LOCKERBIE NORTH PRECINCT STRUCTURE PLAN

March 2012

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PLANS

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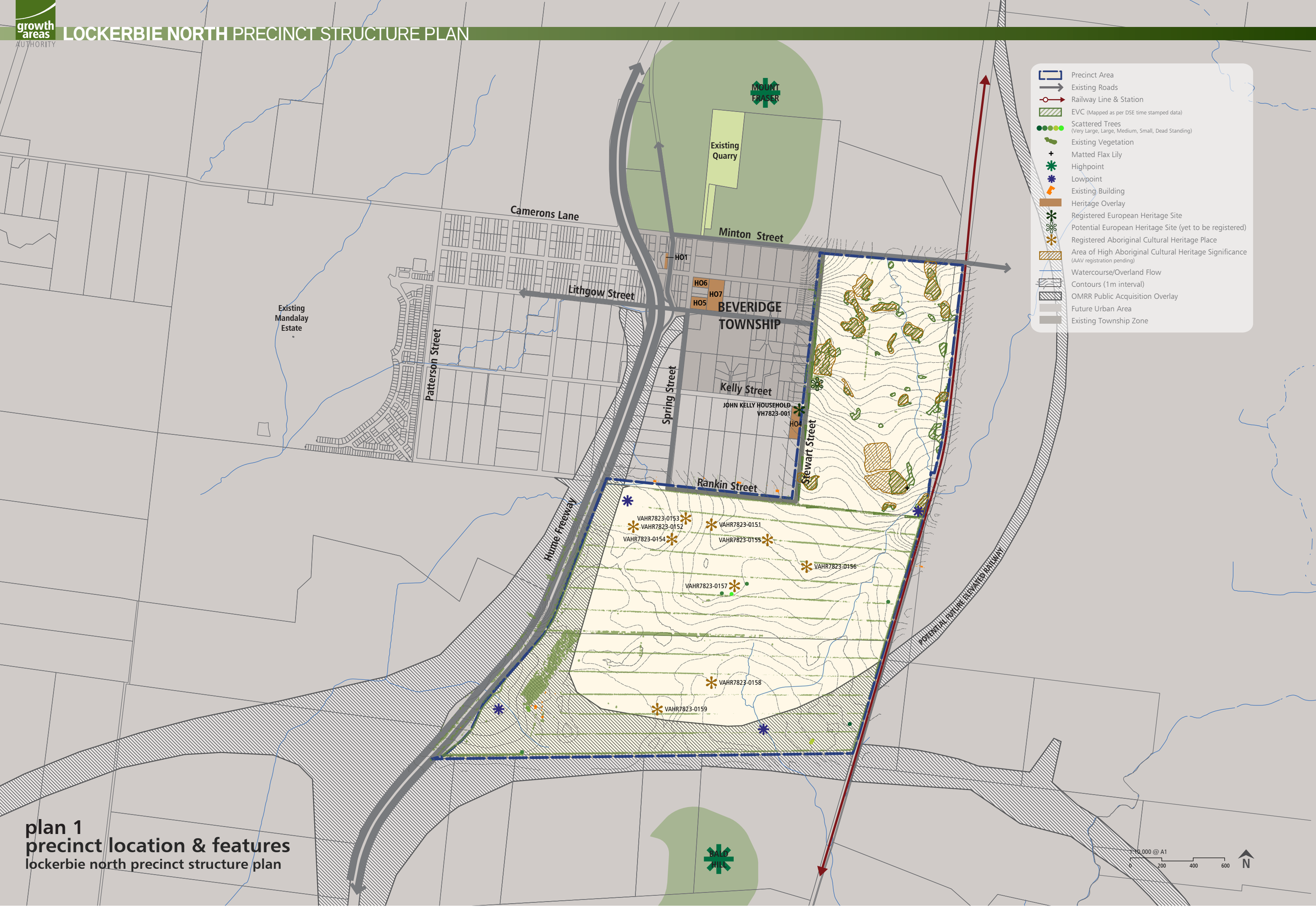


plan 1
precinct location & features
lockerbie north precinct structure plan

1.0 INTRODUCTION

The Lockerbie North Precinct Structure Plan (the "PSP") has been prepared by the Growth Areas Authority in consultation with the Mitchell Shire Council, Whittlesea City Council, Government agencies, service authorities and major stakeholders.

The PSP:

- Is a strategic plan which guides the delivery of a quality urban environment.
- Sets the vision for how land should be developed, illustrates the future urban structure and describes the outcomes to be achieved by the future development.
- Outlines projects required to ensure that future residents, visitors and workers within the area are provided with timely access to services and transport infrastructure necessary to support a quality, affordable lifestyle.
- Details the form and conditions that must be met by future land use and development.
- Provides the framework for the use and development controls that apply in the schedule to the Urban Growth Zone and planning permits which may be granted under the schedule to the zone.
- Provides developers, investors and local communities with guidance about future development.
- Addresses the requirements of the EPBC Act 1999 in accordance with an endorsed program under part 10.

The PSP is informed by:

- The State Planning Policy Framework set out in the Mitchell Planning Scheme and Whittlesea Planning Scheme, including the Draft Northern Growth Corridor Plan and the Precinct Structure Planning Guidelines.
- The Local Planning Policy Framework of the Mitchell and Whittlesea Planning Schemes.
- The draft Biodiversity Conservation Strategy and Sub-Regional Species Strategies for Melbourne's growth areas. (DSE, 2011)

The following planning documents have been developed in parallel with the PSP to inform and direct the future planning and development of the locality:

- Lockerbie North Native Vegetation Precinct Plan (the "NVPP") which sets out requirements for the protection and management of native vegetation within the PSP area.
- Lockerbie North Development Contributions Plan (the "DCP") which sets out the requirements for development proponents to make a contribution toward infrastructure required to support the development of the precinct.
- Lockerbie North Background Report (the "Background Report.")

1.1 HOW TO READ THIS DOCUMENT

This structure plan guides use and development where a planning permit is required under the Urban Growth Zone or another zone where that zone references this structure plan.

