18m. The development does not comply and reaches approximately 24m at its widest. The development does however satisfy the objectives of this control and provide satisfactory solar access and natural ventilation.

8 units have a kitchen with a back wall slightly greater than 8m from a window however the variation is minor and affects only a small proportion of the units within the development. It is not considered to result in any adverse amenity impacts for the subject units.

8 single aspect units within the development have a depth of slightly greater than 8m from a window. The units are however open plan and provided with large glazed areas and balconies. The non-compliance is considered minor and not expected to result in any significant adverse impacts on the affected units.

It is further noted that the proposal satisfies the requirements of SEPP 65 with regards to natural ventilation as outlined at Appendix 1.

CHAPTER D13 – WOLLONGONG CITY CENTRE

2.4 Building depth and bulk

As outlined and supported above, the application proposes a maximum building depth in excess of 18m.

6.2 Housing choice and mix

10% of units are required to be three bedroom or more. The proposal provides 7 three bedroom units representing 3.4% of the total. Whilst this does not fully comply with this control, this is a factor that is considered to be largely dictated by market demand. The development is further considered to be able to be effectively adapted for large units should the need arise.

6.6 Basement Carparks

The basement podium exceeds the maximum of 1.2m above natural ground level required by this section, reaching between 1.4 to 1.6m in some areas. Additional portions of the basement podium above 1.2m height are generally to be included in the total gross floor area calculation.

The car park takes up a single basement level as well as the ground floor of the development. Commercial tenancies are also located on the ground floor of the development at the street frontage and the ground floor car parking area is therefore largely hidden from public view. In addition, the floor level for the ground floor of the development is required to be raised to the proposed level due to clearance requirements for flooding purposes. Where the car park area abuts the adjoining developments to the side and rear, significant landscaping and separation distances have been provided.

In light of the above, there are not considered to be any adverse impacts from the proposed levels and location of car parking and it is not considered reasonable to include the car park area in FSR calculations as this is more onerous than the Environmental Planning Instrument control.

6.7 Communal open space

The communal open space areas for the development receive sunlight for approximately 2 hours between 9.00am and 3.00pm on June 21 only, not 3 as required. Whilst this is not in strict compliance with this control, it is considered that this space is still practical for its intended use.

Extensive balcony areas are provided to each unit which are considered provide good resident amenity to the development.

It is further noted that the proposal is considered to comply with the SEPP 65 requirements for open space as outlined at Appendix 1 of this report.

6.9 Overshadowing

Adjacent residential buildings and their public spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June. No. 34 Gladstone Avenue is on the corner of Gladstone Avenue and Rowland Avenue and is entirely surrounded by the proposed development and will not receive the necessary hours of direct sunlight.

Ideally, this property would have been incorporated into the overall scheme, however attempts to purchase the property to this end were unsuccessful. Evidence of genuine offers to purchase the property by the developer have been provided indicating the owner of no. 34 was not willing to sell unless a price of \$1.5 million was paid. The developer had offered \$1 million, despite valuations indicating the property had a market value of \$430,000. A Statutory declaration was submitted in this regard and is contained at Attachment 5.

The desired future character of the locality as described in the applicable planning controls for the site envisages development of a scale and bulk of the current proposal. Further, the east-west orientation of the lots in question would make full compliance with solar access requirements to this property difficult and place an unreasonable restriction on developing the site.

The overshadowing impacts on no. 34 are therefore not considered unreasonable in this instance.

In assessing the impact of overshadowing Council has considered planning principle previously established in *Parsonage v Ku-ring-gai* (2004) NSWLEC 347 and now replaced with a new planning principles established in the case of *The Benevolent Society v Waverley Council* [2010] NSWLEC 1082. The matters for consideration are outlined below.

“Where guidelines dealing with the hours of sunlight on a window or open space leave open the question what proportion of the window or open space should be in sunlight, and whether the sunlight should be measured at floor, table or a standing person’s eye level, assessment of the adequacy of solar access should be undertaken with the following principles in mind, where relevant:

- The ease with which sunlight access can be protected is inversely proportional to the density of development. At low densities, there is a reasonable expectation that a dwelling and some of its open space will retain its existing sunlight.*
- The amount of sunlight lost should be taken into account, as well as the amount of sunlight retained.*

- *Overshadowing arising out of poor design is not acceptable, even if it satisfies numerical guidelines. The poor quality of a proposal's design may be demonstrated by a more sensitive design that achieves the same amenity without substantial additional cost, while reducing the impact on neighbours.*
- *For a window, door or glass wall to be assessed as being in sunlight, regard should be had not only to the proportion of the glazed area in sunlight but also to the size of the glazed area itself. Strict mathematical formulae are not always an appropriate measure of solar amenity. For larger glazed areas, adequate solar amenity in the built space behind may be achieved by the sun falling on comparatively modest portions of the glazed area.*
- *For private open space to be assessed as receiving adequate sunlight, regard should be had of the size of the open space and the amount of it receiving sunlight. Self-evidently, the smaller the open space, the greater the proportion of it requiring sunlight for it to have adequate solar amenity. A useable strip adjoining the living area in sunlight usually provides better solar amenity, depending on the size of the space. The amount of sunlight on private open space should ordinarily be measured at ground level but regard should be had to the size of the space as, in a smaller private open space, sunlight falling on seated residents may be adequate.*
- *Overshadowing by fences, roof overhangs and changes in level should be taken into consideration. Overshadowing by vegetation should be ignored, except that vegetation may be taken into account in a qualitative way, in particular dense hedges that appear like a solid fence.*
- *In areas undergoing change, the impact on what is likely to be built on adjoining sites should be considered as well as the existing development."*

At present the existing dwelling to the south receives full sun as currently the subject site is vacant. However, it is noted that existing improvements on the dwelling site consisting of garage and pergola limit the penetration of light into the premises. In addition the previous development on the subject site consisted of a two storey commercial premises (DA-1984/246) which also historically limited light penetration.

WLEP 2009 and WDCP 2009 permits building development to a height limit of 32m and a commensurate floor space ratio, which will achieve a high density development outcome in this locality. The subject site is susceptible to shadowing given the subdivision pattern (the lot runs in an east-west direction). It is noted that the proposed development complies with the applicable height and floor space controls provided by the LEP and also complies with the required building setbacks and bulk controls contained within the DCP and Residential Flat Design Code.

It is considered that this proposal is a reasonable development expectation for the subject site having regard to the high density controls.

6.11 Natural ventilation

See 9.21 above.

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

The development provides 316 spaces overall comprised of 249 residential, 42 visitor and 25 commercial spaces.

The development requires 50 car parking spaces for the commercial component based on the current rate of 1 space per 30m² for ground floor business or retail premises.

The development requests a reduction in the rate of commercial car parking of 25 spaces. However, Council's Strategic and Traffic Officers have advised that the strategic plan for Wollongong City Centre is to reduce overall parking to a rate of 1 per 60m². The Access and Movement Strategy, adopted as Council Policy in December 2005 aims for a sustainable level of parking in the City Centre. Furthermore, the Inner City Parking Strategy, adopted by Council in March 2009, continued to emphasise the goal of reducing parking demand long term (and therefore reduced parking rates) by the provision of consolidated parking facilities, on street pay parking, improved public transport, pedestrian and bicycle facilities.

The current office premises car parking rate (1 space per 30m² on the ground floor and 1 space per 50m² for above ground floor levels) is inconsistent with these strategic goals. The first part of the review of these rates to 1 per 60m² was recently reported to Council and has been put on public exhibition.

In this regard, the development complies with a rate of 1 space per 60m² and is considered to align with Council's strategic vision for the City Centre.

It is further noted that the previous rates provided in WLEP 2007 were 1 space per 75m², the development would also comply in this regard.

The close proximity of the site to the city centre, Wollongong train station and the free commuter car park, and local bus routes is considered to further benefit the proposal in regards to access to alternate transport options.

2.4 SECTION 79C 1(A)(IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 93F, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 93F

There are no planning agreements entered into or any draft agreement offered to enter into under S93F which affect the development.

2.5 SECTION 79C 1(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)

92 What additional matters must a consent authority take into consideration in determining a development application?

- (1) *For the purposes of section 79C (1) (a) (iv) of the Act, the following matters are prescribed as matters to be taken into consideration by a consent authority in determining a development application:*
 - (a) *in the case of a development application for the carrying out of development:*
 - (i) *in a local government area referred to in the Table to this clause, and*
 - (ii) *on land to which the Government Coastal Policy applies, the provisions of that Policy,*
 - (b) *in the case of a development application for the demolition of a building, the provisions of AS 2601.*

The application does not involve demolition nor is it located in the coastal zone.

93 Fire safety and other considerations

- (1) *This clause applies to a development application for a change of building use for an existing building where the applicant does not seek the rebuilding, alteration, enlargement or extension of a building.*
- (2) *In determining the development application, the consent authority is to take into consideration whether the fire protection and structural capacity of the building will be appropriate to the building's proposed use.*
- (3) *Consent to the change of building use sought by a development application to which this clause applies must not be granted unless the consent authority is satisfied that the building complies (or will, when completed, comply) with such of the Category 1 fire safety provisions as are applicable to the building's proposed use.*

Note. The obligation to comply with the Category 1 fire safety provisions may require building work to be carried out even though none is proposed or required in relation to the relevant development consent.

- (4) *Subclause (3) does not apply to the extent to which an exemption is in force under clause 187 or 188, subject to the terms of any condition or requirement referred to in clause 187 (6) or 188 (4).*
- (5) *The matters prescribed by this clause are prescribed for the purposes of section 79C (1) (a) (iv) of the Act.*

The proposal is for a new building and as such the development will be required to comply with the provisions of the BCA.

2.6 SECTION 79C(1)(A)(V) ANY COASTAL ZONE MANAGEMENT PLAN (WITHIN THE MEANING OF THE COASTAL PROTECTION ACT 1979)

None applicable.

2.7 SECTION 79C 1(B) THE LIKELY IMPACTS OF DEVELOPMENT

Context and Setting:

The proposal is permissible development and consistent with the objectives for development in the zone. There are no outstanding matters with regards to the applicable planning controls and there are not expected to be any significant detrimental impacts on the locality or amenity of nearby residences.

Access, Transport and Traffic:

Concern was raised regarding the impacts of development-generated traffic on the functioning of the Gladstone Avenue and Rowland Avenue intersection, as the traffic modelling has shown that the intersection will fail in the future.

Background traffic growth alone will cause the intersection to fail in 10 years (without the proposed development), but the proposed development will cause the intersection to fail approximately 5 years earlier.

The applicant put forward a number of interim measures to improve intersection operation. However the Traffic Section does not consider these measures appropriate given Council's long-term plans to increase the traffic-carrying capacity of Gladstone Avenue through the implementation of clearways.

Providing clearways will necessitate the signalisation of Gladstone Avenue and Rowland Avenue. Therefore it was suggested that the developer contribute to the cost of signalising this intersection based on percentage impact. This has been recommended as a condition of consent and agreed upon by the developer.

Public Domain:

The proposal is considered to result in improvements to the public domain by providing ground floor commercial developments and providing street trees and upgrade footpaths. The development is of significant bulk and scale, but is consistent with the planning controls applicable to the site. The site is within an area undergoing transition and is earmarked for higher density development.

