

31 MANN AVENUE & 14 ELSON ROAD NORTHGATE QLD 4013

Planning Assessment Report

Prepared for:

Peter Tornabene

Produced by

URBAN & RURAL

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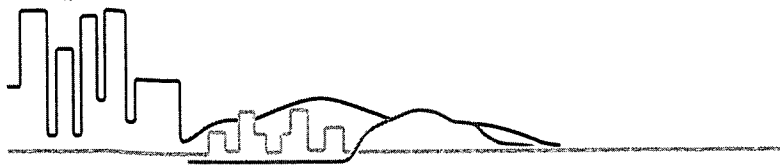
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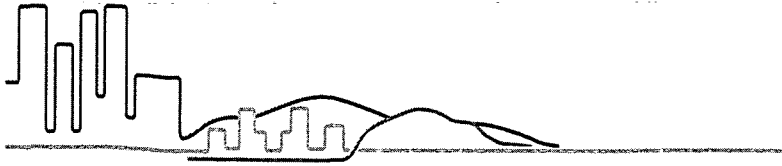
18 September 2007

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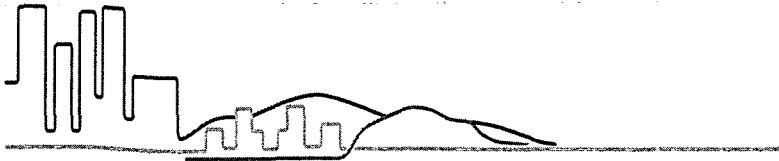
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31 Mann Avenue & 14 Elson Road
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1. Executive Summary

Applicant:	Peter Tornabene c/- Urban & Rural
Contact:	John Carroll (Urban & Rural)
Site Address:	31 Mann Avenue & 14 Elson Road, NORTHGATE QLD 4013
Real Property Description:	Lot 39 on RP 34599 & Lot 3 on RP 76215
Site Area:	3950m ²
Strategic Designation:	Residential Neighbourhood
Existing Area Classification:	Low Density Residential Area
Existing Local Plan and Precinct:	Nundah District Local Plan
Owner:	Peter & Irene Tornabene
Demolition Control Area	No
Vegetation Protection Order / Voluntary Conservation Agreement:	Waterway Vegetation & Wetland Vegetation
Application Process:	Impact Assessable
Development Type:	Material Change of Use
Requested Approval Type:	Development Permit – Multi-Unit Dwellings (10 Units)
Proposal Description:	Multi-Unit Dwellings (10 Units)
Contamination Report Required:	No
Access:	Mann Avenue & Elson Road
Available Services:	Water Sewerage Stormwater Electricity Telecommunications
IPA Referral Agencies:	Nil
Our Reference	1566



2. Proposal

2.1 Introduction

This assessment report has been prepared for the Impact Assessable proposal to create multi-unit dwellings – 10 units on the existing allotments at 31 Mann Avenue & 14 Elson Road, Northgate being Lot 39 on RP 34599 & Lot 3 on RP 76215.

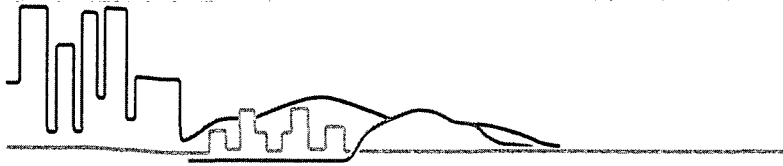
The subject site contains two allotments being a total size of 3950m². The land is designated as a Low Density Residential Area with the site also located within the Nundah District Local Plan area. A waterway corridor is located across the northern section of the site and a wetland area is located adjoining the northern and eastern boundaries. A flood regulation line is also present through the middle of the site. The flood regulation line and boundary of the waterway corridor create the limit to development in the northern section of the site. The proposal has been designed to ensure the building's are compatible with the intended amenity of the surrounding area and the physical constraints that are present on site. Minimum floor heights have been determined from Council's Q100 flood levels that are present on the site.

The development site currently contains two buildings which are to be removed as part of this application. 14 Elson Street contains a single detached dwelling while 31 Mann Avenue contains a duplex structure currently utilised as a multi unit dwelling. The proposed units will be a maximum of two storeys in height and each unit will contain three bedrooms. Each unit is provided with internal car accommodation for one vehicle and sufficient private open space within each respective courtyard and balcony area. The bulk and density of the development has been lessened with the provision of three separate buildings in addition to the projections, recessions and balconies present within the design of each structure.

One access point will cater for all vehicles movements creating a clean and attractive development providing access to each unit's individual private parking space and five additional visitor car parks.

It is noted that a waterway corridor covers a large portion of the northern section of the site. However, the natural functions present within the corridor are not to be affected as no building work is to be undertaken within corridors boundaries. All vegetation currently existing within the waterway corridor is to be retained. A wetland area also exists on the northern and eastern boundary of the property which slightly encroaches within subject site. It is considered that minimal impacts will occur to this wetland as a result of this development as all proposed building work has sufficient separation to the identified wetland area. It should also be noted that the wetland area contains minimal wetland characteristics being largely a cleared, grassed space.

The overall development of the residential units has a Gross Floor Area of 25.49% of the site area. As demonstrated within this assessment and on the included Development Plans, the size and scale will satisfy the expectations of the Brisbane City Council and all adjoining residents by complimenting the existing and future residential scale of adjoining properties. Along with its close proximity to a major transport route being Nudgee Road, Brisbane city bus services stops, high quality recreation, shopping and educational facilities the developments proposed intensity of use is consistent with City Plan outcomes.



2.2 Suitability of Development

31 Mann Avenue & 14 Elson Road, Northgate is a very desirable location for a residential development of this nature. The subject site is well located in close proximity to a number of high quality shops, educational and recreational facilities including:

- A convenience centre on the corner of Melton Road and Toombul Road.
- A large number of employment opportunities within surrounding industrial areas;
- The Northgate Railway Station is within 700m walking distance to the subject site.
- Toombul Road, Nudgee Road and Melton Road provide major transport corridors. Brisbane city bus service are present on these roads.
- There are a large number of park and open space areas surrounding the site including Northgate Reserve, Brisbane Grammar Playing Fields.
- Northgate Primary School, Nundah Primary School, Nudgee Primary School and Banyo School.

The greater Northgate area has a residential amenity that is largely characterised by low density, well vegetated residential living.

3. Site History

3.1 Current Use of the Site

The site is currently contains two residential buildings which are to be removed as a result of this application. 14 Elson Street contains a single detached dwelling while 31 Mann Avenue contains a duplex structure currently utilised as a multi unit dwelling. The site's land classification is a Low Density Residential Area.

3.2 Previous Application History

To our knowledge there have been no previous town planning applications on the subject land apart from the original subdivision that created the allotment. It should be noted however that 31 Mann Avenue is currently utilized a duplex.

3.3 Pre-lodgement Advice

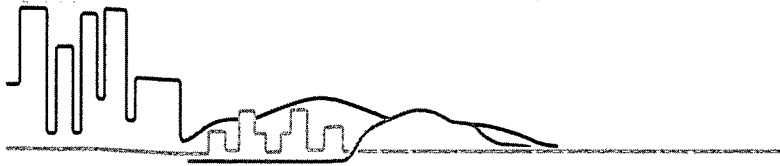
Formal pre-lodgement advice was not sought in relation to this application due to its simplistic nature.

4. Site Characteristics & Context

4.1 Existing Environment

Site Dimensions

The site has an irregular shape with frontage to Mann Avenue & Elson Road of 26.827m and an average depth of 83.196m. The property has a maximum site area of 3950m².



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Topography

The land concerned has a slightly sloping topography with a level of 3.82m AHD found in the western (road frontage) corner of the site. The site then slopes are to a height of 1.54m AHD in the north eastern corner of the property.

Structures

The site is currently contains two residential dwellings on individual lots which are to be removed.

Vegetation

The site consists of mainly ornamental vegetation located in various areas of the site. Where possible all existing vegetation will be retained and is envisaged to be included in the future landscaping of the property. There are no remnant vegetation communities onsite, however, the site is identified as having waterway and wetland vegetation.

Flood Prone Areas or Watercourses

A Flood Regulation Line exists within the site which creates the boundary line for the proposed residential development. A Brisbane City Council flood report for the site identifies a maximum Q100 flood level of 3.4m. As such, all minimum habitable floor levels have been adjusted to provide the required flood immunity.

4.2 Existing Services & Infrastructure

Water Supply

Underground water reticulation already exists to the allotment from the infrastructure within the Mann Avenue & Elson Road reserves. The new dwellings will be serviced from this point.

Sewerage

Underground sewerage reticulation already exists to the allotment, constructed from the sewerage line located through the rear of the property.

Stormwater Drainage

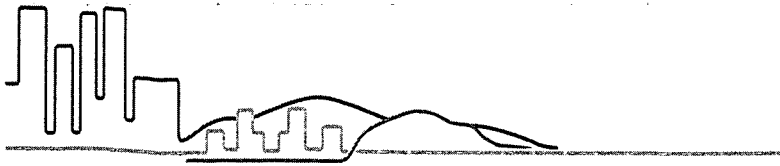
Stormwater drainage is achieved in the existing manner by draining the stormwater along the natural slope of the site toward the north eastern corner being the legal point of discharge. The proposal does not effect or hinder future development of the site or immediate surrounds and does not require the consent of adjoining neighbours in the completion of works.

Electricity

The site is serviced with overhead electricity services from the Mann Avenue & Elson Road reserve. Each unit is to be provided with an individual connection.

Telecommunications

Underground telecommunication infrastructure is already constructed on site, from within the immediate Mann Avenue & Elson Road reserve. Each unit will have an individual connection.



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Access & Traffic

The existing lot has direct frontage to Mann Avenue & Elson Road, which are fully constructed, including kerb and channeling along the frontages of the site. There will only be a minor increase in traffic as a result of this development.

4.3 Easements

There are no easements currently located upon the subject site.

4.4 Surrounding Development

The site is adjoined primarily by one and two storied timber dwellings that are also located within the Low Density Residential Area.

4.5 Anticipated Future Development in the Area

As the site is located within a Low Density Residential Area it is considered that the use of surrounding properties will remain the same.

5. State Planning Policies

5.1 Development and the Conservation of Agricultural Land SPP – 1/92

No agricultural land is to be affected as a result of the establishment of the proposed use.

5.2 Development in the Vicinity of Certain Airports and Aviation Facilities SPP – 1/02

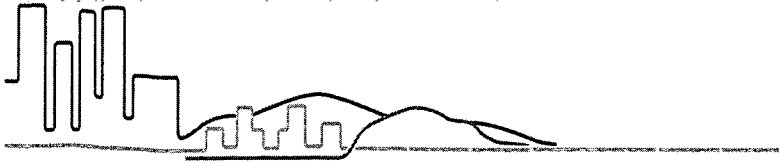
No land surrounding an aerodrome or any other aeronautical facility is to be affected as a result of the establishment of the proposed use.

5.3 Planning and managing Development involving Acid Sulphate Soils SPP – 2/02

No land affected by Acid Sulphate Soil is to be effected as a result of the establishment of the proposed use.

5.4 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide – SPP 1/03

No land is affected by impacts of flood, bushfire and landslide as a result of the establishment of the proposed use.



6. Southeast Queensland Regional Plan 2005

The development site is identified under South East Queensland Regional Plan 2005 as being located within the Urban Footprint land use category.

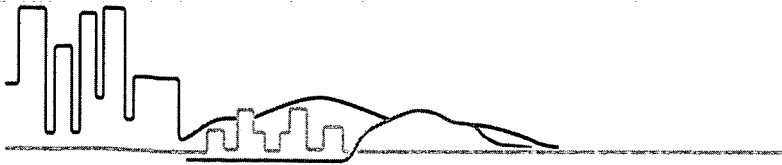
The projected population increase, combined with the continuing trend towards smaller households, will require an estimated 1305,000 new dwellings to be constructed in the region between 2004 and 2026. It is widely recognised that the continued provision of a high proportion of these dwellings at low-densities on the urban fringe is unsustainable both in terms of land consumption and the cost of providing urban services. To promote consolidation within the Urban Footprint, the Regional Plan:

- *sets targets by local government area for increasing the proportion of new dwellings provided through infill or redevelopment to achieve an aggregate target of 40 percent of all new detached and attached dwellings constructed in the region between 2004 and 2016, increasing to 50 per cent between 2016 and 2026;*
- *requires major new residential developments to maximize residential yield, taking account of location, topography and demonstrated community need;*
- *requires higher density residential development to be focused within and around Regional Activity Centres and public transport nodes including TOD sites to improve accessibility to existing and planned facilities and services.*

The Regional Plan proposes a new approach based on managing rather than responding to growth and leading the desired results through timely provision of infrastructure and assisting employment creation. The Regional Plan states that: *"Future urban growth in SEQ will be consolidated around urban activity centres and public transport nodes. New residential areas will be developed at densities that support public transport services. Land and infrastructure will be used more efficiently and economically."*

The proposal is consistent with the South East Queensland Regional Plan 2005 principles and policies in that it:

- *Is efficiently using land within existing residential allotments by increasing the residential yield of the property to a higher percentage which is currently allowable under Brisbane City Council current requirements;*
- *The proposal adds to the mix of different housing types and creates a higher density of development consistent with the current demand in the greater Northgate area;*
- *The efficient provision of infrastructure and services from within the site and the adjoining road reserves;*
- *The site is in close proximity to major public transport corridors being Nudgee Road and Toombul Road while also being located within walking distance of Northgate Railway Station, high quality public open space areas, high schools, universities and shopping facilities; and*
- *The development incorporates a built form consistent with the character and scale of the surrounding area;*



7. Brisbane City Plan 2000

7.1 Strategic Plan

The City Plan sets out to achieve the specific Desired Environmental Outcomes as determined both Citywide and specific Local Plans for the respective areas. The subject land is located within the Residential Neighbourhoods Element of the city as depicted on the City Structure Plan, Map A contained within the City Plan. This element represents that part of the city that had either been developed or intended to be developed for urban purposes either residential or supporting residential.

