

STATEMENT OF ENVIRONMENTAL EFFECTS

MACARTHUR GARDENS NORTH PRECINCT CONCEPT AND STAGE 1 EARLY WORKS



Submitted to Campbelltown City Council
on behalf of Landcom

16 December 2021

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ATTACHMENTS

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Attachment B	Survey
Attachment C	Urban Design and Landscape Report
Attachment D	ESD Report
Attachment E	Green Star Certificate
Attachment F	Operational Waste Management Plan
Attachment G	Civil drawings
Attachment H	Civil Engineering, Services & Infrastructure Master Planning Report
Attachment I	Riparian Assessment
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Attachment K	Environmental Noise and Vibration Assessment
Attachment L	Updated Contamination Assessment
Attachment M	Biodiversity Development Assessment Report
Attachment N	Bushfire Protection Assessment
Attachment O	Site Specific DCP
Attachment P	Traffic and Transport Assessment
Attachment Q	Salinity Assessment
Attachment R	AHIP
Attachment S	Community Needs and Open Space Assessment
Attachment T	CPTED Assessment

GLOSSARY

ADG	<i>Apartment Design Guide</i> , NSW Department of Planning and Environment, 2015
AHIP	Aboriginal Heritage Impact Permit
BDAR	Biodiversity Development Assessment Report (Attachment M)
CPTED	Crime Prevention Through Environmental Design
CTMP	Construction Traffic Management Plan
DA	Development Application
DCP	Development Control Plan
ENVA	Environmental Noise and Vibration Assessment (Attachment K)
EP&A Act	<i>Environmental Planning and Assessment Act, 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
GFA	Gross floor area
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
LEP	Local Environmental Plan
LGA	Local Government Area
MGN	Macarthur Gardens North
OWMP	Operational Waste Management Plan (Attachment F)
SEE	Statement of Environmental Effects
The Site	Macarthur Gardens North Precinct, the subject of this development application
TTS	Traffic and Transport Study (Attachment P)
UDLR	Urban Design and Landscape Report (Attachment C)
VMP	Vegetation Management Plan
VPA	Voluntary Planning Agreement

1. INTRODUCTION

1.1 Overview

This Statement of Environmental Effects (SEE) accompanies a staged Development Application (DA) under Section 4.22 of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) seeking concept approval for a high density residential and mixed use development at Macarthur Gardens North (MGN, referred to herein as 'the Site'). This application also seeks Stage 1 development consent for civil works, landscaping and superlot subdivision.

This staged DA supersedes two DAs lodged by Landcom in 2020 for the following:

- A Concept and Stage 1 DA for a high density residential/mixed use development in the central and western parts of the Site and including civil works, public open space and restoration of Bow Bowing Creek
- A DA for 56 terrace housing dwellings at the eastern end of the Site.

Following the lodgement of the two DAs, the Site was rezoned to R4 High Density Residential and B4 Mixed Use which continued to permit development of the site for apartments and mixed use but which precluded the development of the terrace housing as proposed. As a result, the two DAs were withdrawn and a revised concept for the entire MGN site was developed to correspond to the new planning framework for the Site.

This revised Concept and Stage 1 DA applies to the entire MGN Precinct and seeks development consent for:

- Concept approval of the Macarthur Gardens North Master Plan comprising:
 - Six building envelopes of varying heights up to a maximum of 32 metres (nine storeys)
 - Maximum gross floor area (GFA) of 102,500m²
 - Residential development – approximately 1,250 dwellings equating to approximately 100,500m² GFA
 - Ground floor commercial uses – approximately 2,000m² GFA
 - Provision of approximately 1,145 residential and 21 non-residential car parking spaces together with eight shared vehicle spaces
 - Approximately 517 bicycle parking spaces
 - 1.2 hectares of active open space and a further 9.4 hectares of passive open space (Bow Bowing Creek Reserve)
 - Public domain landscaping
 - Road layout
 - Pedestrian and cycle network, including future pedestrian bridge to Macarthur Railway Station
 - A strategy for the achievement of ecologically sustainable development.
- Detailed consent for Stage 1 works being:
 - Early civil works, including lot grading and provision of stormwater network
 - Construction of local road network
 - Construction of parks and landscaping
 - Superlot subdivision.

Detailed descriptions of the Concept Proposal and Stage 1 works can be found at **Section 4** of this report.

This SEE has been prepared by MG Planning on behalf of Landcom, the owners of the Site. The application is a Crown DA as provided for under Division 4.6 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of this report is to:

- describe the components of the Concept Proposal and Stage 1 Works
- discuss the potential environmental effects of the Concept Proposal and Stage 1 Works
- draw conclusions as to the significance of any impacts
- make a recommendation to Campbelltown City Council as to whether the DA should be approved.

The Concept Proposal and Stage 1 Works have been assessed based on the characteristics of the Site and locality, Campbelltown Local Environmental Plan 2015, Campbelltown (Sustainable City) Development Control Plan 2015, and other relevant local planning controls as well as the requirements of Section 4.15 of the EP&A Act.

1.2 Supporting plans and documentation

This statement has been prepared with input from technical and design documents which have been prepared to accompany this DA. These documents are identified in **Table 1** below.

Table 1: Supporting Information

Document name	Prepared by	Attachment
DA Estimate	Mitchell Brandtman	Attachment A
Survey Plan	JMD Development Consultants	Attachment B
Urban Design and Landscape Report	Urbis	Attachment C
Ecologically Sustainable Development Report	WSP	Attachment D
Green Star Certificate	Green Building Council of Australia	Attachment E
Operational Waste Management Plan	Elephants Foot	Attachment F
Civil drawings	Infrastructure & Development Consulting	Attachment G
Civil Engineering, Services & Infrastructure Master Planning Report	Infrastructure and Development Consulting	Attachment H
Riparian Assessment	Eco Logical Australia	Attachment I
Subdivision plans	JMD Development Consultants	Attachment J
Environmental Noise and Vibration Assessment	Renzo Tonin	Attachment K
Updated Contamination Assessment	JBS&G	Attachment L
Biodiversity Development Assessment Report	Eco Logical Australia	Attachment M
Bushfire Protection Assessment	Eco Logical Australia	Attachment N
Site Specific DCP	MG Planning/Urbis	Attachment O
Traffic and Transport Study	SCT Consulting	Attachment P
Salinity Assessment	Douglas Partners	Attachment Q
Aboriginal Heritage Impact Permit		Attachment R
Community Needs and Open Space Assessment	Urbis	Attachment S
CPTED Assessment	Urbis	Attachment T
Flood Assessment	J Wyndham Prince	Provided under separate cover

1.3 Cost of works

The total cost of works has been estimated at \$463,174,194 (ex GST). The completed DA Cost Estimate report is provided at Attachment A.

2. BACKGROUND

2.1 Site history

Macarthur Gardens North (MGN) is a greenfield site of approximately 18.5 hectares situated north of Macarthur Station in the Campbelltown Local Government Area (LGA). The MGN site is shown in **Figure 1**.

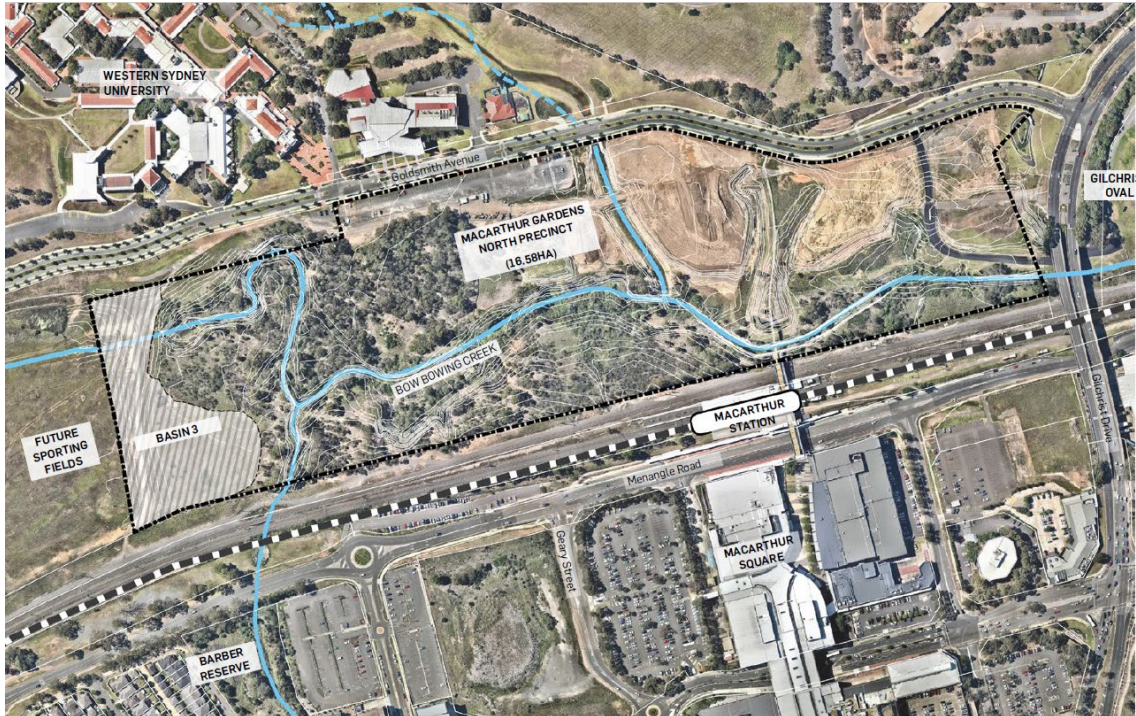


Figure 1: Macarthur Gardens North

(Source: Urban Design and Landscape Report, Urbis, December 2021)

MGN has been earmarked for residential redevelopment since the early 1970s when it was identified in the Macarthur Growth Centre Structure Plan as a Sub-Regional Centre (refer **Figure 2**).

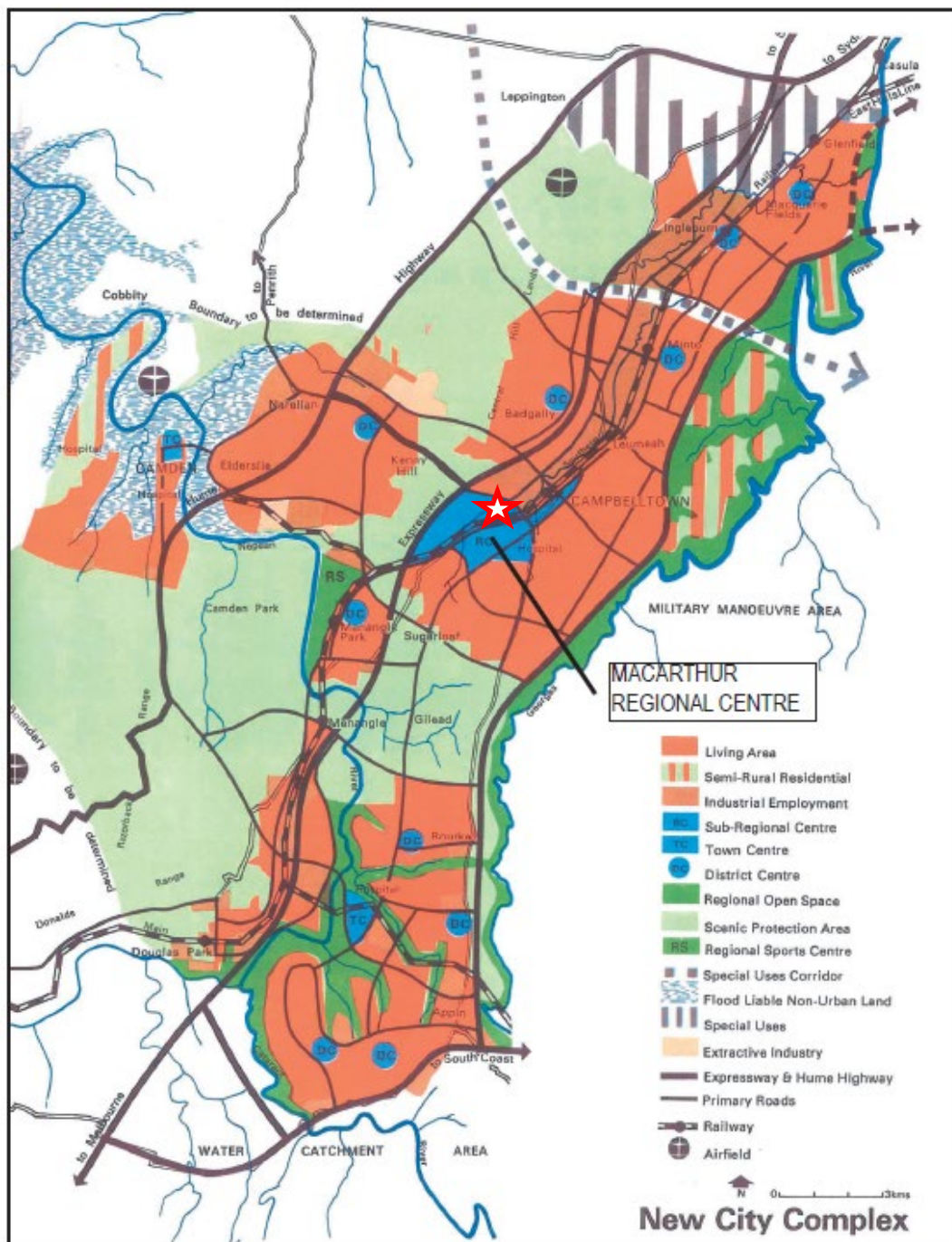


Figure 2: 1973 Macarthur Growth Centre Structure Plan

(Source: Macarthur Regional Centre Master Plan, Annand Alcock Urban Design, June 2003)

In December 2003 a Master Plan DA was approved by Council for the Macarthur Regional Centre, including the MGN site (Council Ref. F540/2003 and G111/2003). The Master Plan envisaged a mix of apartments and multi unit housing dwellings for the MGN land. The Development Consent specified that the Master Plan be amended to achieve a minimum 60 dwellings per hectare net site area for the land on the northern side of the railway.



Figure 3: Excerpt from 2003 Master Plan showing proposed development concept for MGN

Since the Masterplan DA was approved, a number of further DAs have been approved by Council for preparatory works prior to residential development. These DAs are:

- **Phase 1 Bulk Earthworks DA** (Council Ref. 293/2013/DA-CW)
This DA sought approval for Stage 1 Bulk Earthworks primarily comprising the re-contouring of part of the MGN site with excess material from the Macarthur Heights Stage 1 Subdivision and Major Estate works. The proposed fill levels in this DA were not intended to be the final; the final landform levels for MGN were intended to be subject to future design and subsequent approvals.

This DA was approved by Council on 13 November 2013.

- **Interim Bulk Earthworks DA** (Council Ref. 1594/2015/DA-CW)
This DA sought approval for interim bulk earthworks across the MGN site to enable future subdivision. The DA was approved by Council on 5 November 2015.

- **Bulk Earthworks and Bow Bowing Creek Realignment** (Council Ref. 1571/2015/DA-CW)

This DA sought approval for:

- Bulk earthworks involving clearing the land and cut and fill to final landform levels
- Realignment of Bow Bowing Creek - realigning the creek to the south of its existing location to address Council's Dam Break requirements
- Land clearing and revegetation works to enable the creation of a development footprint as well as the realignment of Bow Bowing Creek to accommodate flood waters.

The DA was approved on 5 November 2018. The following additional approvals were issued in relation to these works:

- A Controlled Activity Approval under the *Water Management Act 2000* for the creek realignment was approved by the Natural Resources Access Regulator on 21 May 2019.
- A Biobanking Statement enabling the clearing of vegetation on the site was issued by the Office of Environment and Heritage on 24 January 2018.
- An Aboriginal Heritage Impact Permit (AHIP) to allow harm to certain Aboriginal objects (outside the Terrace Precinct site) was issued by the Office of Environment and Heritage on 3 May 2019.

Bulk earthworks and some site clearing has occurred, as shown in **Figure 4**, in accordance with previous approvals.



Figure 4: Aerial photo from February 2016 showing extent of bulk earthworks across the MGN site
(Source: www.nearmap.com)

- **Terrace Precinct DA** (Council Ref: 1384/2020/DA-SW)
This DA was lodged by Landcom on 11 May 2020 and sought approval to subdivide the eastern end of the MGN site to create 56 terrace lots and 2 residue lots together with associated drainage and road works. This DA was withdrawn in November 2021 following rezoning of the MGN site to R4 High Density Residential and B4 Mixed Use, both of which do not permit terrace housing.
- **Concept and Stage 1 DA** (Council Ref: DA3532/2020/DA-SW)
This DA was lodged by Landcom on 2 October 2020 and, similar to the subject DA, sought Concept and Stage 1 approval for a high density residential/mixed use development on the Site. However, the DA applied to the central and western parts of the Site and not the eastern end which was proposed to be developed for terraces (refer discussion above). Following rezoning of the MGN site, this DA was also withdrawn to enable a redesign of the development concept in line with the new zoning and to encompass the Site in its entirety.

2.2 Strategic context

The Greater Sydney Region Plan, *A Metropolis of Three Cities* and Western City District Plan (March 2018) both identify Campbelltown-Macarthur as a Metropolitan Cluster that will provide substantial housing and employment growth for the Western City District. MGN is located within the Campbelltown-Macarthur precinct. It is also located within the Greater Macarthur Growth Area, as shown in **Figure 5**.