Utilities:

Conditions are recommended in regards to the specific requirements of individual service providers.

Heritage:

No heritage items are envisaged to be adversely impacted by the proposal.

Other land resources:

The proposal is considered to contribute to orderly development of the site and is not envisaged to impact upon any valuable land resources.

Water:

The proposal is not envisaged to have unreasonable water consumption. Four 5000L water tanks are provided to be used for the landscape areas on site.

BASIX Certificates have been provided indicating the development will meet the necessary requirements for water saving devices.

Soils:

The site is not categorised as being affected by acid sulphate soils, instability, fill or contamination.

The proposal involves excavation for basement car parking and appropriate conditions are recommended in this regard.

Air and Microclimate:

The proposal is not expected to have any negative impact on air or microclimate.

Flora and Fauna:

There is no vegetation removal proposed. The development landscaped areas as required by WDCP 2009.

Waste:

A condition is proposed to be attached to any consent granted that an appropriate receptacle be in place for any waste generated during the construction.

The development is not envisaged to generate excessive waste and the necessary waste storage and servicing areas are provided.

Energy:

BASIX Certificates have been provided indicating the development will meet the necessary requirements for energy conservation. The existing substation will be re-located on the site in an appropriate location.

Noise and vibration:

There will be disruption to nearby residences and commercial developments during excavation and construction phases. Conditions are recommended in regards to mitigating these impacts.

Natural hazards:

Council records list the site as being flood affected. Council's Stormwater Engineer has reviewed the application in this regard and given a satisfactory referral subject to appropriate conditions.

Technological hazards:

There are no technological hazards affecting the site that would prevent the proposal.

Safety, Security and Crime Prevention:

The application has been reviewed in regards to the principles of CPTED and is not considered to result in any significant safety risks.

Social Impact:

The proposal is not expected to create any negative social impact.

Economic Impact:

The proposal will have a positive economic impact during the construction stage and through occupation of the premises once complete.

Site Design and Internal Design:

The application does not result in any significant departures from development standards or Council's development control plans that would warrant refusal of the application.

A condition is proposed to be attached to any consent granted that all works are to be in compliance with the Building Code of Australia.

Construction:

A condition will be attached to any consent granted that the requirements of any Statutory Authorities or Government Departments be met.

Cumulative Impacts:

The proposal is not expected to have any negative cumulative impacts.

2.8 SECTION 79C 1(C) THE SUITABILITY OF THE SITE FOR DEVELOPMENT

Does the proposal fit in the locality?

The proposal is considered appropriate with regards to the zoning of the site and the applicable planning controls. There are not expected to be any significant negative impacts on the amenity of the locality or adjoining developments. The development is expected to have a positive impact on the city centre and is considered to fit in the locality.

Are the site attributes conducive to development?

The site constraints have been considered to have been suitably addressed and are not expected to prevent the proposal from proceeding.

2.9 SECTION 79C 1(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS

The application was notified in accordance with WDCP 2009 Appendix 1: Public Notification and Advertising. 15 submissions were received and the main issues identified are discussed below..

<i>Concern</i>	<i>Comment</i>
Impacts on 34 Gladstone Avenue during excavation for basement car park and construction.	Council's Geotechnical Engineer has reviewed the Geotechnical report submitted with the application and has not raised any concerns subject to appropriate conditions in relation to dilapidation reports and support for adjoining developments during works.
Concerns with flooding impacts on 34 Gladstone Avenue.	A detailed flood study has been submitted and reviewed by Council's Stormwater Engineer in relation to flooding. A satisfactory referral has been received subject to appropriate conditions of consent.
Concerns that the proposed buffer landscaping on the boundary of the site once at maturity will be a safety risk to 34 Gladstone Avenue. This landscaping will also potentially overshadow this property.	<p>The landscaping proposed at this boundary is smaller shrubbery and screening only and will not reach a size to pose a risk to this property.</p> <p>The overshadowing from the landscaping is not considered to be significant having consideration to the overshadowing from the development as a whole. This is discussed in detail at section 2.3.1</p>
Impacts from the pedestrian and vehicle access point adjacent to 34 Gladstone Avenue in regards to noise, fumes and privacy.	Whilst the driveway access is located adjacent to the rear boundary for 34 Gladstone Avenue, the dwelling is located to the front of the site away from this boundary. The driveway is separated from this boundary with a 1.5m landscape strip in accordance with the DCP requirements.
The development does not comply with building height and setback requirements.	The development complies with the provisions of WDCP 2009 and SEPP 65 with regards to setbacks and height.

<i>Concern</i>	<i>Comment</i>
The development results in an isolated allotment thereby impacting on future development potential of this lot.	It would have been preferable for the proposal to include number 34. Despite this, the development is not considered to result in number 34 being isolated as the requirements for a minimum dimension of 20m in Clause 8.4 of WLEP 2009 are still met. Any future proposal for number 34 would need to be assessed on merit.
Lighting from the development will have a negative impact on 34 Gladstone Avenue as bedrooms are located at the boundary.	The setback from the boundary combined with the landscape screening is considered to be sufficient to mitigate any lighting impacts.
Concern with future operating hours of the commercial premises and likely noise impacts.	Conditions are proposed to limit the commercial premises to standard business hours.
Concern regarding the location of waste storage facility for the development adjacent to the boundary and the resultant odour and noise impacts.	The waste storage areas are within the basement car park of the development and are not expected to have any significant impacts in this regard.
Loss of privacy and solar access to 34 Gladstone Avenue.	The development will result in overshadowing and overlooking of 34 Gladstone Avenue. However, the application satisfies the necessary setback requirements and genuine attempts were made to purchase this property for incorporation into the scheme.
The offer from the developer to purchase 34 Gladstone Avenue was not genuine.	A Statutory Declaration has been received from the developer claiming an offer of \$1,000,000 was asked by the owner and accepted by the developer. A formal offer was made Clayton Real Estate to this effect. This is further documented at Attachment 5.
Traffic impacts from the development in regards to heavy vehicle movements and residents coming and going.	A Traffic Report has been provided and reviewed by the RTA and Council's Traffic Engineer. There are no outstanding concerns with Traffic impacts and appropriate conditions of consent are recommended.
Impacts on amenity of nearby residents during constructions works.	Conditions of consent are recommended with regards to operational hours and noise generation during construction.
Impacts of excavation on structural integrity of adjoining properties.	Council's Geotechnical Engineer has reviewed the application in this regard and recommended appropriate conditions of consent in relation to dilapidation reports and support for adjoining developments during works.
Non compliance with WDCP 2009	The proposal largely complies with the requirements of WDCP 2009 aside from a number of minor variations as discussed above. There are not expected to be any significant amenity impacts on adjoining developments or the locality in this regard.

<i>Concern</i>	<i>Comment</i>
The proposed height is out of context with the locality.	The site is located in an area undergoing transition and complies with the maximum height limit. The bulk has additionally been broken up into four towers and steps down to the rear. Further, the application was assessed by the Design Review Panel and revisions made based on their recommendations to reduce the height of the towers adjacent the western boundary.
Further landscaping should be required to be established by the developer within the street and road reserve.	Council's Landscape Architect has reviewed the application in regards to street tree planting and compliance with the Public Domain Technical Manual and has recommended appropriate conditions of consent.
Pedestrian and vehicle infrastructure in the area is insufficient to cope with the additional demand from the development.	A Traffic Report has been provided and reviewed by the RTA and Council's Traffic Engineer as satisfactory.
Confusing plans and documents	The plans and documents meet the requirements for submission of a development application.
Inappropriate with regards to zoning.	The proposal is permissible development and is considered to have regard to the zone objectives.
Insufficient community consultation.	The application was notified in accordance with Council's Notification Policy.
Concern that the development does not comply with the car parking rates prescribed in WDCP 2009.	The proposed car parking rate is considered satisfactory with regards to the strategic direction for car parking in the city centre and is not expected to have any significant traffic impacts. This is further discussed at Chapter E3 above.
A 9 level building is way too high for that area and would severely interrupt the view currently enjoyed and paid for by residents of that area.	The proposal complies with the maximum height limit for the site. Consideration was given to the bulk of the building with regards to existing development however the area is one in transition and has been designated for development of this scale through the WLEP 2009 and WDCP 2009 controls. It is not considered that there will be any impacts on significant view corridors as identified in section 3.10 of Chapter D13 of WDCP 2009. It is further considered that some view impacts are unavoidable given the overall permissible height a bulk designated by the planning controls.
9 commercial units and 207 residential units would cause unreasonable noise air pollution and traffic congestion.	<p>Council's Traffic Engineer has reviewed the submitted Traffic Report and associated plans and has not raised any objection in regards to traffic impacts.</p> <p>It is not considered that the location of the driveways of the premises will result in unreasonable noise impacts on adjacent development.</p>

<i>Concern</i>	<i>Comment</i>
The 342 car parking spaces for 9 commercial units and 207 residential units are not sufficient and this would cause further problems with street parking issues.	The proposal provides the necessary residential car parking as required by WDCP 2009. A variation to the rate of commercial car parking spaces has been requested however was considered satisfactory in this instance. The commercial rates are likely to be amended to 1 per 60m ² with which the development complies. Further, the close proximity to Wollongong train station car park, bus routes and the train station would further benefit the proposal. This is further discussed at Chapter E3 above.
The development is out of keeping with the predominantly medium/low level density of the adjacent streets and its height will dominate the surrounding area which, at present, still retains a spacious suburban feel.	The development complies with the FSR and height limits set for the site and is considered to be an area in transition.
The large number of units and the unit to garage ratio is woefully inadequate and will almost certainly put residents' cars from this development onto nearby roads with visitors' cars being parked on the streets as well further compounding the problem. The issue of parking prohibits a development on this scale because the technical college already impacts on the availability of parking for the existing residents in this area. Over the twenty years we have owned these units parking has become an increasing issue for residents.	The development complies with the number of residential car parking spaces required by WDCP 2009.
The other concern for all Wollongong residents is that the new commuter car park funded by us all will almost certainly be used for the overflow from this development and once again commuters will compete for street parking.	The development complies in regards to resident car parking and also with the strategic direction with regards to commercial car parking.
Part of the land should be left as open space for the community.	This is not a planning requirement. S94 contributions would be payable for the proposed development. These would assist Council to provide the appropriate public facilities which are required to maintain and enhance amenity and service delivery within the area
A petition of 23 people was further submitted with the application however did not raise any additional concerns.	

Submissions from public authorities

A number of public authorities reviewed the application as follows:

RTA

The RTA reviewed the application and did not raise any objection to the application.

Railcorp

RailCorp reviewed the application and questioned the level of car parking being provided given the close proximity to the railway station and CBD. Car parking has been reviewed as being satisfactory in this instance.

Department of Planning

The Director General has provided concurrence for the proposed variation to Clause 8.6 of WLEP 2009.

NSW Office of Water

The NSW Officer of Water have confirmed that the application is exempt from the need to obtain a Controlled Activity Approval due to the watercourse being piped.

2.10 SECTION 79C 1(E) THE PUBLIC INTEREST

The application is not expected to result in any unreasonable impacts on the environment or the amenity of the locality. It is considered appropriate with consideration to the zoning and the character of the area and is therefore considered to be in the public interest.