This application is considered consistent with the Desired Environmental Outcomes of the City Plan.

7.2 Low Density Residential Area Designation

The site is contained included in the Low Density Residential Area designation under the City Plan. The City Plan states:

The predominant form of development is detached houses, one or two stories in height.

The specific desired environmental outcomes include:

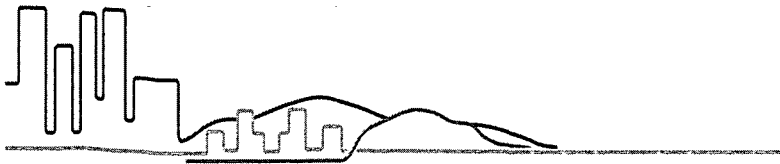
- *Low density living environments predominantly comprise separate houses of no more than 2 storeys.*
- *Neighbourhoods have a distinctive subtropical character where low rise buildings are set in green landscape areas. Natural features such as creeks, gullies, waterways and vegetation are retained.*
- *In Demolition Control Precincts pre-1946 buildings are largely retained and new buildings reflect many of the Precincts architectural themes.*

The proposal achieves the desirable environmental outcomes and is consistent with the City Plan objectives in that it:

- Is consistent with the anticipated land uses;
- Is compatible with existing land uses and developments in proximity to the site;
- It offers a mix of housing types through the incorporation of and additional dwellings that reflect the demands of resident needs; and
- The site is in close proximity to major public transport corridors being Nudgee Road and Toombul Road while also being located within walking distance of Northgate Railway Station, high quality public open space areas, high schools, universities and shopping facilities; and

7.3 District Local Plans

The subject site is located within the Nundah District Local Plan boundary, However this local plan does not alter the level of assessment prescribed in Chapter 3 of *City Plan 2000*. It is noted that a bikeway/walkway is proposed along the rear of the site within the waterway corridor area.



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7.4 Development Assessment Codes

The level of assessment table for Low-medium Density Residential Area designates the following codes for assessment of the application components.

Residential Design – Low Density, Character and Low-medium Density Code

An assessment against the Residential Design – Low Density, Character and Low-medium Density Code is provided in Appendix 3. The proposal complies with this code.

Transport, Access Parking and Servicing Code

An assessment against the Transport, Access Parking and Servicing Code is provided in Appendix 3. The proposal complies with this code.

Services, Works and Infrastructure Code

The site will be provided with all normal urban service infrastructure. An assessment of this code is provided in Appendix 3. The proposal complies with this code.

Stormwater Management Code

An assessment against the Stormwater Management Code is provided in Appendix 3. The proposal complies with this code.

Wetland Code

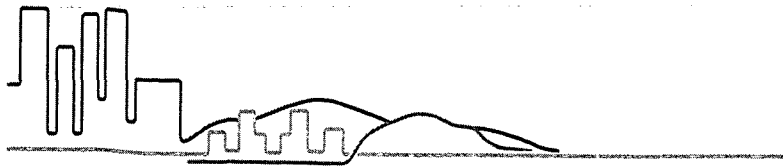
An assessment against the Wetland Code is provided in Appendix 3. The proposal complies with this code.

Waterway Code

An assessment against the Waterway Code is provided in Appendix 3. The proposal complies with this code.

Biodiversity Code

An assessment against the Biodiversity Code is provided in Appendix 3. The proposal complies with this code.



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8. Community Consultation

Public comment will be sought under Section 3.2.7 of the *Integrated Planning Act* 1997. This application is deemed to be an **Impact Assessable** application and as such requires public notification. Public notification will be carried out as follows:

- commence within 20 days of receipt of advice from Council
- place a notice on the principal road frontage of the land on which it is intended to carry out the development in accordance with the *Integrated Planning Act*
- publish a notice in a newspaper circulating generally in the Brisbane City area (such as the *Courier Mail*, *Sunday Mail* or *The Australian*)
- Give a letter to the owners of all adjoining land in accordance with the *Integrated Planning Act*
- A statement of compliance is to be submitted to Council upon completion of the public notification period, indicating how the public notification requirements have been complied with.

A minimum of 15 business days will be allowed between the closing date for lodging comments, and the time the notice is placed on the land or a letter is given to all adjoining owners (whichever is the later).

9. Technical Reports

In conjunction with this Development Assessment Report, a number of technical reports have been prepared by specialist consultants to support the proposal. These reports are attached to this Development Assessment Report.

The key issues derived from these reports are outlined below:

Environmental Traffic Noise Level Study (David Moore & Associates Pty Ltd)

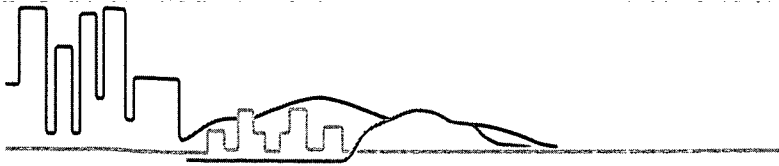
Key management issues for the proposal's noise issues:

- The daytime noise omitted from the adjacent industrial area is within the daytime noise level limits.
- No industrial activities were determined to be undertaken at nighttime.
- 2.1 metre high acoustic barrier is required adjoining the driveway area on the western boundary to mitigate the effects of onsite vehicle activities on the adjoining residence.

Site Based Stormwater Management Plan (Swaan Consulting Pty Ltd)

Key management issues for the proposal's stormwater assessment issues:

- An Erosion and Sediment Control Plan will be implemented during the construction phase of the proposal;
- Stormwater discharged from the site will be subject to the following water quality treatments:



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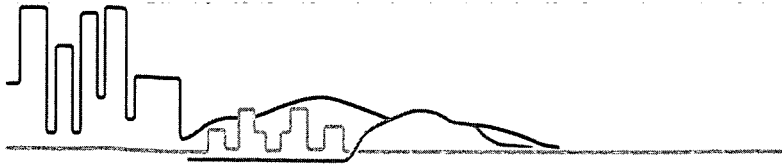
- Buffer Strips – Vegetated strips of turf where sheet flow will be dissipated and infiltrated into the ground;
- Swales – Will be utilized to convey stormwater in lieu of or with underground pipe drainage systems.
- Water tanks will also be provided for each unit. The water tanks will be 3000 litres in size.

10. Referrals

The proposed development does not require referral to any Referral Agency under the Integrated Planning Regulations.

11. Environmentally Relevant Activities

The proposed development does not constitute an Environmentally Relevant Activity under the Environmental Protection Regulations.



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12. Conclusions

This proposed development is in accordance with the intent of the area classification and adjoining land uses as determined under the Planning Scheme along with the identified local and site specific needs.

We are of the opinion that the proposed development is suitable for the subject site as its size, scale and design is consistent with surrounding properties and Council's requirements for the greater Northgate area. The proposed new dwelling units have been specifically designed for their intended location as they take into consideration the general architectural themes of the surrounding properties and the adjoining residents amenity and aspirations.

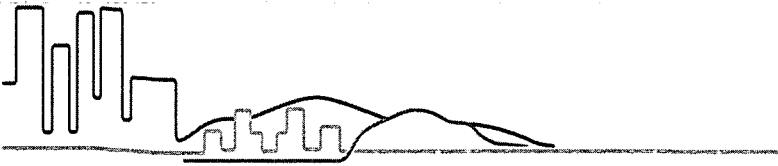
The development is consistent with good planning outcomes and caters for the future residential needs of the city of Brisbane.

This report has addressed all significant issues considered by Council relevant to this development, and trust this application will be given the utmost consideration in Council's comprehensive assessment.

The benefits of the proposed development far outweigh the impacts of the project, as all associated outcomes can be suitably managed.

In consideration of these matters, it is the opinion of this report that this application should be approved.

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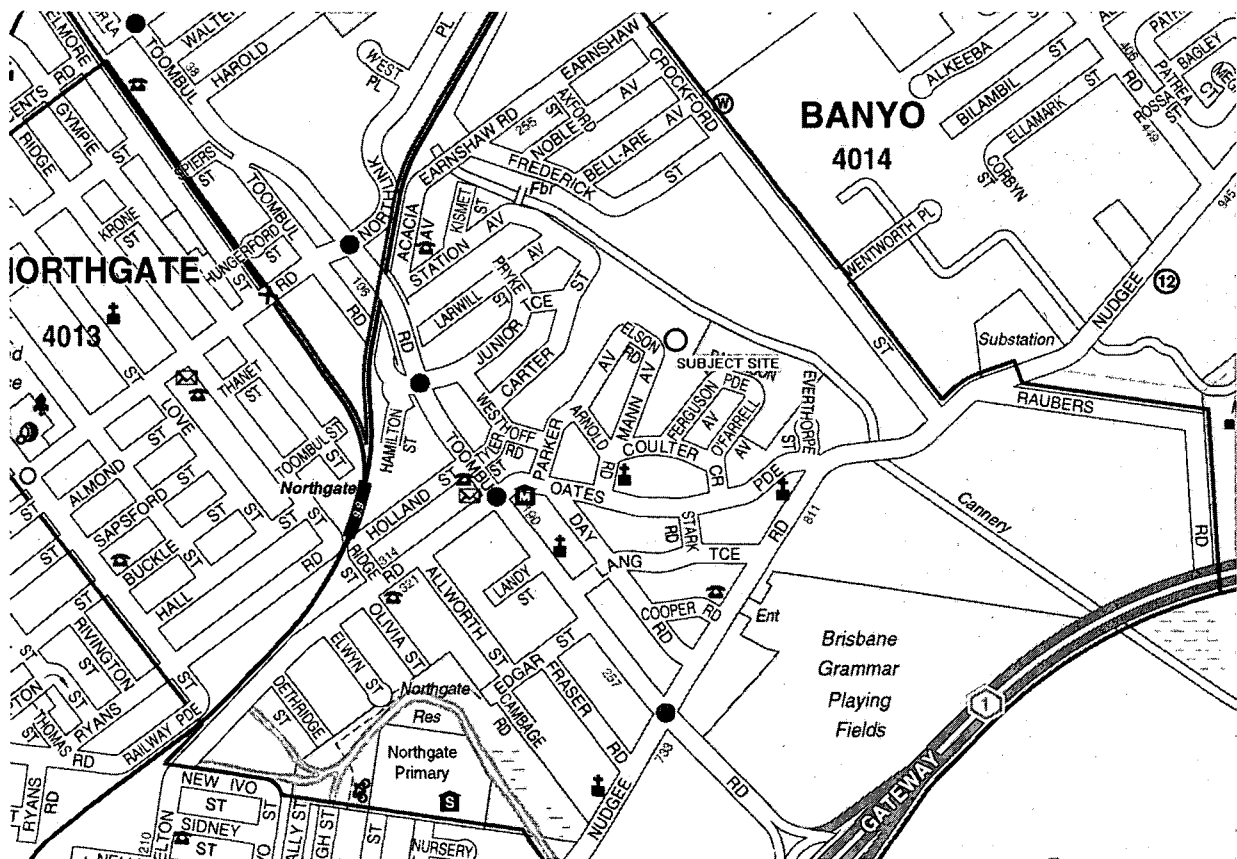
Appendix

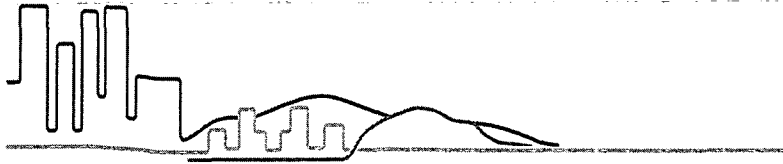
1. Subject Site location from UBD
2. Photographs of Subject Site
3. Assessment of applicable codes.

Drawings and Plans Submitted for Approval

1. Multi-unit dwelling plans prepared by Dowroyle Master Building Designers Drawings C7019 TP1 - 32;
2. Site Based Stormwater Management Plan prepared by Swaan Consulting Pty Ltd;
3. Environmental Industrial Noise Assessment prepared by David Moore & Associates – Environmental Acoustic Consultants.