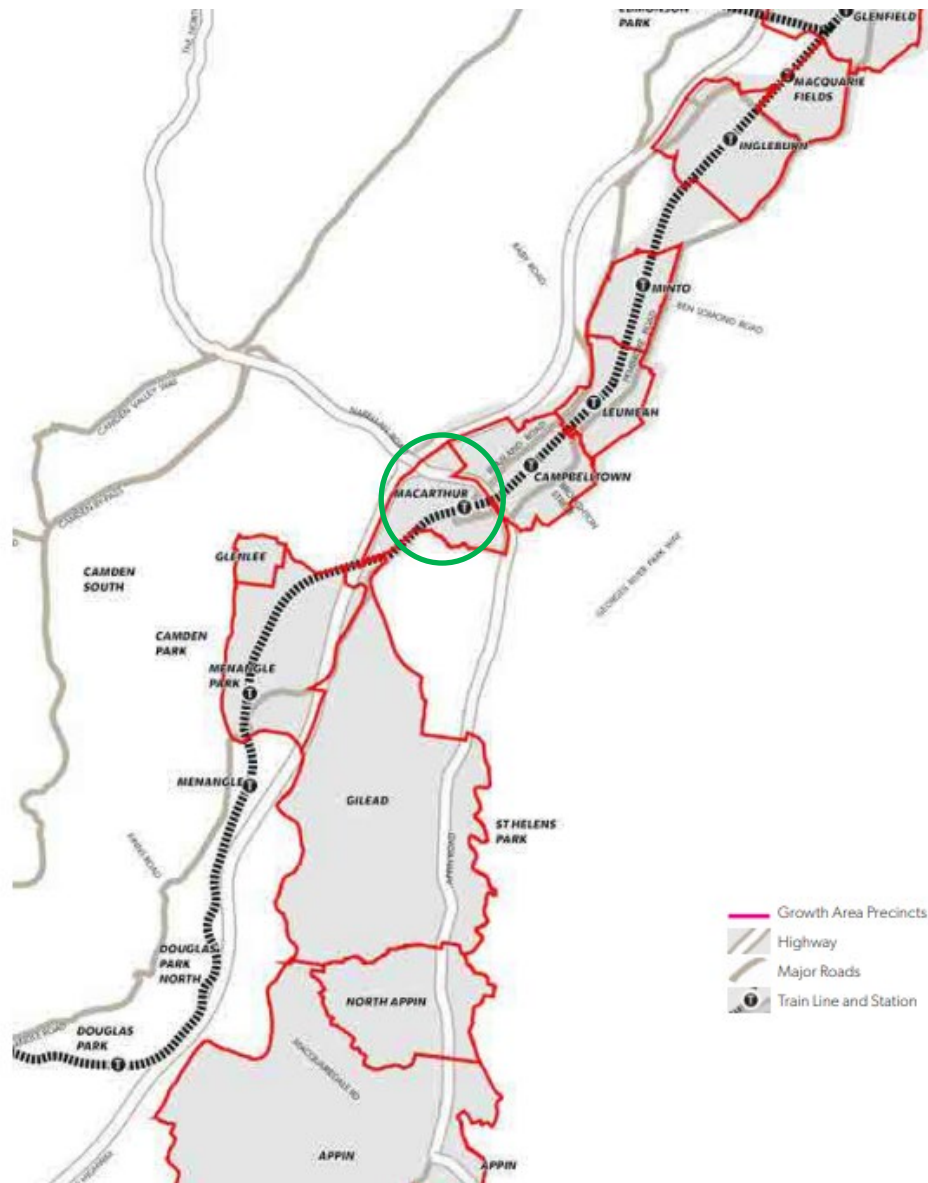


Figure 5: Greater Macarthur Growth Area Precincts)

(Source: Greater Macarthur 2040: An Interim Plan for the Greater Macarthur Growth Area, Department of Planning and Environment, Nov 2018)

Greater Macarthur 2040 identifies the highly accessible transport corridor connecting Campbelltown Macarthur, Gilead, Appin and Douglas Park as suitable for medium density (greater than 25 dwellings per hectare) including smaller lots, terraces, medium density and multi-storey development. The Greater Macarthur 2040 Structure Plan envisages that MGN will be developed for medium rise residential and mixed uses, as shown in **Figure 6**.

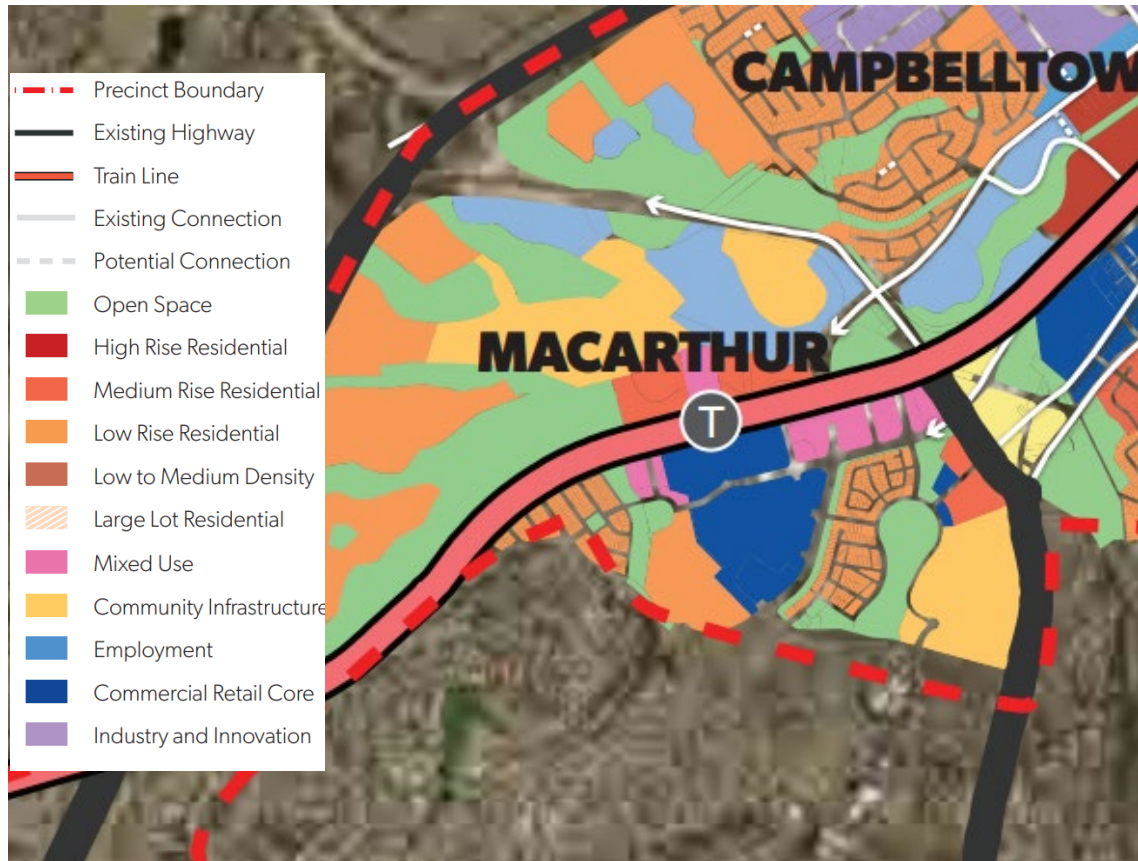


Figure 6: Greater Macarthur 2040 Structure Plan

A more detailed vision for the Macarthur precinct is provided in the Macarthur Precinct Plan prepared by the NSW Department of Planning and Environment in 2017. The Macarthur Precinct Plan similarly indicates that MGN could accommodate medium rise residential and mixed use development.

It is proposed that MGN will be developed for a mix of medium/high density and mixed use development consistent with the vision expressed in both the Macarthur Precinct Plan and Greater Macarthur 2040.

The development of MGN as a medium/high density residential and mixed use community integrated with transport and services is also consistent with Campbelltown City Council's vision for the Campbelltown-Macarthur Precinct. Council's *Reimagining Campbelltown* and the *Reimagining Campbelltown Masterplan* identify a series of projects and actions to support the future development of the Campbelltown City CBD, which includes the MGN site. Key projects of relevance to Macarthur Gardens North include:

- **Project 2.1: Deliver the Macarthur Health, Knowledge and Innovation District** – The MGN concept will support this action by providing a vibrant and liveable residential neighbourhood in close proximity to the University, TAFE and Campbelltown-Macarthur

Health Precinct. It will offer well-designed, diverse and high quality accommodation in close proximity to transport and services.

- **Project 4.1: Transform Bow Bowling Creek** – Landcom is no longer proposing to realign Bow Bowling Creek. Instead, it is committed to enhancing the waterway and surrounding open space as part of this DA, consistent with Council’s objectives for this integral element of the City’s ‘Green-Blue Web’.
- **Project 4.2: Be Guided by Green** – The MGN concept will provide for improved connectivity of pedestrian movements through and beyond the site and improved biodiversity and cooling through street tree planting. It will include the creation of a significant open space and biodiversity corridor along Bow Bowling Creek.

3. SITE DESCRIPTION

3.1 Site context

MGN is part of the Macarthur precinct which is the southernmost precinct in the Glenfield to Macarthur corridor. The Macarthur region, which is a rapidly expanding and developing area, is part of a series of precincts being developed for south-western Sydney. The Macarthur Precinct is a major destination for retail, tertiary education and health services in the region.

MGN is located 100m north of the Macarthur train station, 200m from Western Sydney University and TAFE and is near local services and amenities including the Macarthur Square Shopping Centre, Campbelltown Mall, Campbelltown Hospital, and open space.

Macarthur is complementary to the Campbelltown precinct, and together they comprise the Campbelltown-Macarthur Regional City Centre. The MGN location is shown in **Figure 7** and Site location in **Figure 8**.

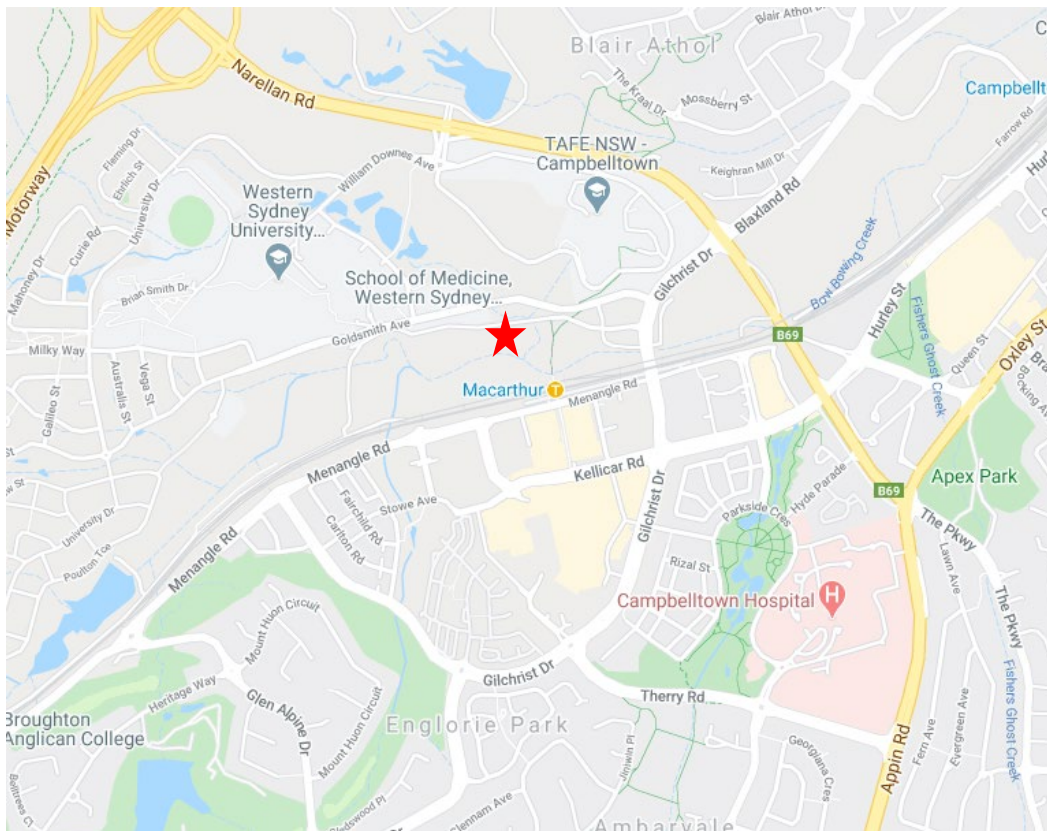


Figure 7: Site location
(Source: www.nearmap.com)



Figure 8: Site location (Source: Urban Design and Landscape Report)

3.2 Site description

The Site is bounded by Goldsmith Avenue to the north, Gilchrist Drive to the east, the southern railway to the south and future playing fields (under construction) to the west. The subject Site is legally described as part Lot 1097 in DP 1182558 and has a total area of 18.52ha. A survey is provided at Attachment B.



Figure 9: Site aerial (Source: www.nearmap.com)

The Site has been cleared and re-contoured in accordance with previous development consents (refer discussion in **Section 2.1**) to make it suitable for residential development.

Bow Bowing Creek enters to the south of the Site through an upstream culvert in the detention bund to the west and discharges under Gilchrist Drive. To the east of the Site is a pedestrian pathway connecting Macarthur Station and the Western Sydney University and TAFE.

The Site is generally gently sloping ribbon patches of steep slope from east to west. The TAFE site situated to the north of the Site has a significant steep slope area.

The Site has direct access to Narellan Road via Gilchrist Drive that provides direct connection to Sydney CBD and Southern Highlands via Hume Highway and South West Growth Area including future Western Sydney Airport via The Northern Road. The Site also has direct access to Gilchrist Drive that connects to Macarthur Square, Campbelltown Hospital and Park Central to the south and Campbelltown CBD to the east via Blaxland Road.

There are existing services available in the vicinity of the Site.

Further details on the Site are provided in the Urban Design and Landscape Report (UDLR) at Attachment C.

4. PROJECT DESCRIPTION

4.1 Project vision

The MGN Precinct will celebrate the natural assets of Bow Bowing Creek and connect this to the community. It will be an attractive urban place for people to live in - a diverse, healthy, vibrant and sustainable new neighbourhood. Designed with 'place' in mind, the new community is underpinned by sustainability principles and high-quality public domain and built for outcomes.

To enable this vision, the MGN Precinct will deliver:

- A new residential community who will live in high-density apartment buildings
- Ground floor retail to support the new community and activate the public domain
- An arrival plaza and park on the northern side of Macarthur Station that links to the precinct's key destinations being Western Sydney University, TAFE, MGN and Bow Bowing Creek
- Active transport via a regional east-west cycle network and walking paths around a significant area of open space that retains the existing creek and biodiversity values
- Safer and more comfortable connections from the Site to the station, the University, TAFE, Gilchrist Oval and the new sporting field complex through new open spaces such as the Bow Bowing Creek Reserve
- Attractive and tree covered streets and public places
- Retention and enhancement of Bow Bowing Creek, the local blue grid.



Figure 10: Indicative scheme – artist's impression (Source: UDLR)

4.2 Concept Proposal

Concept approval is sought for:

- Six building envelopes of varying heights to a maximum of nine storeys
- Maximum gross floor area (GFA) of approximately 102,500 m².
- Residential development – approximately 1,250 dwellings equating to approximately 100,500m² GFA
- Commercial and retail - approximately 2,000 m² GFA
- Provision of approximately 1,145 residential and 21 non residential car parking spaces together with eight shared vehicle spaces
- Approximately 517 bicycle parking spaces
- 1.2 hectares of active open space and a further 9.4 hectares of passive open space (Bow Bowing Creek Reserve)
- Public domain landscaping
- Road layout
- Pedestrian and cycle network, including future pedestrian bridge to Macarthur Railway Station
- A strategy for the achievement of ecologically sustainable development.

An Urban Design and Landscape Report (UDLR), including concept design drawings and details, has been prepared by Urbis and is provided at Attachment C.

An Indicative Scheme for the Concept Proposal is provided to demonstrate how the Site could be developed to achieve good amenity based on best practice urban design principles. The Indicative Scheme is provided in the Appendix to the UDLR (Section 8.2).



Figure 11: Concept Proposal (Source: UDLR)

4.2.1 Key development information

The key numeric details of the proposal are summarised in **Table 2**:

Table 2: Key development information

Site area	18.5 hectares
GFA	102,500m ² (approximately 100,500m ² residential and 2,000m ² non residential)
No of dwellings	1,250 (estimate)
FSR	0.5:1 (Total MGN Development Precinct Area)
Height	32m/9 storeys
Setbacks	Refer Setback Strategy drawing in UDLR
Car spaces	1145 residential / 21 retail / 8 shared

4.2.2 Building envelopes

The proposed building envelopes set the parameters for the future buildings and are detailed in the Built Form Strategy (Strategy 4) included as part of the UDLR. The building envelopes have been designed having regard to maximising solar access, creating a variety of urban scales and visual interest in the urban form.

Detailed buildings within the prescribed envelopes will be subject to future detailed development application(s). These future DA/s will seek approval for the design, construction and fit out of the buildings.