3. RECOMMENDATION

This application has been assessed having regard to the Heads of Consideration under Section 79C(1) of the Environmental Planning and Assessment Act 1979. The proposal is permissible with consent in the B4 Mixed Use zone under the provisions of Wollongong Local Environmental Plan 2009 and has regard to the applicable provisions of the LEP. It is also consistent with the requirements of Wollongong Development Control Plan 2009 with the exception of the variations identified in this report. The variations sought have been assessed in detail within this report and are considered to be reasonable.

Any concerns initially raised by referrals have been resolved through the submission of additional information and amended plans.

The concerns raised in submissions have been addressed above.

There being no outstanding issues, it is recommended that DA-2010/1415 be approved pursuant to Section 80 of the Environmental Planning & Assessment Act 1979, subject to conditions at attachment 6

Attachments

1. Aerial photograph
2. WLEP 2009 Zoning map
3. Plans
4. Director General Concurrence
5. Statutory declaration
6. Draft conditions

Appendix 1: SEPP 55 assessment

Principle 1: Context

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

The proposal is considered to comply with the desired future character of the area as set out in the development standards and permissible uses specified in WLEP 2009. A mixture of commercial and residential uses are provided which are considered activate the public domain. The design responds to the site characteristics and provides a satisfactory transition to adjoining land. The design is considered to be of a high quality and to positively contribute to the streetscape.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

The proposal is of bulk and scale well above the general character of the locality. However, it complies with the FSR and height set out in WLEP 2009 and is considered to be an area in transition. Appropriate transition in the built form is provided between the proposal and likely future development on adjoining lots. Further, the bulk and scale of the development is broken up into four towers.

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

The proposal provides active commercial uses on the ground floor, thereby activating the street frontage. The proposal satisfies the applicable planning controls for the site including setbacks, height and FSR. The design comprises four towers which is considered to soften the bulk and visual impact of the proposal. The internal amenity of the units is considered satisfactory in regards to such measures as solar access, ventilation, storage, private open space, outlook and the like.

Principle 4: Density

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

The development is consistent with the stated desired future density as outlined in WLEP 2009. The site is in close proximity to the train station, public transport routes and the city centre.

Principle 5: Resource, energy and water efficiency

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

Demolition has been completed under separate application. Adequate solar access is provided to the units and BASIX certificates have been provided in accordance with SEPP BASIX.

Principle 6: Landscape

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

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

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

Buffer landscaping to the boundaries has been provided in accordance with WDCP 2009 requirements. The streetscape is improved via new paving and street tree paving.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

The development is considered satisfactory with regards to internal amenity provided to the units as outlined below.

Principle 8: Safety and security

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

The development is considered satisfactory with regards to the principles of CPTED as outlined further at Chapter E2 of this report.

Principle 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. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community. New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

The development is considered to contribute to affordable housing through provision of a mixture of smaller dwellings 1, 2 and 3 bedroom units. The site is in close proximity to transport and the city centre.

Principle 10: Aesthetics

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

The design incorporates a mixture of materials and the façade is articulated. The overall built form is broken up into four towers and a transition is provided to the adjacent 16m height limit zone through reducing the height at this interface.

30 Determination of development applications

- (2) *In determining a development application for consent to carry out residential flat development, a consent authority is to take into consideration (in addition to any other matters that are required to be, or may be, taken into consideration):*

- (a) the advice (if any) obtained in accordance with subclause (1), and
- (b) the design quality of the residential flat development when evaluated in accordance with the design quality principles, and

I the publication *Residential Flat Design Code* (a publication of the Department of Planning, September 2002).

An assessment of the application against the Residential Flat Design Code is contained below.

Residential Flat Design Code

Standards/controls	Comment	Compliance
Part 1 – Local context		
Building height		
Where there is an existing floor space ratio, test height controls against it to ensure a good fit	The building complies with the maximum height limit set in WLEP 2009.	Y
Test heights against the number of storeys and the minimum ceiling heights required for the desired building use.		
Building Depth		
Max 18m (glass line to glass line)	The building depth for parts of both blocks exceeds 18m.	N
For wider buildings, must demonstrate how satisfactory daylight and natural ventilation are achieved.		
Building Separation		
Objectives		
<ul style="list-style-type: none">To ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings.To provide visual and acoustic privacy for existing and new residents.To control overshadowing of adjacent properties and private or shared open space.To allow for the provision of open space with appropriate size and proportion for recreational activities for building occupants.To provide deep soil zones for stormwater management and tree planting, where contextual and site conditions allow.		
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.		

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
Part 2 – Site design		
<u>Deep Soil Zone</u> The rule of thumb is for a minimum of 25% of the open space area of site to be a deep soil zone.	The proposal provides the necessary deep soil area.	Y
<u>Fences and walls</u> Various controls.	A condition is recommended that any proposed boundary fencing is to be built in accordance with the requirements of WDCP 2009.	Y
<u>Landscape design</u> To add value to residents' quality of life within the development in the forms of privacy, outlook and views.	Satisfactory landscape areas and screening to the boundaries of the site are provided in addition to communal open space areas.	Y
<u>Open Space</u> The rule of thumb is for between 25-30% of the site area to be communal open space. The minimum recommended area of private open space for each apartment at ground level or similar space on a structure is 25m ² , minimum preferred dimension is 4m	Two formal communal open space areas are provided as well as the deep soil / overland flow path. The overall combined area satisfies the minimum requirement.	Y
<u>Orientation</u> <ul style="list-style-type: none"> To optimise solar access to residential apartments within the development and adjacent development. To contribute positively to desired streetscape character. To support landscape design of consolidated open areas. To protect the amenity of existing development. To improve the thermal efficiency of new buildings. 	<ul style="list-style-type: none"> Minimum solar access requirements have been met The bulk broken up into four towers to allow greater light penetration and access to northerly aspect. Setbacks and building separation requirements are also met. 	Y
<u>Planting on Structures</u> General guidance on specifications.	The proposal provides planting on the podium level for the communal open space area. This has been reviewed by Council's Landscape Architect and has been given a satisfactory referral subject to appropriate conditions.	Y

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>Stormwater management</u></p> <ul style="list-style-type: none"> To minimise the impacts of residential development and associated works on the health and amenity of natural waterways. To preserve existing topographic and natural features, including watercourses and wetlands. To minimise the discharge of sediment and other pollutants to the urban stormwater drainage system during construction activity. <p><u>Safety</u></p> <p>The rule of thumb is that a formal crime risk assessment be carried out for residential developments of over 20 new dwellings.</p> <p><u>Visual privacy</u></p> <ul style="list-style-type: none"> To provide reasonable levels of privacy externally and internally, during the day and at night To maximise outlook and views from principal rooms and private open space without compromising visual privacy. <p><u>Building entry</u></p> <ul style="list-style-type: none"> To create entrances which provide a desirable residential identity for the development. To orient the visitor To contribute positively to the streetscape and building façade design <p><u>Parking</u></p> <ul style="list-style-type: none"> To minimise car dependency for commuting and recreational transport use and to promote alternative means of transport-public transport, bicycling and walking. To provide adequate car parking for the building's users and visitors, depending on building type and proximity to public transport. 	<p>Council's Stormwater Engineer has reviewed the application with regards to stormwater management and has given a satisfactory referral subject to appropriate conditions.</p> <p>No formal crime risk assessment has been provided. However, Council's SCAT Officer has commented on the application in relation to CPTED principles and recommended appropriate conditions of consent.</p> <ul style="list-style-type: none"> Satisfactory building separation and setbacks have been provided between buildings within the development and adjacent developments Balconies and private open space areas are screened from other units within the development Direct physical and visual connection between street and entry points to building is provided Entries for vehicles and pedestrians are separated Mailboxes are provided at the entry to the buildings <p>The proposal provides 316 car parking spaces, 249 residential, 42 visitor and 25 commercial.</p> <p>This amounts to a surplus of 10 resident car parking spaces. Further, the development requests a reduction of 30 commercial spaces required by WDCP 2009. These matters are discussed in detail at Chapter E3 of WDCP 2009 below.</p>	<p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p>

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Pedestrian Access</u> <p>Identify the access requirements from the street or car parking area to the apartment entrance</p> <p>Follow relevant Australian Standards for accessibility</p> <p>Barrier free access to at least 20% of dwellings.</p>	<p>A compliance report has been provided by an access consultant in this regard.</p>	Y
<u>Vehicle access</u> <ul style="list-style-type: none"> • Generally limit the width of driveways to a maximum of 6 metres. • Locate vehicle entries away from main pedestrian entries and on secondary street frontages. 	<ul style="list-style-type: none"> • Two vehicle driveways proposed, one on Osborne (6.1m wide) and one on Rowland Avenue (6.1m wide) • The driveways are located away from pedestrian entries 	Y
Part 3 – Building Design		
<u>Apartment layout</u> <ul style="list-style-type: none"> • Single-aspect apartments should be limited in depth to 8m from a window • Back of a kitchen should be no more than 8m from a window • Providing open space in the form of a balcony, a terrace, a courtyard or a garden for every apartment • Locating main living areas adjacent to main private open space. • Include adequate storage space. 	<ul style="list-style-type: none"> • All single aspect units are limited in depth to approximately 8m from a window • The back of kitchens of all units are also no greater than approximately 8m from a window • Private open space provided for each unit to meet minimum dimensions • POS are direct extensions of main living areas • Kitchens do not form part of main circulation space • Facilitates are designed to facilitate furniture removal and placement • Storage is provided in the basement car park and additionally within the units. 	Y
<u>Apartment mix</u> <ul style="list-style-type: none"> • To provide a diversity of apartment types, which cater for different household requirements now and in the future • To maintain equitable access to new housing by cultural and socio-economic groups. 	<p>A variety of apartment types are provided including 23 adaptable units.</p>	Y

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Balconies</u> <ul style="list-style-type: none"> • Provide primary balconies with a minimum depth of 2m. • Developments that seek to vary from the minimum standards must demonstrate negative impacts from noise, wind can not be mitigated with design solutions. 	All balconies have a minimum depth of 2m.	
<u>Ceiling heights</u> <ul style="list-style-type: none"> • Minimum 2.7m for habitable rooms • 3.3 minimum floor to ceiling height in ground floor commercial 	Floor to ceiling heights are in accordance with this control.	
<u>Flexibility</u> <ul style="list-style-type: none"> • To encourage housing designs which meet the broadest range of the occupants' needs as possible. • To promote 'long life loose fit' buildings, which can accommodate whole or partial change of use. • To encourage adaptive re-use. 	The proposal comprises commercial and residential components as well as a variety of unit sizes.	Y
<u>Ground floor apartments</u> <ul style="list-style-type: none"> • Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site. • Provide ground floor apartments with access to private open space, preferably as a terrace or garden. 	<p>Four ground floor units are provided with separate entries.</p> <p>Ground floor apartments have access to terrace/balcony as well as the landscaped overland flow path area.</p>	Y