1. Subject Site from UBD





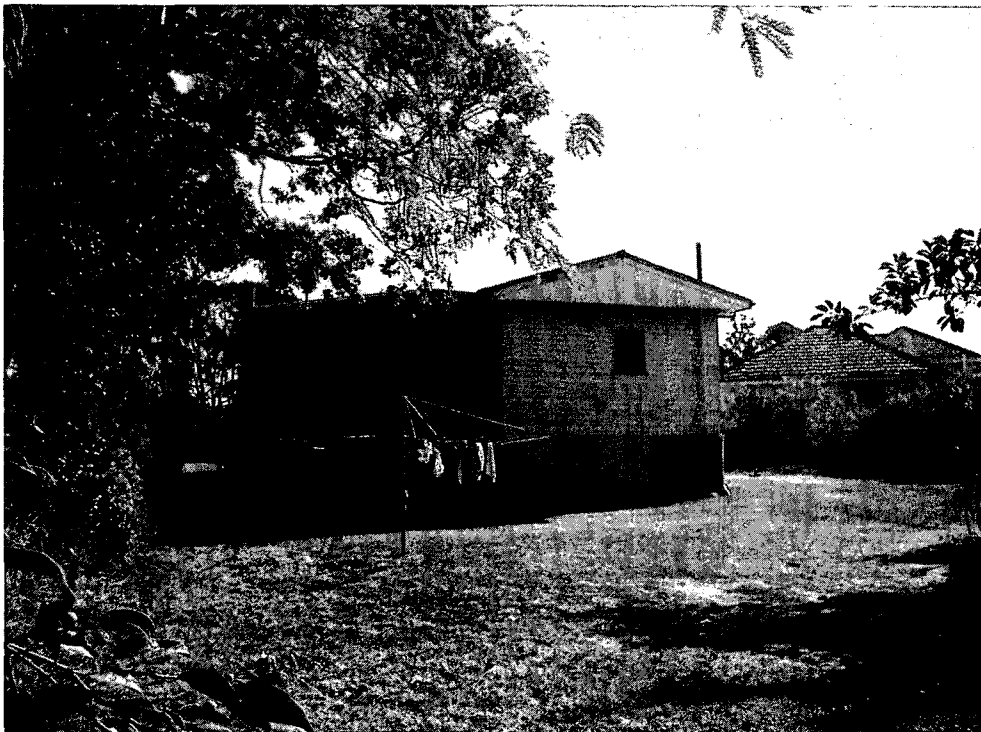
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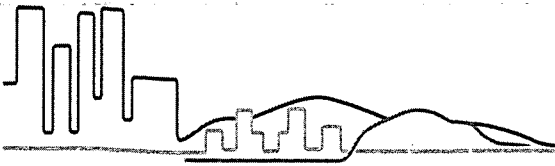
2. Photographs of Subject Site

Frontage of 31 Mann Avenue (Multi Unit Dwelling)



Rear of 31 Mann Street





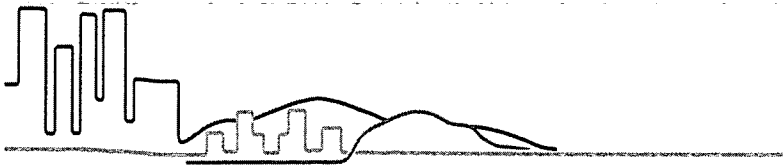
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Frontage of 14 Elson Street



Eastern Boundary of Subject Site





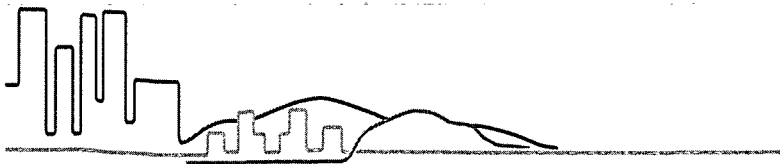
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Rear Section of the Subject Site. The Fence Line is in the Approximate Location of Flood Regulation Line



Wetland Area in Adjoining Lot 58 on RP34599





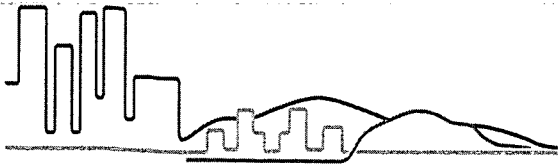
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Adjoining Parkland Area along the boundary of Lot 58 on RP34599 & 59 on RP34599



Wetland Area in Lot 58 on RP34599





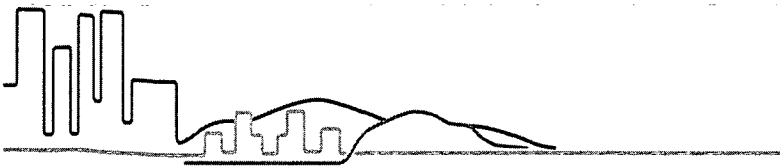
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Adjoining Dwelling at 29 Mann Avenue



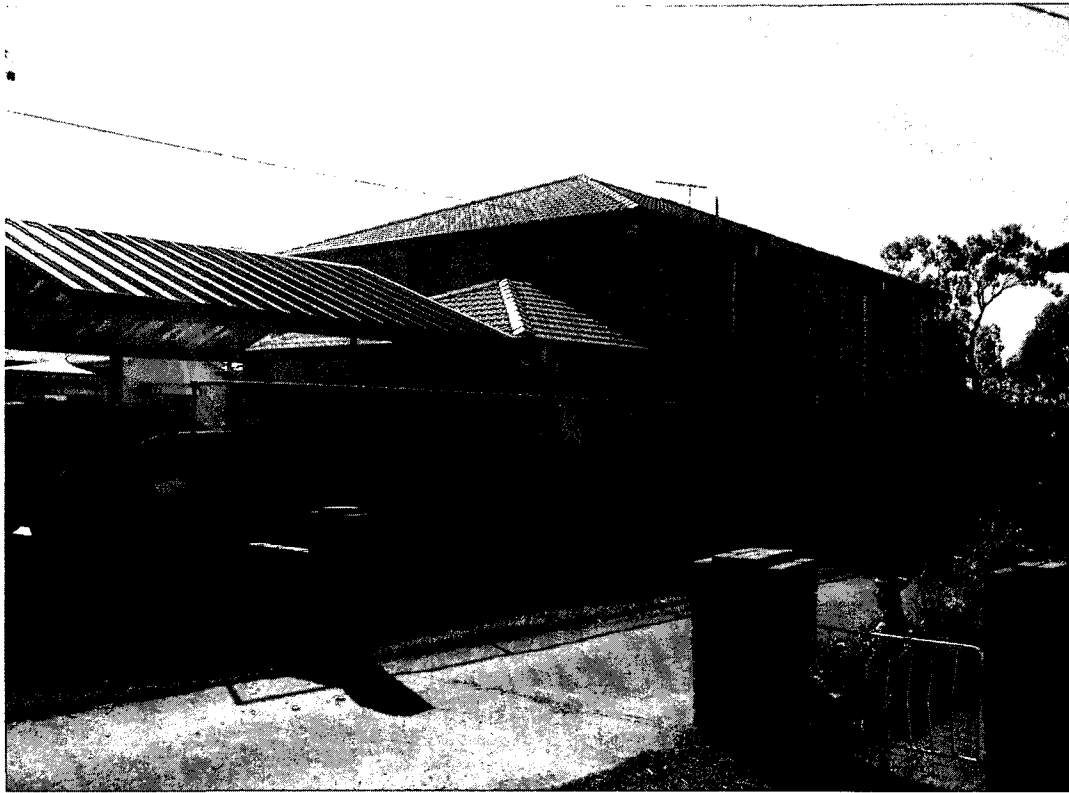
Adjoining Dwelling at 12 Elson Road





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Adjoining Dwelling at 8 Elson Road

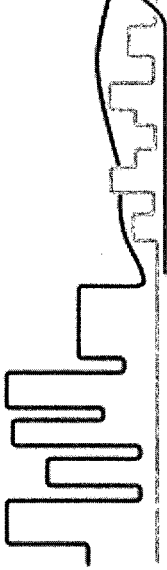


Residential Design – Low Density, Character and Low-medium Density Code

Performance Criteria and Acceptable Solutions

4.1 Multi-unit dwellings in Low Density Residential Areas

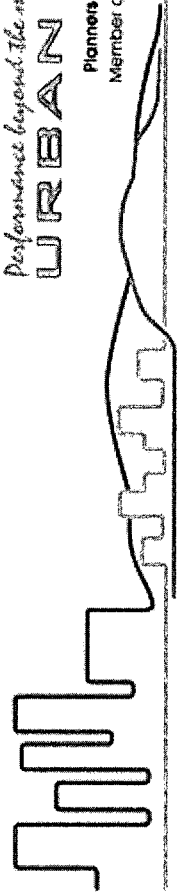
Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	Building size and bulk must be consistent with the low density nature of the locality	<p>A1.1 Gross floor area is no more than 0.3 times the site area</p> <p>A1.2 Building height at any point is no more than 8.5m above ground level and 2 storeys</p> <p>A1.3 The site area is a minimum of 3,000m² and has a minimum frontage of 40m</p>	<p>Compliant The proposed GFA of the site is 1007m² which equates to 24.59% of proposed site area. GFA calculations are depicted on Drawings 23 & 24.</p> <p>Compliant The development proposes a maximum height of 2 storeys and 8.5m above ground level. Please see Drawings 5, 6, 9, 10, 13, 14, 17, 18, 21 & 21 clearly demonstrate this.</p> <p>Compliant The subject site has a maximum area of 3950m². The sites road frontage is only 26.827m in width, however, it is considered that there is sufficient area within the site to effective house this development.</p>	
P2	Larger developments must integrate with the neighbourhood and form part of the local street network	<p>A2.1 Development on a site over 3,000m²:</p> <ul style="list-style-type: none"> • includes some houses, particularly near road frontages, with the proportion of houses increasing for larger sites • is connected to and part of the neighbourhood rather than a separate semi-private enclave • is integrated with the existing or proposed local street network • provides for legible and direct access for all residents to surrounding and future community facilities in the area such as schools, parks, neighbourhood shops and public transport • clearly defines public, communal and private open space <p>Refer to <i>Figure a</i></p>	<p>Compliant The development has been designed with five separate buildings to house the 10 units. Unit 1 has been provided as a stand alone house close to the road frontage of the site while Units 2, 3 & 4 present a similar appearance to that of a typical residential dwelling.</p> <p>The development will be connected to the surrounding street environment with the front setbacks of Units 1 & 2 being consistent with the adjoining properties.</p> <p>The development will be incorporated into the existing road and pedestrian networks in the</p>	



		<p>A2.2 Where two adjoining sites each contain over 5,000m², they will be separated by public road/s and detached housing OR All dwellings are within 60m of a public road Refer to <i>Figure b</i></p>	N/A	<p>directly surrounding area. Not Applicable The subject site does not have a land area over 5000m².</p>	
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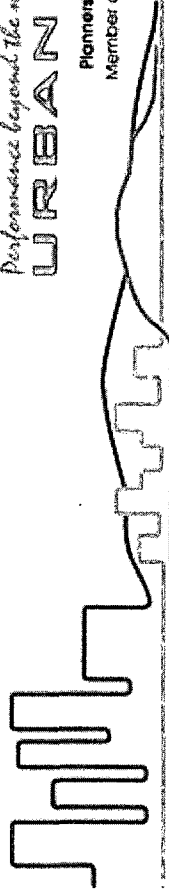
5 Part B—General Performance Criteria and Acceptable Solutions for multi-unit dwellings

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	<p>Building design and setting The appearance of building bulk must be reduced by design elements</p>	<p>A1.1 The building bulk is reduced by a combination of: • verandahs • recesses • variation in materials, colours, and/or textures including between levels • variation in building form Refer to <i>Figure d</i></p>	<p>✓</p> <p>Compliant The bulk of the proposed buildings has been reduced with a number of recesses, projections and balconies which can be seen on the elevation plans being Drawings 5, 6, 9, 10, 13, 14, 17, 18, 21 & 21.</p> <p>The use of different building materials and textures such as rendered brick work and timber cladding also provides variation between floor levels.</p>	
		<p>A1.2 Roofs include pitches, gables or skillions</p>	<p>✓</p> <p>Compliant All sections of the roof include the appropriate pitch.</p>	
		<p>A1.3 Services structures and mechanical plant are screened or designed as part of the building</p>	<p>N/A</p> <p>Not Applicable No services structures or mechanical plants are included in this proposal.</p>	
P2	<p>The development must be orientated to the street and facilitate casual surveillance of the street Note: North or north-east facing windows, balconies or decks may be permitted to provide lesser levels of privacy than would otherwise be allowed by this Code where this will significantly improve</p>	<p>A2 Building has large windows or balconies facing the street Refer to <i>Figure d</i></p>	<p>✓</p> <p>Compliant Each unit with street frontage (Units 1 & 2) has large windows and/or balcony areas that are orientated towards the street frontage.</p>	



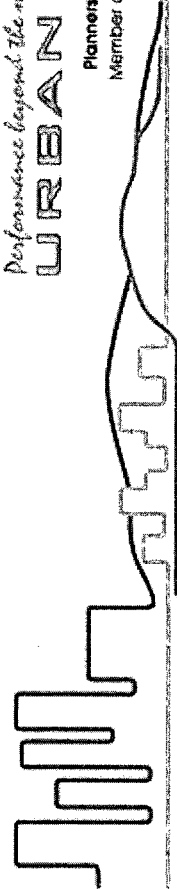
	<i>passive solar design</i>			
P3	Screening and partial enclosure of balconies is limited to provide privacy for neighbours and comfort for residents without resulting in unattractive buildings or an appearance of excessive bulk or restricting opportunities for passive surveillance of the street	<p>A3.1 Screening of balconies is limited to the side and rear boundaries and the sides of balconies between those units where needed to prevent noise and overlooking of other units or dwellings and recreation areas</p> <p>A3.2 Street frontages of balconies are not screened or enclosed by shutters, glazing, louvres, or similar permanent structures</p>	<p>✓</p> <p>Compliant All balconies have been provided with screening where required as part of this application.</p>	
P4	The front setback must complement the setbacks prevailing in the street	<p>A4.1 In established areas, the front setback is within 20% of the average setback of adjoining buildings</p>	<p>✓</p> <p>Compliant The average front setback of the buildings adjoining Unit 1 both existing and proposed creates a setback range of 6.64m - 9.9636m. As such, the proposed setback of Unit 1 being 7.211m is considered appropriate.</p> <p>The average front setback of the buildings adjoining Unit 2, both existing and proposed, creates a setback range of 6.884m-10.3266m. As such, with the angled front boundary of this lot the average front setback of Unit 2 being 7.7m is consistent with adjoining properties.</p> <p>It should be noted that the dwellings directly adjoining the subject site have front setbacks that are larger than typical residential areas where the setback is generally closer to 6m from the road boundary.</p>	
P5	Landscaping must be consistent with the established landscape character of the area and accommodate the retention of existing vegetation, including street trees	<p>A4.2 In newly developing areas, the setback from a street frontage is a minimum of 3m</p> <p>A5 Established trees are retained where removal is not required to site new buildings</p>	<p>N/A</p> <p>Not Applicable</p>	
			<p>✓</p> <p>Compliant All existing vegetation will be retained where possible within the development area while all vegetation within the waterway corridor will remain as it currently exists.</p>	