Figure 12:: Built form strategy (Source: UDLR)

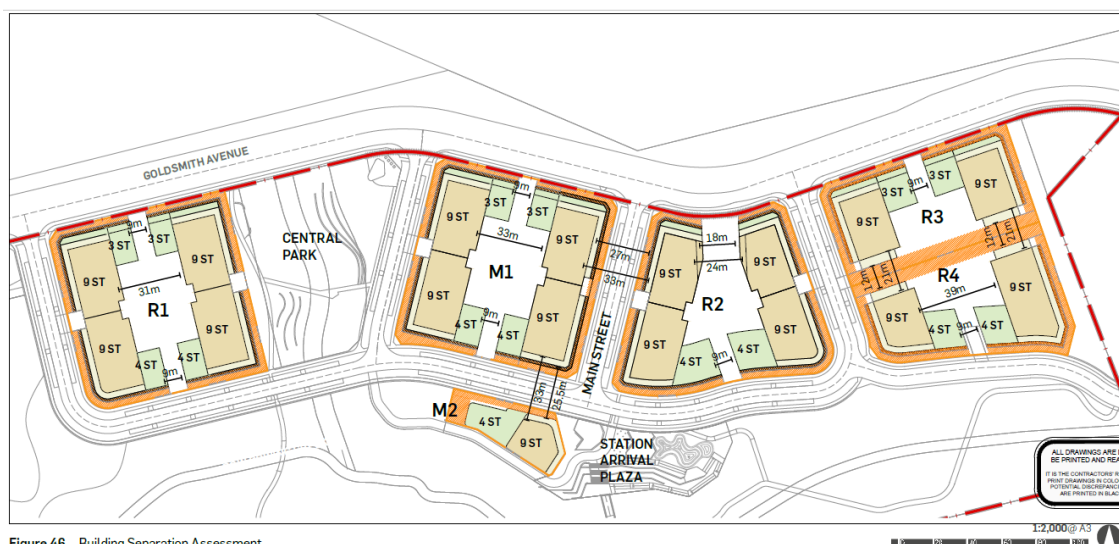


Figure 46 Building Separation Assessment

LEGEND

Macarthur Gardens North	Setback Zone	Lower Podium (Up to 4 storeys)	Tower (up to 9 storeys)
Residential Lot Boundary	1.5m Articulation Zone (2 storeys)	Upper Podium/ Streetwall (6 storeys)	

Figure 13: Proposed building envelopes (Source: UDLR)

4.2.3 Land use

It is proposed to provide for a vibrant precinct comprising residential, retail/commercial and recreational uses. High density residential development is proposed to take advantage of the Site's close proximity to Macarthur Station and Macarthur Square. A range of dwelling sizes are proposed to meet the housing needs of a range of family types.

The primary role of retail and non-retail facilities on the Site will be convenience-based, to serve localised demand for residents, workers and commuters. An extensive open space system will be provided, offering active and passive recreation opportunities.

The land use strategy is shown in **Figure 14**.

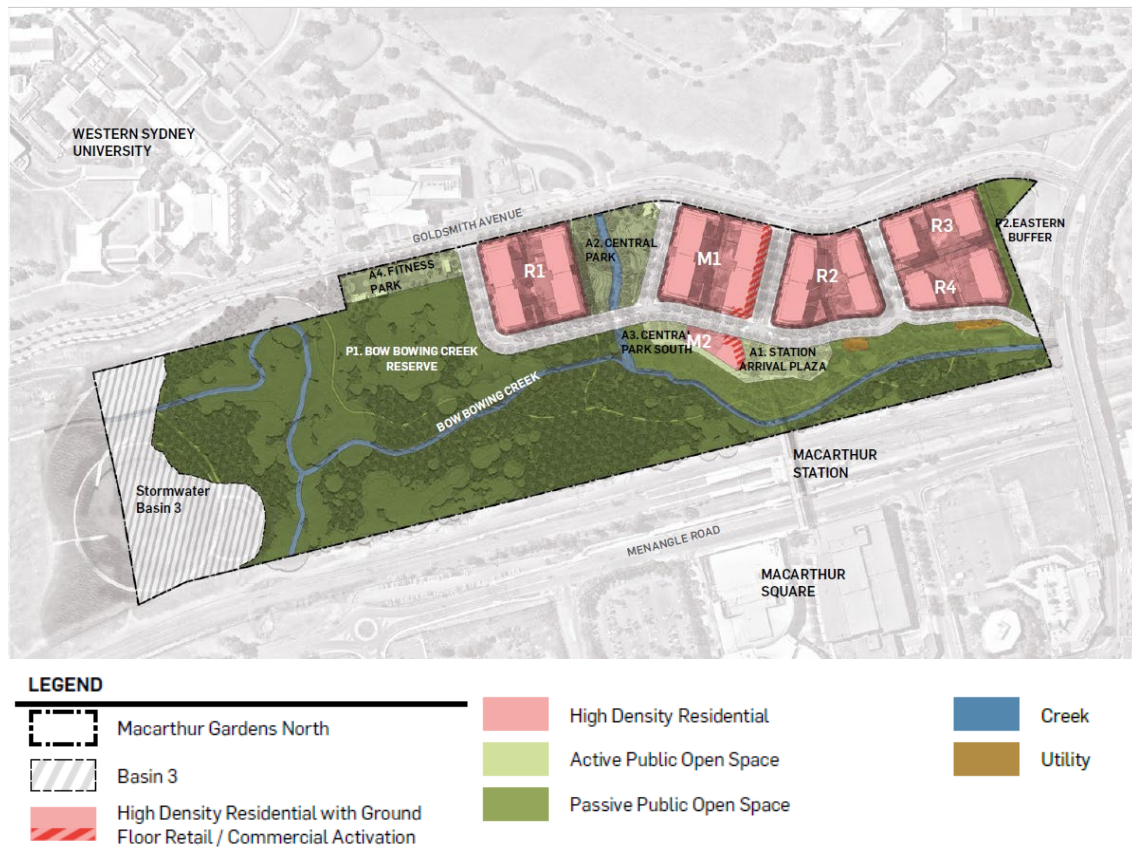


Figure 14: Land use strategy (Source: UDLR)

4.2.4 Open space and landscaping

Open space

The MGN Precinct landscape design will create a natural environment for residents and visitors to relax and unwind. The aim for the ground-floor landscape is to create spaces for people to connect to the wider precinct. Varying scales of form, function and planting offer a variety of outdoor experiences for the residents.

In addition to the Bow Bowing Creek Reserve, the proposal identifies five key landscape places within the precinct:

- Public Domain
- Station Arrival Park
- Central Park Main
- Central Park South
- Fitness Park.

Landscaping

Details of proposed landscaping and public domain are provided in the UDLR at Attachment C.

The proposal will increase the tree canopy cover to achieve approximately 54% canopy cover target. The strategy to achieve the 54% canopy cover target includes:

- Revegetation of Bow Bowling Creek Reserve
- New tree planting on the public domain including streets, the arrival plaza and new open spaces
- Softscaping including tree planting to private open space on ground level and communal areas with deep soil zones.

This outcome provides an additional 5.2ha/ 31.8% tree canopy resulting in a total 53.6% total canopy cover that well exceeds the minimum 40% canopy cover target.

Removal of some existing trees will be necessary to ensure other objectives of the master plan are delivered. These are located along the perimeter of the development footprint/ civil work extent.

It is intended that the public domain and open space will be handed over to Council under the terms of a Voluntary Planning Agreement (VPA). Landcom intends to commence discussions with Council shortly regarding the scope and terms of the VPA.

4.2.5 Vehicular access and parking

The proposed street layout comprises:

- An interconnected street network that promotes safe pedestrian environment with varied typology based on the lot frontage and streetscape treatment
- Vehicular access to residential lots are provided off secondary streets with raised threshold when crossed with footpath along the streetscape
- All street sections provide a min. 6.0m carriageway.

Vehicles will access the Site from Goldsmith Avenue. The proposed internal road network layout consists of four north-south local streets off Goldsmith Avenue as well as an east-west road along the southern boundary with Bow-Bowing Creek.

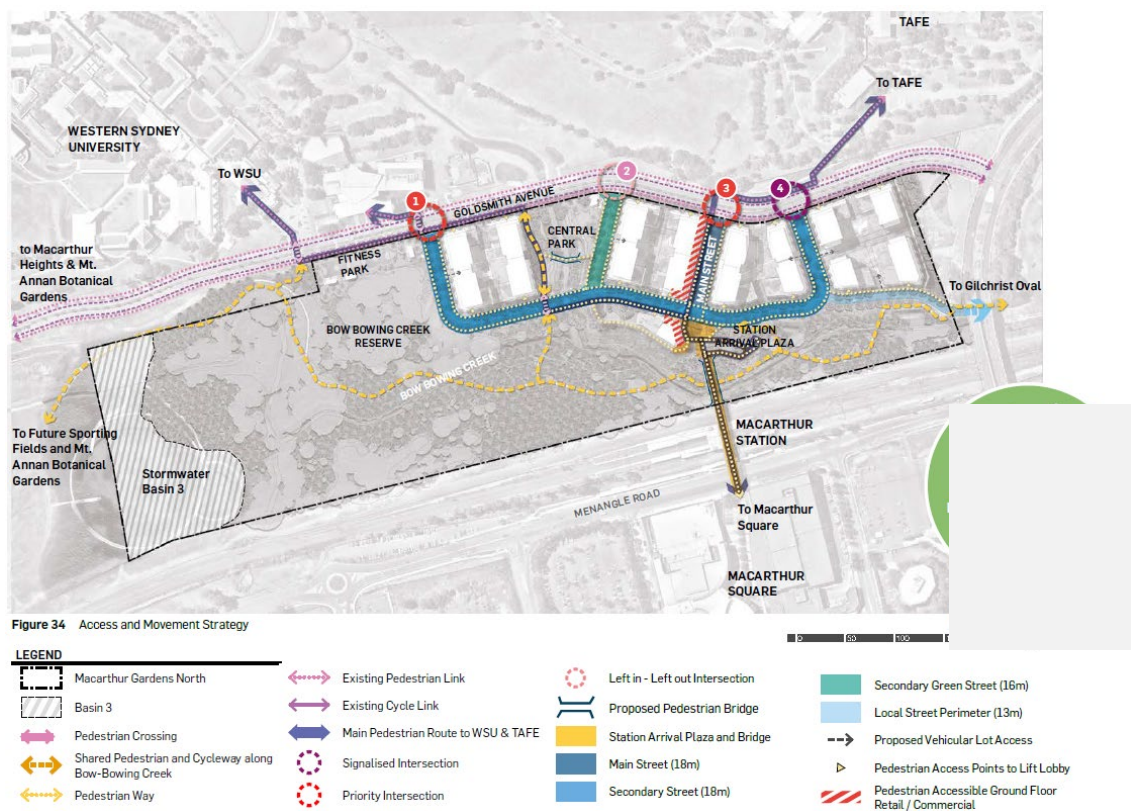
The hierarchy of these roads can be split into either an 18m Secondary Road or a 16m Park Road, with the cross-sections for each road based generally on Council Guidelines. There is also to be a new 13m road that will provide a vehicle link through to Gilchrist Oval to the east of the proposed site. Similarly, provision for on-street parking is to be provided on all internal roads within the MGN site in accordance with Council requirements.

The movement and access strategy is shown in **Figure 15**.

Proposed car parking provision is set out in **Table 3**. Further detail on parking provision and justification is provided in **Section 5.3.2**.

Table 3: Proposed car parking spaces (Source: Traffic Report)

Type of dwelling	No. of dwellings	Proposed car parking rates	Car parking spaces	Proposed bicycle parking rates	Bicycle parking spaces
Studio/1-bedroom unit	604	0.6 space per unit	363	1 space per 3 unit	201
2-bedroom unit	496	0.9 space per unit	447	1 space per 3 unit	165
3-bedroom unit	150	1.4 space per unit	210	1 space per 3 unit	50
Visitor space	1,250	1 space per 10 unit	125	1 space per 12 unit	104
SUB-TOTAL FOR RESIDENTIAL			1,145		520
Retail	~1,960sqm of GFA	1 space per 95m2 of GFA	21		

**Figure 15: Access and movement strategy** (Source: UDLR)

4.2.6 Pedestrian and cycle access

The Concept Proposal facilitates improved pedestrian and cycling connections between Macarthur Square, Macarthur Station (south of the Site) and the Western Sydney University and TAFE NSW – Campbelltown (north of the Site). It will also provide a 1.2km dedicated pedestrian cycleway along the Bow Bowling Creek Reserve.

A pedestrian network through the site will be provided via footpaths along the internal local streets, that connect with Goldsmith Avenue to the north, to Gilchrist Oval and to Macarthur Station (via an approximate 200-400m walk). Safe pedestrian access across Goldsmith Avenue is provided at a new zebra crossing located near Access 1 and a new traffic signals with controlled crossings at Access 4 (refer **Figure 15**).

Cycling access from the site will be connected to the surrounding road network via existing facilities along Goldsmith Avenue and the rest of the network. A new shared path is also proposed south of the site along Bow Bowling Creek, connecting the site (at the eastern end) to the greater Green Grid Network, as well as Gilchrist Oval in the east. Multiple connections are also proposed between the Bow Bowling Creek and Goldsmith Avenue through the permeable street network of the site.

4.2.7 Pedestrian bridge

A new pedestrian bridge is proposed to be constructed linking the Site to the Macarthur Station. The bridge will provide accessible pedestrian access from Macarthur Station to Station Arrival Plaza via 1:20 bridge and 1:19 ramps in response to the level changes between these places.

The detailed design of the pedestrian bridge will be subject to a separate planning approval process.

4.2.8 Public transport access

The improvements to the pedestrian network as part of the Concept Proposal will provide convenient access to the Macarthur Station and bus interchange, via an approximate 200-400m walk from the Site. The proximity of the Site to the Macarthur Station along with the frequent number of train services available to the City and Airport, suggests that future residents will be well served by public transport to these key destinations. In addition, the frequent number of bus services at the Macarthur Station Interchange will provide access to surrounding local and key employment centres in the Campbelltown and Macarthur Region.

A public transport corridor (as part of the Sydney Metro Greater West project) has been planned and reserved between the North West, Western Sydney Airport, South West and Greater Macarthur Growth Areas. The Future Transport Link through Western Sydney will provide improved transport options and accessibility for future MGN residents to future employment areas along Sydney's expanded Metro network. This will also enable MGN to be designed as a transit-oriented development with 30-minute access to jobs and economic growth across Western Sydney and for the planned Western Sydney Airport.

4.2.9 Ecologically sustainable development

Ecologically Sustainable Development (ESD) is an integral part of the MGN development principles and the preparation of the Concept Proposal. An ESD report has been prepared and is provided at Attachment D. Overall the Precinct will achieve high standards of ESD through Landcom's Sustainable Places Strategy.

Further, Macarthur Gardens North has been awarded a 5 star Green Star rating, making it the first 5 green star community in Campbelltown/Macarthur. The Green Star Certificate is provided at Attachment E.

4.2.10 Operational waste management

The road layout has been designed to ensure that garbage trucks can manoeuvre easily through the Site. The subdivision provides for a circular street configuration to minimise culs-de-sac and allow garbage truck movement.

An Operational Waste Management Plan has been prepared by Elephant's Foot and is provided at Attachment F. The Operational Waste Management Plan identifies the different waste streams likely to be generated during the operational phase of the development. Associated information includes how the waste will be handled and disposed, details of bin sizes/quantities and waste rooms, descriptions of the proposed waste management equipment used, and information on waste collection points and frequencies.

Further details of waste management associated with future residential development will be provided at the detailed DA stage for each apartment building.

4.2.11 Arrangements for future development

Landcom will seek expressions of interest from prospective developers to purchase and develop each of the development blocks. Special Conditions will be included in any sales contract between Landcom and future developers to require Landcom's established Design Review Process is followed. This will ensure that design and construction principles are in line with the vision for the MGN Precinct, as articulated in the UDLR and Site Specific Development Control Plan.

4.3 Stage 1 Works

Development consent is also sought for Stage 1 works being:

- Early civil works, including lot grading and provision of stormwater network
- Construction of local road network
- Construction of parks and landscaping
- Superlot subdivision.

4.3.1 Earthworks and land grading

Bulk earthworks across the MGN site were approved under separate consents, as outlined in **Section 2.1**.

This proposal seeks consent for earthworks to facilitate the development, as outlined in the Site Cut and Fill Plan in the civil drawings prepared by Infrastructure and Development Consulting and included in this SEE at Attachment G

Preliminary assessment of the Site indicates that import of fill will be required to both:

- ensure that the proposed lot areas are situated above the 100yr ARI flood extents in accordance with Council requirements
- allow for level pedestrian access and egress to Macarthur Train Station which is situated immediately to the south of the Site. The Site is to be linked to the train station via a new pedestrian walkway which is to be constructed over Bow Bowing Creek and connect to the Station concourse.

Initial review based on the current Masterplan Lot Layout indicates that approximately 83,700m³ of fill will need to be imported to the site to suit (refer to IDC Drawing 19-036-DA-C1300 for details). The proposed fill will comprise virgin excavated natural material (VENM) and will not comprise or be mixed with any waste or contaminated material.

The civil drawings contain detailed plans and sections, confirm the extent of cut and fill, the proposed stormwater drainage measures, and sediment and erosion controls. Further details are also provided in the Civil Engineering, Services and Infrastructure Master Planning Report at Attachment H.

4.3.2 Roads

As part of the proposal, a new local road network is to be constructed to link the Site to Goldsmith Ave (refer civil engineering drawings at Attachment G). The proposed road hierarchy is shown in **Figure 16**.