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Internal circulation</u> <i>Objectives</i> <ul style="list-style-type: none"> To create safe and pleasant spaces for the circulation of people and their personal possessions. To facilitate quality apartment layouts, such as dual aspect apartments. To contribute positively to the form and articulation of the building façade and its relationship to the urban environment. To encourage interaction and recognition between residents to contribute to a sense of community and improve perceptions of safety. <p>In general, where units are arranged off a double loaded corridor, the number of units accessible from a single core/corridor should be limited to eight.</p>	<p>The maximum number of units of a corridor is 10. The development does not exceed the maximum recommended single aspect units and solar access and ventilation requirements have been met.</p> <p>This is further not considered to significantly detract from the form and articulation of the building façade.</p>	Y
<u>Mixed use</u> <i>Objectives</i> <ul style="list-style-type: none"> To support the integration of appropriate retail and commercial uses with housing To create more active lively streets and urban areas, which encourage pedestrian movement, service the needs of the residents and increase the area's employment base. To ensure that the design of mixed use developments maintains residential amenities and preserves compatibility between uses. 	<p>The proposal provides an active street frontage and integrates residential and commercial uses. The proposed commercial ground floor use is not expected to result in any unreasonable impacts on the locality.</p> <p>Operational times for the commercial units are to be within standard working hours.</p> <p>Servicing of the commercial component is not expected to have any significant detrimental impacts on the locality.</p> <p>The development is not expected to result in any significant adverse traffic impacts. Council's Traffic Engineer has reviewed the application and has given a satisfactory referral subject to appropriate conditions in this regard.</p>	Y
<u>Storage</u> Studio apartments – 6m ³ One-bedroom apartments – 6m ³ Two bedroom apartments – 8m ³ Three plus bedroom apartments – 10m ³	<p>Storage has been provided in the basement car park area as well as additional storage areas within some of the units that is considered to satisfy the storage requirements.</p>	Y

<i>Standards/controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Acoustic privacy</u> <ul style="list-style-type: none"> Adequate separation from neighbouring buildings. Unit arrangement to avoid noise transmission. 	<p>The buildings are designed with fin walls between balconies and laundries, kitchens and bathrooms and hallways between units where possible.</p> <p>Suitable separation and setbacks provided between adjoining buildings.</p>	
<u>Daylight access</u> <p>Living rooms and private open spaces for at least 70% of apartments should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter. In dense urban areas a minimum of 2 hours may be acceptable.</p>	<p>It has been demonstrated that the minimum daylight access requirements have been met for the residential component.</p>	Y
<u>Natural ventilation</u> <ul style="list-style-type: none"> Building depths which support natural ventilation typically range from 10-18m 60% of residential units should be naturally cross ventilated. 25% of kitchens within a development should have access to natural ventilation. 	<p>Overall the development provides 60% of units as naturally cross ventilated and approximately 25% of kitchens with access to natural ventilation.</p> <p>The overall design is considered satisfactory in regards to natural ventilation.</p>	Y
<u>Awnings and signage</u> <ul style="list-style-type: none"> To provide shelter for public streets To ensure signage is in keeping with desired streetscape character and with the development in scale, detail and overall design 	<p>Awnings are provided along Gladstone Avenue and wrapped around Osborne Street. Awnings are also provided above the main entrances on Osborne Street and Roland Avenue.</p> <p>No specific signage is proposed at this stage and will be provided by tenants of the commercial space.</p>	Y
<u>Facades</u> <ul style="list-style-type: none"> To promote high architectural quality in residential flat buildings. To ensure that new developments have facades which define and enhance the public domain and desired street character. To ensure that building elements are integrated into the overall building form and façade design. 	<p>The design of the facades is considered to be satisfactory.</p>	Y

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Roof design</u> <ul style="list-style-type: none"> To provide quality roof designs, which contribute to the overall design and performance of residential flat buildings. To integrate the design of the roof into the overall façade, building composition and desired contextual response To increase the longevity of the building through weather protection. 	<p>The roof design is integrated into the building as a whole. The building is in a transitional area and there are no similar buildings with which to compare.</p>	Y
<u>Energy efficiency</u> <i>Objectives</i> <ul style="list-style-type: none"> To reduce the necessity for mechanical heating and cooling To reduce reliance on fossil fuels To minimise greenhouse gas emissions To support and promote renewable energy initiatives <i>Better design practice</i> <ul style="list-style-type: none"> Incorporate passive solar design techniques Improve the control of mechanical space heating and cooling 	<p>BASIX Certificates have been provided.</p>	Y
<u>Maintenance</u> <ul style="list-style-type: none"> To ensure long life and ease of maintenance for the development. 	<p>The materials are considered to be durable and not require unreasonable levels of maintenance.</p>	Y
<u>Waste management</u> <i>Objectives</i> <ul style="list-style-type: none"> To avoid the generation of waste through design, material selection and building practices. To plan for the types, amount and disposal of waste to be generated during demolition, excavation and construction of the development. To encourage waste minimisation, including source separation, reuse and recycling To ensure efficient storage and collection of waste and quality design of facilities. <i>Rule of thumb</i> <p>Supply waste management plans as part of the development application.</p>	<ul style="list-style-type: none"> Demolition of previous structures has been completed as part of separate DA. The applicant has requested a detailed Construction and Environment Management Plan (CEMP) be prepared and submitted for approval, following the appointment of a builder and prior to the commencement of any construction works on site. A condition of consent is recommended in this regard. A Site Waste Minimisation and Management Plan has been submitted Satisfactory waste servicing arrangements have been provided. 	Y

<i>Standards/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>Water conservation</u> <ul style="list-style-type: none"> To reduce mains consumption of potable water. To reduce the quantity of stormwater run off. 	<ul style="list-style-type: none"> BASIX Certificates have been provided for the residential component of the development. 4 x 5,000 L rainwater tanks are provided in the basement 	Y

Appendix 2: Wollongong Development Control Plan 2009 compliance table

CHAPTER B1 – RESIDENTIAL DEVELOPMENT

9 Residential Flat Buildings

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<u>9.2 Minimum Site Width Requirement</u> Min site width of 24m is required.	The site has a minimum width in excess of 24m	Y
<u>9.3 Maximum Floor Space Ratio (FSR) / Density</u> The maximum FSR for the site is stipulated in WLEP 2009 and is 2.57:1	The proposal has an FSR of 2.44:1	Y
<u>9.4 Building Height</u> A maximum height of 32m is permitted in WLEP 2009.	A maximum height of 30.65 is proposed.	Y
<u>9.5 Front Setbacks</u> <u>9.5.1 Objectives</u> <ol style="list-style-type: none"> To reinforce the existing character of the street by acknowledging building setbacks. To define the spatial proportions of the street and define the street edge. To provide a transition between the public and private domain. To promote compatibility in front setbacks to provide unity in the building line. 	Zero street setbacks are generally provided to the street frontages in accordance with Chapter D13, the controls of which prevail over this Chapter.	Y
<u>9.6 Side and Rear Setbacks / Building Separation</u> <u>Buildings up to 4 storeys (12 metres)</u> <ul style="list-style-type: none"> 6 metres (to habitable room/balcony) 3.5 metres (to non-habitable room/blank wall) 	9m setback up to 12m	Y
<u>Buildings of 5 to 8 storeys (up to 25 metres)</u> <ul style="list-style-type: none"> 9 metres (to habitable room/balcony) 	9m setback between 12 and 25m	Y

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<ul style="list-style-type: none"> 4.5 metres (to non-habitable room/blank wall) <p><u>9.7 Built Form</u></p> <p>Various controls</p>	<p>The proposal is considered satisfactory with regards to the built form. This is further discussed in the SEPP 65 assessment above.</p>	Y
<p><u>9.8 Visual privacy</u></p> <p><i>9.8.2 Objectives</i></p> <p>(a) To provide reasonable levels of visual privacy externally and internally, during the day and at night time.</p> <p>(b) To maximise outlook and views from principal rooms and private open space without compromising visual privacy.</p>	<p>The design of the units is considered to provide satisfactory privacy to residents and to adjoining developments.</p>	Y
<p><u>9.9 Acoustic privacy</u></p> <p><i>9.9.2 Objective</i></p> <p>To ensure a high level of amenity by protecting the privacy of occupants both within apartments and in private open space areas / balconies in the building.</p>	<p>The design of the proposal is considered to provide satisfactory acoustic privacy to occupants and adjoining developments. The private open spaces of each unit are separated by fin walls and do not directly overlook one another. Busy spaces within units are generally located away from bedrooms.</p> <p>The development is located approximately 100m from the rail corridor. Whilst this is outside of the 80m distance within which an acoustic assessment should be provided</p>	Y
<p><u>9.10 Car parking requirements</u></p> <p>See Chapter E3</p>		

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<p>9.11 Basement Car Parking</p> <p><i>9.11.1 Objective</i></p> <p>(a) To integrate the siting, scale and design of basement parking into the site and building design.</p> <p><i>Development controls</i></p> <ol style="list-style-type: none"> Where parking is provided within a basement level(s), the scale and siting of the basement car park must not impact upon the ability of the development to satisfy minimum landscaping and deep soil zone requirements. The roof of any basement podium, measured to the top of any solid wall located on the podium must not be greater than 1.2m above natural or finished ground level, when measured at any point on the outside walls of the building. On sites with a greater slope, a change in level in the basement must be provided to achieve this maximum 1.2m height. <p>Generally variation to this 1.2m podium height limit will not be supported, however Council recognises that there may be occasions where this standard cannot be achieved. Should such a circumstance arise, the additional portion of the basement podium above 1.2m height must be included in the total gross floor area calculation for the development.</p>	<p>The ground floor of the development comprises commercial units at the street frontages and car parking located behind. A further level of basement car parking is provided and at its highest it extends approximately 1.4m above natural ground level.</p> <p>This is not considered unreasonable in this instance for the following reasons:</p> <ul style="list-style-type: none"> A satisfactory deep soil zone is provided. The basement podium is not considered to result in an adverse visual impact on the streetscape. Due to the flooding levels on the site, the floor level of the ground floor commercial was required to be raised which contributed towards the increased podium level. The height of the basement does not result in the building having a bulk and scale which dominates the streetscape. The main pedestrian entries to the buildings are identifiable and readily accessible from the street frontage, including for disabled persons. <p>In light of the above, it is not considered reasonable or necessary to include the small portion of the building that exceeds the 1.2m in the overall FSR calculations.</p>	Y
<p>9.12 Access Requirements</p> <p><i>9.12.1 Objectives</i></p> <p>(a) To provide adequate and safe vehicular access to basement car parking areas.</p> <p>(b) To ensure that all car parking areas have satisfactory manoeuvring areas to enable vehicles to leave the site in a forward direction.</p>	<p>The traffic manoeuvring for the development has been reviewed by Council's Traffic Engineer as being satisfactory.</p>	Y
<p>9.13 Landscaping Requirements</p> <ul style="list-style-type: none"> A minimum of 30% of the total site area must be provided as landscaped area. The required landscaped area must include a minimum 1.5 metre wide landscaping bed, which is provided along the side and rear boundaries of the site. 	<p>The proposal provides approximately 35% of the overall site area as landscaping, including a 1.5m landscaped strip to the boundaries.</p>	Y