P6	The development must include landscaping that contributes to a pleasant and safe environment and integrates well with the neighbourhood	<p>A6.1 Landscape design allows the overlooking of the street and pedestrian entry areas</p> <p>A6.2 Landscape design emphasises a clear pedestrian entry point</p>	✓	<p>Compliant Landscaping of the site will allow for overlooking of each adjoining street and the pedestrian entry point from Elson Road & Mann Avenue available adjoining the driveway area.</p> <p>Compliant Pedestrian entry points from Elson Road & Mann Avenue are clearly legible through pathways and vegetation. This can be seen on Drawing 2.</p> <p>Compliant Landscape design allows entry points to be easily identified as can be seen on Drawing 2.</p>	
P7	<p>Fencing and walls must:</p> <ul style="list-style-type: none"> • assist the development to be orientated towards the street • assist safety and surveillance of the street and entry areas • enable use of private open space abutting the street • assist in highlighting entrances 	<p>A7.1 High solid front fences are avoided so that each dwelling unit can observe the street</p> <p>A7.2 Height of fences/walls on any road alignment does not exceed:</p> <ul style="list-style-type: none"> • 1.5m if 50% transparent • 1.2m if solid <p>A7.3 Solid front fences/walls above 1.2m high are provided only on arterial or suburban routes and:</p> <ul style="list-style-type: none"> • living areas can maintain surveillance of the street • fences longer than 10m have gates, indentations or detailing to provide visual interest • the fences are limited to 60% of the frontage where private open space fronts the street 	✓	<p>Compliant Front fences 1500mm in height and 50% transparent will be provided by this application.</p> <p>Compliant Front fences 1500mm in height and 50% transparent will be provided by this application.</p> <p>Compliant Front fences 1500mm in height and 50% transparent will be provided by this application.</p>	
P8	The location, height, extent and materials of retaining walls must be designed to minimise visual impact	A8.1 Combined height of retaining wall and fence does not exceed 2m	✓	<p>Compliant Where fencing and retaining walls are combined the maximum height will be a maximum of 2m. This can be seen on Drawing 25.</p>	



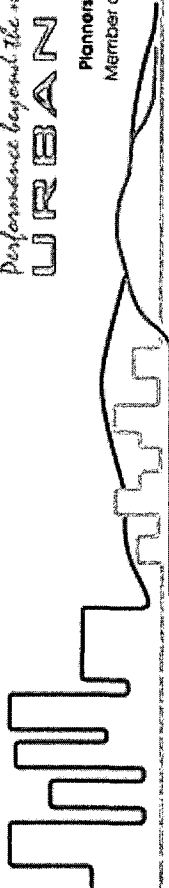
		<p>A8.2 Retaining walls are set back from any boundary and are stepped or terraced, so that landscaping can soften visual impact</p>	<p>✓</p>	<p>Compliant Where retaining walls adjoin boundaries they will create an adverse visual effect for adjoining properties.</p>	
<p>P9</p>	<p>Development must provide sufficient communal and private open space for residents needs</p>	<p>A9.1 A minimum 30% of the site is provided as open space each with a minimum dimension of 2m</p>	<p>✓</p>	<p>Compliant The proposal contains a minimum open space area of 1838m², which equates to 46.5% of site area. Additional private open space is also available within each unit's balcony areas.</p>	
		<p>A9.2 A landscape area of minimum dimension of 2m is provided along the full frontage of any road frontage (excluding crossover and pedestrian access only)</p>	<p>✓</p>	<p>Compliant A 2m wide landscaped area is provided along the Mann Avenue & Elson Road frontage. This can be seen on Drawing 2.</p>	
		<p>A9.3 For a ground floor dwelling, ground floor private open space is provided with:</p> <ul style="list-style-type: none"> • minimum area of 35m² • minimum dimension of 3m 	<p>✓</p>	<p>Compliant The following private open space areas with a minimum dimension greater than 3m are provided as follows. Unit 1 – 96m² Unit 2 – 115m² Unit 3 – 37.25m² Unit 4 – 39m² Unit 5 – 43m² Unit 6 – 43m² Unit 7 – 43m² Unit 8 – 37m² Unit 9 – 102m² Unit 10 – 83m²</p>	
		<p>A9.4 For a dwelling unit above ground level, private open space is provided as a balcony with a minimum dimension of 3m</p>	<p>N/A</p>	<p>Not Applicable All units have access to the ground floor.</p>	
<p>P10</p>	<p>Communal open space for clothes drying and common recreation facilities must be provided where a significant proportion of dwellings do not have access to ground floor private open space</p>	<p>A10 Where more than 25% of dwellings do not have access to ground floor private open space, communal open space for clothes drying and common recreation facilities is provided with at</p>	<p>N/A</p>	<p>Not Applicable All units have access to the ground floor. As such, no communal open space is required.</p>	

		least one continuous area a minimum of 50m ² with a minimum dimension of 4m		
Character				
P11	Buildings built prior to 1900 must be retained whether in a Demolition Control Precinct or not	A11 Buildings built prior to 1900 are reused, refurbished and retained	✓	Not Applicable There are no dwellings constructed prior to 1900 located on site.
Privacy and access to sunlight				
P12	Habitable spaces must not directly overlook dwellings on adjacent land <i>Note:</i> <i>North or north-east facing windows, balconies or decks may be permitted to provide lesser levels of privacy than would otherwise be allowed by this Code where this will significantly improve passive solar design</i>	A12 Where habitable room windows look directly at habitable room windows in an adjacent dwelling within 2m at ground floor level or 9m at levels above ground floor, privacy is protected by: <ul style="list-style-type: none"> • sill heights a minimum 1.5m above floor level OR • fixed opaque glazing in any part of the window below 1.5m above floor level OR • fixed external screens OR • fencing to a minimum 1.5m above ground floor level (only applies to overlooking from windows at ground floor level) OR • achieving the privacy solution shown in <i>Figure e</i> OR • where screening of decks is required, it is solid translucent screens, perforated panels, or trellises that are permanent and durable and have a maximum of 25% openings Refer to <i>Figures e, f, g and h</i>	✓	Compliant Where windows are required to be screened they have been provided with screening in accordance with Council's requirements. Please Drawings 5, 6, 9, 10, 13, 14, 17, 18, 21 & 21 for further details.
P13	Development must not significantly reduce daylight to open space and habitable rooms in adjacent development Boundary walls must be limited in dimensions and openings, to minimise the impact on neighbours	A13.1 The side boundary setback, except for a wall built to the boundary, is a minimum of: <ul style="list-style-type: none"> • 1.5m for a wall up to 4.5m high • 2m for a wall up to 7.5m high • 2m plus 0.5m for every 3m (or part of 3m) over 7.5m height for a wall over 7.5m high • less than 1.5m where the wall is no more than 3.5m high and no more than 15m long A13.2 A wall built to a side boundary has:	✓	Compliant The minimum side boundary setback to the southern boundary is 2m at the rear of Unit 2. The minimum side boundary setback to the western boundary is 2m at the rear of Unit 5.
			N/A	Not Applicable



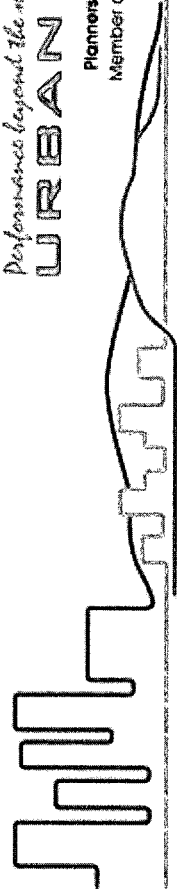
	<p>No built to boundary walls are proposed by this application.</p>		
	<p>Compliant The development provides minimum rear setbacks greater than 6m.</p>	<p>✓</p> <p>A13.3 Minimum rear boundary setback is 6m <i>Note:</i> Minimum setbacks do not apply to eaves and sun shading devices</p>	
	<p>Compliant Where practical the majority of units have been orientated towards the north.</p>	<p>✓</p> <p>A14.1 The optimal number of units are orientated to within 20° either side of north</p>	<p>P14 Development must achieve a pleasant, attractive and manageable living environment Dwellings must receive daylight and allow passage of cooling breezes through habitable rooms <i>Note:</i> North or north-east facing windows, balconies or decks may be permitted to provide lesser levels of privacy than would otherwise be allowed by this Code where this will significantly improve passive solar design</p>
	<p>Compliant Where possible main living areas have been orientated towards the north.</p>	<p>✓</p> <p>A14.2 Orientation of main living area windows to within 20° either side of north is maximised</p>	
	<p>Compliant Open space has been provided that is both functional and has good access to daylight.</p>	<p>✓</p> <p>A14.3 The majority of private open space has good access to sunlight</p>	
	<p>Compliant As depicted on the development plans the internal layout and balconies of the proposed dwelling units promote good cross ventilation for each unit.</p>	<p>✓</p> <p>A14.4 Window placement and internal layout allows cross-ventilation</p>	
<p>Car accommodation and vehicle access</p>			
<p>P15</p>	<p>Compliant Each unit is allocated with an individual car parking space located within each respective garage. All vehicle car parks are accessed from the internal driveway area. Vehicle manoeuvring within the car parking area is indicated on Drawings 26 & 27.</p>	<p>✓</p> <p>A15.1 Carparking is located underground or within a building</p>	<p>Garages, driveways and parking structures must not visually dominate the street frontage Vegetation must soften hard stand areas Refer to Figures i and j</p>

<p>P16</p>	<p>Vehicle access and parking must be safe and convenient for residents, visitors and service providers Resident and visitor parking provision must be provided according to: <ul style="list-style-type: none"> the number, size and type of dwellings proposed the availability and acceptability of kerbside parking adjacent to the site local traffic or parking management the likely preference of the occupier or target market Note: <i>Resident parking provision may be reduced from the rate specified in the Acceptable Solution where public transport is available within a reasonable walking distance or where low demand is indicated</i></p>	<p>A15.2 Vehicle movement areas are broken up by alternative materials, patterns, or threshold treatments. Crossovers are a minimum width of 3.5m</p>	<p>✓</p>	<p>Compliant The crossover proposed is a width of 5.000m. This can be seen on Drawing 2.</p>										
<p>P17</p>	<p>Vehicle access and parking must be safe and convenient for residents, visitors and service providers Resident and visitor parking provision must be provided according to: <ul style="list-style-type: none"> the number, size and type of dwellings proposed the availability and acceptability of kerbside parking adjacent to the site local traffic or parking management the likely preference of the occupier or target market Note: <i>Resident parking provision may be reduced from the rate specified in the Acceptable Solution where public transport is available within a reasonable walking distance or where low demand is indicated</i></p>	<p>A16 Off-street parking spaces are provided: <ul style="list-style-type: none"> where qualifying for a subsidy for aged persons or persons with disabilities accommodation under any law, 1 car space per 3 dwellings otherwise, as in Table 1, the total rounded up to the nearest whole number </p>	<p>✓</p>	<p>Compliant Off street car parking for 15 vehicles is provided onsite.</p>										
	<p>Table 1 Vehicle spaces for different dwelling sizes</p> <table border="1"> <thead> <tr> <th>Dwelling unit size (gross floor area)/ number of bedrooms</th> <th>Average vehicle spaces per dwelling</th> </tr> </thead> <tbody> <tr> <td>Location</td> <td>A⁽¹⁾ B⁽²⁾</td> </tr> <tr> <td>Small (<75m²) or 1 bedroom</td> <td>0.75 1</td> </tr> <tr> <td>Other</td> <td>1 1.25</td> </tr> <tr> <td>Plus per dwelling for visitors</td> <td>0.25 0.25</td> </tr> </tbody> </table> <p>Note: Tandem parking may be used where 2 spaces are provided for 1 dwelling</p> <p>⁽¹⁾ A means any part of the site is within 200m of a pedestrian entry to a railway station, busway station, or ferry terminal, or within 100m of a major road except where the site has its only access to a road where on-street parking restrictions apply</p> <p>⁽²⁾ B means any other circumstances</p>	Dwelling unit size (gross floor area)/ number of bedrooms	Average vehicle spaces per dwelling	Location	A ⁽¹⁾ B ⁽²⁾	Small (<75m ²) or 1 bedroom	0.75 1	Other	1 1.25	Plus per dwelling for visitors	0.25 0.25	<p>✓</p>	<p>Compliant Car parking is provided as follows. The development is classified as a 'type B', 'Other' and as such with 10 dwellings on the site equates to 10 x 1.25 being 12.5 and 10 x 0.25 visitor requirements equates to 2.5, thus in total requiring 15 spaces. Fifteen (15) car spaces are provided for the units and visitors. Car parking and manoeuvring will be accordance with Drawing 26 & 27.</p>	
Dwelling unit size (gross floor area)/ number of bedrooms	Average vehicle spaces per dwelling													
Location	A ⁽¹⁾ B ⁽²⁾													
Small (<75m ²) or 1 bedroom	0.75 1													
Other	1 1.25													
Plus per dwelling for visitors	0.25 0.25													
<p>P17</p>	<p>Vehicle access and parking design and location must minimise impacts on neighbouring dwellings</p>	<p>A17.1 Vehicle parking is: <ul style="list-style-type: none"> screened to minimise reflection of car headlights onto dwelling windows and attenuate noise </p>	<p>✓</p>	<p>Compliant Residential car parking will be provided with acoustic screening along a section of the</p>										