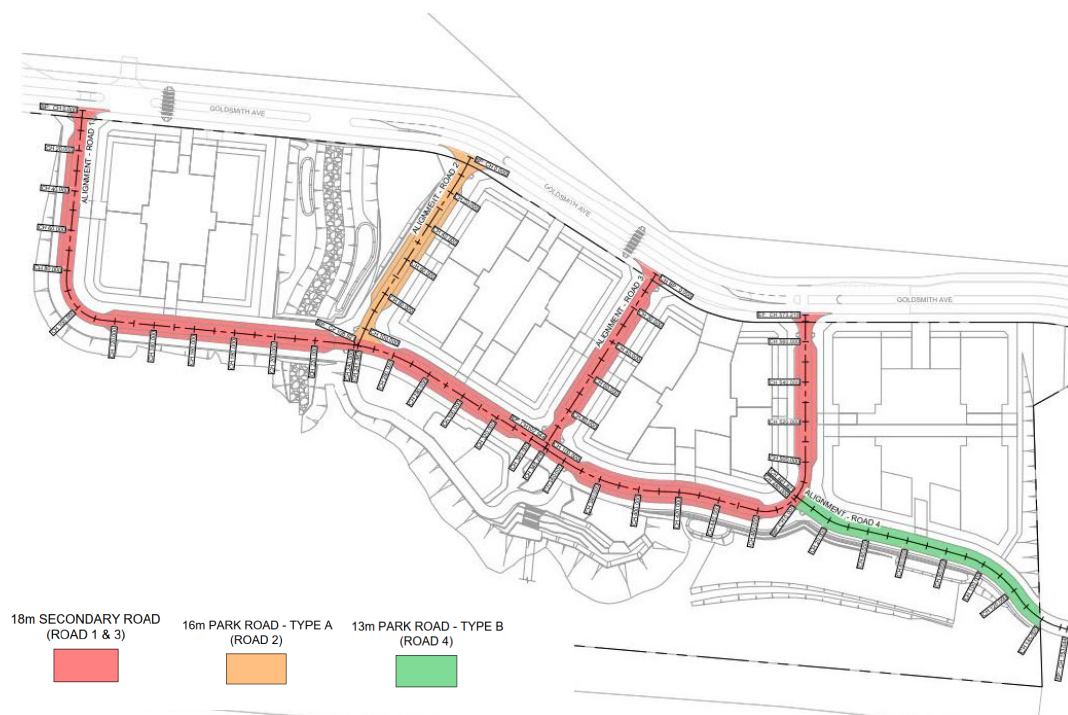


Figure 16: Road hierarchy (Source: Civil Engineering, Services & Infrastructure Master Planning Report, Attachment H)

Access is to be provided via four new priority intersection treatments with Goldsmith Ave as shown in **Figure 17** below, with the following vehicle movements proposed:

- Intersection 1 = left in / left out only
- Intersection 2 = all vehicle movements
- Intersection 3 = left in / left out only
- Intersection 4 = all vehicle movements.

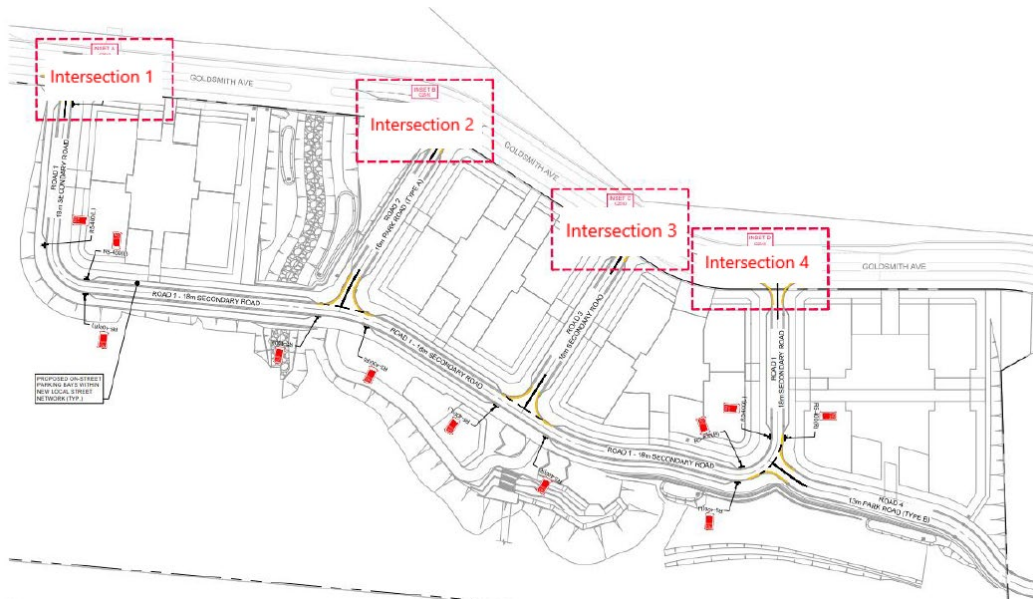


Figure 17: Proposed intersection layout (Source: Civil Engineering, Services & Infrastructure Master Planning Report)

Road alignments, typical sections and longitudinal sections are provided in the civil drawings and are also illustrated in the UDLR.

4.3.3 Stormwater

Details of the proposed stormwater system are provided in the Civil Engineering, Services and Infrastructure Master Planning Report at Attachment H and civil engineering drawings at Attachment G.

The stormwater network for the Site has been designed to comply with the following guidelines:

- Campbelltown City Council Development Control Plans
 - Campbelltown (Sustainable City) Development Control Plan 2015
 - Campbelltown (Sustainable City) Development Control Plan 2009 – Engineering Design for Development
- Australian Rainfall and Runoff
- Managing Urban Stormwater: Soils and Construction

4.3.4 Landscaping and open space

Detailed landscaping works are provided for the Stage 1 works under this application. Specifically, this includes:

- Station Arrival Park
- Central Park
- Fitness Park
- Communal open space
- Street tree planting
- Restoration of Bow Bowing Creek Corridor

Station Arrival Park

Station Arrival Precinct serves as the primary civic place and the front door of MGN Precinct from Macarthur station. The key features of this space include:

- Ground floor activation through retail frontages and food and beverage offer
- Flexible plaza space allowing for markets and gatherings
- Adventure playground for informal and programmed play with a signature play tower
- Terraced amphitheatre to alleviate level changes and provide passive surveillance to adjacent plaza and play area
- Water play mitigating both urban heat island effects and providing additional play opportunity and public art
- Accessible bridge and ramp from station concourse to the arrival plaza with integrated edges for seating
- Central raised lawn with incidental seating opportunities and feature shade trees.

Central Park

The Central Park is the main green active open space situated next to Goldsmith Avenue. It provides visitors with informal open space, vegetated retreat spaces and a connection with nature. The key features of this space include:

- Terraced amphitheatre walls to connect & improve the connection to the creek
- An open lawn for informal play and recreation
- BBQ area and amenity block with handstand corner to Goldsmith Ave
- Wetland detention basins incorporating WSUD principles
- Suspended board walk with viewing platforms.

Fitness Park

The Fitness Park - Multi Purpose Outdoor Recreational Space, will be provided adjacent to Goldsmith Ave and WSU and will offer fitness and active recreational facilities for all ages. Key features include:

- Key location adjacent to Goldsmith Ave and WSU to maximise exposure and usage
- Two basketball courts, both full courts and half courts
- Terraced seating edges and breakout recreational spaces
- Multi purpose outdoor space - table tennis and fitness equipment
- Amenities

Communal open space – courtyards and rooftop gardens

Communal open spaces within residential lots will be located centrally on ground level and at rooftops to provide shared amenity for residents. These communal spaces are designed in accordance with the ADG.

Future key features include:

- Seating areas
- Shade areas
- BBQ/picnic areas
- Play areas
- Primary tree canopy within deep soil zone
- Secondary tree canopy within ground level and podium rooftop
- Balance of private and open spaces
- Rooftop design to maximise elevated views
- Community gardens.

Street tree planting

Proposed street tree planting is shown on the Master Plan in Section 4.2 of the UDLR. In general, it is proposed that street trees will respond to the street hierarchy and Council's street tree list.

Bow Bowing Creek

Bow Bowing Creek is to generally be maintained in its current alignment along the southern boundary of the lot, with minor localised re-grading proposed. It is proposed to carry out weeding and re-vegetation of the riparian corridor in accordance with the recommendations of the Riparian Assessment prepared by Ecological Australia and included at Attachment I.

4.3.5 Services

Following initial review of the existing utilities and local infrastructure, it is evident that opportunities exist to adequately service the proposed development. Detailed requirements from the relevant service providers will be obtained as the project progresses and incorporated into the relevant design documentation for service authority approval prior to Subdivision Certificate.

Further detail is provided in the Civil Engineering, Services and Infrastructure Masterplan Report at Attachment H.

4.3.6 Construction

It is intended that a detailed Construction Management Plan will be prepared prior to the commencement of works and once a contractor has been engaged. The Construction Management Plan will address a range of construction issues to minimise impacts including:

- the proposed methods for access to and egress from the Site for construction vehicles
- the proposed phasing of works on the Site and the expected duration of each phase
- the proposed order in which works on the Site will be undertaken, and a method statement on how various stages will be undertaken
- the proposed method of pedestrian management surrounding the Site (if required) for the various stages of the development
- the proposed method for traffic management during construction
- the proposed areas within the Site to be used for the storage of materials, and waste containers during the construction period
- the proposed method/device to remove loose material from all vehicles and/or machinery before entering the road reserve
- erosion and sediment control, and
- dust suppression measures and stockpile protection.

All work will be undertaken during standard construction hours. Having regard to these measures it is considered that the proposal will not give rise to any adverse construction impacts.

A detailed Construction Traffic Management Plan (CTMP), which will include a construction traffic control plan, will also be prepared. This will be done prior to commencement of construction and in accordance with the Traffic Control at Work Sites Technical Manual (2010). The CTMP will address the overall traffic management of the Site during the construction phase, including provision for vehicular and pedestrian access, parking for construction vehicles and appropriate wayfinding. The vehicular movements and expected routes to and from the Site will also be further quantified and defined.

4.3.7 Subdivision

Development consent is sought for subdivision of the Site into four superlots and one residue lot, as described in **Table 4** and shown in the proposed subdivision plans at Attachment J.

Table 4: Proposed superlots

Proposed Lot	Area
Lot 11	7,885m ²
Lot 12	8,101m ²
Lot 13	7,336m ²
Lot 14	9,850m ²
Lot 15	1,208m ²
Lot 16	588m ²
Lot 10 (residue)	13.55ha
Sub Total	17.05ha
Road	1.52ha
Total area	18.5ha

The superlot subdivision is required to facilitate development of the site in accordance with the structure plan set out in the UDLR at Attachment C.

5. ENVIRONMENTAL ASSESSMENT

This section provides an assessment of the planning issues associated with the Proposal in accordance with Section 4.15 and other relevant provisions under the EP&A Act.

5.1 Environmental Planning and Assessment Act 1979

5.1.1 Determination of Crown Development Applications

The application is a Crown DA as provided for under Division 4.6 of the EP&A Act. Landcom is a public authority as defined under the EP&A Act and is therefore a 'prescribed person' for the purposes of Division 4.6. In accordance with Clause 4.33 of the EP&A Act, a consent authority must not impose a condition on its consent to a Crown development application, except with the approval of the applicant.

5.1.2 Integrated Development

Division 4.8 of the EP&A Act is the division dealing with integrated development. Section 4.44(2) of Division 4.8 states that:

... this Division does not apply to development the subject of a development application made by or on behalf of the Crown (within the meaning of Division 4.6), other than development that requires a heritage approval.

Therefore, a Crown DA cannot be integrated development except where a heritage approval is required. As no heritage approval is required in this instance, this DA is not integrated development.

5.2 Section 4.15(1)(a) Planning Instruments

5.2.1 State Environmental Planning Policies

State Environmental Planning Policy (Infrastructure) 2007

Development in or adjacent to rail corridors is subject to Part 2, Division 15 of the *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP). Undertaking building works near a railway line requires consideration of the impact of that development on the safe and reliable operation of the railway, including stormwater drainage, excavation impacts, operation of cranes, noise impacts and design issues. Clauses 85 and 86 of the ISEPP require the council to refer applications for development and excavation in or adjacent to rail corridors to the relevant rail authority (in this case Sydney Trains) and to take into account any comments received. The council may only approve excavation in or adjacent to a rail corridor with the concurrence of the rail authority.

Clause 87 of the ISEPP outlines provisions relating to the impact of rail noise or vibration on non-rail development. Clause 87 applies to certain development proposed on land in or adjacent to a rail corridor where the consent authority considers that it is likely to be affected by rail noise or vibration. Before determining a DA, the consent authority must take into consideration any relevant guidelines. The NSW Government has issued *Development Near Railway Corridors and Busy Road – Interim Guideline* which is the relevant policy document for the purposes of this clause.

In the case of development applications for residential development, the consent authority must not grant consent unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:

- in any bedroom in the residential accommodation—35 dB(A) at any time between 10.00 pm and 7.00 am,
- anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

An Environmental Noise and Vibration Assessment for the proposed subdivision has been prepared by Renzo Tonin, a copy of which is provided at Attachment K. In summary, the assessment found that noise and vibration issues do not present a constraint to the Site being developed for residential use and that noise impacts can be suitably mitigated to achieve compliance through standard acoustic treatments. Further discussion on noise and vibration is provided in **Section 5.3.3**.

Schedule 3 of the ISEPP lists traffic generating development that is to be referred to Transport for NSW (formerly Roads and Maritime Services). This includes residential development comprising 300 or more dwellings. As the Concept Proposal comprises approximately 1,250 dwellings the application will need to be referred to Transport for NSW.

State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55)

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) provides a Statewide planning approach to the remediation of contaminated land by consideration of whether the land is contaminated and, if it is contaminated, whether it can be made suitable for the proposed purpose.

JBS&G Australia Pty Ltd (JBS&G) was previously appointed by UrbanGrowth NSW (now Landcom) in 2015 to undertake a contamination assessment of the Macarthur Gardens North area. Since completion of the contamination assessment the site area and proposed development plans have changed and additional stockpiled material has been imported to the Site. Landcom therefore engaged JBS&G to provide an updated contamination assessment report to incorporate changes in Site boundary, proposed land use, additional stockpiles imported to the Site and regulatory/guidance changes. A copy of the updated Contamination Assessment is provided at Attachment L.

The updated Contamination Assessment found that there are no indicators of significant or widespread contamination impacts at the Site that require management for the Site to be considered suitable for the proposed residential with accessible soil land use. However, as a result of former site works activities, the assessment did find that there are several minor features that will require management prior to commencement of development activities at the Site. Beyond these minor issues, there remains a low potential for small scale conditions to occur at the Site as may be encountered during broadscale ground disturbance that may adequately be addressed through the implementation of an Unexpected Finds Protocol (UFP).

In view of the findings of the updated Contamination Assessment, it is considered that the Site does not give rise to any contamination risks and can be made suitable for the future residential land use. It therefore satisfies the requirements of SEPP 55.

Further detail on contamination is provided in **Section 5.3.4**.

State Environmental Planning Policy (BASIX) 2004

State Environmental Planning Policy (Building Sustainability Index: BASIX) aims to ensure that new residential development within New South Wales is designed and constructed to use less water and energy. This policy incorporates BASIX, which is a web-based planning tool for the assessment of the potential performance of a development against an agreed set of criteria for energy and water conservation.

While this Concept DA does not seek approval for building construction, the ESD Report at Attachment D notes that Landcom's requirements for BASIX Energy and BASIX Water are more stringent than the minimum provided in the SEPP.

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65) aims to improve the design quality of residential flat developments, provide sustainable housing in social and environmental terms that is a long-term asset to the community and delivers better built form outcomes.

An assessment of the Concept Proposal in relation to the nine design quality principles contained in SEPP 65 has been undertaken by Urbis (refer Appendix 8.0 of UDLR). The assessment is supported by a preliminary ADG Compliance Assessment. The Urbis assessment indicates that the Concept Proposal complies with the design principles and design guidance.

State Environmental Planning Policy (Koala Habitat Protection) 2019

The proposed development is located on land mapped on the Land Application Map under the Koala Habitat SEPP 2019. The proposed development is also mapped as "Koala Development Application Map". According to the SEPP, consideration of the controls in the SEPP do not need to be required if the Local Government Area has an operational Koala Plan of Management (KPoM). The requirement is then to assess the proposed development consistent with the assessment guidelines outlined in the KPoM. Campbelltown City Council has a Comprehensive Koala Plan of Management (2018).

An assessment of the Concept Proposal against the provisions of the KPoM has been undertaken in the Biodiversity Development Assessment Report (BDAR) included at Attachment M. The BDAR indicates that the proposed development is considered consistent with the aims of the KPoM given the minor reduction of potential feed trees, absence of previously mapped core Koala habitat, few historical records and the severe fragmentation of the development Site and areas known to contain Koalas. Further detail is provided in the BDAR.

State Environmental Planning Policy (Major Infrastructure Corridors) 2020

The MGN Site is located adjacent to land identified within the *State Environmental Planning Policy (Major Infrastructure Corridors) 2000* (Major Infrastructure Corridors SEPP), as shown in **Figure 18**.



Figure 18: Excerpt from Major Infrastructure Corridors SEPP Map

Clause 11 of the Major Infrastructure Corridors SEPP states that:

11 Excavation in, above, below or adjacent to future infrastructure corridors

(1) This clause applies to development that involves the penetration of ground to a depth of at least 2 metres below ground level (existing) on land—

- (a) within, below or above a future infrastructure corridor, or*
- (b) within 25 metres (measured horizontally) of a future infrastructure corridor, or*
- (c) within 25 metres (measured horizontally) of the ground directly below a future infrastructure corridor, or*
- (d) within 25 metres (measured horizontally) of the ground directly above an underground future infrastructure corridor.*

(2) Before determining a development application (or an application for modification of a consent) for development to which this clause applies, the consent authority must—

- (a) within 7 days after the application is made, give written notice of the application to Transport for NSW, and*
- (b) take into consideration—*
 - (i) any response to the notice that is received within 21 days after the notice is given, and*
 - (ii) any guidelines issued by the Planning Secretary for the purposes of this clause and published in the Gazette.*

(3) The consent authority must not grant consent to development to which this clause applies without the concurrence of Transport for NSW.

(4) In deciding whether to provide concurrence, Transport for NSW must take into account—

- (a) the potential effects of the development (whether alone or cumulatively with other development or proposed development) on—*
 - (i) the safety or structural integrity of existing or proposed infrastructure in the future infrastructure corridor, and*
 - (ii) the safe and effective operation of existing or proposed future infrastructure in the future infrastructure corridor, and*
- (b) what measures are proposed, or could reasonably be taken, to avoid or minimise those potential effects.*

(5) Despite subclause (3), the consent authority may grant consent to development to which this clause applies without the concurrence of Transport for NSW if 21 days have passed since the consent authority gave notice under subclause (2)(a) and Transport for NSW has not granted or refused to grant concurrence.