The vision and objectives describe how the precinct will be used and developed. Requirements must be implemented in order to achieve objectives. Guidelines and plans (including tables and figures) explain how the vision and objectives may be achieved in relation to specified matters.

The Vision should inform all of the outcomes in the precinct.

Objectives are what development of the precinct must achieve.

Requirements must be adhered to in developing the land. They will usually be included as a condition on a planning permit whether or not they take the same wording as in this structure plan.

Guidelines express how discretion will be exercised by the Responsible Authority in certain matters that require a planning permit.

Plans are a spatial expression of the outcomes. Development may take alternative forms from that described in plans, tables and figures provided it achieves the outcomes and meets the requirements in this structure plan and biodiversity outcomes are considered.

Not every aspect of the land's use and development is addressed in this structure plan and a Responsible Authority may manage development and issue permits as relevant under its general discretion.

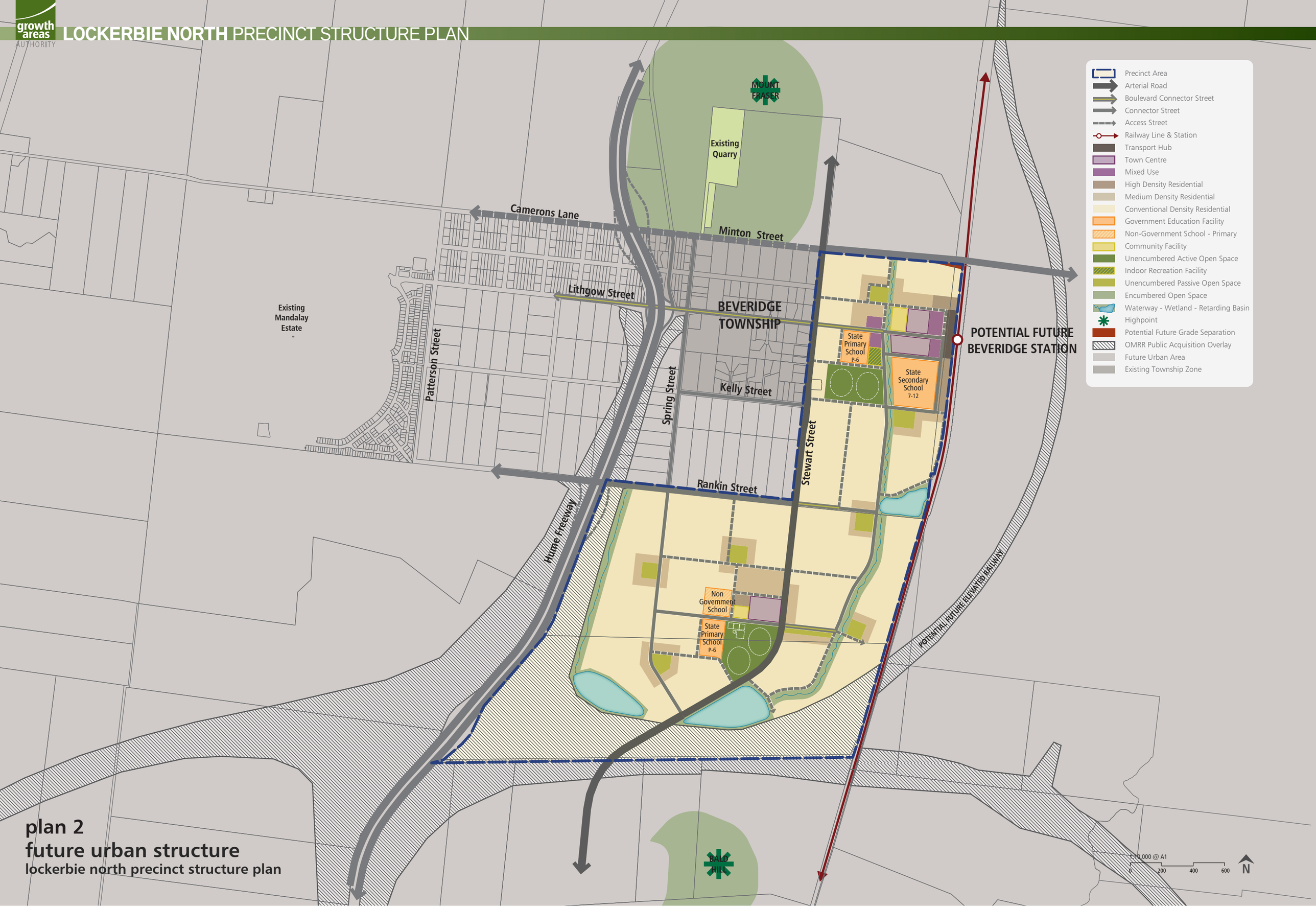
1.2 LAND TO WHICH THIS PSP APPLIES

PLAN 1 – PSP LOCATION & FEATURES

The land to which the PSP applies is shown on Plan 1 and on the Mitchell Planning Scheme as Schedule 2 to the Urban Growth Zone and the Whittlesea Planning Scheme as Schedule 2 to the Urban Growth Zone. The PSP applies to approximately 515 hectares of land generally bound by Minton Street to the North, the Hume Freeway to the west, the Melbourne-Sydney rail to the east and the proposed Outer Metropolitan Ring Road (OMRR) to the south. The Beveridge Township is situated outside the plan area located to the west.

1.3 BACKGROUND INFORMATION

Detailed background information on the PSP area including its local and metropolitan context, history, landform and topography, drainage, biodiversity, open space and community facilities are contained in background reports. This information has informed the preparation of the PSP.



plan 2
future urban structure
lockerbie north precinct structure plan

2.0 OUTCOMES

2.1 VISION

The Lockerbie North precinct will be a vibrant and engaged community, promoting a healthy lifestyle and creating its own identity whilst drawing upon the rich heritage of the Beveridge area.

Lockerbie North will provide an urban form that is responsive to the undulating natural characteristics of the area and protect vistas to key landscape features, such as Mount Fraser and Bald Hill, to ensure urban design compliments the landscape character.