<p>Noise disturbance must be mitigated by parking area location and fencing</p>	<ul style="list-style-type: none"> • lit at night • separated from habitable windows to minimise noise and fumes disturbance <p>A17.2 Vehicle parking structures are designed and located:</p> <ul style="list-style-type: none"> • behind the building setback, or • behind or below the building so they are not visually dominant from a public street <p>Refer to <i>Figure k</i></p> <ul style="list-style-type: none"> • to be compatible with overall building design in terms of height, roof form, detail, material and colours • as close as possible to the dwellings to be served <p>A17.3 The location of visitor parking is discernible from the street</p> <p>A17.4 Acoustic screening is provided next to any vehicle movement or vehicle parking areas along the side or rear boundary</p> <p>OR</p> <p>A 2m wide vegetated buffer is provided next to any movement or parking areas along the side or rear boundary</p>	<p>western boundary to restrict any adverse impacts.</p> <p>Compliant Noise and other unwanted pollution will be significantly screened from adjacent neighbours through acoustic non-transparent fencing as depicted upon the plans.</p> <p>Compliant Signage can be located at that frontage of the site to identify to visitors that visitor car parking spaces are available within the site.</p> <p>Compliant Acoustic screening is provided along the western boundary of the property in the vicinity of the car parking area adjoining Unit 5.</p>	<p>western boundary to restrict any adverse impacts.</p>
<p>P18 Vehicle access to the site and neighbouring sites must not impede the traffic flow on arterial routes The development must have safe and convenient vehicle access to dwellings and the street network</p>	<p>A18.1 The proposal does not use an arterial route for vehicle access to the site</p> <p>A18.2 Vehicle access is provided to abutting sites that only have frontage to an arterial route, to facilitate access to the abutting site via an alternative street</p>	<p>Compliant Mann Avenue or Elson Road are not classified as Arterial Routes.</p> <p>Not Applicable</p>	<p>Compliant Mann Avenue or Elson Road are not classified as Arterial Routes.</p> <p>Not Applicable</p>
<p>Managing light and noise impacts P19 Light nuisance must be minimised</p>	<p>A19 Outdoor lighting complies with the requirements of the AS4282—Control of the Obtrusive Effects of Outdoor Lighting</p>	<p>Compliant Outdoor lighting will comply with the requirements of the AS4282 – Control of the Obtrusive Effects of Outdoor Lighting. This should be conditioned appropriately.</p>	<p>Compliant Outdoor lighting will comply with the requirements of the AS4282 – Control of the Obtrusive Effects of Outdoor Lighting. This should be conditioned appropriately.</p>

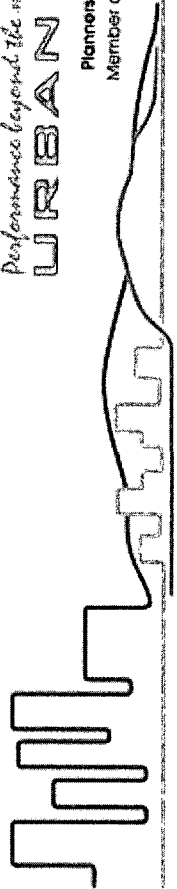
<p>P20</p>	<p>Noise from the development must not affect existing or likely future dwellings on adjacent land unreasonably</p>	<p>A20.1 Vehicle movement areas are located a minimum of 3m from any adjoining dwellings, or are provided with acoustic screening to the boundary</p> <p>A20.2 Any air conditioning plant is located toward the centre of the site</p> <p>A20.3 Communal open space is located a minimum of 3m from adjoining dwellings or provided with acoustic screening</p> <p>A20.4 The development complies with the Noise Impact Assessment Planning Scheme Policy</p>	<p>✓</p>	<p>Compliant The vehicle movement area is provided with acoustic screening along the western boundary as recommended by the Noise Impact Assessment.</p>
<p>P21</p>	<p>Exposure of new dwellings to noise must be minimised</p>	<p>A21.1 Noise impacts on dwellings located within 150m of a Centre, Industry Area, rail corridor, road corridor (suburban routes, motorways and arterial routes) or within a noise exposure of 20ANEF or greater are mitigated to comply with the requirements of the Noise Impact Assessment Planning Scheme Policy Refer to <i>Figure m</i></p>	<p>✓</p>	<p>Compliant A Noise Impact Assessment has been prepared by David Moore & Associates which indicates that noise from the adjoining industrial area is not of a level to require any noise mitigation measures.</p>
<p>Utilities and services</p>				
<p>P22</p>	<p>Waste disposal and collection areas must be unobtrusive, and adverse impacts on neighbouring properties must be mitigated</p>	<p>A22.1 Garbage bin storage and collection areas are located on site and are screened from view</p> <p>A22.2 For buildings of ten or more units, on-site bin storage:</p> <ul style="list-style-type: none"> • is not located within 5m of a property boundary • is located where it can be accessed by refuse collection services • is located within the main building 	<p>✓</p>	<p>Compliant Waste collection will occur via bulk bin collection. The bulk bin corral located near Unit 1 has been provided with suitable screening. It is anticipated that Council refuse trucks will be able the reverse up to the bin storage area and load the bins via the rear load method.</p>



Affordable housing outcomes		
<p>Low cost housing is encouraged through development bonuses but only if it does not compromise local amenity</p>	<p>A23 If accommodation provides lodging for permanent residents or is administered by a housing cooperative, a Government or Council agency or charitable organisation to provide low cost, special needs housing or aged care accommodation for at least 10 years and height limits and setbacks are complied with:</p> <ul style="list-style-type: none"> the plot ratio of low cost and special needs housing may exceed the plot ratio applicable to multi-unit dwellings in the area on-site parking may be less than otherwise stated in this Code provided it meets expected requirements 	<p>N/A</p>
		<p>Not Applicable The development is intended for residential uses in a Low Density Residential Area, and is not low cost housing</p>

Transport, Access, Parking and Servicing Code
Performance Criteria and Acceptable Solutions

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
<p>P1</p>	<p>Development with high traffic generating potential must give suitable consideration to transport/land use issues</p>	<p>A1 For any development with:</p> <ul style="list-style-type: none"> more than 500 low turnover (employee) parking spaces or 200 high turnover (customer or visitor) parking spaces <p>OR</p> <ul style="list-style-type: none"> access to any roads other than minor roads <p>OR</p> <ul style="list-style-type: none"> a driveway within 100m of a signalised intersection <p>the transport impacts of the proposal are addressed in accordance with the Transport, Access, Parking and Servicing Planning Scheme Policy</p>	<p>✓</p> <p>Compliant The proposed development is of a relatively small residential scale with low traffic generation, and does not warrant the installation of any further road networks.</p>	
<p>P2</p>	<p>The development must be designed to encourage customers and employees to walk, cycle or use public transport to and from the development instead of using a car</p>	<p>A2 The proposal provides convenient and safe pedestrian and cyclist facilities for access from existing and proposed public transport facilities and public areas</p>	<p>✓</p> <p>Compliant The site is within close proximity to Brisbane City Bus service stops on Oates Parade and Melton Road and is located in close proximity to high quality recreation areas.</p>	



<p>P3</p>	<p>The development must be located on roads identified in the City's Road Hierarchy as appropriate for that type and size of development and/or must be located appropriately in relation to public transport facilities to encourage their use</p>	<p>A3 The proposal is self or code assessable in the Area in which the site is located. Land uses that are consistent with walk-up access will be favoured</p>	<p>✓</p>	<p>Compliant The proposed development is suitable for the residential area in which it is located, with a road system that is appropriate for the scale and nature of the proposal.</p>
<p>P4</p>	<p>Relevant development must not compromise the functions of particular roads as indicated in the City's Road Hierarchy</p>	<p>A4.1 There is no direct access to motorways or arterial routes A4.2 Major traffic generators are only accessed from district or suburban roads</p>	<p>✓</p>	<p>Compliant The site does not adjoin or have direct access to any major transportation routes.</p>
<p>P5</p>	<p>Development must not impact adversely on the safety or operations of the road system</p>	<p>A5.1 One vehicle footpath crossing is provided in accordance with the design vehicle table and site access design guidelines in the Transport, Access, Parking and Servicing Planning Scheme Policy A5.2 A vehicle manoeuvring area is provided on site in accordance with the design vehicle table and servicing layout design guidelines in the Transport, Access, Parking and Servicing Planning Scheme Policy so that the design vehicle can enter and leave the site in a forward gear</p>	<p>✓</p>	<p>Compliant A one vehicle footpath crossing is provided 5.000m in width for access into the Multi-unit dwelling lot in accordance with the Transport, access, parking and Servicing planning scheme policy. Compliant A vehicle manoeuvring area is provided in accordance with the Transport, Access, Parking and Servicing Planning Scheme Policy to ensure vehicles can enter and leave the site in a forward direction. This is demonstrated on Drawings 26 & 27.</p>
<p>P6</p>	<p>Access, parking and servicing must not reduce the amenity of lands in the vicinity of the site</p>	<p>A6.1 Vehicular site access is located in accordance with the site access design guidelines in the Transport, Access, Parking and Servicing Planning Scheme Policy A6.2 Vehicle site access is provided in accordance with <i>Figure d</i> Standard Non-residential Vehicle Crossing, in Section 3.5.2 of the Transport, Access, Parking and Servicing Planning Scheme Policy</p>	<p>✓</p>	<p>Compliant Internal access is provided in accordance with the Transport, Access, Parking and Servicing Planning Scheme Policy. Residential (Type A) driveways in accordance with <i>table 8</i> is considered acceptable for streetscape enhancement as Mann Avenue & Elson Road may be considered as an Access Route. The proposed 5.0m wide accessway into the development complies with layout dimensions for a W1 usage and driveway type while providing sufficient area for vehicle manoeuvring within the driveway area</p>

				allowing safe and efficient access into all car parking spaces. This can be seen on Drawings 26 & 27. Construction of the access way will also comply with the requirements of Figure d within Transport, Access, Parking and Servicing Planning Scheme Policy	
P7 Vehicle parking The layout of development must achieve adequate provision for on-site vehicle parking that is clearly defined, safe and easily accessible and must be designed to contain potential adverse impacts within the site Vehicle parking: <ul style="list-style-type: none"> • must not detract from the aesthetics or amenity of an Area • must discourage on-street parking where parking has adverse traffic management, safety or amenity impacts • must be consistent with convenient pedestrian and cyclist access 	<p>▼</p> <p>A7.1 Parking bays, manoeuvring areas and driveways are designed with the dimensions and to the standards set out in the carparking table and carparking layout design guidelines in the Transport, Access, Parking and Servicing Planning Scheme Policy</p> <p>A7.2 For development for any of the uses listed in column 1 of the carparking table, on-site carparking complies with column 2 of that table in the Transport, Access, Parking and Servicing Planning Scheme Policy, except for non-residential development in the City Centre or City Frame</p> <p>A7.3 On-site carparking numbers for development in the City Centre or City Frame as indicated on <i>Map A—City Centre and City Frame Areas</i> do not exceed 1 car space for every 200m² of gross floor area for any development other than multi-unit or single unit dwellings or Short Term Accommodation</p> <p>A7.4 The number of carparking spaces as required by the carparking table are provided. Two per cent of that number of carparking spaces are provided as marked and signed areas for motorcycles, with a minimum of 1 space, each measuring 2.5m by 1.35m</p>	<p>▼</p> <p>A8 Carparks are screened from any nearby sensitive receiving environment and stormwater from the carpark does not flow directly into that sensitive receiving environment.</p>	<p>▼</p>	<p>Compliant Internal parking bays and manoeuvring areas are designed to comply with figure u and template ad respectively as depicted on attached Drawing 2. The driveway for the proposed residential units will be designed in accordance with the Transport, Access, Parking and Servicing Planning Scheme Policy.</p> <p>Provision for Car parking is compliant with table 12.</p>	
P8	Vehicle parking must have no adverse impact on the residents of adjoining sites in terms of noise, odour or run-off	<p>▼</p>	<p>▼</p>	<p>Compliant No water or environmental aspects will be affected by stormwater runoff from any car parking areas.</p>	

<p>Servicing</p> <p>P9</p> <p>The layout of development must achieve adequate provision for servicing on site that is clearly defined, safe and easily accessible and must be designed to contain potential adverse impacts of servicing within the site</p> <p>Servicing must be located to discourage on-street loading and must not detract from the aesthetics or amenity of an Area</p>	<p>A9.1 Servicing facilities are provided on-site in accordance with the design vehicle table in the Transport, Access, Parking and Servicing Planning Scheme Policy</p> <p>A9.2 Loading/unloading facilities and associated vehicle manoeuvring areas on-site are designed in accordance with the servicing layout design guidelines in the Transport, Access, Parking and Servicing Planning Scheme Policy</p>	<p>✓</p>	<p>Compliant</p> <p>As the proposal is for additional residential uses, the servicing is envisaged to occur in an appropriate manner as recognised within residential areas.</p>	
<p>Where involving a material change of use to shop or office with a gfa over 2500m²</p> <p>P10</p> <p>The proposal must provide adequately for bicycle access to the site and movement within the site, and for secure and convenient bicycle parking and storage, that:</p> <ul style="list-style-type: none"> • is located close to the building's pedestrian entrance • is obvious, and easily and safely accessible from outside the site • does not impact adversely on visual amenity • does not impede the movement of pedestrians or other vehicles 	<p>A10 Bicycle parking facilities and cyclist facilities are designed and constructed in accordance with AUSTROAD's <i>Traffic Engineering Practice, Part 14—Bicycles</i></p>	<p>N/A</p>	<p>Not Applicable</p>	
<p>P11</p> <p>Adequate bicycle parking, shower cubicles and lockers must be provided to meet the needs of users and to encourage bicycle use by the users of an office or shop</p>	<p>A11.1 Employees of an office or shop have:</p> <ul style="list-style-type: none"> • 1 bicycle space per 500m² of gfa • 1 locker per 2 bicycle parking spaces • 1 shower cubicle with ancillary change rooms per ten bicycle spaces, with a minimum of 1 shower, with provision for both females and males <p>A11.2 Customers of an office have 1 bicycle parking space per 750m² of gfa</p> <p>A11.3 Customers of a shop have 1 bicycle parking space per 500m² of gfa, with a minimum of 10 spaces</p>	<p>N/A</p>	<p>Not Applicable</p>	