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>9.14 Deep Soil Zone</u></p> <p><i>9.14.1 Objectives</i></p> <p>(a) To protect existing mature trees on a site and encourage the planting of additional significant vegetation.</p> <p>(b) To encourage the linkage of adjacent deep soil zones on development sites, to provide habitat for native indigenous plants and birdlife and provide privacy and amenity for existing and future residents.</p> <p>(c) To allow for increased water infiltration.</p> <p>(d) To contribute to urban biodiversity.</p> <p><i>Development controls</i></p> <p>A minimum of half of the landscaped area (i.e. 15% of the site) must be provided as a deep soil zone and have a minimum dimension of 6m.</p> <p><u>9.15 Communal Open Space</u></p> <p>Developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 5m² per dwelling.</p> <p><u>9.16 Private Open Space</u></p> <p>The primary private open area of at least 70% of the dwellings within a residential apartment building must receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.</p> <p>Design private open spaces so that they act as direct extensions of the living areas of the dwellings they serve.</p> <p>Screen private open space where appropriate to ensure privacy.</p> <p>Balconies must have a minimum area of 12m² open space and a minimum depth of 2.4 metres.</p> <p><u>9.17 Adaptable Housing</u></p> <p>10% of all dwellings (or at least one dwelling) must be designed to be capable of adaptation for disabled or elderly residents</p> <p><u>9.18 Access for People with a Disability</u></p> <p>See Chapter E1</p>	<p>The site is clear of vegetation.</p> <p>A satisfactory deep soil zone is incorporated within the development.</p> <p>See Chapter D13</p> <p>Balconies have minimum dimensions of 2.4 and minimum areas of 12m².</p> <p>Private open spaces are direct extensions of the living areas and are appropriately screened from other units within the development and adjoining sites.</p> <p>It has been demonstrated that the minimum solar access requirements have been satisfied.</p> <p>Out of 207 units 23 (11%) are capable of being adapted. A statement of compliance from an accessibility consultant has been provided in this regard.</p>	<p>Y</p> <p>Y</p> <p>Y</p>

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<u>9.19 Apartment Size and Layout Mix for Larger Residential Flat Building Developments</u>		
<ul style="list-style-type: none"> A mix of apartment sizes and layouts is required for larger residential apartment buildings involving ten (10) or more dwellings. This could include both variation in the number of bedrooms and gross floor areas of apartments, variety in the internal design or incorporating single and two level apartments to accommodate various resident requirements. 	The development comprises a mixture of 1, 2 and 3 bedroom units and a mixture of layouts.	Y
<ul style="list-style-type: none"> For residential apartment buildings having ten (10) or more dwellings, a minimum of 10% of the apartments must be one bedroom and/or studio apartments, to provide for housing choice. 	The proposal provides 26 one bedroom units (12.5%).	Y
<ul style="list-style-type: none"> Consideration should be given to the design of apartments to encourage future flexibility. 	The internal layout of the units is considered to be capable of adaptability.	Y
<ul style="list-style-type: none"> Apartments must be designed with internal spaces which are flexible and adaptable to resident's requirements. This should involve the efficient utilisation of available floor space to maximise useable room areas. Apartment layouts must respond to the site's opportunities, including views and aspect. 	The internal layout of the units is considered to be a practical use of space. Orientation takes advantage of views towards the ocean and the escarpment.	Y
<ul style="list-style-type: none"> for residential flat buildings a 2.7m minimum ceiling height is required for all habitable rooms on all floors 	The ceiling heights for all floors comply.	Y
<u>9.20 Solar Access</u>		
<ul style="list-style-type: none"> maximise northern exposure to optimise the number of dwellings having a northern aspect. 	The built form is broken up into four towers to allow increased solar access to the development.	Y
<ul style="list-style-type: none"> living spaces and balconies of such apartments must typically be orientated towards the north where possible 	Living spaces and balconies are oriented to take advantage of northerly aspect where possible.	
<ul style="list-style-type: none"> Shading devices should be utilised where necessary, particularly where windows of habitable rooms are located on the western elevation. 	The western elevation is provided with recessed balconies and louvre devices to protect from westerly sun.	Y
<ul style="list-style-type: none"> The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm. 	It has been demonstrated that the minimum solar access requirements have been satisfied.	

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<ul style="list-style-type: none"> The number of single aspect apartments with a southerly aspect (south-westerly to south-easterly) is limited to a maximum of 10% of the total number of apartments proposed. 	Approximately 8% of units are considered to have a single southerly aspect.	Y
<ul style="list-style-type: none"> Provide vertical shading to eastern and western windows. Shading can take the form of eaves, awnings, colonnades, balconies, pergolas, external louvres and planting. 	Vertical shading is provided on the eastern and western elevation through recessed balconies and in some parts moveable vertical louvres.	Y
<ul style="list-style-type: none"> Windows to living rooms and private space areas in adjacent residential buildings must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21. 	No. 34 Gladstone Avenue will be significantly overshadowed by the development. Whilst this is not considered a desirable outcome for development, the applicant has demonstrated reasonable steps were taken to purchase the lot with no success.	N
<ul style="list-style-type: none"> In areas undergoing change, the impact of overshadowing on development likely to be built on adjoining sites must be considered, in addition to the impacts on existing development. 	Further, the zoning and corner location of the lot allow for future redevelopment of the site for commercial purposes. This is further discussed in the body of the report above.	
<ul style="list-style-type: none"> At least 50% of the private open areas of adjoining residential properties must receive at least 3 hours of sunlight between 9.00am and 3.00pm on June 21. 	No. 34 will not receive the necessary amount of sunlight. This is not considered unreasonable as further discussed in the body of the report above. The adjoining dwellings to the west of the development should still retain the necessary solar access beyond midday.	N
9.21 Natural Ventilation		
<ul style="list-style-type: none"> All residential apartment buildings shall have a building depth of between 10 and 18 metres. Variation to this standard will only be considered where it can be demonstrated that apartments will achieve the minimum requirements with regard to natural ventilation. 	The building depths exceed 18m, reaching 24m at its widest. The development is considered to provide satisfactory cross ventilation.	N
<ul style="list-style-type: none"> A minimum of sixty percent (60%) of all residential apartments shall be naturally cross ventilated. 	The proportion of units naturally cross ventilated is 60%.	Y

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<ul style="list-style-type: none"> Twenty five (25%) of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, the back of the kitchen must be no more than 8 metres from a window. 	<p>Approximately 27% of kitchens have access to natural ventilation.</p> <p>The majority of the remainder are generally within 8m of a window. Units A1, A2, A3, A4, B1, B2, B3 and B4 have kitchens with back walls slightly greater than 8m from a window however this minor non-compliance is not expected to have any significant impacts given the overall scale of the development and otherwise satisfactory amenity of the units.</p>	N
<ul style="list-style-type: none"> Single aspect apartments must be limited in depth to 8 metres from a window. 	<p>Units A1, A2, A3, A4, B1, B2, B3 and B4 are single aspect apartments with a depth greater than 8m. The non-compliance in this instance is small and results in an insignificant proportion of the units not complying fully with this control.</p>	N
<u>9.22 Crime Prevention Through Environmental Design (Safety And Security)</u> See Chapter E2 of the DCP		

11 General Requirements For All Residential Development

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<u>11.1 Waste Management</u> See Chapter E7		
<u>11.2 Stormwater Drainage</u> See Chapter E14 and E15		
<u>11.3 Floodplain Management</u> See Chapter 13		
<u>11.4 Land Re-Shaping Works (Cut and Fill Earthworks)</u> See Chapter E19		
<u>11.5 Soil Erosion and Sediment Control</u> See Chapter E22		
<u>11.6 Development near the Coastline</u> Not applicable.		
<u>11.7 Sunlight Access</u> In higher density localities, sunlight access is harder to protect and the claim to retain it is not as strong.	The development is not considered to result in unreasonable overshadowing impacts on adjoining developments. This is further discussed in the SEPP 65 assessment above.	Y
<u>11.8 View Sharing</u> New development and alterations and additions to existing development must be designed to	The development is significantly larger than other developments in the locality	Y

<i>Controls/ objectives</i>	<i>Comment</i>	<i>Compliance</i>
<p>maximise view sharing opportunities from neighbouring dwellings and to minimise potential view loss.</p> <p><u>11.9 Services</u></p> <p>To encourage early consideration of servicing requirements, to ensure that all residential development can be appropriately serviced.</p> <p><u>11.10 Fire Brigade Servicing</u></p> <p>To ensure that all dwellings can be serviced by fire fighting vehicles.</p> <p><u>11.11 Site Facilities</u></p> <p><u>11.11.1 Objectives</u></p> <p>(a) To ensure that site facilities (such as clothes drying, mail boxes, recycling and garbage disposal units/areas, screens, lighting, storage areas, air conditioning units and communication structures) are effectively integrated into the development and are unobtrusive.</p> <p>(b) To design site services and facilities in a manner such that they relate to the development, enable easy access, require minimal maintenance and blend with the development.</p> <p><u>11.12 Storage Facilities</u></p> <p>Studio/1 bedroom: 6m³ / 3m²</p> <p>Two bedroom: 8m³ / 4m²</p> <p>Three or more bedrooms: 10m³ / 5m²</p> <p>For multi dwelling housing and residential flat buildings a secure space shall be set aside exclusively for storage as part of the basement and/or garage area.</p>	<p>and will be of considerable bulk as viewed from adjoining properties. However, the development complies with the setback requirements and is not considered to result in unreasonable view loss or to impact on any significant view corridors.</p> <p>The site is currently serviced by all the major utilities. Additional conditions are recommended in regards to contacting the service providers for their specific requirements.</p> <p>This is considered to be covered by compliance with the BCA.</p> <p>Waste storage facilities are integrated into the basement car park area.</p> <p>Letterboxes are located adjacent to the main entries.</p> <p>Satisfactory storage facilities have been both incorporated in the basement car park area as well as additionally in the units.</p>	<p></p> <p>Y</p> <p>Y</p> <p>Y</p>

CHAPTER B4 – DEVELOPMENT IN BUSINESS ZONES

The development is located in a business zone and as such this chapter is applicable to the development. An assessment against the relevant sections is outlined below.

2 Objectives

The development is considered consistent with the objectives of development in business zones.

3. Retail and business centre hierarchy strategy

This section is not considered applicable to the proposal as it does not comprise retail development.

4 Economic impact assessment – retail hierarchy

This section is not applicable as the application does not involve any retail component involving a gross floor area of 3,500 square metres or more.

5 Planning requirements for development in the regional city and major regional centres

5.1 Wollongong City Centre

1. The specific planning requirements for development upon any land within the Wollongong City Centre are contained in Part D (Locality Based/ Precinct Plan) of this DCP.

9 General design requirements for retail and business premises developments

9.1 Objectives

- Appropriate transition and access from the footpath is provided into the development
- Clear glazing is provided at street level
- Minimum ceiling heights of 3.3m are provided to ground floor commercial development
- The site is located in an area undergoing transition to higher density development and as such will effectively set the tone of built form for the area
- Appropriate massing and building articulation is provided
- Suitable pedestrian amenity is provided through improvements to the footpath, landscaping and awnings to the development.

9.2 Development Controls

9.2.1 Floor Configuration

- Commercial units are not greater than 20m in depth.
- Residential building depth exceeds 18m however satisfactory daylight access and ventilation have been demonstrated.
- The development provides 3.3m floor to ceiling heights for ground floor commercial

9.2.2 Building Appearance

- The building design incorporates satisfactory articulation and there is a delineation between ground floor commercial units and residential above.
- The massing of the building is considered satisfactory
- Glazed areas are recessed beneath balconies

9.2.3 Building Alignment

- Commercial uses are provided at ground floor level.
- The development is built to the street alignment on Gladstone and Osborne Street. The setback of the building from Rowland Avenue is consistent with the existing setbacks of adjoining developments.