The precinct will establish a community that integrates with the existing Beveridge Township and provides opportunities for all residents to have access to essential services such as schools, town centres, community facilities and both passive and active open spaces.

It will provide a legible neighbourhood design that allows easy access to multiple transport modes and encourages walking, cycling and utilisation of public transport services to access local and regional destinations.

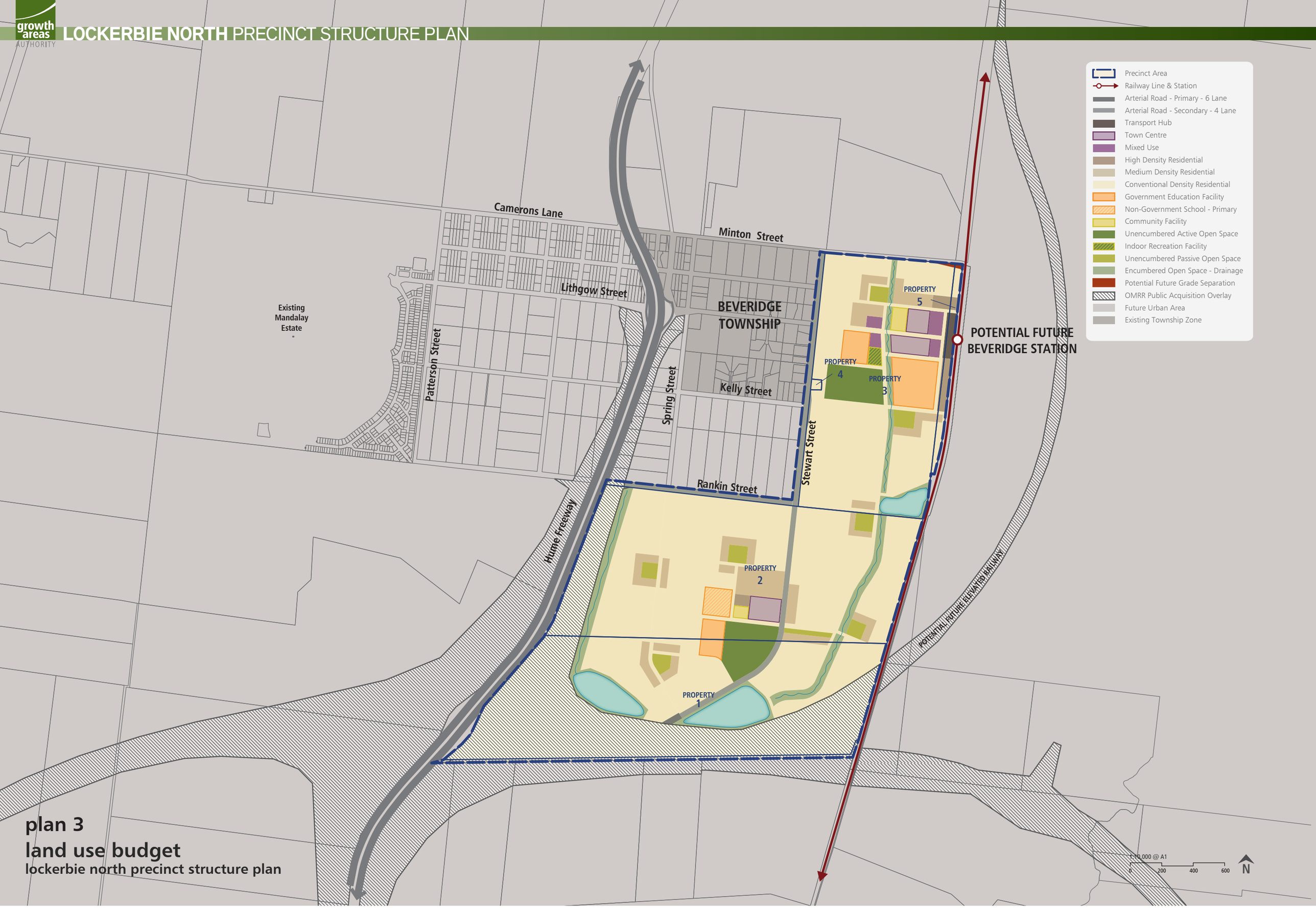
The Lockerbie North PSP area will provide:

- Walkable neighbourhoods, serviced by local town centres, schools, active open spaces and community facilities, integrated with the existing township of Beveridge to become a vibrant new community in the city's north;
- A precinct that is connected to the wider region through its connection to the Principal Public Transport Network, with:
    - A potential future rail station at Beveridge that will be integrated with the surrounding community and connect Beveridge to key destinations; and
    - A direct connection to the higher capacity bus route;
- A larger Local Town Centre co-located with the potential future rail station and centrally sited to service the new community and also provide services for the existing Beveridge Township;
- A well designed arterial road network that includes a new north-south arterial that connects to the Donnybrook Principal Town Centre (Lockerbie) to the south;
- Access to a wide range of local employment opportunities, with a Principal Town Centre and dedicated employment precincts in close proximity; and
- An open space network connected via the north-south linear open space corridor allowing for strong off-road pedestrian and cycle links that encourage a healthy and interactive environment.

2.2 OBJECTIVES

The following objectives describe the desired outcomes of development of the precinct and guide the implementation of the vision. In addition to the below, the structure plan has been designed to achieve the general objectives and standards set out in the GAA's "Precinct Structure Planning Guidelines" as well as requirements from State and Local planning policy frameworks.