Stormwater Management Code

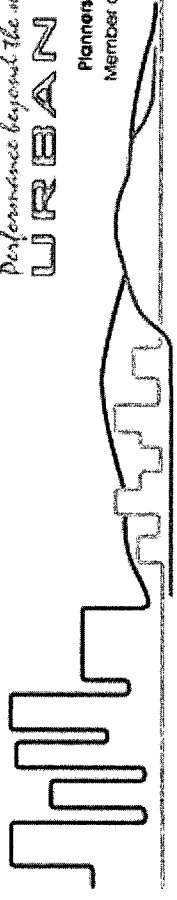
Performance Criteria and Acceptable Solutions

4.1 General

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	<p>The planning of the stormwater management system must provide for the integrated management of stormwater in order to:</p> <ul style="list-style-type: none"> • minimise flooding • protect and enhance environmental values of receiving waters • maximise the use of water sensitive urban design principles • maximise the use of natural waterway corridors and natural channel design principles • maximise community benefit • minimise public safety risk 	<p>A1.1 The proposal complies with the Subdivision and Development Guidelines</p> <p>A1.2 A Site Based Stormwater Management Plan (SBSMP) is prepared for all major and minor stormwater management measures. The SBSMP must provide for the following where applicable:</p> <ul style="list-style-type: none"> • an underground and/or open drain/overland flowpath network maximising the use of natural channel design and water sensitive urban design principles • make provision for detention/retention storage basins • an Erosion and Sediment Control (ESC) Program where required by Council's Erosion and Sediment Control Standard • retention of natural waterway corridors • public safety factors and risk management measures • an acceptable level of flood immunity <p>A1.3 The proposal complies with any Stormwater Management Plan (SMP), Local Stormwater Management Plan (LSMP) or Waterways Management Plan (WMP) prepared by Council</p> <p><i>Note:</i> The Subdivision and Development Guidelines provide guidance on the level of information required for different development types</p>	<p style="text-align: center;">▼</p> <p>Compliant</p> <p>The multi-unit dwellings will discharge stormwater through the existing legal point of discharge being the drainage area at the rear of the site. A Site Based Stormwater Management Plan has been prepared by Swaan Consulting to provide further details on treatment and discharge of stormwater.</p>	

4.2 Flooding

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	The proposed stormwater management system or site works must not adversely impact on flooding or drainage of properties that are upstream, downstream or adjacent to the subject site	<p>A1 The proposal meets the requirements of Council's Subdivision and Development Guidelines and does not result in an increase in flood level or flood duration on upstream, downstream or adjacent properties</p> <p>Note: Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report (as part of a SBSMP) identifying potential flooding impacts on upstream, downstream or adjacent properties</p> <p>A2.1 The design demonstrates that a drainage network will be provided that will comply with Council's Subdivision and Development Guidelines</p> <p>Note: Compliance with this acceptable solution can be demonstrated by identifying the conceptual drainage requirements for the proposal in a SBSMP</p> <p>A2.2 The design allows sufficient area to provide for a drainage network that will comply with Council's Subdivision and Development Guidelines</p> <p>Note: Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report (as part of a SBSMP) identifying the area required to accommodate the drainage network</p>	<p>Compliant No increase in flooding levels will occur as a result of this development. The development will be undertaken in accordance with the requirements of the <i>Subdivision and Development Guidelines</i>. Please see attached Site Based Stormwater Management Plan for further details.</p> <p>Compliant The drainage network will be in accordance with the requirements of the <i>Subdivision and Development Guidelines</i>.</p>	
P2	The drainage network must provide capacity to safely convey stormwater run-off resulting from relevant design storm events taking into account increased run-off from roof drainage	<p>A3.1 All development is located above minimum flood immunity levels in accordance with Council's Subdivision and Development Guidelines</p> <p>Note: Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report identifying flood levels and</p>	<p>Compliant The development will achieve full flood immunity as all development is located above the flood regulation line that is present within the site.</p>	
P3	Development design must reduce property damage and, where applicable, ensure public safety by ensuring that the development levels are set above the relevant design flood level or storm surge level			

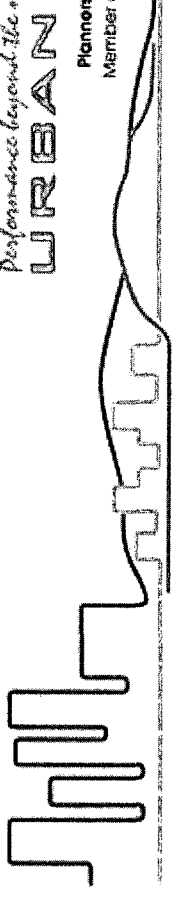


		<p>development design levels (as part of a SBSMP)</p> <p>A3.2 Road access is provided in accordance with the flood immunity levels identified in Council's Subdivision and Development Guidelines</p> <p>Note: <i>Compliance with this acceptable solution can be demonstrated by the submission of a hydraulic and hydrology report identifying flood levels and development design levels</i></p>		
<p>P4</p>	<p>Any channel works that are part of the development, major drainage works or flood mitigation works must maintain and/or enhance the environmental values of the waterway corridor or drainage corridor</p>	<p>A4 Design and construction of channel works incorporate water sensitive urban design and natural channel design features which will comply with:</p> <ul style="list-style-type: none"> • Council's Subdivision and Development Guidelines, and • where applicable any SMP, LSMP or WMP prepared by Council <p>Note: <i>Compliance with this acceptable solution can be demonstrated by the provision of conceptual details of any channel works (as part of a SBSMP)</i></p>	<p>▼</p>	<p>Compliant The development is not of a significant size to require channel works.</p>
<p>P5</p>	<p>Erosion treatment works along waterway banks and associated drainage structures must maintain or enhance the environmental values of waterways</p>	<p>A5 Design and construction of erosion treatment features incorporate natural channel design features which will comply with:</p> <ul style="list-style-type: none"> • Council's Subdivision and Development Guidelines, and • Council's Urban Creek Erosion—Guidelines for Selecting Remedial Works <p>Note: <i>Compliance with this acceptable solution can be demonstrated by the provision of conceptual details of any erosion treatment works (as part of a SBSMP)</i></p>	<p>▼</p>	<p>Compliant All erosion treatments will be undertaken in accordance with Council's Subdivision and Development Guidelines and Urban Creek Erosion – Guidelines for Selecting Remedial Works. Please see attached Site Based Stormwater Management Plan for further details.</p>
<p>P6</p>	<p>Bridges and culverts provided for flood immunity to minimise traffic disruption must improve public safety and allow for fauna movement and recreation corridors where these needs are identified</p>	<p>A6 The design complies with Council's Subdivision and Development Guidelines</p> <p>Note: <i>Compliance with this acceptable solution can be demonstrated by the provision of conceptual details</i></p>	<p>N/A</p>	<p>Not Applicable No bridges or culverts will be required for this development.</p>

	<p>The design and construction of detention and retention storage features must:</p> <ul style="list-style-type: none"> • achieve acceptable impacts on environmental values • provide for recreational use where possible • achieve acceptable risk to public safety and property 	<p><i>of any bridge or culvert works (as part of a SBSMP)</i></p> <p>A7 The design complies with Council's Subdivision and Development Guidelines and where applicable any SMP, LSMP or WMP prepared by Council</p> <p><i>Note:</i> <i>Compliance with this acceptable solution can be demonstrated by the provision of conceptual details of any detention and retention storage features (as part of a SBSMP)</i></p>	<p>▼</p>	<p>Compliant Where any detention or retention storage features are required, they will be implemented under Council's Subdivision and Development Guidelines.</p>
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4.3 Water Quality and Drainage

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	<p>Water quality impacts must be minimised using best practice techniques</p>	<p>A1.1 The design provides for stormwater quality best management practices that are sufficient to treat the target pollutants and will comply with the Council's Subdivision and Development Guidelines</p> <p><i>Note:</i> <i>Compliance with this acceptable solution can be demonstrated by indicating the areas that are to be set aside for water quality best management practices. For most development this can be achieved by determining pollutant loads using hand calculations as set out in Council's Guidelines for Pollutant Export Modelling in Brisbane and identifying the type and size of stormwater quality best management practices based on their efficiencies identified in Council's Subdivision and Development Guidelines</i></p> <p>A1.2 Stormwater quality best management practices are designed, constructed and maintained in accordance with Council's Subdivision and Development Guidelines</p> <p><i>Note:</i> <i>Compliance with this acceptable solution can be</i></p>	<p>▼</p>	<p>Compliant Water quality objectives will be met through this development's accordance with the <i>Subdivision and Development Guidelines</i>.</p>



		demonstrated by providing conceptual detail of how stormwater quality will be managed (as part of a SBSMP)		
P2	Release of sediment laden stormwater is minimised	<p>A2 All development complies with Council's Erosion and Sediment Control Standard</p> <p>Note: <i>Compliance with this acceptable solution can be demonstrated by providing conceptual details of how the requirements of Council's Erosion and Sediment Control Standard will be met (conceptual SBSMP). This will generally be conditioned and may require the submission of a subsequent detailed SBSMP for operational works</i></p>	✓	<p>Compliant</p> <p>The erosion and sediment control program will be undertaken in accordance with BCC's Best Practice requirements.</p>
High risk development				
P3	Environmental values and water quality objectives of receiving waters within or downstream of the proposal are protected or enhanced	<p>A3.1 Relevant water quality objectives for receiving waters are identified and site specific discharge standards met</p> <p>Note: <i>Compliance with this acceptable solution may be demonstrated by following the process outlined in the Management of Urban Stormwater Quality Planning Scheme Policy. This can be documented in a SBSM</i></p> <p>A3.2 The design provides for stormwater quality best management practices that are sufficient to treat the target pollutants and will comply with the Council's Subdivision and Development Guidelines</p> <p>A3.3 Stormwater quality best management practices are designed, constructed and maintained in accordance with Council's Subdivision and Development Guidelines</p> <p>Note: <i>Compliance with this acceptable solution can be demonstrated by providing conceptual detail of how stormwater quality will be managed (as part of a SBSMP)</i></p>	N/A	<p>Not Applicable</p> <p>The proposed development is not of significant risk.</p>

Services, Works and Infrastructure Code
 Performance Criteria and Acceptable Solutions

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	Land used for urban purposes must be serviced adequately with regard to water, waste disposal, drainage, telecommunication and energy	<p>A1 The land is provided with:</p> <ul style="list-style-type: none"> • reticulated water, sewerage, drainage, electricity and telecommunications services • gas service where reasonable 	<p>✓</p> <p>Compliant The site will be fully serviced with the required infrastructure such as sewerage, water, telecommunications and electricity. The site is infill development within an urban area containing all the necessary infrastructure.</p>	
P2	Frontage to the site must provide the following to an appropriate urban standard: <ul style="list-style-type: none"> • an effective, high quality paved roadway • an effective, high quality roadway kerb and channel • safe, high quality crossings over channels and walkways • safe, accessible high quality bikeways • a safe, accessible, high quality public walkway compatible and integrated with the surrounding environment • provision of and alteration to required public utilities • effective drainage • appropriate conduits to facilitate the provision of required street lighting systems and traffic signals 	<p>A2 The following are provided or already exist at the frontage of the site, to the standard that would have applied if the development formed part of a new subdivision:</p> <ul style="list-style-type: none"> • concrete kerb and channel • forming and grading to walkways • crossings over channels and walkways • a constructed bikeway • a constructed walkway, minimum 1.2m wide and full width from the property line to the kerb in Multi-purpose Centres • reconstruction of any damaged public walkway in concrete • construction of the carriageway • payment of costs for required alterations to public utility mains, services or installations • construction of and required alterations to public utility mains, services or installations • drainage works • installation of electrical conduits 	<p>✓</p> <p>Compliant Mann Avenue & Elson Road is already constructed to the required standard with kerb and channeling and effective road drainage.</p>	
P3	Building design and layout must provide for additional infrastructure to facilitate future telecommunication services and providers (e.g. fibre optic cable)	<p>A3.1 Conduits, cabling or ducting is provided in all residential, community, commercial and industrial buildings of a sufficient diameter to enable two or more carriers to service the building. An underground access connection pit and "lead in" duct is provided in the footpath, plus a conduit from the property boundary to:</p> <ul style="list-style-type: none"> • a designated entry point in each building 	<p>✓</p> <p>Compliant Appropriate infrastructure will be installed.</p>	

	<ul style="list-style-type: none"> • each lot in community title developments • each floor and tenancy in multi-occupancy buildings <p>All work is to be in accordance with relevant Building Codes and Australian Standards</p> <p><i>Note:</i> An accurate, digital 'as built' three dimensional location plan will need to be supplied for all infrastructure provided in the footpath</p> <p>Additional requirements for Multi-unit Dwellings of more than 4 storeys and 20 units or Centre Activities with a gross floor area of 2500m² or greater:</p> <p>A3.2 New buildings are provided with:</p> <ul style="list-style-type: none"> • a co-located equipment room • a central (vertical) riser duct within the core of the building • a telecommunications closet on each floor • distribution by underfloor or suspended ceiling ducts • designated wireless area on roof with structural capability <p>All work is to be in accordance with relevant Building Codes and Australian Standards Refer to Figure a</p> <p><i>Note:</i> A signed statement must be submitted to Council by a competent person (as defined in the Standard Building Regulation 1993) confirming that the premises as built complies with these requirements, when final building certification is issued.</p>			
P4	Major public projects promote the provision of affordable, high bandwidth telecommunication services throughout Brisbane		N/A	Not Applicable

	telecommunication network • when there is a clear gap in the bandwidth available to the area Note: An accurate, digital 'as built' three dimensional location plans will need to be supplied for all infrastructure provided in the road reserve		