As shown in **Figure 19**, all works will be located more than 25m from the infrastructure corridor. As such, this clause does not apply.

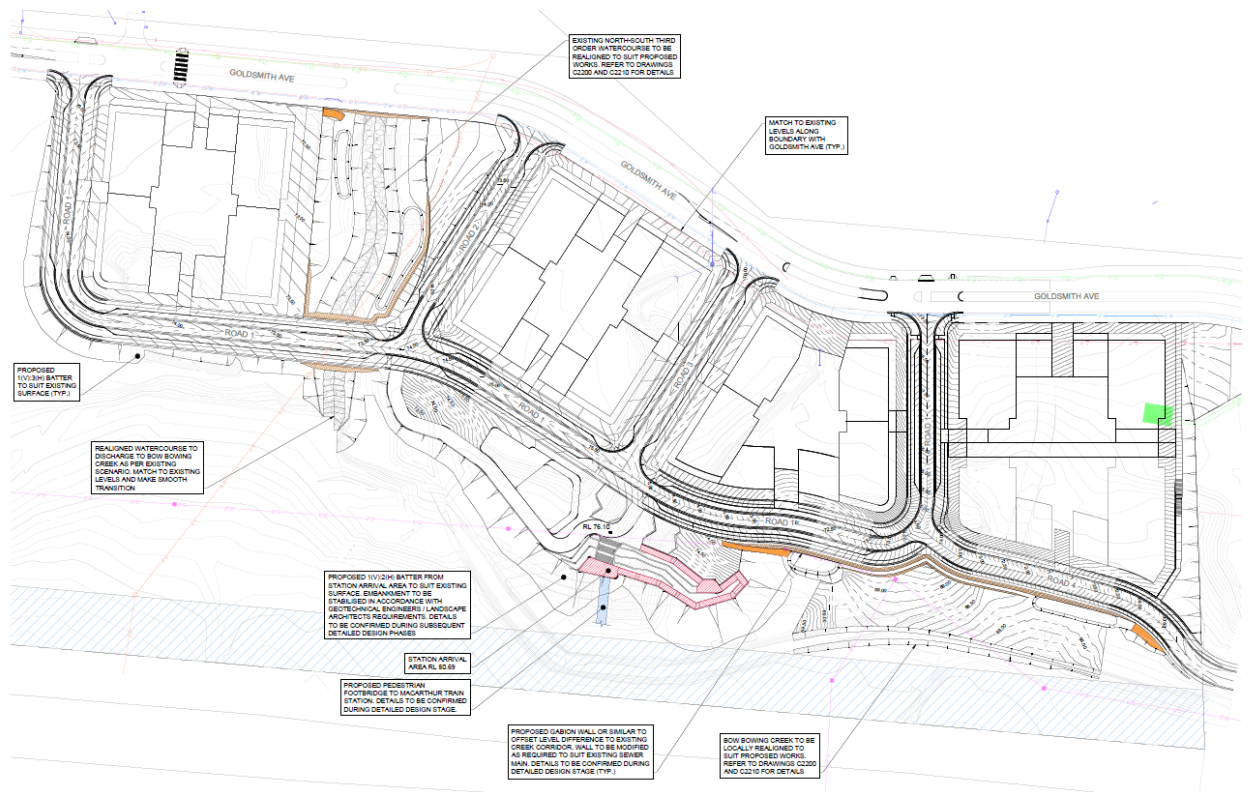


Figure 19: Plan showing location of 25m buffer (blue hatching) to infrastructure corridor (Source: Drawing No 19-036-DA-C2000, Civil Drawings, Attachment G)

State Environmental Planning Policy (Vegetation in Non Rural Areas)

This Policy provides a State-wide planning approach to protect the biodiversity values of trees and other vegetation in non-rural areas and to preserve the amenity of those areas through the preservation of trees and other vegetation. Approval of an application from a Native Vegetation Panel for the clearing of native vegetation under this policy is not sought and cannot be granted on account of the purpose for which development consent is sought (i.e. residential development and subdivision) requires development consent.

Development consent is sought for the removal of vegetation as part of this DA. An assessment of significance of the proposed native vegetation removal is provided in the Biodiversity Development Assessment Report (Attachment M), which concludes that the proposal will not have a significant impact on the existing local occurrence of the Cumberland Plain Woodland community (refer discussion in **Section 5.3.6**).

There are no other State Environmental Planning Policies that apply to the proposed development.

5.2.2 Campbelltown Local Environmental Plan 2015

The Site was previously identified as a 'deferred matter' under Campbelltown Local Environmental Plan 2015 (CLEP 2015) but has recently been zoned part R4 High Density Residential and part B4 Mixed Use, as shown in **Figure 20**.

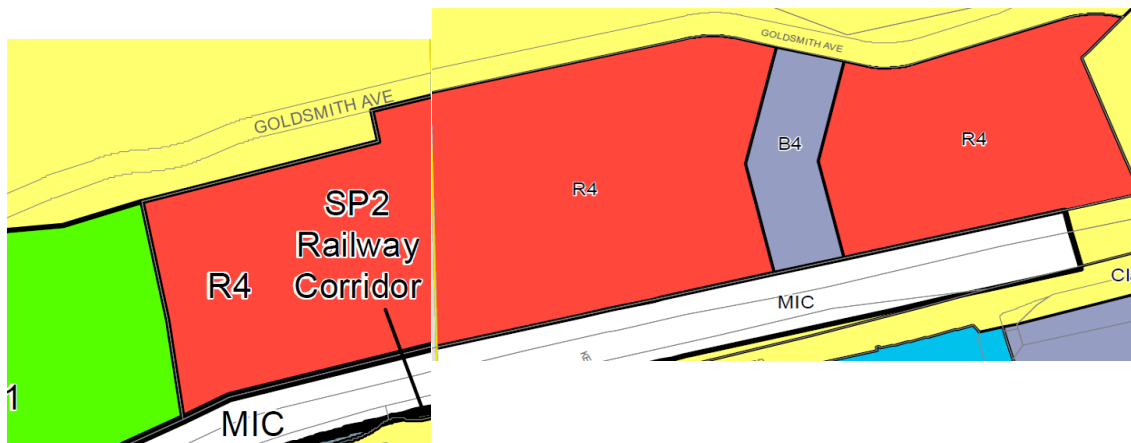


Figure 20: Excerpt from CLEP 2015 zoning map

The objectives of the R4 zone are:

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To encourage high density residential development in close proximity to centres and public transport hubs.
- To maximise redevelopment and infill opportunities for high density housing within walking distance of centres.
- To enable development for purposes other than residential only if that development is compatible with the character and scale of the living area.
- To minimise overshadowing and ensure a desired level of solar access to all properties.

The objectives of the B4 zone are:

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.
- To encourage the timely renewal and revitalisation of centres that are undergoing growth or change.
- To create vibrant, active and safe communities and economically sustainable employment centres.
- To provide a focal point for commercial investment, employment opportunities and centre-based living.
- To encourage the development of mixed-use buildings that accommodate a range of uses, including residential uses, and that have high residential amenity and active street frontages.
- To facilitate diverse and vibrant centres and neighbourhoods.
- To achieve an accessible, attractive and safe public domain.
- To provide healthy, attractive, vibrant and safe mixed use areas.

The Concept Proposal is wholly consistent with the R4 and B4 objectives, providing for the following:

- high density housing and mixed use close to transport and services
- housing that meets the needs of the community, increasing housing diversity and responding to changing demographic trends
- a high level of residential amenity in terms of solar access and natural ventilation
- shops and services to meet the day to day needs of the community
- an active, vibrant, attractive and safe public domain
- a high degree of accessibility with public transport and employment, retail, commercial, services and recreation facilities all within easy walking distance.

Cl.4.1 Minimum subdivision lot size

The CLEP 2015 Lot Size Map does not stipulate a minimum lot size for the Site.

Cl.4.3 Height of buildings

The Site has a maximum building height of 32 metres, as shown on the CLEP 2015 Height of Buildings Map. The proposed building envelopes comply with this maximum height limit.

Cl.4.4 Floor space ratio

The CLEP 2015 Floor Space Ratio Map does not specify a maximum floor space ratio for the Site.

Cl.5.21 Flood Planning

Clause 5.21 of CLEP 2015 aims to minimise the flood risk to life and property associated with the use of land, to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change, and to avoid significant adverse impacts on flood behaviour and the environment.

The clause applies to land at or below the flood planning level. The flood planning level means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5m freeboard.

The clause identifies that consent must not be granted to land at or below the flood planning unless Council has considered that the development:

- (a) is compatible with the flood function and behaviour on the land, and*
- (b) will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and*
- (c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and*
- (d) incorporates appropriate measures to manage risk to life in the event of a flood, and*
- (e) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.*

A Flood Impact Assessment has been prepared by J Wyndham Prince and is provided under separate cover. The results from the assessment indicate that the development extent is generally well clear of the 1% AEP flood extents and the flood levels downstream of the Site (at Gilchrist Basin) are not increased as a result of the development of the MGN Site. There is also no significant increase in flood levels external to the MGN Site. Further discussion on flooding is provided in **Section 5.3.8** and in the Flood Impact Assessment.

Clause 7.1 Earthworks

Clause 7.1 of CLEP 2015 requires the consent authority to consider the following matters when assessing development involving earthworks:

- (a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,*
- (b) the effect of the development on the likely future use or redevelopment of the land,*
- (c) the quality of the fill or the soil to be excavated, or both,*
- (d) the effect of the development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material and the destination of any excavated material,*
- (f) the likelihood of disturbing relics,*
- (g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,*
- (h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

As noted in **Section 4.3.1**, the Stage 1 works involve earthworks, as outlined in the Site Cut and Fill Plan in the civil drawings (refer to Attachment G). The proposed earthworks will provide an appropriate landform for the future development of the MGN Precinct and will not adversely impact on the nearby waterway or have a detrimental effect on drainage patterns or soil stability. The proposed fill will comprise virgin excavated natural material (VENM) and will not comprise or be mixed with any waste or contaminated material. As discussed in **Section 5.3.5**, the likelihood of disturbing relics is negligible. The soil and water management plan included in the civil drawings illustrates that appropriate measures will be taken to ensure the earthworks do not result in any adverse impacts.

Cl.7.3 Riparian land and watercourses

Clause 7.3 requires the consent authority to consider the following with respect to riparian land and watercourses:

- (a) whether or not the development is likely to have any adverse impact on the following—*
- (i) the water quality and flows within the watercourse,*
 - (ii) the aquatic and riparian species, habitats and ecosystems of the watercourse,*
 - (iii) the stability of the bed and banks of the watercourse,*
 - (iv) the free passage of fish and other aquatic organisms within or along the watercourse,*
 - (v) any future rehabilitation of the watercourse and its riparian areas,*
 - (vi) the underlying and surrounding groundwater resources and groundwater dependent ecosystems, and*
- (b) whether or not the development is likely to increase water extraction from the watercourse, and*
- (c) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

The clause also states that the consent authority must not grant consent to development unless it is satisfied that:

- (a) the development is designed, sited and will be managed to avoid potential adverse environmental impact, or*
- (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or*
- (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.*

A detailed Riparian Assessment has been prepared by Eco Logical Australia (ELA) (refer Attachment I). Field validated top of bank mapping identified three watercourses and their associated riparian corridors on the Site, as shown in **Figure 21**. The three watercourses are:

- Bow Bowing Creek – a 4th order stream
- Unnamed 2nd order creek
- Unnamed 3rd order creek

A fourth watercourse, a 1st order stream, was technically removed through a previous Controlled Activity Approval (CAA). The three remaining watercourses meet the definition of a 'river' under the *Water Management Act 2000* (WM Act).

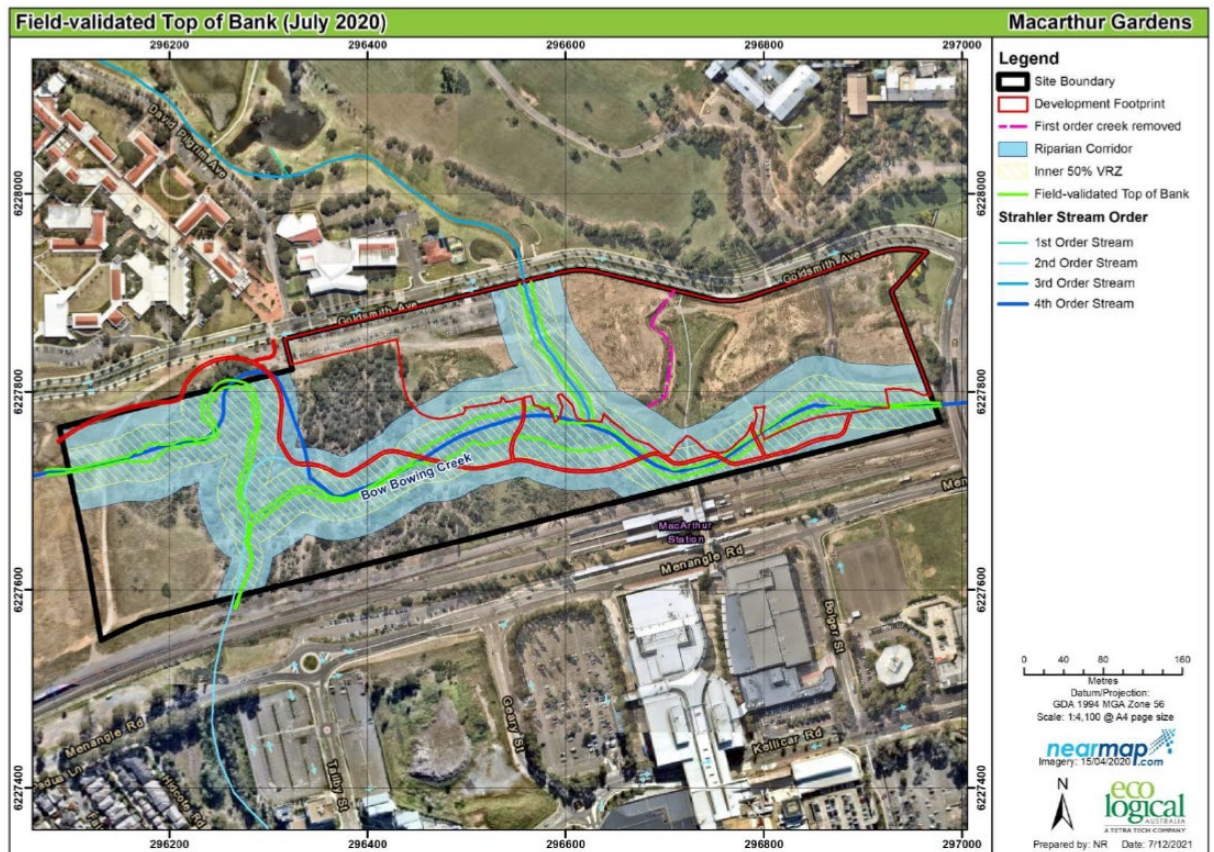


Figure 21: Watercourses (Source: Riparian Assessment, Attachment I)

The proposal would realign the 3rd order waterway and encroach the riparian corridor of Bow Bowing Creek. The works would encroach 0.66 ha of the outer Vegetated Riparian Zone (VRZ) and 0.59 ha of the inner VRZ plus realignment of a 3rd order river.

The encroached areas are highly degraded, and 1.28 ha of riparian offsets are proposed which is greater than a 1:1 ratio. The 3rd order channel has been previously realigned under a CAA approval and as a result, the banks have been left unvegetated and the channel is silted and degraded.

Revegetation and water quality improvement measures are proposed to be implemented, as detailed in the ELA Riparian Assessment. A Vegetation Management Plan (VMP) is to be prepared which will address all riparian corridors within the Site. The VMP will outline the areas to be revegetated as part of the offset and recommend fully structured vegetated areas as per *Guidelines for vegetation management plans on waterfront land* (DPI Water, 2012).

Overall, the MGN Concept has been designed and sited to avoid potential adverse environmental impact on the riparian corridors. ELA concludes that implementation of the VMP will ensure the revegetation and maintenance of the riparian corridors are successful in providing a buffer between the development and waterway, increasing the amount of native vegetation and riparian functions whilst improving the visual amenity and habitat this area provides. A range of other measures are proposed which will result in improved water quality and water flows.

It is therefore considered that the proposal complies with the requirements of Clause 7.3.

Further detail on the riparian corridors is provided in **Section 5.3.7**.

Cl.7.4 Salinity

Clause 7.4 requires the consent authority to consider the following with respect to salinity:

- (a) whether the development is likely to have any adverse impact on salinity processes on the land,*
- (b) whether salinity is likely to have an impact on the development,*
- (c) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

Moderately saline materials are naturally occurring features of the local landscape and are not considered significant impediments to future development of the Site, provided appropriate remediation or management techniques are employed. Further discussion on salinity is provided in **Section 5.3.4**.

Cl.7.9 Mixed use development in Zone B3 and Zone B4

Under cl.7.9(3) development consent must not be granted to the erection of a building in Zones B3 or B4 that will contain a residential component, or a change of use of a building unless the consent authority is satisfied that:

- (a) the building will have an active street frontage after its erection or change of use, and*
- (b) the ground floor will only accommodate non-residential land uses, and*

However, Cl.7.9(3A) states that sub-clauses (3)(a) and (b) do not apply to the Site, referred to as *land at Goldsmith Avenue, Campbelltown, being Lot 1097, DP 1182558*.

Notwithstanding the above, the MGN Concept provides for 1,960 sqm of ground level retail / commercial along the station arrival plaza and main street within the B4 zone to provide vibrancy and activation within the precinct.