IDENTITY / CHARACTER / LANDSCAPE	
O1	Create cohesive neighbourhoods that have unique natural and built form characteristics but are connected through open space and street networks
O2	Provide for an attractive urban environment with a strong sense of place through the provision of well designed public spaces (i.e. streetscapes, open spaces)
O3	Provide a built environment that is functional, safe, aesthetically pleasing and promotes a strong sense of place and address for future residents.
O4	Provide a variety of landscape character themes throughout the Precinct with landscaping to be complementary in natural areas, with more urbanised landscaping adjacent to town centres and community hubs
O5	Provide landmark buildings at gateway sites, and develop strong landscape treatments along key boulevard roads, vistas and at entry points
O6	Encourage a variety of frontages to future arterial roads to avoid continuous built form and rear fencing outcomes.
HOUSING DENSITY	
O7	Provide a diverse range of lots and housing types to satisfy the needs and aspirations of the new and evolving community, which achieves an average of at least 15 dwellings per NDha
O8	Provide for a mix of densities within the precinct with medium density focused around areas of higher amenity, including open space and Local Town Centres and high density concentrated around public transport nodes.
NEIGHBOURHOOD STRUCTURE	
O9	Embrace the natural landscape amenity of the area through the provision of a 'green' linear spine connecting the precinct to landscape features and key destinations
O10	Locate active open space areas with other community facilities and in locations as part of the wide open space network to encourage the sharing of infrastructure and increased accessibility to uses
O11	Ensure a network of community facilities, schools and open spaces facilities which provide a strong focal point for community activity and interaction within each neighbourhood
CONNECTIVITY	
O12	Provide for alternative modes of travel by creating an efficient street network that links pedestrians and cyclists to town centres, open space and public transport
O13	Provide an integrated road network which connects to the existing Beveridge township road structure
O14	Provide an integrated, grid based road network that connects to the Principal Public Transport Network, including the potential future Beveridge Rail Station
TOWN CENTRES	
O15	Provide services to new residents through the early delivery of local town centres and community hubs supported by local open spaces, schools and other community uses
O16	Establish Local Town Centres that incorporate a mixture of uses and facilitate the generation of local employment opportunities as well as servicing a broader population catchment
O17	Encourage the development of a broad range of business activity including small office, mixed use and home based businesses within and at the edge of local town centres
SERVICING	
O18	Maximise water use efficiency, storm water quality and long term viability of waterways, biodiversity and vegetation through the use of Water Sensitive Urban Design ("WSUD") initiatives for residential development and integrated water management solutions for the precinct
O19	Provide all lots, to the satisfaction of the relevant authority, with potable water, electricity, a reticulated sewerage, drainage, gas and telecommunications
BIODIVERSITY, CULTURAL HERITAGE & BUSHFIRE MANAGEMENT	
O20	Identify and enhance areas of European and Aboriginal Cultural Heritage elements within and surrounding the Precinct
O21	Facilitate connections to the Beveridge Township through the provision of infrastructure and community facilities
O22	Enhance the natural environment through the appropriate design, construction and management of watercourses and wetlands
O23	To ensure that the location, design and construction of development considers the need to implement bushfire protection measures.
O24	To identify areas where the bushfire hazard requires specified bushfire protection measures for subdivision and buildings and works to be implemented.
O25	To ensure development does not proceed unless the risk to life and property from bushfire can be reduced to an acceptable level.



plan 3
land use budget
lockerbie north precinct structure plan

Table 1: SUMMARY LAND USE BUDGET

DESCRIPTION	AREA 1		
	Hectares	% of GPA	% of NDA
TOTAL PRECINCT AREA (ha)	**515.67**		
Outer Metropolitan Transport Corridor (OMR & E6)	**109.24**		
GROSS PRECINCT AREA (ha)	**406.43**		
TRANSPORT			
6 Lane Arterial Roads	0.43	0.11%	0.15%
4 Lane Arterial Roads	15.09	3.71%	5.09%
Transport Hub	1.75	0.43%	0.59%
Land Required For Future Grade Separation	0.30	0.07%	0.10%
Sub-total	**17.57**	**4.32%**	**5.93%**
COMMUNITY FACILITIES			
Community Services Facilities	2.30	0.57%	0.78%
Indoor Recreation Facility	1.00	0.19%	0.34%
Sub-total	**3.30**	**0.81%**	**1.11%**
GOVERNMENT EDUCATION			
Government Schools	15.40	3.79%	5.19%
Non-Government School - Primary	3.00	0.58%	1.01%
Sub-total	**18.40**	**4.53%**	**6.21%**
OPEN SPACE			
ENCUMBERED LAND			
Waterway / Drainage Line / Wetland / Retarding	43.55	10.72%	14.69%
Sub-total	**43.55**	**10.72%**	**14.69%**
UNENCUMBERED LAND AVAILABLE FOR RECREATION			
Active Open Space	17.50	4.31%	5.90%
Passive Open Space	9.62	2.37%	3.24%
Sub-total	**27.12**	**6.67%**	**9.15%**
TOTALS OPEN SPACE	**70.67**	**17.39%**	**23.84%**
NET DEVELOPABLE AREA (NDA) ha	**296.49**	**72.95%**	

2.3 SUMMARY LAND BUDGET

The Net Developable Area (NDA) is established by deducting the land requirements for community facilities, public and private education facilities, and open space (active and passive) from the Gross Developable Area (GDA). The NDHa for the Lockerbie North Precinct is 296 hectares which equates to approximately 73% of the Gross PSP area.

The land budget shows that the PSP achieves a lot density of approximately 15 dwellings per Net Developable Hectare (NDHa).

The PSP will a yield approximately 4400 lots including 950 lots less than 300 square metres.

Based on an average household size of 2.8 persons (Victoria in Future 2008), the future population of the PSP is estimated at approximately 12,500 people.