9.2.4 Active Street Frontages

Commercial uses are provided at ground floor level with satisfactory glazing and passive surveillance of the street.

9.2.5 Urban Design / Streetscape Appearance

The facades of the building are appropriately articulated to add visual interest

9.2.6 Pedestrian Access

Direct pedestrian access and visual inspection is provided from the front of the building

9.2.7 Awnings

The development provides a continuous awning along the full length of the building's street frontage on Gladstone Avenue. Further awnings are provided above the entries on Osborne Street and Rowland Avenue. The awnings have a minimum soffit height of 3.2m and are setback at least 600mm from the kerb line.

9.2.8 Public Domain – Footpath Paving

Council's Landscape Architect has recommended appropriate conditions with regards to compliance with Council's Public Domain Technical Manual

9.2.9 Solar access and overshadowing

Satisfactory solar access has been provided and no unreasonable overshadowing is expected.

9.2.10 Shower and Change Facilities & Parenting Facilities in Large Business Premises / Commercial Office Buildings

The development does not comprise a gross floor area of 10,000 square metres or greater and as such parenting facilities, shower and change facilities are not required.

9.2.11 Advertising Signage

The development does not comprise any advertising or signage.

9.2.12 Wind Impact Assessment

A wind impact assessment report is not required as the building is not greater than 32m in height.

9.2.13 Access, Car parking and Servicing

See Chapter E3

9.2.14 Access for People with a Disability

See Chapter E1

9.2.15 Land Consolidation

The development takes in a number of separate lots and a condition of consent will be that the lots are consolidated prior to issue of the Occupation Certificate.

10 General design requirements for retail shopping centres

Not applicable.

11 General building design requirements for fast food restaurants

Not applicable.

12 Peripheral sales (bulky goods) precincts

Not applicable.

13 Works in the public domain

Appropriate conditions are recommended in relation to compliance with Council's Public Domain Technical Manual.

CHAPTER D1 – CHARACTER STATEMENTS

Wollongong City Centre

The proposal is considered to be consistent with the existing and desired future character for the locality as specified in the height, FSR and development controls for the site and the broad objectives for development in the city centre.

CHAPTER D13 – WOLLONGONG CITY CENTRE

The site is located within the Wollongong City Centre, as defined in WLEP 2009 and WDCP 2009. Chapter D13 applies to the development and prevails over other parts of the DCP where there is any inconsistency.

2 Building form

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>2.2 Building to street alignment and street setbacks</u></p> <p>In the mixed Use (City Edge) zone, developments should be built to 3m from the street alignment.</p>	<p>The development proposes a zero setback to Gladstone Avenue and Osborne Street. This is considered appropriate in this instance as it will provide appropriate definition of the streetscape.</p> <p>The setback on Rowland Avenue is approximately 3.34m and is compatible with the existing setbacks on adjoining properties.</p>	
<p><u>2.3 Street frontage heights in commercial core</u></p> <p>Not applicable.</p>		
<p><u>2.4 Building depth and bulk</u></p> <p><u>2.4.2 Objectives</u></p> <p>a) To promote the design and development of sustainable buildings.</p> <p>b) To achieve the development of living and working environments with good internal amenity and minimise the need for artificial heating, cooling and lighting.</p> <p>c) To provide viable and useable commercial floor space.</p> <p>d) To achieve usable and pleasant streets and public domain at ground level by controlling the size of upper level floor plates of buildings.</p> <p>e) To achieve a city skyline sympathetic to the topography and context.</p> <p>f) To allow for view sharing and view corridors.</p> <p>g) To reduce the apparent bulk and scale of buildings by breaking up expanses of building wall with modulation of form and articulation of facades.</p> <p><i>Development controls</i></p> <ul style="list-style-type: none"> Residential and serviced apartments above 12m in height outside the Commercial Core should have a maximum floor plate of 900m² and a maximum depth of 18m. 	<ul style="list-style-type: none"> The development is broken up into four towers, each with an overall floor plate not greater than 900m² The maximum building depth exceeds 18m however satisfactory levels of solar access and natural ventilation have been provided. 	N

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>2.5 Side and rear building setbacks and building separation</u>		
<i>Residential uses up to 12m in height</i>		
<ul style="list-style-type: none"> • habitable rooms with openings and balconies: 6m side and 6m rear • non-habitable rooms and habitable rooms without openings: 3m side and 4.5m rear 	A side and rear setback of 9m is provided up to 12m	Y
<i>Residential uses between 12m & 24m</i>		
<ul style="list-style-type: none"> • habitable rooms with openings and balconies: 9m side and 9m rear • non-habitable rooms and habitable rooms without openings: 4.5m side and 4.5m rear 	A side and rear setback of 9m is provided between 12m and 24m	Y
<i>Residential uses above 24m</i>		
<ul style="list-style-type: none"> • - habitable rooms with openings and balconies and up to 45m: 12m side and 12m rear • - non-habitable rooms and habitable rooms without openings: 6m side and 6m rear 	Above 24m the proposal provides a rear setback of approximately 18m for building D and B, a side setback from building C of 12m.	Y
<u>2.6 Mixed used buildings</u>		
<ul style="list-style-type: none"> • Minimum side setbacks of 6m up to 12m • Minimum side setbacks of 9m between 12 and 24m • Building separation of 12-20m up to 45m in height • In the B4 Mixed Use zone, the ground floor and first levels of a building shall incorporate a minimum 3 metre floor to ceiling height clearance, to maximise the flexibility in the future use of the building. • Separate commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook 	<p>9m side setbacks provided.</p> <p>Building separation between the towers within the development is 20m</p> <p>Floor to ceiling heights of approximately 3.5m are provided.</p> <p>Access to the delivery and service area for the commercial component is combined with the residential access although separate manoeuvring areas are provided.</p> <p>Council's Traffic Engineer has reviewed the application in this regard and has not raised any concerns subject to appropriate conditions of consent.</p>	<p>Y</p> <p>Y</p> <p>Y</p> <p>Y</p>
<ul style="list-style-type: none"> • Locate clearly demarcated residential entries directly from the public street. • Clearly separate and distinguish commercial and residential entries and vertical circulation • Provide security access controls to all entrances into private areas, including car 	<p>Satisfied</p> <p>Separate entries provided for commercial and residential components.</p> <p>Security access is provided into the residential car park for stage 1.</p>	<p>Y</p> <p>Y</p> <p>Y</p>

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
parks and internal courtyards	Visitor, commercial and residential parking in stage two is mixed. This could raise potential safety concerns for residents in this area as the car park is open to the public during normal work hours. In this regard, conditions are recommended that CCTV cameras be installed in the car park.	
<ul style="list-style-type: none"> • Front buildings onto major streets with active uses 	Active uses are provided at street level	Y
<ul style="list-style-type: none"> • Avoid the use of blank building walls at the ground level. 	Satisfied	Y
<u>2.7 Deep soil zone</u>		
A deep soil zone of 15% of the site area is to be provided.	15% of the site area is provided as a deep soil zone.	Y
<u>2.8 Landscape design</u>		
Chapter E6		
<u>2.9 Planting on structures</u>		
<u>2.9.2 Objectives</u>		y
a) To contribute to the quality and amenity of open space on roof tops and internal courtyards.	Council's Landscape Architect has reviewed the application in relation to the planting on the podium level in the communal open space areas.	
b) To encourage the establishment and healthy growth of trees in urban areas.	Appropriate conditions of consent have been recommended in this regard.	
<u>2.10 Sun access planes</u>		
	The site is not located in an area affected by sun access planes.	N/A
<u>2.11 Development on classified roads</u>		
	The site is not located on a classified road.	N/A

3 Pedestrian amenity

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>3.2 Permeability</u>		
	The site is not identified as one requiring site through links.	N/A
<u>3.3 Active street frontages</u>		
<u>3.3.1 Objectives</u>		Y
a) To promote pedestrian activity and safety in the public domain.	The proposal provides active uses at ground floor level with glazing to the street frontage to provide passive surveillance.	
b) To maximise active street fronts in Wollongong city centre.		
c) To define areas where active streets are		

required or are desirable.		
<u>3.4 Safety and security</u>		
See Chapter E2		
<u>3.5 Awnings</u>		
<ul style="list-style-type: none"> Continuous street frontage awnings are to be provided along Gladstone Avenue 	Provided	Y
<ul style="list-style-type: none"> Wrap awnings around corners for a minimum six metres from where a building is sited on a street corner. 	Satisfied	Y
<ul style="list-style-type: none"> Minimum soffit height of 3.3 metres 	Satisfied	Y
<ul style="list-style-type: none"> Low profile, with slim vertical fascias or eaves 	Satisfied	Y
<ul style="list-style-type: none"> Setback a minimum of 1.2 metres from the kerb 	Satisfied	Y
<ul style="list-style-type: none"> 2.4 metres deep 	Satisfied	Y
<u>3.6 Vehicular footpath crossings</u>		
<ul style="list-style-type: none"> No additional vehicle entry points will be permitted into the parking or service areas along Gladstone Avenue. 	None proposed.	Y
<ul style="list-style-type: none"> one vehicle access point only (including the access for service vehicles and parking for non-residential uses within mixed use developments) 	One vehicle access point from Rowland and one from Osborne Street frontages.	Y
<ul style="list-style-type: none"> vehicle access is to be from lanes and minor streets rather than primary street fronts or streets with major pedestrian and cyclist activity 	No access point on Gladstone Avenue	Y
<u>3.7 Pedestrian overpasses, underpasses and encroachments</u>		N/A
<u>3.8 Building exteriors</u>		
<ul style="list-style-type: none"> Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings 	Appropriate setbacks and separation have been provided.	Y
<ul style="list-style-type: none"> Balconies and terraces should be provided 	Satisfied	Y
<ul style="list-style-type: none"> Articulate facades 	Satisfied	Y
<ul style="list-style-type: none"> Construction with high quality and durable materials and finishes 	Satisfied	Y
<ul style="list-style-type: none"> avoid expanses of any single material 	A mixture of materials and finishes has been provided.	Y
<ul style="list-style-type: none"> Limit opaque or blank walls for ground floor uses 	Glazing provided to street frontages at ground floor.	Y
<ul style="list-style-type: none"> Highly reflective finishes and curtain wall glazing are not permitted above ground floor level 	Satisfied	Y

<ul style="list-style-type: none"> A materials sample board and schedule is required to be submitted with applications for development over \$1 million 	Provided	Y
<ul style="list-style-type: none"> roof plant rooms and lift overruns to be integrated into the overall architecture of the building 	Satisfied	Y
<u>3.9 Advertising and signage</u>		N/A
<u>3.10 Views and view corridors</u>		
a) To maintain and enhance views from the city centre to the foreshore, escarpment and significant objects (such as the lighthouse) wherever possible.	The built form is broken up into two towers and there are not expected to be any impacts on significant view corridors.	Y
b) To enhance views along city streets.		
c) To protect silhouettes of the tops of major buildings or structures as seen against the sky or backdrop of the escarpment or foreshore.		