Operational Works Code
 Performance Criteria and Acceptable Solutions

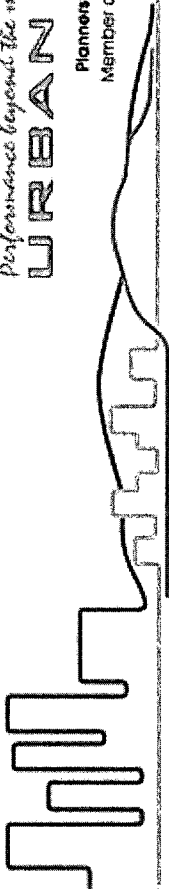
Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
Road construction				
P1.1	The pavement, edging and landscaping must support the specified functions and amenity of the road	A1 The proposal complies with Council's Subdivision and Development Guidelines	✓	Compliant The pavement and landscaping within development will be in accordance with Council guidelines.
P1.2	Road pavement surfaces must be well designed and: • durable enough to carry wheel loads of travelling and parked vehicles • ensure the safe passage of vehicles, pedestrians and cyclists, the discharge of stormwater run-off and the preservation of all-weather access • allow for reasonable travel comfort		✓	Compliant The driveway will be designed and constructed in accordance with Council guidelines.
P1.3	The pavement edge: • must control vehicle movements by delineating the carriageway for all users • must provide for people with disabilities by allowing safe passage of wheelchairs and other mobility aids		✓	Compliant The driveway will be designed and constructed in accordance with Council guidelines.
P1.4	Verges and footpaths must be constructed to provide: • safe access for pedestrians clear of obstructions		✓	Compliant Any verges and footpaths required will be designed and constructed in accordance with Council guidelines.

<p>P1.5</p> <ul style="list-style-type: none"> • an access area for vehicles onto properties • an area for public utility services • additional amenity of the minor road <p>Bikeways must be constructed to provide safe and attractive cycle routes for commuter and recreational purposes</p>					
<p>Utilities</p> <p>P2</p> <p>The design and provision of public utilities, including sewerage, water, electricity, gas, street lighting and communication services must facilitate accessibility and ease of maintenance, must optimise life cycle costs, must use best current and alternative technology and must incorporate provisions to minimise adverse environmental impact in the short and long term</p> <p><i>Note:</i> Where a similar or better standard of servicing can be achieved using alternatives to public utilities they may be considered</p> <p>Development must be staged to ensure that each stage is fully serviced before a new area is released</p> <p>The selection of materials used for the construction of water supply and sewerage networks must be determined by suitability, durability, ease of maintenance and cost effectiveness considering whole of life cycle costing, and must achieve beneficial environmental impacts and energy savings from new materials and technologies</p> <p>Adequate buffers must be maintained between utilities and houses to protect residential amenity and health</p> <p>Local treatment plants must be used to treat, recycle and reuse waste in areas where connections to large sewage treatment plants are less economically viable, and planning and</p>	<p>▼</p> <p>Compliant</p> <p>Existing available services will remain intact and will be utilised to service the additional residential units.</p> <p>As infrastructure is readily available from the Mann Avenue & Elson Road reserve or from within the subject site itself, there will be no requirement to obtain consent for any works from any adjoining owner.</p>	<p>A2.1 The location, design and proposed construction of electricity, gas, communication services and street lighting are in accordance with Council's Subdivision and Development Guidelines and the requirements of the relevant service providers</p> <p>The location, design and proposed construction of sewerage reticulation, drainage, sewage pumping stations and water supply are in accordance with Council's required standards for the design and construction of water and sewerage reticulation</p> <p>A2.2 Compatible public utility services are co-located in common trenching in order to minimise the land required and the costs for underground services</p> <p>A2.3 Drainage, sewerage and sillage systems are designed so that overflows do not enter residences</p> <p>A2.4 Public utilities are located and aligned so as to:</p> <ul style="list-style-type: none"> • avoid significant trees and/or other habitat areas • minimise earthworks • avoid crossing waterways, waterway corridors and/or wetlands, but where such crossings are unavoidable, tunnel boring techniques are used to minimise disturbance and disturbed areas are reinstated and revegetated on completion of works 			

	amenity considerations are addressed			
P3	Transportation, treatment and disposal of sewage wastes must meet proper standards of durability and environmental performance	A3 The design and construction of sewerage facilities, water supply mains and fixtures, electricity, communications, gas and regulator street lighting are undertaken by properly qualified people	✓	Compliant Qualified people will undertake any necessary waste treatment or disposal issues with the development.
P4	Development must occur within locations where there is water supply adequate for intended use and fire fighting purposes	A4 The distribution system for all services is in place before the first houses are occupied	✓	Compliant Low Density Residential Areas surround the subject site, where adequate supplies of water for fire fighting purposes can be gained from the existing water reticulation and infrastructure.

Wetland Code
 Performance Criteria and Acceptable Solutions

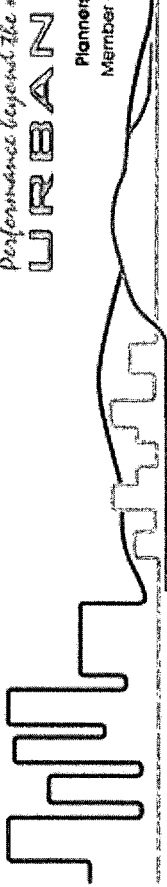
Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	Wetlands must be adequately protected from the impacts of adjacent development	A1.1 Development is set back: <ul style="list-style-type: none"> • 40m from the maximum water level of a freshwater wetland • 100m from the Highest Astronomical Tide line of a tidal wetland A1.2 The use complies with the Biodiversity Code	✓	Compliant Council's wetland mapping indicates a very small section of wetland along the eastern boundary of the site. However, the area on site designated as wetland consists of mown grass and is slightly more elevated than the adjoining wetland. There is minimal evidence of a wetland environment on site or the any previous wetland functions. Therefore, it is considered that there are no wetland hydrological regimes that will be altered or that will need to be restored upon the property. It also should be noted that no building works are to be undertaken in close proximity to the adjoining wetland area.
			✓	Compliant



				The proposed development is consistent with the Biodiversity Code.	
P2	Ecological features and processes associated with the wetland must be protected, managed and restored where necessary, to ensure their long term viability	A2 The use complies with all relevant Acceptable Solutions in the Biodiversity Code	✓	Compliant Council's wetland mapping indicates a very small section of wetland along the eastern boundary of the site. However, the area on site designated as wetland consists of mown grass and is slightly more elevated than the adjoining wetland. Please see photographs of the wetland area in the appendix of this report for further demonstration of this.	
P3	Proposals must be designed to protect wetland values through maintenance of hydrological regimes, including water quantity, water quality and wet/dry phases, during and after construction	A3 The use complies with the Biodiversity Code , and the Stormwater Management Code , and the Waterway Code and with the Management of Urban Stormwater Quality Planning Scheme Policy	✓	Compliant The proposed development is consistent with the applicable Codes.	

Waterway Code
 Performance Criteria and Acceptable Solutions

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	The natural functions of waterways as landscape and environmental corridors must be preserved	A1 No vegetation is disturbed on land: <ul style="list-style-type: none"> • in the Green Space Areas • covered by a Vegetation Protection Order or Voluntary Conservation Agreement • designated in a Local Plan as being an area subject to environmental and scenic constraint • identified in the Natural Assets Planning Scheme Policy 	✓	Compliant Existing vegetation within the waterway corridor will not be effected by this application.
P2	Waterfront land must be preserved for public use where relevant	A2 Land in a waterway corridor or Brisbane River Corridor is transferred into public ownership in accordance with the relevant Contributions Planning Scheme Policies, where that land is required for ecological, open space or recreation	✓	Compliant The land within the waterway corridor is to be retained in private ownership as it is not required by Council for ecological, open space or recreation functions.



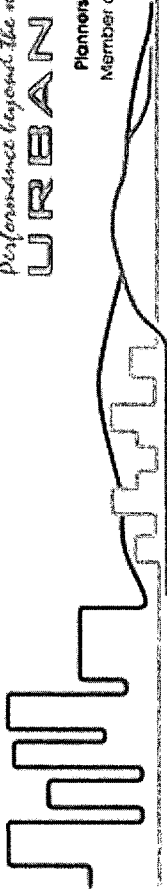
		functions, including: <ul style="list-style-type: none"> • public use • access for maintenance • linking core and remnant habitat areas • protecting water quality and ecological processes • other public benefit 		
P3	The proposal must provide for ongoing maintenance of any works or planting required to ensure that impacts on the ecology of waterways or the Brisbane River, or on riparian vegetation, are minimised both during and after construction	<p>A3.1 A maintenance program is approved by Council and implemented</p> <p>A3.2 A performance bond and agreement is lodged with Council to ensure the approved maintenance program is implemented</p>	✓	Compliant A maintenance program can be implemented in accordance with Council's requirements.
P4	Where a site includes degraded land identified for rehabilitation in a Catchment Management Plan, SMP, WMP or a rehabilitation plan approved by Council, it must be implemented and maintained at the landowner's expense	<p>A4.1 A rehabilitation plan is approved by Council and implemented</p> <p>A4.2 A performance bond and agreement is lodged with Council to ensure the ongoing maintenance of rehabilitation works</p>	✓	Compliant The site does not include land identified for rehabilitation.

4.5 Open space/recreation/riparian amenity

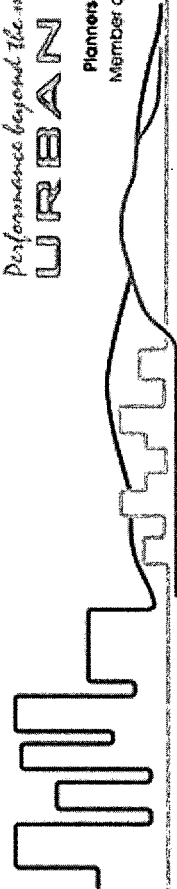
Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	Where a development site has frontage to a waterway or the Brisbane River or contains a waterway, land required by Council for open space/recreation (community land) or public access, must focus on that waterway or the Brisbane River where applicable <i>Note:</i> The Brisbane River Corridor Planning Scheme Policy provides guidance on meeting this Performance Criteria	A1 No Acceptable Solution is prescribed	N/A	Not Applicable Council does not require land within the waterway area for open space/recreational purposes.
P2	Open space/recreation areas must contribute positively to managing flooding impacts, protecting water quality, preserving or enhancing ecological processes and maintaining/enhancing amenity	A2 No Acceptable Solution is prescribed	N/A	Not Applicable No open space/recreational areas are provided by this application.

4.6 Location and design of buildings, structures and activities

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	<p>For sites within the Brisbane River Corridor, and fronting the Brisbane River, the attractive appearance of the Brisbane River and its banks, when viewed from the Brisbane River, from development near the Brisbane River, or from other public vantage points, must be maintained and enhanced</p> <p>Materials used for buildings and structures must complement surrounding buildings, the visual character of the area and the character of the precinct</p> <p>In Precinct 1, buildings must not locate within the corridor and must be minimised to maintain landscape values</p> <p>In Precincts 2, 3, 4 and 5 setbacks must be no less than the setbacks of buildings sharing a common boundary. In these circumstances buildings must be of a similar height and bulk to these adjoining buildings, substantially shielded from view of the Brisbane River by vegetation and ancillary structures between the main building and the Brisbane River must be restricted to minimise impacts on the Brisbane River's landscape values</p> <p>In the City Centre, setbacks must maintain the existing building line and minimise impacts on the Brisbane River's landscape values</p>	<p>A1.1 Buildings, parking and servicing areas, placing of materials, goods or solid waste, storage areas and filling or excavation are not located:</p> <ul style="list-style-type: none"> • within 30m horizontal distance of high water mark in Precinct 1 <p>OR</p> <ul style="list-style-type: none"> • within 20m horizontal distance of high water mark in Precincts 2, 3, 4 or 5 <p>A1.2 Reclamation of land does not occur in Precincts 1, 2, 3 or 4, or on residential land in Precinct 5</p>	<p>Not Applicable</p> <p>The subject site is not located within the Brisbane River Corridor.</p>	
P2	<p>Land between buildings and the Brisbane River is dominated by landscaped areas which preserve the landscape characteristics of the area</p>	<p>A2.1 The minimum proportion of the land between buildings and the Brisbane River that is provided as landscaped area is:</p> <ul style="list-style-type: none"> • 70% in Precinct 1 • 50% in Precincts 2 and 4 • 30% in Precincts 3 and 5 	<p>Not Applicable</p> <p>The subject site is not located in close proximity to the Brisbane River.</p>	