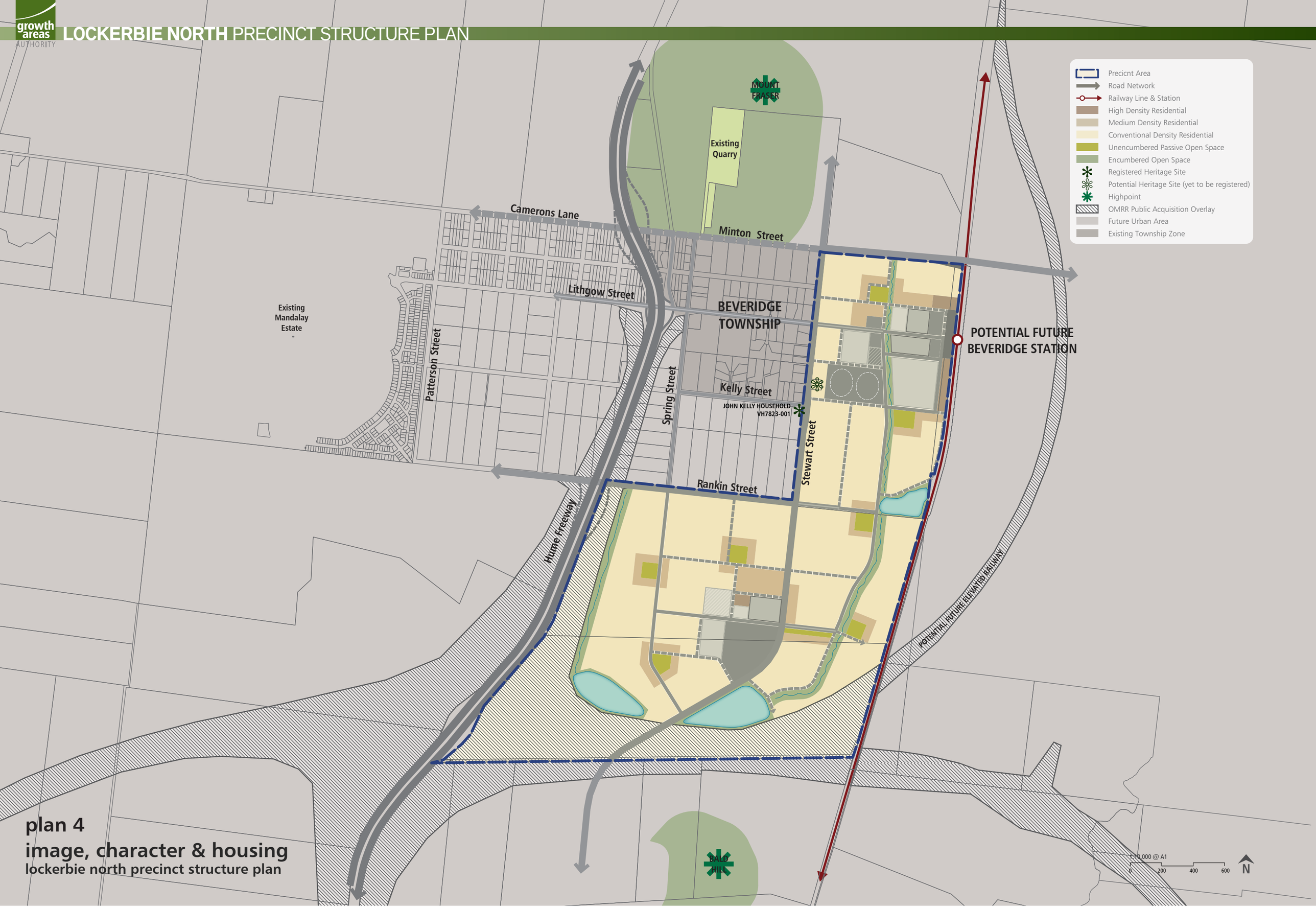
See Plan 3: Land Use Budget, Table 1 Summary Land Use Budget and Table 2 Property Specific land Use Budget.

RESIDENTIAL LOT YIELD BREAKDOWN

DESCRIPTION	AREA 1		
RETAIL & EMPLOYMENT	**Ha**		
Activity Centre (Retail / Office / Mixed Use)	8.30		
Mixed Use	3.10		
Sub-total	**11.40**		
RESIDENTIAL	**NRA (Ha)**	**Dwell / NRHa**	**Dwellings**
Residential - Conventional Density Residential	248.32	14	3476
Residential - Medium Density	32.93	25	823
Residential - High Density	3.84	35	134
Subtotal Against Net Residential Area (NRA)	**285.09**	**15.6**	**4434**
COMBINED RES/ RETAIL / EMP / OTHER	**NDA (Ha)**	**Dwell / NDha**	**Dwellings**
TOTAL RESIDENTIAL YIELD AGAINST NDA	**296.49**	**15.0**	**4434**

Table 2: PROPERTY SPECIFIC LAND USE BUDGET

				TRANSPORT				COMMUNITY				ENCUMBERED LAND	UNENCUMBERED LAND FOR RECREATION			KEY PERCENTAGES						
PROPERTY NUMBER	TOTAL AREA (HECTARES)	OUTER METROLPLITAN TRANSPORT CORRIDOR (OMR) & E6	GROSS PRECINCT AREA (GPA) (HECTARES)	6 LANE ARTERIAL ROAD / WIDENING	4 LANE ARTERIAL ROAD / WIDENING	TRANSPORT HUB	LAND REQUIRED FOR FUTURE GRADE SEPARATION	COMMUNITY FACILITIES	INDOOR RECREATION FACILITY	GOVERNMENT EDUCATION	POTENTIAL NON-GOVERNMENT SCHOOL - PRIMARY	WATERWAY / DRAINAGE / WETLAND / RETARDING	ACTIVE OPEN SPACE	PASSIVE OPEN SPACE	TOTAL NET DEVELOPABLE AREA (HECTARES)	NET DEVPT AREA % OF GPA	ACITVE OPEN SPACE% NDA	PASSIVE OPEN SPACE % NDA	TOTAL PASSIVE & ACTIVE OPEN SPACE %	OPEN SPACE DEL TARGET %	DIFFERENCE	DIFFERENCE AREA HA
PROPERTY																						
Property 1	177.03	88.38	88.65	0.43	2.72	0.00	0.00	0.00	0.00	1.63	0.00	24.28	6.00	1.16	52.43	59.14%	11.44%	2.21%	13.66%	9.15%	**4.51%**	**2.36**
Property 2	184.55	15.20	169.35	0.00	2.91	0.00	0.00	0.80	0.00	1.87	3.00	9.55	3.50	5.92	141.80	83.73%	2.47%	4.17%	6.64%	9.15%	**-2.50%**	**-3.55**
Property 3	132.17	0.00	132.17	0.00	0.13	0.33	0.17	1.50	1.00	11.90	0.00	9.72	8.00	2.54	96.88	73.30%	8.26%	2.62%	10.88%	9.15%	**1.73%**	**1.67**
Property 4	0.43	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	100.00%	0.00%	0.00%	0.00%	9.15%	**-9.15%**	**-0.03**
Property 5	6.27	0.00	6.27	0.00	0.00	1.42	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.72	75.28%	0.00%	0.00%	0.00%	9.15%	**-9.15%**	**-0.43**
Sub-total	**500.45**	**103.58**	**396.87**	**0.43**	**5.76**	**1.75**	**0.30**	**2.30**	**1.00**	**15.40**	**3.00**	**43.55**	**17.50**	**9.62**	**296.26**	**77.21%**	**5.71%**	**3.16%**	**8.87%**	**9.15%**	**0.00%**	**0.02**
ROAD RESERVE																						
Rankin Street	4.15	0.37	3.78	0.00	3.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	9.15%	**-9.15%**	**0.00**
Stewart Street	5.78	0.00	5.78	0.00	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	3.98%	0.00%	0.00%	0.00%	9.15%	**-9.15%**	**-0.02**
Donovans Lane	5.29	5.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	9.15%	**-9.15%**	**0.00**
Sub-total	**15.22**	**5.66**	**9.56**	**0.00**	**9.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.23**	**2.41%**	**0.00%**	**0.00%**	**0.00%**	**9.15%**	**-9.15%**	**-0.02**
TOTAL	**515.67**	**109.24**	**406.43**	**0.43**	**15.09**	**1.75**	**0.30**	**2.30**	**1.00**	**15.40**	**3.00**	**43.55**	**17.50**	**9.62**	**296.49**	**72.95%**	**5.90%**	**3.24%**	**9.15%**			