4 Access, parking and servicing

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>4.2 Pedestrian access and mobility</u>		
<ul style="list-style-type: none"> Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features 	Satisfied	Y
<ul style="list-style-type: none"> The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, AS 2890 Pt 1, or as amended) and the Disability Discrimination Act 1992 (as amended) 	Satisfied	Y
<ul style="list-style-type: none"> provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor 	Satisfied	Y
<ul style="list-style-type: none"> continuous access paths of travel from all public roads and spaces as well as unimpeded internal access 	Satisfied	Y
<ul style="list-style-type: none"> Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours in accordance with Council's Public Domain Technical Manual. 	Satisfied	Y

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<ul style="list-style-type: none"> Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1:2001, AS/NZS 2890.1:2004 and the Disability Discrimination Act. 	Ramps provided	Y
<u>4.3 Vehicular driveways and manoeuvring areas</u>		
<i>4.3.1 Objectives</i>		
a) To minimise the impact of vehicle access points and driveway crossovers on streetscape amenity, pedestrian safety and the quality of the public domain by: <ul style="list-style-type: none"> i) Designing vehicle access to required safety and traffic management standards; ii) Integrating vehicle access with site planning, streetscape requirements, traffic patterns; and iii) Minimising potential conflict with pedestrians. 	The proposal has been reviewed by Council's Traffic Engineer in this regard and a satisfactory referral subject to appropriate conditions received.	Y
<u>4.4 On-site parking</u>		
See Chapter E3		
<u>4.5 Site facilities and services</u>		
<i>Mail boxes</i>	Satisfied	Y
a) Provide letterboxes for residential building and/or commercial tenancies in one accessible location adjacent to the main entrance to the development. b) They should be integrated into a wall where possible and be constructed of materials consistent with the appearance of the building. c) Letterboxes shall be secure and large enough to accommodate articles such as newspapers.		
<i>Communication structures, air conditioners and service vents</i>	Satisfied	
<ul style="list-style-type: none"> Integrate ancillary structure into the design of the building. 		Y
<i>Waste (garbage) storage and collection</i>		
<ul style="list-style-type: none"> Onsite waste handling and storage required 	Satisfied	Y
<ul style="list-style-type: none"> Access for service vehicles from secondary streets or lanes 	Provided	Y
<ul style="list-style-type: none"> Waste storage areas to provide sufficient manoeuvring areas 	Satisfied	Y
<ul style="list-style-type: none"> Waste storage areas not to result in adverse noise impacts 	Satisfied	Y
<ul style="list-style-type: none"> Waste storage area to be well lit and 	Satisfied	Y

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
accessible		
<i>Location requirements for Waste Storage Areas and Access</i>		
<ul style="list-style-type: none"> The common collection, storage and handling area is to be located enclosed within a basement or enclosed carpark 	Satisfied	Y
<ul style="list-style-type: none"> Site access and circulation for servicing vehicles to be provided 	Satisfied	Y
<i>Service docks and loading/ unloading areas</i>		
<ul style="list-style-type: none"> Adequate loading and delivery docks to be provided, preferably off secondary streets or laneways and screened or away from street frontages. 	Satisfied	Y
<i>Fire service and emergency vehicles</i>		
<ul style="list-style-type: none"> vehicular access, egress and manoeuvring must be provided to, from and on the site in accordance with the NSW Fire Brigades Code of Practice – Building Construction – NSWFB Vehicle Requirements 	Provided	Y
<i>Utility Services</i>		
<ul style="list-style-type: none"> Development must ensure that adequate provision has been made for all essential services including water, sewerage, electricity and telecommunications and stormwater drainage to the satisfaction of all relevant authorities. 	The site is serviced by utility provides. Additional conditions are recommended in this regard.	Y

5 Environmental management

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>5.2 Energy efficiency and conservation</u>		
<i>Residential</i>		
<ul style="list-style-type: none"> New dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). 	BASIX Certificates provided.	Y
<i>Non-Residential</i>		
<ul style="list-style-type: none"> For all commercial development over \$5 million: Provide an Energy Efficiency Report from a suitably qualified consultant to accompany any development application for new commercial office development with a construction cost of \$5 million or more that demonstrates a commitment to achieve no less than a 4 star rating under the Australian 	The development is valued at \$38 million however the commercial component is only a small fraction of this overall cost and is not considered to require an Energy Efficiency Report.	Y

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<p>Building Greenhouse Rating Scheme.</p> <p><u>5.3 Water conservation</u></p> <p><i>Residential</i></p> <ul style="list-style-type: none"> New dwellings, including a residential component within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). <p><i>Non-residential</i></p> <p>a) The following water saving measures are to be incorporated into non-residential building. Water fixtures (shower heads, taps, toilets, urinals etc) are to be 3 stars or better rated.</p> <p>i) Appliances (dishwashers, clothes washers etc) are to be 3 stars or better rated with respect to water use efficiency. Demonstrate, if necessary, how these requirements will be achieved for replacement appliances, appliances not installed at construction or bought in by occupants following construction,</p> <p>ii) Stormwater runoff control, capture and reuse, including water quality management in accordance with Council's guidelines,</p> <p>iii) Select water efficient plants and/or, indigenous vegetation for landscape in accordance with Council's recommendations,</p> <p>iv) Use non-potable water for watering gardens and landscape features, and</p> <p>v) Operating details for swimming pools and water features including filling, draining and maintenance activities. Covers are to be included in the design and operational aspects of swimming pool installations.</p> <p>b) Alternatives to the above water savings methods can be presented to Council and they will be assessed on merit.</p>	<p>BASIX Certificates provided.</p> <p>Water tanks are provided to capture and reuse stormwater.</p> <p>Native plants incorporated into landscaped areas.</p> <p>BASIX Certificates have been provided demonstrating water saving measures for the residential component.</p>	<p>Y</p> <p>Y</p>

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>5.4 Reflectivity</u> a) New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers. b) Visible light reflectivity from building materials used on facades of new buildings should not exceed 20%.	The glazed areas within the development are largely recessed beneath balconies or awnings. There is no curtain wall glazing proposed. A condition will further be attached that glazing not exceed 20% reflectivity.	Y
<u>5.5 Wind mitigation</u> A Wind Effects Report is to be submitted with the DA for all buildings greater than 32m in height	The building does not exceed 32m in height.	Y
<u>5.6 Waste and recycling</u> <i>Non-residential development</i> Development applications for all non-residential development must be accompanied by a waste management plan that addresses:	A detailed Construction and Environment Management plan (CEMP) will be prepared and submitted for approval, following the appointment of a builder and prior to the commencement of any construction works on site. The CEMP will include a waste management plan which will address material management, waste and material re-use, and incorporate any mitigation measures necessary to prevent any potential adverse impacts.	Y
i) Best practice recycling and reuse of construction and demolition materials	The proposal is considered to be of long life expectancy and to incorporate materials that could be potentially reused at the end of their life.	
iii) Handling methods and location of waste storage areas in accordance with the provisions of Section 4.4.3 of this DCP, such that handling and storage has no negative impact on the streetscape, building presentation or amenity of occupants and pedestrians, and	Satisfactory waste servicing and storage areas are provided.	Y
iv) Procedures for the on-going sustainable management of green and putrescible waste, garbage, glass, containers and paper, including estimated volumes, required bin capacity and on-site storage requirements.	Separate general and recyclable waste bins are to be provided for commercial and residential components.	Y
<i>Residential development</i> General: 80 litres per week/flat Recycling: 80 litres per week/flat	The proposal provides the necessary waste storage.	Y

6 Residential development standards

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>6.1 SEPP 65 and residential flat design code</u> See SEPP 65 assessment above.		
<u>6.2 Housing choice and mix</u> Studio and one bedroom units must not be less than 10% of the total mix of units Three or more bedroom units must not be less than 10% of the total mix of units	12.6% one bedroom units The proposal provides only 3.4% of units as three bedroom units. Whilst this does not fully comply with this control, this is a factor that is considered to be largely dictated by market demand. The development is further considered to be able to be effectively adapted for large units should the need arise.	Y N
10% of all dwellings (or at least one dwelling) must be designed to be capable of adaptation for disabled or elderly residents.	11% of units are adaptable.	Y
adaptable dwellings shall be located on the ground floor, for ease of access.	The design is such that the ground floor is taken up with commercial and car parking spaces.	Y
The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).	Provided.	Y
Car parking and garages allocated to adaptable dwellings must comply with the requirements of the relevant Australian Standard for disabled parking spaces.	Provided	Y
Ceiling heights of apartments must be 2.7m minimum for all habitable rooms on all floors	Provided	Y

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>6.6 Basement Carparks</u></p> <p>The roof of any basement podium, measured to the top of any solid wall located on the podium, must not be greater than 1.2m above natural or finished ground level.</p> <p>Any additional portion of the basement podium above 1.2m height must be included in the total gross floor area calculation for the development.</p>	<p>The car park takes up a single basement level as well as the ground floor of the development. Commercial tenancies are also located on the ground floor of the development at the street frontage and the ground floor car parking area is therefore largely hidden from public view. In addition, the floor level for the ground floor of the development is required to be raised to the proposed level due to clearance requirements for flooding purposes. Where the car park area abuts the adjoining developments to the side and rear, significant landscaping has been provided.</p> <p>In light of the above, there are not considered to be any adverse impacts from the proposed levels and location of car parking and it is not considered reasonable to include the car park area in FSR calculations.</p>	Y/N
<p><u>6.7 Communal open space</u></p> <p>Communal open space at a rate of 5m² per dwelling is to be provided.</p> <p>The communal open space must be easily accessible and within a reasonable distance from apartments, be integrated with site landscaping, allow for casual social interaction and be capable of accommodating recreational activities.</p> <p>The communal open space area must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.</p>	<p>The proposal comprises 207 units resulting in a requirement for 1,035m² communal open space.</p> <p>The proposal provides 520m² formal communal open space for stage 1 and 295m² for stage 2. In addition, the overland flow / deep soil area is approximately 1,800m². This area is directly accessible from four of the ground floor residential units and also easily accessed by the commercial units within the development. The combination of this area with the formal communal open space is considered to satisfy the requirements of this section.</p> <p>The formal communal open space areas are easily accessible.</p> <p>The communal open space areas will receive sunlight for approximately 2 hours between 9.00am and 3.00pm on June 21. Whilst this is not in strict compliance with this control, it is considered that this space is still practical for its intended use.</p> <p>Extensive balcony areas are provided to each unit which are considered provide good amenity to the development.</p>	N

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<u>6.8 Private open space</u>		
<ul style="list-style-type: none"> Avoid locating the primary balconies where they address side setbacks. 	Where possible, primary balconies are located to address the street rather than side boundaries.	Y
<ul style="list-style-type: none"> minimum area of 12m² open space a minimum depth of 2.4 metres 	All balconies are a minimum of 12m ² and minimum depth of 2.4m	Y
<ul style="list-style-type: none"> shall receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21 	The necessary minimum solar access has been provided.	Y
<ul style="list-style-type: none"> designed and positioned to ensure sufficient light can penetrate into the building at lower levels 	Satisfactory	Y
<u>6.9 Overshadowing</u>		
Adjacent residential buildings and their public spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.	34 Gladstone Avenue will not receive the necessary hours of direct sunlight. However, it is considered in this instance unreasonable to expect this to be provided given the desired future character of the locality through height and FSR limits. Satisfactory attempts have been made to purchase this property for incorporation into the project but were unsuccessful.	N
<u>6.10 Solar access</u>		
<ul style="list-style-type: none"> Maximise northerly aspect 	The development provides northerly aspect to units where possible.	Y
<ul style="list-style-type: none"> Maximise dual orientation 	58% of the units have dual orientation.	Y
<ul style="list-style-type: none"> Shading devices for westerly orientation 	Shading devices are provided to the westerly orientation in the form of recessed balconies and louvres.	Y
<ul style="list-style-type: none"> The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm. 	Provided.	Y
<ul style="list-style-type: none"> The number of single aspect apartments with a southerly aspect (south-westerly to south-easterly) is limited to a maximum of 10% 	8.2% of units are single aspect with southerly orientation.	Y
<ul style="list-style-type: none"> Provide vertical shading to eastern and western windows. 	Shading devices are provided to the westerly orientation in the form of recessed balconies and louvres.	Y