Cl. 7.10 Essential services

Clause 7.10 requires that the consent authority must be satisfied that adequate arrangements are in place for the provision of essential services before granting development consent. As noted in **Section 4.3.5**, there are no major impediments to the provision of essential services for the proposed development.

Cl. 7.13 Design Excellence

Clause 7.13 requires that development in Zones R4 and B4 (amongst other zones), must exhibit design excellence. An assessment of the concept proposal in relation to the matters for consideration in Clause 7.13 is provided in **Table 5**. It is considered that the MGN Concept complies with these matters.

Table 5: Clause 7.13 Design Excellence assessment

Cl.7.13 Design Excellence matters for consideration	Assessment
<i>(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved</i>	As this DA is seeking development consent for the overall concept, details of architectural design for each of the buildings is not yet available. Special Conditions will be included in any sales contract between Landcom and future developers to require Landcom's established Design Review Process is followed which requires a high standard of architectural design, materials and detailed be achieved.
<i>(b) whether the form and external appearance of the development will improve the quality and amenity of the public domain,</i>	As above.
<i>(c) whether the development detrimentally impacts on view corridors,</i>	The Site is not located within the viewshed of any of Campbelltown's important views and vistas. Comprehensive street tree and open space planting will ensure the view of the Site is softened.
<i>(d) how the development addresses the following matters—</i>	
<i>(i) the suitability of the land for development,</i>	The Site has been earmarked for residential and mixed use development in accordance with the Greater Macarthur 2040 Interim Plan, the Macarthur Precinct Plan, Reimagining Campbelltown as well as other strategic and statutory planning policies. It facilitates new housing in an area that will be well serviced and well connected. The development footprint is clear of vegetation or other constraints that preclude its development.
<i>(ii) existing and proposed uses,</i>	See above.
<i>(iii) heritage issues and streetscape constraints,</i>	There are no heritage issues or streetscape constraints applying to the site.
<i>(iv) bulk, massing and modulation of buildings,</i>	Refer discussion in Section 5.3.1 and ULDR at Attachment C.
<i>(v) street frontage heights,</i>	Refer discussion in Section 5.3.1 and UDLR.
<i>(vi) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,</i>	Refer discussion in Section 5.3.1 and UDLR
<i>(vii) the achievement of the principles of ecologically sustainable development,</i>	Refer discussion in Section 4.2.8 and ESD Report at Attachment D.
<i>(viii) pedestrian, cycle, vehicular and service access, circulation and requirements,</i>	Refer discussion in Section 5.3.2 and Traffic Report at Attachment P.
<i>(ix) the impact on, and any proposed improvements to, the public domain,</i>	Refer discussion in Section 4.3.4 and UDLR.
<i>(x) the interface with the public domain,</i>	Refer discussion in Section 5.3.1 and UDLR.
<i>(xi) the quality and integration of landscape design.</i>	Refer discussion in Section 4.3.4 and UDLR.

Cl. 7.20 Terrestrial biodiversity

The Site is partially covered by the Terrestrial Biodiversity Map under CLEP 2015. Where terrestrial biodiversity is identified, clause 7.20 requires the consent authority to consider the following:

(a) whether the development is likely to have:

- (i) any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and*
- (ii) any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and*
- (iii) any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and*
- (iv) any adverse impact on the habitat elements providing connectivity on the land, and*
- (b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.*

A Biodiversity Development Assessment Report has been prepared by ELA (refer Attachment M). It notes that the proposed development would impact native vegetation that is mapped on the terrestrial biodiversity overlay. The native vegetation to be affected is comprised of:

- PCT 849 Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion
- PCT 835 Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion

This vegetation forms parts of Cumberland Plain Woodland and River-flat Eucalypt Forest which are both threatened ecological communities under the Biodiversity Conservation Act.

The vegetation to be affected is mostly located on the edge of larger patches. Minor impacts will occur to Cumberland Plain Woodland within a patch to facilitate the construction of a pedestrian walkway. The proposed development is unlikely to fragment or diminish the structure and function of the ecological values present, given the concentration of the footprint in cleared areas and the retention of 3.04 ha of Cumberland Plain Woodland and 4.13 ha of River-flat Eucalypt Forest. The BDAR details measures to be taken to avoid and minimise impacts. Subject to implementation of these measures, it is considered that the proposal complies with the requirements of this clause.

Further discussion on biodiversity conservation is provided in **Section 5.3.6**.

There are no other provisions under CLEP 2015 relevant to the proposed subdivision.

5.2.3 Campbelltown (Sustainable City) Development Control Plan 2015

As the Site was previously a 'deferred area' under CLEP 2015, it is subject to Volume 3 of the Campbelltown (Sustainable City) Development Control Plan 2015 (CDCP 2015). An assessment of the Concept Proposal in relation to the relevant provisions in the Deferred Areas DCP is provided in Section 6 of the UDLR at Attachment C.

In accordance with Section 1.5 of Volume 3, an assessment of the relevant Parts of Volume 1 of CDCP 2015 (*Development Controls for All Types of Development*) is provided in **Table 6**. No non-compliances have been identified.

Table 6: Assessment against relevant provisions of Volume 1 of CDCP 2015

Section	Control	Compliance
2.2 Site Analysis	A Site Analysis Plan shall be lodged with the DA for all development involving the Torrens title subdivision of land.	Complies - A Site Analysis Plan is provided in the UDLR at Attachment C.
2.3 Views and vistas	Development shall appropriately respond to Campbelltown's important views and vistas to and from public places.	Complies - The Site is not located within the viewshed of any of Campbelltown's important views and vistas. Comprehensive street tree and open space planting will ensure the view of the Site is softened.
2.4 Sustainable building design	Include measures to reduce energy and water consumption in building design and layout	Complies. Refer ESD report at Attachment D.
2.5 Landscaping	Ensure landscaping is provided that enhances the development and adds value to the quality and character of the streetscape.	Complies. A Master Plan for the public domain has been prepared and is included in the UDLR at Attachment C.
2.7 Sediment control	An erosion and sediment control plan should be prepared for development that involved disturbance of the land surface	Complies – A sediment and erosion control plan is included in the civil drawings at Attachment G.
2.8 Cut, fill and floor levels	Cut and fill should be minimised and a cut and fill management plan should be submitted with any relevant application	Complies – A site cut and fill plan is included in the civil drawings at Attachment G.
2.10 Water management	A Water Cycle Management Plan should be submitted with any relevant application, that stormwater systems be sized to accommodate the 100 year ARI and that water quality control structures are located generally off line to creek paths or other watercourses.	Complies - A stormwater management strategy has been prepared which provides for stormwater systems that meet Council's requirements. The stormwater management strategy is included in the Civil Engineering, Services & Infrastructure Master Planning Report provided at Attachment H and discussed in Section 5.3.9 .
2.11 Heritage	Ensure that new development takes appropriate account of the significance of heritage items, heritage conservation areas, relics and their settings. Clause 2.11.1 provides that all developments that have the potential to impact upon Aboriginal cultural heritage must provide an assessment in accordance with the "Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW", published by the Office of Environment and Heritage (OEH).	N/A. There are no heritage items on or in the vicinity of the Site. Complies. Refer discussion in Section 5.3.5 .
2.13 Security	Ensure that development incorporates security features in accordance with the principles of Crime Prevention Through Environmental Design (CPTED)	Complies - The proposal has considered the principles of CPTED as discussed in Section 5.3.12 .
2.14.1 Risk Management - Salinity	On sites likely to accommodate saline soils a detailed salinity analysis and remedial action plan is required.	Complies - Refer discussion in Section 5.3.4 .
2.14.2 Risk Management - Bushfire	Specific requirements for land identified on Council's bushfire prone land maps.	Complies – Refer discussion in Section 5.3.10 and Bushfire Assessment at Attachment N.

Section	Control	Compliance
2.15 Waste Management	A detailed Waste Management Plan (WMP) shall accompany development applications for certain types of development/land uses	A Waste Management Plan has been prepared and is provided at Attachment F.
2.16 Provision of services	Development is to be provided with adequate water and power supply.	Complies – refer engineering report at Attachment H.

5.2.4 Site Specific Development Control Plan

In addition to the CDCP 2015, a site-specific Development Control Plan has been prepared and is provided at Attachment O.

The Site Specific DCP includes provisions relating to the following:

- Vision and objectives
- Natural systems
- Access and movement
- Built form controls
- Acoustic privacy
- Waste management
- Site services
- Stormwater management
- Retaining walls
- Fencing

The intention is that this DCP would be inserted into Volume 2 of CDCP 2015 which comprises site specific DCPs that apply to specific localities within Campbelltown LGA. Landcom also intends to implement the requirements of the DCP as part of any contractual arrangements with future developers.

5.3 Section 4.15(1)(b) Environmental Assessment

Section 4.15(1)(b) requires an assessment of the likely environmental impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality. This section discusses the environmental impacts of the key issues of the proposal and any measures required to minimise impacts. Technical reports explaining the assessment in more detail are in the Attachments.

5.3.1 Built form

The Concept Proposal built form provides for the following key outcomes:

- **North-South Orientated Residential Blocks and Sensible Height**
 - Orientate all residential blocks north-south length-ways to ensure residential units achieve internal amenity
 - Maximum height to 9 storeys across the precinct to comply with maximum HOB of 32m.
 - Limit of 4 storeys to the east-west longitudinal podium levels to maximise solar access to communal open space.
- **Building Envelope Dimension and Separation**
 - Provide building separation in accordance with the ADG Design Criteria.
 - Provide a residential block envelope of generally 24m x 40.5m dimension to allow for flexibility to the design of the internal layouts.

- 18.5m building depth for east-west longitude podium envelopes to allow for single loaded typology and enable corner apartments.
- **Transitional Podium Height**
 - 1.5m deep articulation zone on the first 2 storeys to delineate the terrace typology and frontage across the whole precinct.
 - Additional 2.5m setback above the 6th storey to define the streetwall and provide transition to the tower element.
- **Landmark Building**
 - A maximum 9-storey landmark residential building next to station arrival plaza to define a bold arrival into Macarthur Gardens North and provide a visual marker within the urban fabric.

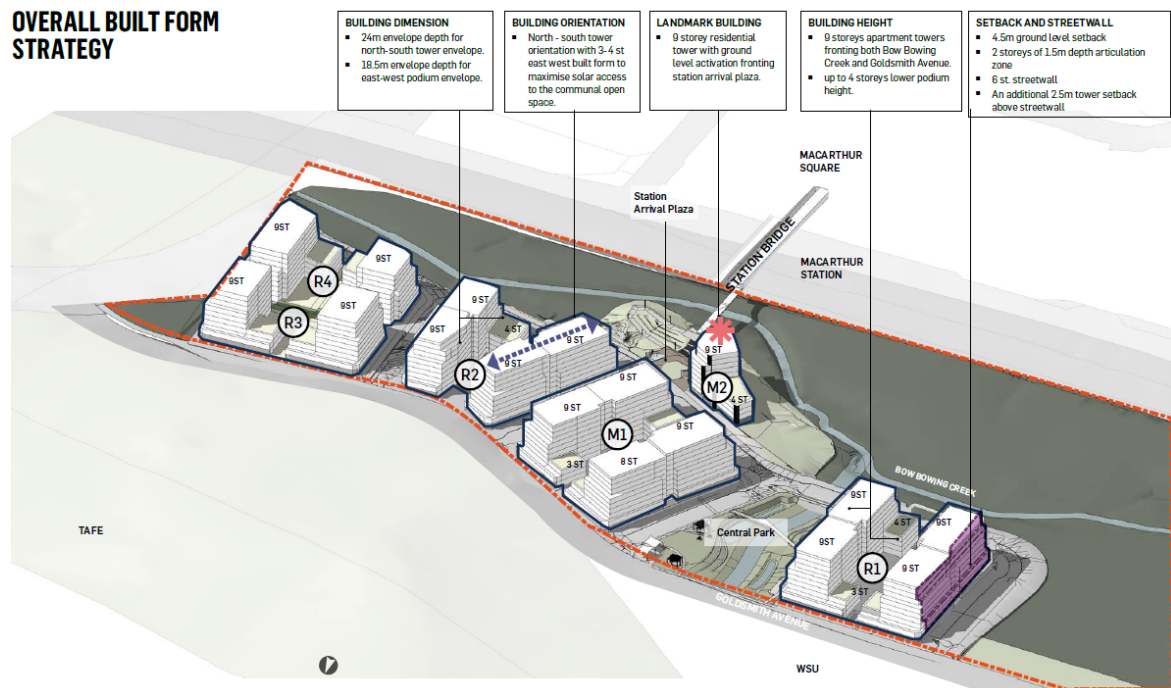


Figure 22: Overall built form strategy (Source: UDLR)

Bulk and scale

The MGN Precinct aims to deliver best-practice residential development in accordance with the Apartment Design Guide (ADG). The Precinct has a maximum height of 32m/ 9 storeys to ensure a consistent building height reflective of its location and as a transition area between the railway station to the Western Sydney University, TAFE, future sporting fields and Macarthur Heights.

The proposed building envelopes have been designed to maintain a scale that is consistent with its future desired character. The envelopes are generally perpendicular to Goldsmith Avenue and the rail line to minimise the bulk and visual impacts along these two corridors. Smaller scale four storey building envelopes maintain a consistent street wall along both corridors. The street level is defined by a two storey articulated podium to provide a terrace typology. Upper levels up to 9 storeys are articulated through additional setbacks from this podium.

The proposed building envelopes enable the ability to enhance aesthetic qualities by the expression of buildings functions through:

- Recesses and articulation both horizontally and vertically
- Well defined street addresses and entries
- Ensuring important corners/ interfaces/elements are given visual importance through a change in articulation, materials or colour, roof expression or changes in height (at detailed design stage)
- Design of attractive public and private domain ensuring an abundance of green and nature is emphasised
- Building separation is proposed in accordance with the ADG to achieve amenity, acoustic and visual privacy.

Setbacks

The setback strategy for MGN aims to enhance the interface between the public and private realm, whilst supporting ground floor activation. The MGN Precinct master plan has six frontage typologies, as shown in **Table 7** and **Figure 23**.

Table 7: Proposed setbacks

Location	Setback
Street frontage along Goldsmith Avenue	4.5 metres for ground floor 3.0 metres for L1 podium 4.5 metres for L2-L5 upper level podium Additional 2.5m for podium up to 4 storeys Additional 6m for 5 th storey and above
Street frontage along Main Street	3.0 metres for ground floor and L1 podium 4.5 metres for L2-L5 upper level podium Additional 2.5m for 6 th storey and above
Street frontage along Station Arrival Main Street	5.0 metres for ground floor level 3.0 metres for L1-L5 upper level podium Additional 2.5 metres for 6 th storey and above
Street frontage along Secondary Street and Central Park	4.5 metres for ground level podium 3.0 metres for L1 podium 4.5 metres for L2-L5 upper level podium Additional 2.5m for 6 th storey and above
Station arrival plaza frontage	2.0 metres for ground floor level 0 metres for L1-L5 upper level podium Additional 2.5 metres for 6 th storey and above.



Figure 23: Setback strategy (Source: UDLR)

The setback strategy will enable passive surveillance throughout the precinct. This is realised by orientating the dwelling frontage i.e. balconies and windows towards the public realm and activating the ground floor through retail frontage and ground level apartments with direct access to streets and parks.

The proposal adopts a reduced setback from a minimum 5.5m front setback identified in Campbelltown DCP 2015 to a minimum 4.5m ground level setback. This strategy establishes good street character and street address whilst maintaining the objectives of the DCP control by providing adequate space for tree planting at ground level.

Further detail on the built form frontage typologies and examples of developments that adopt a similar front setback strategy that delivers a good outcome are provided in the Urban Design and Landscape Strategy Report.

Solar access

A detailed analysis of solar access to the active open space, communal open space and future dwellings is provided in Sections 6.4 and 6.5 of the UDLR. In summary, the analysis finds that:

- 60% of the total communal open spaces receive a min. 2hrs sunlight in mid winter between 9AM-3PM.
- 93.3% of all active open spaces that includes Station Arrival Plaza, Central Park and Fitness Park receives a min. 2 hrs sunlight in mid winter between 9AM-3PM.
- 70.0 % of all residential units receives a minimum 2 hours sunlight in mid winter in compliance with the ADG 70% minimum requirement (based on indicative scheme).

Amenity of future dwellings

The proposal will deliver high amenity for both residents and users of the Site. For residents, the building envelopes have been designed to incorporate flexible internal configurations at detailed design stage. As demonstrated through the indicative design concept included in the UDLR, the development would achieve very good levels of solar access and cross ventilation to the overall units. Furthermore, acoustic, and visual privacy will be achieved through the implementation of screening, landscape and other architectural elements at detailed design stage.

Indicative floor plans have been included in the UDLR Appendix to demonstrate how the building envelopes can comply with the relevant design objectives and guidance in SEPP 65 and the ADG. Future detailed development will need to comply with all design objectives and guidance set out under the ADG.