plan 4
image, character & housing
lockerbie north precinct structure plan

3.0 IMPLEMENTATION

3.1 IMAGE, CHARACTER, AND HOUSING

REQUIREMENTS

IMAGE & CHARACTER	
R1	Development along all open space, including waterways and drainage infrastructure, must front open space areas and provide a road or significant open space frontage.
R2	Street tree planting on declared arterial roads must be established in accordance with the VicRoads Clear Zone Guidelines to the satisfaction of the Responsible Authority.
R3	Street trees must be provided on both sides of connector and local access streets.

GUIDELINES

IMAGE & CHARACTER	
G1	Significant elements of the landscape and built form should be used as focal points for key view lines and gateway locations.
G2	Street layout should generally be aligned to maximise connection and views to key destination points such as Mount Fraser, Bald Hill and town centres.
G3	Street design and subdivision layout should provide for various access options for dwellings which front arterial roads (primary, secondary and local arterials) including internal street network access, rear loaded lots and service roads, where appropriate.
G4	Housing throughout the precinct should be site responsive taking account of the topography and environmental conditions.
G5	Selection of street trees and landscaping should reinforce the movement hierarchy and the character of distinct neighbourhoods.
G6	Street trees should form continuous canopy, frame view corridors, and provide strong avenues and shade to streetscapes.
G7	Landscaping along future major arterial roads should be consistent with the PSP guidelines with the inclusion of bicycle and pedestrian paths in accordance with the cross sections in this PSP.
G8	Facades of built form in key destination nodes should be activated to provide visual interest through the introduction of elements such as windows, entrances and /or other architectural treatments (i.e. screens and balconies, porticos).
G9	Dwelling design should add to the precinct character by providing an attractive street address which encourages passive surveillance of public areas.
G10	Front fences, particularly abutting open space areas and the drainage corridor should generally be low (no greater than 1.2m in height) and partly transparent. Corner lots should address both streets with low fences (no greater than 1m height) within 9 metres from the mid point of the intersection. If the front wall of the dwelling is setback between 3 and 4 metres from the front street, a garage must be set back 5 metres from the street.