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
<p><u>6.11 Natural ventilation</u></p> <p>Provide residential apartment buildings with a building depth of between 10 and 18m. The depth is measured across the shortest dimension of the building. Dwellings should be a maximum depth of 21m measured from the outside of the balcony.</p> <p>Variation to this standard will only be considered where it can be demonstrated that apartments will achieve the minimum requirements with regard to natural ventilation. This may be achieved where apartments have a wider frontage, or increased ceiling and window height to allow for greater penetration of natural light.</p> <p>A minimum of sixty percent (60%) of all residential apartments shall be naturally cross ventilated.</p> <p>Twenty five percent (25%) of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, the back of the kitchen must be no more than 8m from a window.</p> <p>Single aspect apartments must be limited in depth to 8m from a window.</p>	<p>The development has building depths ranging between approximately 8m and 25m. Satisfactory natural ventilation requirements have been demonstrated in this instance.</p> <p>60% of units are cross ventilated.</p> <p>Approximately 27% of kitchens have access to natural ventilation.</p> <p>Units A1, A2, A3, A4, B1, B2, B3 and B4 have kitchens with back walls greater than 8m from a window. The extent of non-compliance in these instances is not great and the overall amenity of the units within the development is not considered to be significantly compromised by this non-compliance.</p> <p>A number single aspect units are greater than 8m from a window however the areas in excess of this are generally bathrooms, storage or hallway areas.</p>	<p>N</p> <p>Y</p> <p>N</p> <p>Y</p>
<p><u>6.12 Visual privacy</u></p> <p><i>Objectives</i></p> <p>(a) To provide reasonable levels of visual privacy externally and internally, during the day and at night.</p> <p>(b) To maximise outlook and views from principal rooms and private open space without compromising visual privacy.</p>	<p>The design of the development is considered to provide satisfactory privacy. Balconies are recessed and separated by fin walls and perimeter landscaping is provided. There are not expected to be unreasonable overlooking of private open space areas within the development.</p>	<p>Y</p>
<p><u>6.13 Acoustic Privacy</u></p> <p>(a) Locating busy, noisy areas next to each other and quieter areas, next to other quieter areas (eg living rooms with living rooms and bedrooms with bedrooms);</p> <p>(b) Using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas; and</p> <p>(c) Minimising the amount of party (shared)</p>	<p>The buildings are designed with fin walls between balconies and laundries, kitchens and bathrooms and hallways between units where possible.</p> <p>Suitable separation and setbacks provided between adjoining buildings.</p>	<p>Y</p>

<i>Objectives/ controls</i>	<i>Comment</i>	<i>Compliance</i>
walls with other apartments. All residential apartments within a mixed use development should be designed and constructed with double-glazed windows and / or laminated windows, solid walls, sealing of air gaps around doors and windows as well as insulating building elements for doors, walls, roofs and ceilings etc Acoustic construction details	A condition is recommended in this regard. Acoustic building requirements are considered to be covered by compliance with the BCA.	Y Y
<u>6.14 Storage</u> One bedroom apartments 3m ² 3m ³ Two bedroom apartments 4m ² 8m ³ Three or more bedroom apartments 5m ² 10m ³	Satisfactory storage areas have been provided.	Y

7 Planning controls for special areas

The site is not located within a special area.

8 Works in the public domain

<i>Objective/ controls</i>	<i>Comment</i>	<i>compliance</i>
Any development requiring works to be carried out within the public domain in the Wollongong City Centre will be subject to compliance with the requirements of the Wollongong City Centre Public Domain Technical Manual at Appendix 2 to this DCP and any other specific Council requirements.	Conditions are recommended in regards to street tree planting and footpath paving in accordance with the Public Domain Technical Manual.	Y

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

An assessment from an access consultant has been submitted with the application indicating the requirements for disabled access have been satisfied.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The proposal is considered to satisfy the CPTED principles of natural surveillance, access control and ownership. This is further outlined below.

5.1 Lighting

Appropriate lighting will be incorporated into public areas of the development.

5.2 Natural surveillance and sightlines

The proposal provides commercial ground floor premises with glazed frontages to increase passive surveillance of the street. There are not considered to be any significant blinds corners or alcoves and sight lines within the development are satisfactory.

5.3 Signage

No specific signage is proposed for the development however it is considered that appropriate signage can be provided at the stage of occupation of the commercial premises.

5.4 Building design

The ground floor commercial premises are considered to increase natural surveillance of the public domain.

Building entries are secure, easily accessible and clearly visible.

There are not considered to be any significant safety concerns with regards to sight lines or potential for entrapment.

The basement car park area for stage 2 comprises a mixture of commercial, visitor and residential. This area is accessible during the day to the general public and is considered to pose a potential safety risk for residents. It is therefore recommended that CCTV cameras be installed in this area.

5.5 Land use mix

The building provides a mixture of residential and commercial uses on the site which is considered compatible with the neighbourhood. Natural surveillance of the street is provided through the ground floor commercial units.

5.6 Landscaping

The proposed landscape areas are not considered to result in any safety concerns.

5.7 Spaces safe from entrapment

The design is not considered to result in any significant entrapment opportunities.

5.8 Management and maintenance

The proposal is considered to comprise robust materials.

5.9 Public open space and parks.

The proposal does not incorporate any public open space.

5.10 Community facilities

The proposal does not comprise any community facilities.

5.11 Bus stops and taxi ranks

The proposal does not comprise any bus or taxi ranks.

5.12 Public toilets

The proposal does not comprise any public toilets.

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

Car parking rates are as follows:

Use	Required rate	Provided
Commercial (1485m²)		
<i>Car</i>		
1 per 30m ² for ground floor	1485/30 = 50	25
<i>Bicycle</i>		
1 per 200m ² (office/business)	1485/200 = 8	Provided = 11
1 per 750m ² (visitors)	1485/750 = 2	

Use	Required rate	Provided
<i>Motorbike</i>		
1 per 25 car spaces	$50 / 25 = 2$	2
Residential (207 units)		
<i>Car</i>		
1 per 1 bedroom	$26 \times 1 = 26$	
1.2 per 2 bedroom	$174 \times 1.2 = 208.8$	
2 per 3 bedroom	$7 \times 2 = 14$	249 residential
Visitor = 0.2 per unit	$0.2 \times 207 = 41.4$	42 visitor
Total	290.2	291
<i>Bicycle</i>		
1 per 3 dwellings (residential)	$207 / 3 = 69$	Residential: 69
1 per 12 dwellings (visitor)	$207 / 12 = 17.25$	Residential visitor: 18
		Commercial visitor: 3
		Total: 90
<i>Motorbike</i>		
1 per 15 dwellings	$207 / 15 = 13.8$	14

The development provides 316 spaces overall comprised of 249 residential, 42 visitor and 25 commercial spaces. The development complies with the residential car parking rates as well as motorbike and bicycle requirements.

The development requires 50 car parking spaces for the commercial component based on the current rate of 1 space per 30m² for ground floor business or retail premises. Only 25 spaces are provided. The variation is supported in this instance as outlined in the body of the report above.

CHAPTER E4: DEVELOPMENT NEAR RAILWAY CORRIDORS AND MAJOR (BUSY) ROADS

The site is located approximately 100m from a railway corridor. The guidelines released by the Department of Planning require acoustic reports where sites are located within 80m of a rail corridor.

CHAPTER E5: BASIX (BUILDING SUSTAINABILITY INDEX)

BASIX Certificates have been submitted in accordance with this chapter.

CHAPTER E6: LANDSCAPING

Council's Landscape Architect has reviewed the application with regards to the controls in this section and given a satisfactory referral subject to appropriate conditions.

CHAPTER E7: WASTE MANAGEMENT

- A Site Waste Minimisation and Management Plan (SWMMP) has been provided.
- Communal waste storage areas are provided for the residential component and separate waste storage areas for the commercial component.
- For residential flat buildings involving ten (10) or more dwellings, the DCP requires a dedicated room or caged for the temporary storage of discarded bulky items which are awaiting removal. It is considered that the large turning head area could be utilised for this purpose if properly managed.

- The waste storage areas as easily accessible by residents and commercial tenants.
- Council's Traffic Engineer has reviewed the application with regards to dimensions, manoeuvring and operational matters and has given a satisfactory referral subject to appropriate conditions.
- Unobstructed and continuous path of travel is required (as per Australian Standard 1428 Design for Access and Mobility - 2001) from the waste/recycling storage room(s) or area(s) to:
 - The entry to any Adaptable Housing (as per Australian Standard 4299 Adaptable Housing - 1995);
 - The principal entrance to each residential flat building; and
 - The point at which bins are collected/emptied.

It is considered that this has been satisfied.

CHAPTER E9 HOARDINGS AND CRANES

Appropriate conditions are recommended in relation to construction, excavation and use of hoardings or cranes.

CHAPTER E12 GEOTECHNICAL ASSESSMENT

The application has been reviewed by Council's Geotechnical Engineer in relation to site stability, suitability of the site for the development and potential impacts from excavation works. Appropriate conditions have been recommended.

CHAPTER E13 FLOODPLAIN MANAGEMENT

The site is categorised as being flood affected. Council's Stormwater Engineer has reviewed the submitted documentation in this regard and has given a satisfactory referral subject to appropriate conditions.

CHAPTER E14 STORMWATER MANAGEMENT

Council's Stormwater Engineer has reviewed the submitted documentation in regards to stormwater matters and has given a satisfactory referral subject to appropriate conditions.

CHAPTER E15 WATER SENSITIVE URBAN DESIGN

The development is considered to incorporate the principles of water sensitive urban design in the following ways:

- The stormwater overflow area is incorporated into the deep soil area
- 4 X 5000L rainwater tanks are included
- The deep soil / overland flow area increases the pervious surface on the site, decreasing stormwater runoff.
- The development is not expected to result in any significant pollutants entering the stormwater system.

CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

The site is clear of vegetation.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

Council's Geotechnical Engineer has reviewed the application in regards to the proposed earthworks and has not raised any concerns subject to appropriate conditions.

CHAPTER E21 DEMOLITION AND ASBESTOS MANAGEMENT

The prior structures on site were demolished under a separate development application.

CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL

An Erosion and Sediment Control Plan was submitted in accordance with this chapter.

Conditions are recommended in regards to sedimentation and erosion control measures.

WOLLONGONG SECTION 94A DEVELOPMENT CONTRIBUTIONS PLAN (2010)

The estimated cost of works is approximately \$38 million and a section 94A levy is therefore applicable as the threshold figure is \$100,000.