5.3.2 Traffic and parking

A Traffic and Transport Study (TTS) has been prepared for the Concept Proposal by SCT Consulting and is provided at Attachment P. The TTS notes as follows:

- Additional active transport facilities are proposed as part of the development, including improved linkages to the Macarthur Station, the Western Sydney University and TAFE NSW – Campbelltown. In addition, a shared path along Bow Bowing Creek connecting to greater Green Grid Network as well as Gilchrist Oval in the east will also be provided.
- The proposed development is likely to generate an additional 220 train trips, 50 bus trips and 290 walking (walk only and public transport trips) trips during the AM and PM peak hours. The public and active transport network surrounding the Site is expected to be able to cope with this additional demand.
- Based on the intent to provide restrained car parking for the Site given its proximity of good public transport, the total number of parking spaces for the Site would be 1,164 car parking spaces. Ample on-street parking supply would be created on all local streets (except the laneways) to provide parking for visitors through the Site. It is expected that these on-street parking spaces would be short-term time-restricted such that they are reserved for visitors and not to be used by commuters, given the development's proximity to the station.
- The future (2029) road network will require infrastructure upgrades as a result of background traffic growth, to the Narellan Road / Western Sydney University Access Road, Narellan Road / Blaxland Road / Gilchrist Drive and Kellicar Road / Gilchrist Drive intersections. These upgrades are required without the trips generated by the development.
- The proposed development is expected to generate a total of 375 vehicular trips per AM and PM peak hour respectively. These trips will access the surrounding road network via a 35:65 split in the AM peak hour and 25:75 in the PM peak hour via the William Downes Avenue and Goldsmith Avenue respectively.
- The additional 375 trips estimated to be generated by the development in the AM and PM peak hours, will not have a major impact on the performance of the surrounding intersections, compared to the 2029 scenario without the Site's additional development trips.

In summary, the surrounding road network is expected to be able to cope with the additional traffic, public transport and active transport trips generated by the MGN Masterplan. The intersection upgrades required for three of the surrounding intersections to perform satisfactory in 2029 are required regardless of the inclusion of the additional trips generated by the MGN Masterplan.

5.3.3 Noise and vibration

An Environmental Noise and Vibration Assessment (ENVA) has been prepared for the Concept Proposal by Renzo Tonin and Associates and is provided at Attachment K. The ENVA has been undertaken in accordance with NSW *State Environment Planning Policy (Infrastructure) 2007*, the associated *Development in Rail Corridors and Busy Roads – Interim Guideline*, and other relevant vibration standards.

The findings of ENVA are:

- Some facades of proposed residential buildings with exposure to road and rail noise will require acoustic facade treatments to meet the ISEPP criteria. The affected lots have been identified in the ENVA and indicative facade treatment recommendations provided.
- Some building façades have been identified to require mechanical ventilation.
- Vibration impacts from the rail line have been found to be compliant with human comfort vibration criteria.
- Ground borne rail noise during train passbys is compliant.

In summary, noise and vibration issues do not present any constraint to the Site being developed for residential use. Noise impacts can be suitably mitigated to achieve compliance through standard acoustic treatments. As such, the Concept Development Application can be supported in relation to potential noise and vibration impacts.

5.3.4 Contamination and salinity

Contamination

An updated Contamination Assessment has been prepared by JBS&G Australia Pty Ltd (JBS&G) and is provided at Attachment L. The updated contamination assessment included a review of previous environmental investigations completed at the site, detailed site inspection, review of historic and recent aerial photographs since the completion of the previous contamination assessment and preparation of the report.

The following areas of potential concern (AEC) were identified (refer **Figure 24** for locations):

- **North-Western Carpark (Area 1):** Scattered litter was present along the access road (south of the carpark) which presents an aesthetic issue and should be removed. Fill material placed to the east of the carpark was validated as suitable for use at the site
- **Central Stockpile Portion (Area 2):** A small stockpile of road base gravel material was observed along the southern site of the access road that was recently formed and not previously assessed. Grassed topsoil stockpiles in this portion of the site were previously assessed
- **Vegetated Portions (Area 3):** Vegetated portions of the site appeared to remain relatively unchanged since the previous contamination assessment. Due to the extension of the site boundary to the west, the site now includes a cleared area with a large stockpile of natural clay soil. It is understood that the stockpiled material is temporarily being stored at this location during development of playing fields to the west of the site
- **Pedestrian Walkway (Area 4):** Fill mounds associated with the pedestrian walkway have been previously assessed and did not identify the presence of impacted soils. During the recent site inspection no indicators of potential contamination were identified within this portion of the site
- **North-Eastern Development Portion (Area 5):** Fill areas in the eastern portion of the site were previously assessed and did not identify the presence of impacted soils. During the

recent site inspection and as identified on recent aerial photographs, two small stockpiles were observed within the north east portion of this area. These stockpiles have not been assessed as part of previous site investigations.

As a result of former site works activities, there are several minor features that will require management prior to commencement of development activities at the Site, including:

- Removal of scattered litter identified along the access road within North-Western Carpark (Area 1), that comprises an aesthetic issue with regard to future use of the site
- Validation of three additional small stockpiles identified in Central Stockpile Portion (Area 2) and North-Eastern Development Portion (Area 5), for potential re-use on site during development works, or classification for off-site disposal
- Validation of either remaining material from the temporary stockpiled soils located along the western boundary of the Site related to the sporting field development to the west of the Site, or confirmation upon removal of the material that this area is suitable for residential with accessible soil use.

Beyond these minor issues identified above, there remains a low potential for small scale conditions to occur at the Site as may be encountered during broadscale ground disturbance that may adequately be addressed through the implementation of the Unexpected Finds Protocol (UFP) within the CMP adopted for the Site.

Based on the scope of work completed for the updated contamination assessment and with consideration to standard limitations, there are no indicators of significant or widespread contamination impacts at the Site that require management for the Site to be considered suitable for the proposed residential with accessible soil land use.

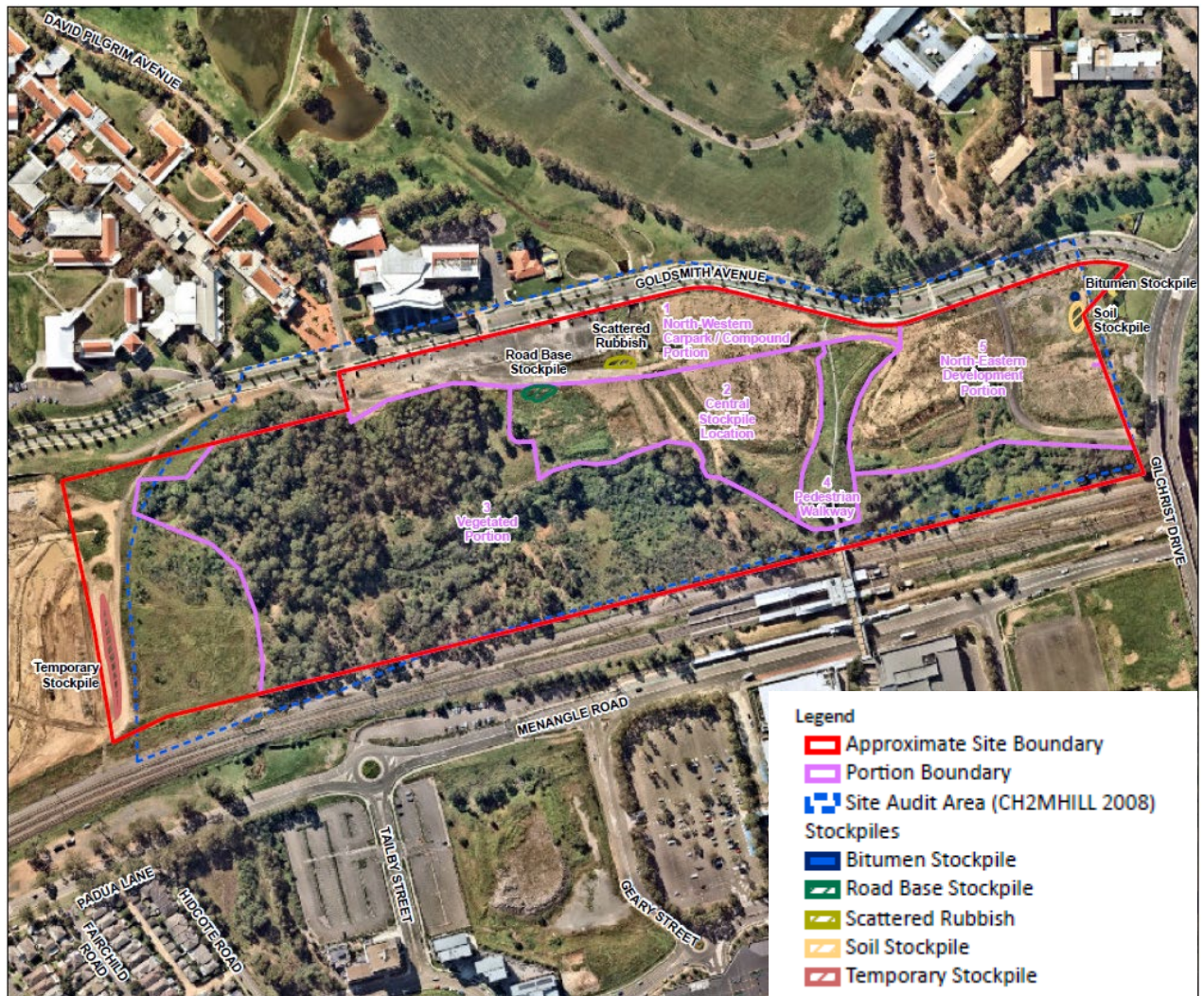


Figure 24: Contamination investigation areas (Source: Updated Contamination Assessment, Attachment L)

Salinity

A Salinity Investigation and Management Plan was prepared by Douglas Partners in October 2013 to inform future residential subdivision of the MGN site. The report is still considered relevant and is included at Attachment Q.

Saline soils affect much of the Western Sydney Region. Buildings and infrastructure located on shales of the Wianamatta Group are particularly at risk. The investigation found that moderately saline materials are naturally occurring features of the local landscape and are not considered significant impediments to future development of the Site, provided appropriate remediation or management techniques are employed. The report recommends a number of strategies to be adopted for completion of civil construction and service installation. These will be adopted as part of the civil works. Future building construction will be subject to more detailed assessment.

5.3.5 Aboriginal archaeology

In 2002, Macarthur Gardens North was investigated by Mary Dallas Consulting Archaeologists as part of the Master Plan DA for the Macarthur Regional Centre. An archaeological assessment and survey failed to identify any Aboriginal cultural remains. However, the close

proximity of the site to Bow Bowing Creek suggested that this area contained moderate archaeological potential for sub-surface Aboriginal artefacts to exist to a limited extent.

In 2017 Austral Archaeology Pty Ltd was commissioned by the former UrbanGrowth NSW to undertake subsurface archaeological testing for the Bulk Earthworks and Bow Bowing Creek Realignment DA (1571/2015/DA-CW)¹. Five artefacts were identified during the course of the excavation (refer **Figure 25**). Three artefacts were retrieved from MGN-Pit14 (Macarthur AS1, AHIMS 52-204437); and single isolated finds were retrieved from MGN-Pit5 (Macarthur IF1, AHIMS 520204438) and MGN-Pit29 (Macarthur IF2, AHIMS 52-2-4439). The remaining 36 test pits excavated yielded no artefacts.

The excavations demonstrated that the Aboriginal cultural material contained within the site is very limited in frequency and distribution and all sites identified are considered to have been impacted by past soil disturbance to varying degrees. The Austral report concluded that:

Overall, the degree of disturbance and small assemblage prevent the study area from offering a data set that could contribute meaningfully to broader archaeological discussion for the Cumberland Plain, such as predictive modelling relating to site frequency and stream order, or the procurement of raw materials.²

An Aboriginal Heritage Impact Permit (AHIP) was subsequently issued by the NSW Office of Environment and Heritage on 3 May 2019 to harm AHIMS 52-204437 (Macarthur AS1), AHIMS 520204438 (Macarthur IF1) and AHIMS 52-2-4439 (Macarthur IF2). A copy of the AHIP is provided at Attachment R. However, the AHIP has not been actioned.

Notwithstanding the above, the Concept Proposal and Stage 1 works now provide for the protection and enhancement of Bow Bowing Creek and surrounding vegetation. There is no longer a need to undertake major earthworks in areas of Aboriginal archaeological sensitivity (albeit moderate sensitivity). Further, an unexpected finds protocol will be included in the Construction Management Plan in the event that potential Aboriginal objects are encountered.

¹ *Macarthur Gardens North Aboriginal Archaeological Report*, Austral Archaeology Pty Ltd, December 2017

² *Ibid*, p.61



Figure 25: Map showing the location of artefacts by site type and name (Source: Macarthur Gardens North Aboriginal Archaeological Report, Austral Archaeology, December 2017)

5.3.6 Biodiversity

Eco Logical Australia Pty Ltd (ELA) has prepared a Biodiversity Development Assessment Report (BDAR) for the proposed MGN Precinct, a copy of which is provided at Attachment M. The BDAR has been prepared to meet the requirements of the Biodiversity Assessment Method (BAM) established under Section 6.7 of the *Biodiversity Conservation Act 2016* (BC Act).

A large portion of the development Site contains cleared land that is dominated by bare ground or exotic groundcover species. The remainder of the development Site contains remnant patches of native vegetation comprised of the following Plant Community Types (PCT):

- *PCT 849 - Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion*
- *PCT 835 - Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion*
- *PCT 1071 - Phragmites australis and Typha orientalis coastal freshwater wetlands of the Sydney Basin Bioregion.*

PCT 849 forms part of Cumberland Plain Woodland in the Sydney Basin Bioregion which is listed as a critically endangered ecological community under the BC Act. This PCT also forms part of Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest listed as critically endangered ecological community under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

PCT 835 forms part of *River-flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions* which is listed as endangered under the BC Act and has been nominated for listing under the EPBC Act. The EPBC Act listing is yet to be gazetted.

PCT 1071 can form part of *Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions* or *Sydney Freshwater Wetlands in the Sydney Basin Bioregion*. The area mapped as PCT 1071 in the development Site does not meet the criteria to be considered either of these endangered ecological communities. This is based on the community being present in a recently constructed storm water channel. While this area was dominated by *Typha orientalis* it was in poor condition and has been substantially degraded by weed species such as *Cenchrus clandestinus* (Kikuyu). The presence of the wetland species is likely the result of the stormwater pipe discharging into the constructed corridor. Their presence is considered opportunistic resulting from the significant changes to topography in the area (related to the former bulk earthworks DA) to construct the corridor.

Field survey identified water bodies that could provide foraging habitat for *Myotis macropus* (Southern Myotis). ELA has assumed presence for this species within the development Site.

The BDAR outlines the measures taken to avoid, minimise and mitigate impacts on the vegetation and species habitat present within the development footprint and measures to minimise impacts during construction and operation of the development. Following consideration of the above aspects, the residual unavoidable impacts of the project were calculated in accordance with BAM by utilising the Biodiversity Assessment Method Credit Calculator (BAMC).

Table 8: Summary of ecosystem and species credits required to offset the residual impacts of the proposed development (Source: BDAR, Attachment M)

PCT ID	PCT Scientific Name	Condition	Vegetation Zone	Area (ha)	Vegetation Integrity Score	Credits
Ecosystem credits						
849	Grey box – Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	Good	1	0.06	27.5	1
849	Grey box – Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	Poor	2	0.12	12.3	0
849	Grey box – Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	DNG	3	0.09	19.2	1
835	Forest Red Gum – Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion	Moderate	4	0.59	44.1	13
1071	<i>Phragmites australis</i> and <i>Typha orientalis</i> coastal freshwater wetlands of the Sydney Basin Bioregion	Poor	5	0.17	33.3	3
Total				1.03		11
Species credits						
	<i>Myotis Macropus</i> (Southern Myotis)		All zones	1.03		19
	<i>Meridolum corneovirens</i> (Cumberland Plain Land Snail)		Zones 1 and 4	0.65		14
Total						16

Serious and Irreversible Impacts (SII) have been considered as part of this assessment. PCT 849 - Cumberland Shale Plains Woodland is a listed candidate entity. About 0.27 ha of Cumberland Plain Woodland will be affected as a result of the development. The 0.27 ha of Cumberland Plain Woodland will be offset consistent with the Biodiversity Offsets Scheme (BOS). It is noted that the threshold for what is considered a SII is yet to be published by Department of Planning, Industry and Environment (DPIE). A SII assessment has been undertaken consistent with the BAM. The determination of SII on biodiversity values is to be made by the approval authority.

About 0.06 ha of Cumberland Plain Woodland within the development Site met the condition criteria for listing under the EPBC Act. The significant impact criteria were applied with respect to this community and determined that a significant impact is unlikely to occur as a result of the proposed development.

5.3.7 Riparian Corridors

A Riparian Assessment has been prepared by Eco Logical Australia (ELA) and is provided at Attachment I. Eco Logical Australia has assessed the four watercourses within the Site and their associated riparian corridors. One watercourse, a 1st order stream, was technically removed through a previous controlled activity approval (CAA) under the *Water Management Act 2000* (WM Act). The three remaining watercourses meet the definition of a 'river' under the WM Act.

The riparian and aquatic habitat in the eastern portion of the Site is in good condition, with wide, well-vegetated, predominately native riparian corridors and natural meandering channels. The western extent of the Site has been previously cleared and the realigned creek is dry with unvegetated banks and poor aquatic habitat.

The proposal will realign the 3rd order waterway and encroach the riparian corridor of Bow Bowling Creek. As works are within 40 m of a defined river, a CAA will be required before construction commences. The works will encroach 0.66 ha of the outer Vegetated Riparian Zone (VRZ) and 0.59 ha of the inner VRZ plus realignment of a 3rd order river. As a result, they are not consistent with Natural Resources Access Regulator's guidelines and will require a merit-based assessment. The encroached areas are highly degraded, and 1.28 ha of riparian offsets are proposed which is greater than a 1:1 ratio.

The 3rd order channel has been previously realigned under a CAA approval and as a result, the banks have been left unvegetated and the channel is silted and degraded.