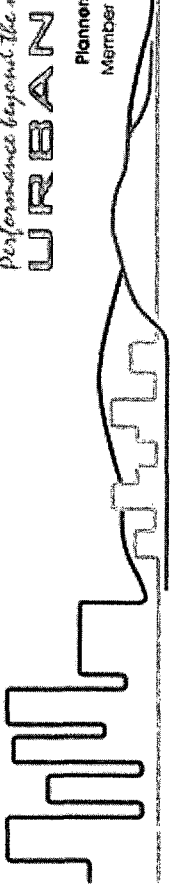
<p>P3</p>	<p>Ancillary buildings and structures must:</p> <ul style="list-style-type: none"> enhance the character and amenity of their site and surrounding area not adversely impact upon the riparian landscape minimise their visual impact on the Brisbane River's landscape values <p>In Precinct 1 ancillary buildings and structures, tennis courts and swimming pools must only locate in the corridor where there is no other alternative site on the lot, and where designed to be unobtrusive and take into account the surrounding landscape</p> <p>Tennis courts and swimming pools must minimise impacts on the character of the area and precinct and be heavily landscaped in Precincts 2, 3 and 4.</p> <p>Fencing materials and design must minimise:</p> <ul style="list-style-type: none"> impacts on the Brisbane River's landscape values impedance to the flow of floodwaters or to fauna movement destruction of native vegetation for its erection 	<p>Refer to Figure a</p> <p>A2.2 The landscaped area includes:</p> <ul style="list-style-type: none"> at least one tree that will grow to a height of at least 5m for every 20m² of landscaped area a minimum of 50% garden area planted with ground cover and shrubs of various growth forms a maximum of 50% grassed/lawn area <p>A2.3 Hardstand areas, minor buildings and structures are limited to the following site cover of the land between buildings and the Brisbane River:</p> <ul style="list-style-type: none"> 30% in Precinct 1 50% in Precincts 2 and 4 70% in Precincts 3 and 5 <p>A3.1 Ancillary buildings and structures are:</p> <ul style="list-style-type: none"> not located over water located and of a size: - consistent with Table 1 in Precincts 1, 2 and 4 <p>OR</p> <ul style="list-style-type: none"> - consistent in height, scale/bulk and setbacks with ancillary buildings and structures on the site in Precincts 3 and 5 <p>OR</p> <ul style="list-style-type: none"> - for any precinct, located where they will be screened from view of the Brisbane River by vegetation subject to a Vegetation Protection Order or Voluntary Conservation Agreement or topographic features such as high banks - constructed of materials that are durable, of low visual impact, visually recessive and complementary to the surrounding buildings <p>Within Precincts 2, 3 and 4 minor structures within the Brisbane River Corridor do not exceed:</p> <ul style="list-style-type: none"> 3m in height 40m² site cover for all roofed structures, including 20m² for unenclosed roofed structures such as pergolas <p>Note: <i>Ancillary structures and buildings include:</i></p>	<p>N/A</p>	<p>Not Applicable</p> <p>The subject site is not located in close proximity to the Brisbane River.</p>
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<p>Riverwalls must minimise impacts on the character of the area and precinct and must be designed as follows:</p> <ul style="list-style-type: none"> • the natural form of the riverbanks in Precinct 1 must be maintained • riverwall design and materials in Precincts 3 and 4 must complement the intended character of the Precinct • riverwalls are designed to manage riverbank stabilisation so to control erosion 	<ul style="list-style-type: none"> • outdoor living structures such as decks (roofed or unroofed), gazebos, poolside shelters, garden pavilions, and green-houses and glass-houses • roofed play areas for children • buildings and other structures for activities necessarily associated with the use of the Brisbane River • garages and carports <p>A3.2 Tennis Courts and swimming pools located between buildings and the Brisbane River are:</p> <ul style="list-style-type: none"> • located and designed to minimise the need for retaining walls with the maximum height of retaining walls limited to 1m • located landward of a minimum 6m landscaped strip which covers the full width of the site and includes planting as required for general landscaped areas in <p>A2.2 Note: This landscaped area forms part of the required proportion of landscape area outlined in A2.1</p> <ul style="list-style-type: none"> • not within 30m horizontal distance of high water mark for land in the Environmental Protection or Rural Areas <p>OR</p> <ul style="list-style-type: none"> • not within 20m horizontal distance of high water mark for other land <p>OR</p> <ul style="list-style-type: none"> • located where they will be screened from view of the Brisbane River by vegetation subject to a Vegetation Protection Order, Voluntary Conservation Agreement, or topographic features such as high river banks <p>Refer to <i>Figure b</i></p> <p>A3.3 Fencing erected in the Brisbane River Corridor is less than 2m in height</p> <p>A3.4 Riverwalls:</p> <ul style="list-style-type: none"> • are not constructed in Precinct 1 • are designed and constructed consistent with surrounding approved riverwalls in Precincts 2, 3, 4 		
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4.7 Riparian landscape

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	Valued habitats, remnant riparian vegetation and mature examples of appropriate planted tree species must be conserved and protected	<p>A1 Native vegetation within the Brisbane River or waterway corridor is incorporated as part of any development proposal and landscaping involves the sustainable removal of weed species</p> <p>Note: This may be demonstrated by the submission of a landscape plan as detailed in the Brisbane River Corridor Planning Scheme Policy</p>	<p>✓</p> <p>Compliant All existing riparian vegetation is to be retained within the waterway corridor.</p>	
P2	Reshaping of the landform (e.g. to create terraced areas, steps and ramps) must minimise the extent of earthworks required, minimise removal/clearing of native and riparian vegetation and be consistent with the desired character of the Precinct in which the site is located	<p>A2 Landscaping or site works proposed on land wholly or partly within the Brisbane River Corridor or a waterway corridor, which is intended to create terraces stepping down to the water, do not occur:</p> <ul style="list-style-type: none"> • within 30m horizontal distance from high water mark for land in the Environmental Protection or Rural Areas <p>OR</p> <ul style="list-style-type: none"> • within 20m horizontal distance from high water mark for other land 	<p>✓</p> <p>Compliant Landscaping is proposed within the sites waterway corridor in accordance with Council's generally requirements.</p>	
P3	Retaining walls are designed to minimise the extent of earthworks required and present attractively to public viewing areas such as the Brisbane River, Brisbane riverside walkways and paths, or Brisbane River bridge crossings. Retaining walls are to be designed to manage riverbank stabilisation so to control erosion. Retaining walls should be permitted in Precincts 2, 3, 4 or 5 if they retain the existing approved	<p>A3.1 Retaining walls are:</p> <ul style="list-style-type: none"> • not constructed within 30m horizontal distance from high water mark for land in the Environmental Protection or Rural Areas <p>OR</p> <ul style="list-style-type: none"> • not constructed within 20m horizontal distance from high water mark for other land • designed and constructed to withstand flood conditions <p>A3.2 Retaining walls proposed in locations where</p>	<p>N/A</p> <p>Not Applicable Site is located on Land within the Environmental Protection or Rural Areas.</p>	
			N/A	Not Applicable



	height or ground level (as defined) in this plan of the land	<p>they are visible from the Brisbane River are:</p> <ul style="list-style-type: none"> limited to a height of 1m separated by at least 5m between any other retaining wall higher or lower on the slope constructed of durable materials that complement that character and amenity of the immediate environs with respect to their texture, shape and colour (e.g. natural stone, coloured off-form concrete) landscaped to obscure at least 50% of the face of any retaining wall, including at least one tree or shrub that will grow to a minimum height of 5m for every 5m of retaining wall length <p>Refer to <i>Figure c</i></p>	Retaining walls will not be visible from the Brisbane River.	
P4	Steps and ramps are designed to be unobtrusive, involve the use of natural or natural toned materials and to minimise the need for cut and fill	<p>A4 Steps and ramps:</p> <ul style="list-style-type: none"> do not require the construction of retaining walls greater than 1m in height are designed to be obscured by landscaping, and are constructed of materials which are dark green/brown in colour 	N/A	Not Applicable Steps and ramps are not proposed.

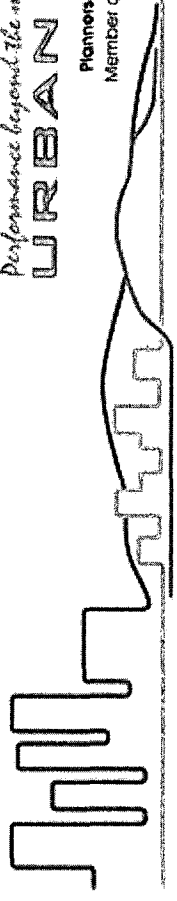
4.8 Access to Waterways and the Brisbane River

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
P1	Public access to Waterways and the Brisbane River Corridor must be provided in appropriate locations and designed to minimise the visual impact on the Brisbane River's landscape values	<p>A1.1 Where required by the <i>Brisbane RiverWalk Strategy</i>, proposals on land wholly or partly within the Brisbane River Corridor provide for the construction of contiguous walkways and structures, and surrender land to the Crown</p> <p>A1.2 Public access is provided in a manner consistent with the 'Public access' Element of the Brisbane River Corridor Planning Scheme Policy</p> <p>A1.3 Public riverside pedestrian/cycle pathways and boardwalks and other facilities, including those identified in the <i>Brisbane RiverWalk Strategy</i>, are</p>	Not Applicable No public access is to be provided to the waterway corridor. The Waterway corridor land is to remain in private ownership.	

	designed, constructed and maintained in accordance with the Public Riverside Facilities Design and Maintenance Manual	
	A1.6 Public access in Precincts 3 and 4 is located above high water mark	

Biodiversity Code
 Performance Criteria and Acceptable Solutions

Clause	Performance Criteria	Acceptable Solutions	Compliance	Council Notes
General				
P1	<p>Ecological features and processes on or adjacent to the site, including those identified in the Natural Assets Planning Scheme Policy, must be protected, managed and restored, where necessary, to ensure their long term viability</p> <p><i>Note:</i> Brisbane City Council Ecological Assessment Guidelines provides guidance on demonstrating compliance with this part of the Code</p>	<p>A1.1 Ecological features and processes likely to be affected by the proposal are identified, evaluated and protected. Local knowledge is accessed where available</p> <p>A1.2 Potential impacts, including edge effects, on ecological features and processes are identified, assessed and protected</p> <p>A1.3 Development layout and planning retains, protects and manages the ecological features and processes identified on or adjacent to the site, such as fauna and flora habitat areas, ecological corridors, habitat trees, waterways (in-stream habitats), riparian zones and wetlands</p> <p>A1.4 Disturbed significant habitat areas are rehabilitated through revegetation and restoration that assists in maintaining and improving biodiversity values. A rehabilitation plan is prepared and implemented generally consistent with the format and principles contained in the Brisbane City Council Ecological Assessment Guidelines</p> <p>A1.5 The proposal meets the management intent for any Significant Flora Species, Significant Fauna Species or Significant Vegetation Communities, as</p>	<p>▼</p> <p>Compliant As the subject site has been previously cleared for residential purposes there are minimal natural functions and processes still present within the lot boundaries. No development is to take place within the waterway corridor or the small section of wetland located on site. It is noted that a wetland containing typical wetland functions and vegetation adjoins the site, however, it is not considered that this development will adversely impact on this area as all stormwater is to be suitably treated and development is located a sufficient distance away. The units are to be developed in accordance with the Site Based Stormwater Management Plan prepared by Swaan Consulting, as such, no additional stormwater will be discharged to the wetland land area. While all stormwater discharged to the rear of the site will be of a quality consistent with Council's requirements.</p>	



		<p>defined in the Natural Assets Planning Scheme Policy, or in any existing Council Conservation Action Statements, Natural Area Management Plans or other relevant conservation or management plans</p>		
P2	<p>Ecological corridors within or adjacent to the site must be identified and retained to create, maintain and/or improve connectivity between habitat areas and to allow wildlife movement between habitat areas</p>	<p>A2 The design and management of ecological corridors is consistent with the principles contained in the Brisbane City Council Ecological Assessment Guidelines</p>	<p>✓</p> <p>Compliant This development does not propose an ecological corridor.</p>	
P3	<p>The management of fire must maintain and/or enhance biodiversity</p>	<p>A3.1 Clearing for fire management does not occur outside Building Location Plans, accessways and areas required for essential infrastructure and services OR A3.2 Where clearing is proposed outside of areas described in A3.1, a Fire Management Plan demonstrating the protection of biodiversity is provided. The Plan is consistent with the principles contained in the Brisbane City Council Fire Management Guidelines and Ecological Assessment Guidelines</p>	<p>✓</p> <p>Compliant Clearing for fire management purposes will not be required as there is minimal vegetation currently located in the vicinity of the proposed units.</p>	
P4	<p>The design and management of the proposal must ensure that significant biodiversity areas will be provided with ongoing protection</p>	<p>A4.1 Areas supporting significant ecological features and/or processes are transferred to community ownership or control, e.g. Council, community group trusteeship, or community title OR A4.2 Areas supporting significant ecological features and/or processes are included in the Conservation Area or included under a protective covenant</p>	<p>✓</p> <p>Compliant The site does not contain areas of significant vegetation or processes.</p> <p>✓</p> <p>Compliant No Conservations areas or covenants are currently proposed for this development.</p>	
Waterways and wetlands				
P5	<p>Ecological features and processes associated with waterways and wetlands must not be significantly and adversely impacted by changes in hydrological regimes, including wet/dry regimes</p>	<p>A5 Impacts on the surface and ground water flow patterns of the subject waterway or wetland are minimised <i>Note:</i></p>	<p>✓</p> <p>Compliant Please refer to the Site Based Stormwater Management Plan which provides in-depth detail in relation to this Acceptable Solution.</p>	

		<p>Information used to demonstrate the above is collected and presented in accordance with the principles and procedures of the Stormwater Management Information Code and the Environmental Impact Assessment Planning Scheme Policy</p>		
<p>Information P6 Ecological assessment information accompanying applications must be comprehensive, competent and adequate</p>		<p>A6 Ecological assessment information accompanying an application is consistent with the principles and procedures contained or referenced in the Brisbane City Council Ecological Assessment Guidelines, Brisbane City Council Fire Management Guidelines, Natural Assets Planning Scheme Policy, Management of Urban Stormwater Quality Planning Scheme Policy and the Environmental Impact Assessment Planning Scheme Policy</p>	<p>✓</p>	<p>Compliant All technical reports submitted with this application are consistent with the requirements of Councils respective assessment documents.</p>