REQUIREMENTS

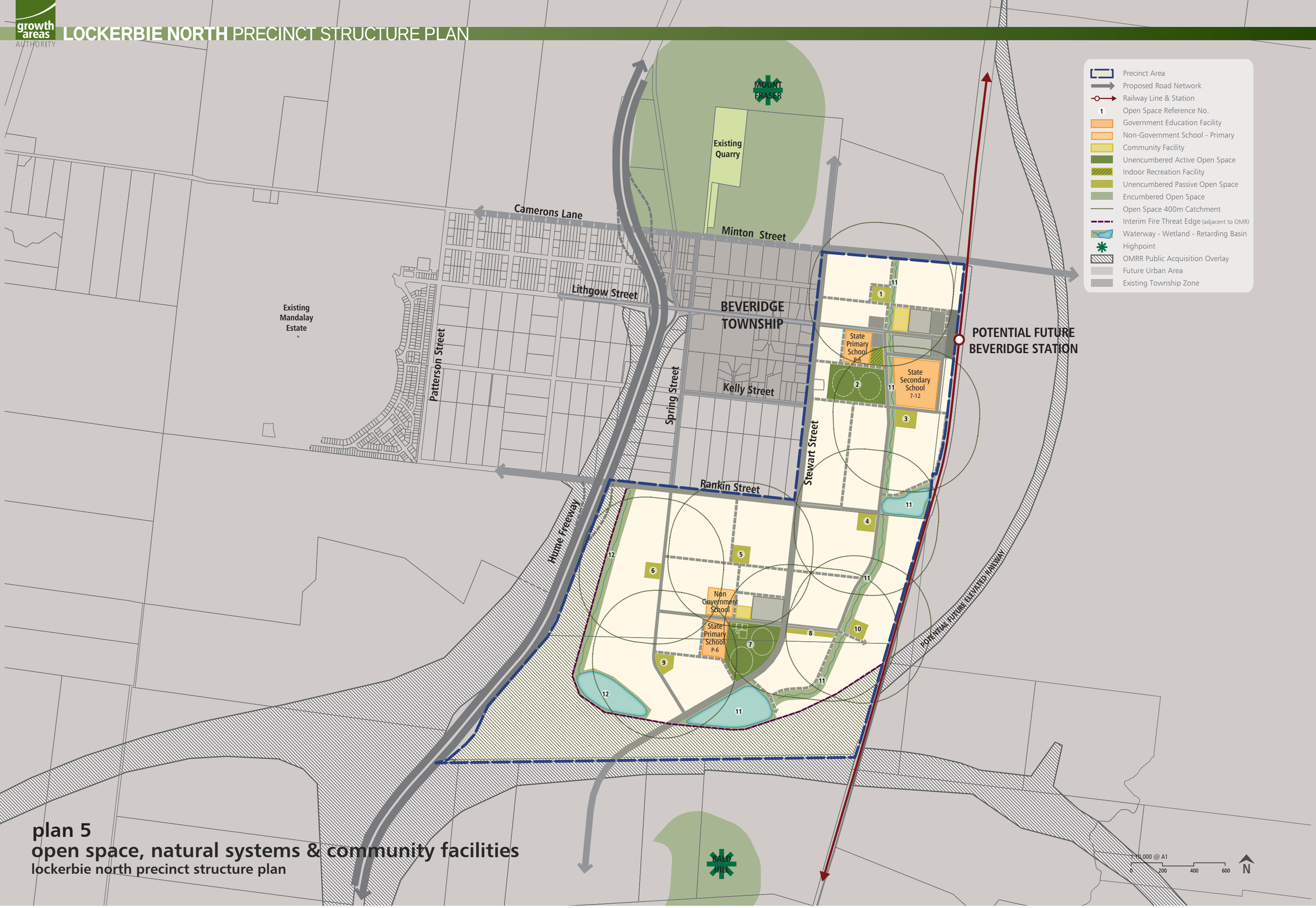
HOUSING	
R4	Achieve a minimum of 15 dwellings per Net Developable Hectare (NDha) across the entire Precinct.
R5	Residential development across the Precinct must include a full range of dwelling densities and housing types as outlined in the GAA's "Precinct Structure Planning Guidelines."
R6	High density housing must be maximised adjacent to the potential future Beveridge rail station.
R7	Development along the rail corridor must provide an appropriate fencing treatment to restrict public access where development directly interfaces with the corridor.

GUIDELINES

HOUSING	
G11	Subdivisions should aim to achieve an average density higher than the minimum 15 dwellings per Net Developable Hectare
G12	High density housing should be provided at a minimum density of 30 dwellings per NDHa and should be achieved in locations proximate to the potential future Beveridge rail station and along the Primary Public Transport Network (PPTN) routes.
G13	Medium density housing should be provided at a minimum density of 25 dwellings per NDHa and should be placed in areas of high amenity or convenience, including around Local Town Centres around public open spaces (active and passive) and along public transport routes.
G14	Specialised housing forms such as retirement living or aged care should be located in areas of key high amenity including land within and surrounding the Local Town Centres.
G15	Where housing is proposed adjacent to an acoustic wall, opportunities to reduce the visual dominance of the wall may be explored, such as providing dwellings to front an internal road, with the acoustic wall to form the rear fence or provide a network of landscaping and shared trails along the green open space link. The latter instance should provide a road with indented car parking along the link.
G16	Incorporate measures to attenuate the noise impacts (e.g. acoustic insulation and double glazing on windows) associated with nearby major transport corridors.

GUIDELINES

HERITAGE	
G17	Development and use of land surrounding the John Kelly Household at 44 Kelly Street (Beveridge) (HO4) in the Mitchell Planning Scheme, should have regard to the heritage significance of the property and provide a sensitive interface.
G18	Subdivision of land in proximity to the Stewart Homestead at 75 Stewart Street, Beveridge should provide a sensitive interface and consider the heritage values of that property.



plan 5
open space, natural systems & community facilities
lockerbie north precinct structure plan

3.2 OPEN SPACE, NATURAL SYSTEMS, COMMUNITY FACILITIES AND BUSHFIRE MANAGEMENT

REQUIREMENTS

OPEN SPACE	
R8	All public landscaped areas must be designed for low maintenance to the satisfaction of the Responsible Authority.
R9	Open space must abut a road unless otherwise addressed by an active frontage.
R10	Appropriately scaled lighting must be installed along all major pedestrian thoroughfares traversing public open space and shared paths to the satisfaction of the Responsible Authority.
R11	An alternative provision of unencumbered land for passive open space to that shown on Plan 5 is generally in accordance with Plan 5 provided the passive open space (unencumbered) is: • Located so as not to reduce the walkable access to local parks demonstrated in Plan 5; and • A minimum area of .75ha is provided unless co-located with other unencumbered open space (e.g. active open space).
R12	An appropriate mix of infrastructure (i.e. playspace, shelters, toilets and bbq's) must be provided within the provision of open space, to the satisfaction of the Responsible Authority.
R13	Development abutting open space must be designed to provide passive surveillance, through the appropriate siting of windows, balconies and pedestrian access points.
R14	Land designated for active and passive open spaces must be landscaped and developed to the satisfaction of the Responsible Authority prior to it being transferred to the Responsible Authority.
R15	Fencing of parkland must have an average height of no greater than 1.2 meters and must be permeable to facilitate public safety and surveillance.
R16	Fencing of active sporting areas such as tennis courts and cricket nets must be constructed to the satisfaction of the Responsible Authority.