The Riparian Assessment recommends a number of mitigation measures to protect and enhance the riparian corridors. They include:

- **Construction Environmental Management Plan** – to ensure adequate sediment and erosion control measures are in place prior to construction commencing
- **Timing and location of construction works** - higher-disturbance activities (such as noisy machinery, floodlights, generators and compounds) will need to be located as far from the riparian buffer as practically possible. This is to avoid disturbance to fauna that rely on the riparian corridor for refuge, roosting, foraging and breeding. Likewise, any construction within the riparian corridor zone should be minimised at night (i.e. reduction of floodlights and noise that may disturb nocturnal fauna such as mammals and bats). Works should take place in dry periods when the 3rd order creek is dry.
- **Offset riparian encroachment** – the development footprint will encroach into the VRZ and will be offset elsewhere along the Bow Bowling Creek riparian corridor at a 1:1 ratio. The proposed layout proposes to vegetate the riparian corridor along the 3rd order creek with native trees as canopy cover and groundcovers. Although not consistent with NRAR's guidelines ELA considers this will be an improvement on the current highly degraded condition and takes account of the social and safety aspects of the development by providing for recreational areas for residents.
- **Vegetation Management Plan (VMP)** - a VMP is proposed which will outline the areas to be revegetated as part of the offset and recommend fully structured vegetated areas as per *Guidelines for vegetation management plans on waterfront land* (DPI Water, 2012). The implementation of the VMP will ensure the revegetation and maintenance of the riparian corridors are successful in providing a buffer between the development and waterway. This will increase the amount of native vegetation and riparian functions whilst improving the visual amenity and habitat this area provides.
- **Protection of water quality and habitat condition** - through the implementation of key water quality protection measures including gross pollutant traps, sediment fences, construction and maintenance of sediment detention and water quality ponds, planting of appropriate native species and the like.

Subject to the implementation of the mitigation measures outlined in the Riparian Assessment, it is considered that the impact on the riparian corridors as a result of the development will be positive.

5.3.8 Flooding

A Flood Impact Assessment has been prepared by J. Wyndham Prince on behalf of Landcom and is submitted under separate cover. The purpose of the assessment is to understand the impact of flooding to the neighbouring properties during the design storm events.

The flood modelling has been undertaken within TUFLOW to determine flood extents, levels and flows for a range of storm events, with comparisons made between the “developed” landform and “existing” site conditions. The results from a 1% AEP storm event assessment indicates that the development extent is generally well clear of the 1% AEP flood extents and the flood levels downstream of the Site (at Gilchrist Basin) are not increased as a result of the development of the MGN Site. There is also no significant increase in flood levels external to the MGN Site.

The results of the Flood Impact Assessment demonstrate that the MGN development will not adversely impact on either hydrological flows or flood levels downstream from the Site in the 1% AEP.

5.3.9 Stormwater

The Civil Engineering, Services & Infrastructure Master Planning Report at Attachment H includes discussion on the proposed stormwater system. The report:

- outlines the existing stormwater flow conditions for the Site and determines requirements for post-development flows from regulatory authorities
- includes a concept masterplan stormwater pipe network to convey flows throughout the Site to appropriate discharge points including connecting to the existing network where applicable
- identifies appropriate measures to satisfy Council's water quality and detention requirements and determines the location and land area required to implement the measures.

Water quantity

The proposed stormwater management strategy for the Site is to consist of the following:

- Bow Bowing Creek is to generally be maintained in its current alignment along the southern boundary of the lot, with minor localised re-grading proposed just to the south of the medium-density residential precinct
- The existing Third-Order watercourse which enters the Site to the north from Goldsmith Ave is to be realigned as part of the proposal. Here, upstream flows will be captured and conveyed through the Site via a new watercourse which is to drain from Goldsmith Ave to Bow Bowing Creek as per the existing flow regime. This watercourse has been integrated as part of the proposed landscape design for the masterplan with appropriate dedicated riparian offsets to suit
- A below ground trunk pit and pipe system is to be created within the new local road network to capture and convey runoff from the proposed road, lot, and building areas before discharging to Bow Bowing Creek as per the existing scenario; and
- Flows relating to the upstream pipe crossing from the Campbelltown TAFE site are to be intercepted within an easement and diverted to the new trunk street drainage network.

The DRAINS model of the proposed Site was created to assess the performance of the new street pit and pipe network to adequately convey stormwater flows to the downstream watercourses. Iterations were performed in the DRAINS model to determine the size of the proposed piped network in order to satisfy major / minor system requirements in accordance with Campbelltown City Council standards.

The proposed piped drainage system has been designed to cater for the 1 in 5-year ARI event leading to the outlet to the downstream watercourse. A provision for overland flows for events greater than the 1 in 5-year ARI event has also been considered.

Results indicate that the major / minor system requirements are satisfied at all proposed pits in the development area and that the piped system sufficiently conveys minor storm flows with safe provision for major system flows.

Water quality

The following treatment train has been proposed for the Site:

- Rainwater Tanks are to be provided. Apartment buildings would generally have a single tank per building integrated into the basement that would then reticulate for non-potable uses for the apartments and for irrigation of garden areas. From here, overflows from the rainwater tanks are to be directed to the new street drainage system. It should be noted that for the purposes of this study that Rainwater Tank treatments have been excluded from the proposed MUSIC model. This is considered appropriate as it assumes the worst-case scenario for the Site. Moving forward, the exact type, size and location of the proposed tanks are to be confirmed via detailed modelling during the subsequent Development Application proposals for each building. Similarly, this will allow for different options to be explored to achieve higher standards (including BASIX requirements) where feasible
- Runoff from the new road reserve areas are to be collected within the below-ground pit and pipe network before being conveyed to a series of bioretention basins which are to be incorporated as part of the proposed landscape masterplan for the Site
- Gross Pollutant Traps (GPT) are proposed immediately upstream of each bioretention system to provide pre-treatment of larger pollutants and sediments prior to discharge to the basin
- Bioretention "Raingardens" are proposed as an end-of-line treatment prior to discharge to Bow-Bowing Creek.

Modelling of the proposed development was undertaken using Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software. Based on the results of the assessment, the proposed treatment train will provide adequate improvements to satisfy the water quality improvement objectives set out in Council's DCP. As such, the water quality objectives have been achieved for the proposed development.

5.3.10 Bushfire

The Site is located on land classified as bush fire prone on the Campbelltown City Council bush fire prone land (BFPL) map. Eco Logical Australia was therefore engaged by Landcom to prepare a Bushfire Protection Assessment. A copy of the assessment is provided at Attachment N.

The proposal was assessed in accordance with Section 100B of the *Rural Fires Act 1997*, Clause 44 of the *Rural Fires Regulation 2013* and *Planning for Bush Fire Protection* (RFS 2019), herein referred to as PBP.

The bush fire prone vegetation affecting the proposed development is to the south where a riparian corridor is classified as 'River-Flat Eucalypt Forest' and classified as 'woodland' under PBP. The effective slope under the vegetation falls into the slope category of '>0-5 degrees downslope'. Further to the south, on the southern side of the rail corridor an empty industrial lot contains unmanaged vegetation classified as 'Grassland' under PBP which falls into the slope category of 'all upslopes and flat land'.

To the west, land has been cleared for the subdivision development. On the north and east, the land is managed as garden road reserves and managed fields and nature strips of Gilchrist Oval and Campbelltown TAFE.

The assessment identifies the location and dimensions of Asset Protection Zones (APZs) required to address potential bushfire hazard. The footprint of the proposed APZ is shown in **Figure 26**. The APZ is wholly provided within the perimeter road to the south.

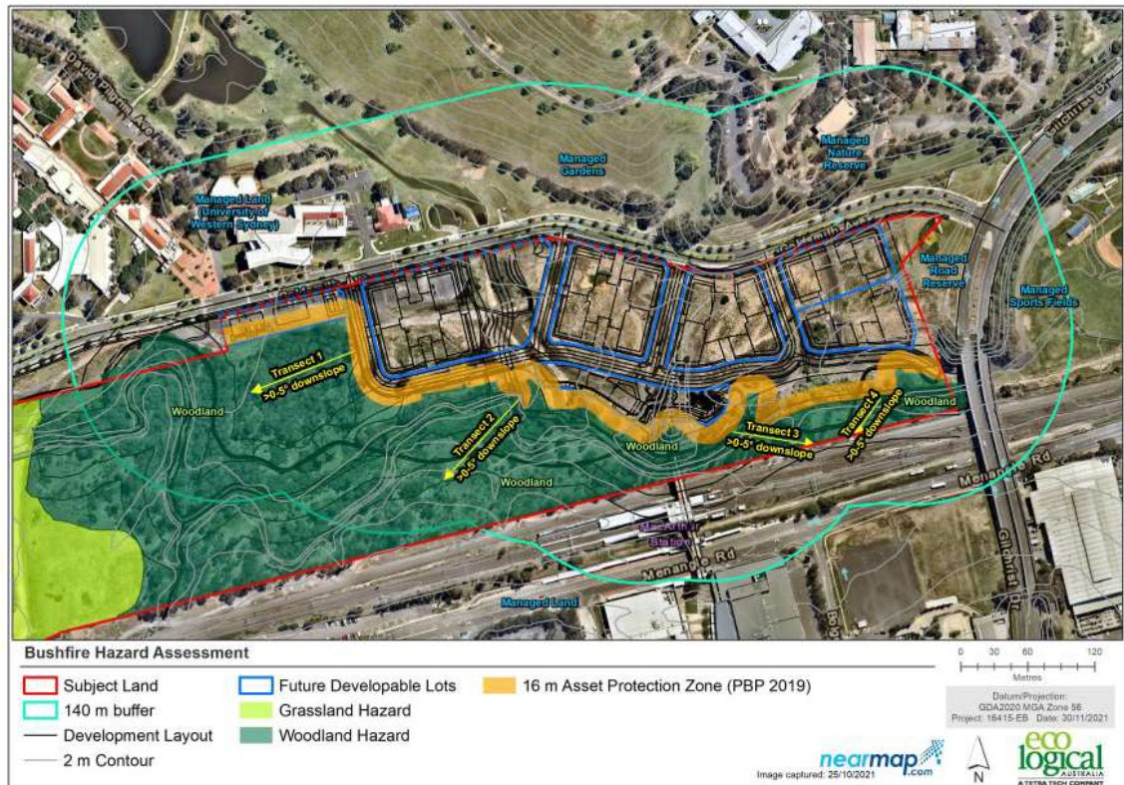


Figure 26: Bushfire hazard assessment and APZs (Source: Bushfire Protection Assessment, Attachment N)

The assessment also identifies appropriate standards and requirements to be met with respect to landscaping, construction elements, access, water supply, electricity services and gas services. Provided that these standards and requirements are met, the assessment concludes that the Concept Proposal complies with the specifications and requirements of '*Planning for Bush Fire Protection 2019*'.

5.3.11 Socio-economic impacts

A Community Needs and Open Space Assessment for the Concept Proposal has been undertaken by Urbis and is provided at Attachment S. This study seeks to review what social infrastructure and open space would best serve the needs of MGN now and into the future.

The report estimates that the total future population of the Site will be 2,400. Based on analysis of the existing community and analysis of the typical characteristics of people living in apartments conducted by ABS, it is likely the incoming population will include high proportions of young professionals and students, couple families without children or single parent families, and high proportions of people renting.

The Community Needs and Open Space Assessment includes a summary of social infrastructure requirements, reproduced in **Table 9** below.

Table 9: Social infrastructure requirements

SOCIAL INFRASTRUCTURE TYPE	SUMMARY AND RECOMMENDATION
Community facilities and libraries	<p>Consultation with Council confirmed that given the close proximity to existing and planned communities in Campbelltown and Menangle Park, the site is not envisioned to include community and cultural facilities or libraries. Council's preferred approach is to provide fewer, larger, multipurpose facilities within the town centre.</p> <p>It is acknowledged that the incoming community will contribute to the cumulative demand for community facility and library space more broadly, which we understand will be addressed through Council's Local Infrastructure Contributions Plan (2018).</p>
Open space	<p>The structure plan addresses the performance criteria outlined in Council's Open Space and Recreation Strategy including size requirements and accessibility. It offers a diversity of spaces and the site is also within 2km of other large district and regional open space including Marsden Park reserve, Ambarvale Sports Complex and Mount Annan Botanical Gardens and within 5km of planned playing fields and recreation facilities associated with the Menangle masterplan.</p> <p>The structure plan includes over 10ha of open space. The proposed guidance released by DPIE for comment in September 2021 recommends 15% of net developable land (NDL) be provided as public open space. The open space proposed in the Structure Plan exceeds this threshold. DPIE's guidance also recommends residents are within 200m –400m of small and medium sized parks. The Structure Plan proposes all residents to be within 200m of open space.</p>
Education	<p>The future population of the MGN proposal does not generate demand itself to require either a primary or secondary school. However, DPIE's Macarthur Precinct Plan advice from the SINSW indicates that a new primary school is likely to be required by 2036 to jointly serve the Macarthur and Campbelltown precincts. NSW Department of Education notes that existing high schools are likely to accommodate future requirements up until 2036. As further planning occurs for Macarthur, it is expected that SINSW will work with DPIE and Council to find an appropriate site for a primary school.</p>
Childcare	<p>The future MGN population is likely to generate demand for approximately 56 childcare places, which could support one medium sized childcare facility. There are already 17 childcare centres within a 2km radius of the site with most of these centres advertising capacity across all age groups (0 to 5 years). However, it is noted that vacancy numbers can fluctuate and demand can be difficult to predict longer term. The broader population growth projected for Macarthur and Campbelltown is likely to generate additional demand for childcare. It is not necessary that precise requirements for childcare are identified at this stage as childcare centres are a permitted use within residential areas and do not require land to be designated at the master planning stage.</p>
Health	<p>The development may be able to support two general practitioners. Contemporary medical practices typically employ a minimum of four GPs, and therefore MGN incoming population may not by itself generate demand for a new medical centre. However, the broader precinct population (approximately 12,000 people by 2036) will require additional medical practices. Therefore, the retail/commercial uses proposed as part of the structure plan could potentially support a medical centre. Given there is limited access to general local community health centres, there may also be opportunity to provide local community health onsite, but this would need to be confirmed with the Local Health District.</p>

It is considered that adequate infrastructure either exists or is planned to meet the needs of the future population of the Site.

5.3.12 Crime Prevention Through Environmental Design (CPTED)

A CPTED assessment has been prepared by Urbis and is included at Attachment T. The assessment found that the proposal incorporates CPTED principles throughout the Concept Plan. This includes good building site orientation to enhance natural surveillance opportunities and clear sightlines and pathways to various access points across the Site. The incorporation of

a range of publicly accessible open spaces including Station Arrival Park, Central Park, Bow Bowling Creek Reserve and Fitness Park activates the Concept Plan area and enhances territorial reinforcement. The clear separation between public and private uses and the colocation of uses on site demonstrates good space and activity management.

The recommendations provided in the report for the Concept Plan will enhance the proposal and help reduce crime and anti-social behaviour during detailed design stages. Overall, it is considered that with the implementation of recommendations, the proposed development will enhance activation of the Site and demonstrate good CPTED principles.

5.4 Section 4.15(1)(c) Site Suitability

Having regard to the characteristics of the Site and its location, the proposal is considered suitable for the Site as:

- The Site has been earmarked for residential and mixed use development in accordance with the Greater Macarthur 2040 Interim Plan, the Macarthur Precinct Plan, *Reimagining Campbelltown* as well as other strategic and statutory planning policies
- It facilitates new housing in an area that will be well serviced and well connected
- The development footprint is clear of vegetation or other constraints that preclude its development
- The Site is capable of being developed in a manner that will minimise impacts to the environmental qualities of the surrounding area
- It will only result in minor environmental impacts that can be appropriately managed and mitigated.

5.4 Section 4.15(1)(e) Public Interest

The Proposal is considered to be in the public interest as it will:

- Help meet the demand for housing in close proximity to public transport, employment and services
- Allow for the development of a variety of housing forms to meet differing demographics needs in the area
- Provide for tree planting and other significant enhancements to the public domain and open space to create an attractive and sustainable neighbourhood
- Make the best use of the significant investment in transport and other infrastructure that is being provided in the area.
- Protects and enhances Bow Bowling Creek and valuable Cumberland Plain Woodland.

6. CONCLUSION

This report constitutes a Statement of Environmental Effects (SEE) and accompanies a development application to Campbelltown City Council seeking:

- concept approval for a high density residential and mixed use development at Macarthur Gardens North (the Site)
- detailed consent for Stage 1 works, including civil works, landscaping and superlot subdivision.

The aim of this report has been:

- to describe the proposed development
- to illustrate that the proposed development complies with the intent of relevant statutory and policy documents
- to provide an assessment of the likely environmental effects of the proposed development.

The Concept Proposal and Stage 1 works are consistent with the zoning of the Site and all relevant provisions contained within Campbelltown LEP 2015 and Campbelltown (Sustainable City) DCP 2015. A Site Specific DCP has been prepared to ensure the delivery of a high quality apartment and mixed use development in a naturalistic landscaped setting. The assessment contained herein concludes that there are no significant environmental constraints on the Site that would preclude the development and that the development will not result in any significant environmental impacts.

Accordingly it is concluded that the Concept Proposal and Stage 1 works are appropriate on the Site and within the locality, and should therefore be approved by Campbelltown City Council.

Attachment A

DA Cost Estimate

Attachment B

Survey

Attachment C

Urban Design and Landscape Report

Attachment D

ESD Report

Attachment E

Green Star Certificate

Attachment F

Operational Waste Management Plan

Attachment G

Civil drawings

Attachment H

Civil Engineering, Services & Infrastructure
Master Planning Report

Attachment I

Riparian Assessment

Attachment J

Subdivision plans

Attachment K

Environmental noise and vibration assessment

Attachment L

Updated Contamination Assessment

Attachment M

Biodiversity Development Assessment Report

Attachment N

Bushfire Protection Assessment

Attachment O

Site Specific Draft Development Control Plan

Attachment P

Traffic and Transport Assessment

Attachment Q

Salinity Assessment

Attachment R

AHIP

Attachment S

Community Needs and Open Space Assessment

Attachment T

CPTED Assessment