GUIDELINES

OPEN SPACE	
G19	Active open space should be designed to maximise co-location opportunities between complementary sports and adjoining school facilities.
G20	The design and layout of open space should maximise water use efficiency, storm water quality and long term viability of vegetation through the use of WSUD initiatives.
G21	Passive open space should cater for a broad range of users and support both structured and informal recreation activities.
G22	Advice should be sought from qualified Council staff regarding suitability of proposed tree species prior to confirming planting schedule.
G23	Design should provide pedestrian and cyclist crossings of waterways at appropriate distances to improve accessibility and permeability within precinct.
G24	All sporting arenas (ovals, pitches, courts) should be designed with a north-south alignment

Table 3: Open Space Inventory

Item No.	Property No.	Size (Ha)	Type	Facilities	Other Attributes	Responsibility
1	3	1.11	Unencumbered Passive Local Park	Paths, seating, shelter and local playground	Park to be associated with & provide amenity to the northern Local Town Centre & connected to waterway/open space network	Mitchell Shire Council
2	3	8.00	Active Recreation Reserve	Two full size Australian Rules ovals/cricket ovals, cricket nets and large local playground	Co-located with Indoor Recreation Facility & State Primary/Secondary schools	Mitchell Shire Council
3	3	1.43	Unencumbered Passive Local Park	Paths, seating, shelter and local playground	Connected to waterway/open space network	Mitchell Shire Council
4	2	1.32	Unencumbered Passive Local Park	Paths, seating, shelter and local playground	Anchored to connector street network	Mitchell Shire Council
5	2	1.32	Unencumbered Passive Local Park	Paths, seating, shelter and local playground	Provide an open space node to serve the local catchment	Mitchell Shire Council
6	2	1.35	Unencumbered Passive Local Park	Paths, seating, shelter and local playground	Anchored to connector street network	Mitchell Shire Council
7	1&2	9.50	Active Recreation Reserve	Two full size Australian Rules ovals/cricket ovals or three full size soccer fields, cricket nets, six tennis courts, two netball courts and a large local playground	Co-located with State Primary school and Potential Non-Government School.	Mitchell Shire Council
8	2	0.91	Unencumbered Passive Local Park/ Linear Link	Paths, seating, shelter and local playground	Connected to waterway/open space network & provide an open space link to the southern Local Town Centre	Mitchell Shire Council
9	1	1.16	Unencumbered Passive Local Park	Paths, seating, shelter and local playground	Anchored to connector street network	Mitchell Shire Council
10	2	1.00	Unencumbered Passive Local Park	Paths, seating, shelter and local playground	Connected to waterway/open space network	Mitchell Shire Council
11	1,2 &3	28.69	Encumbered Passive Open Space - Waterway & Retarding Basins	Shared trail (3m) along one side as a minimum, seating, wetland areas	Provide primary off-road walking and cycling network through the eastern area of the precinct. Open space feature/ gateway.	Melbourne Water (drainage funtion) & Mitchell Shire (rec. facilities)
12	1&2	14.85	Encumbered Passive Open Space - Retarding Basin	Shared trail (3m) along one side as a minimum, seating, wetland areas	Provide primary off-road walking and cycling network through the western area of the precinct connecting to the existing Beveridge Township.	Melbourne Water (drainage funtion) & Mitchell Shire (rec. facilities)
13	N/A	7.50	District Active Open Space	To be determined by Council	Location to be in line with the Northern Growth Corridor Plan	Mitchell Shire Council

REQUIREMENTS

PASSIVE OPEN SPACE REQUIREMENTS

R17	All land owners must provide a public open space contributrion equal to 3.24% of Net Developable Area (NDA) upon subdivision of land in accordance with the following: • Where land is required for unencumbered open space purposes as shown in Plan 5 and specified in Table 2 and is less or equal to 3.24% of NDA that land is to be transferred to Council at no cost; • Where no land or less than 3.24% of NDA is shown in Plan 5 and specified in Table 2, as required for unencumbered open space purposes a cash contribution is to be made to Council to bring the total open space contribution to a value equal to 3.24% of NDA of that site; • Where land required for unencumbered open space purposes as shown in Plan 3 and specified in Table 2 is more than 3.24% of NDA, Council will pay an amount equivalent to the value of the additional land being provided by that property. The value of land for equalisation purposes is to be assessed as an equivalent proportion of the value of the whole of the land, in accordance with Section 18 of the Subdivision Act 1988

REQUIREMENTS

COMMUNITY FACILITIES AND EDUCATION

R18	Where a responsible authority is satisfied that land shown as a non-government school site is unlikely to be used for a non-government school, that land may be used for an alternative purpose which is generally in accordance with the Precinct Structure Plan and consistent with the provisions of the applied zone.

GUIDELINES

COMMUNITY FACILITIES AND EDUCATION

G25	Community facilities should provide a focal point for community activity and interaction within each neighborhood.
G26	Community facilities should be planned and designed to have the flexibility and capacity to meet the changing needs of the community and provide for a range of community uses.
G27	Community facilities should be located within proximity of Local Town Centres and co-located with open space and education facilities.
G28	Co-location of community centres with proposed children's playgrounds, recreation infrastructure and kindergartens is encouraged
G29	Private services should, where appropriate, integrate with Council community centres, town centres or local hubs.
G30	If a non-government school is to be located in the PSP it should, if possible, be co-located with other education and community infrastructure.
G31	All sporting arenas (ovals, pitches, courts) should be designed with a north-south alignment

REQUIREMENTS

BUSHFIRE MANAGEMENT

R19	Unless a subdivision meets the standards set out in either G32 or G33, it must provide defendable space between a fire threat identified on Plan 5 this Precinct Structure Plan and a dwelling to the satisfaction of the CFA.
R20	Where a lot contains defendable space the following applies: Before the Statement of Compliance is issued under the Subdivision Act 1988 the owner must enter into an agreement with the Responsible Authority under Section 173 of the Planning and Environment Act 1987 and make application to the Registrar of Titles to have the agreement registered on the title to the land under Section 181 of the Act. The agreement must set out the following matters: • A building envelope and that a building must not be constructed outside of the building envelope. • That a building must not be constructed on the lot unless it is constructed to 12.5 BAL. • The area of defendable space applicable to the lot with the following restrictions on vegetation during a declared fire danger period: » Within 10 metres of a building, flammable objects (such as plants, mulches and fences) must not be located close to the vulnerable parts of the building (such as windows, decks and eaves). » Grass must be no more than five centimetres in height. » Trees must not overhang or touch any part of a building. » Leaves and vegetation debris must be removed at regular intervals. » Shrubs must not be planted under trees. » Plants greater than ten centimetres in height at maturity must not be placed directly in front of a window or other glass feature. » A tree canopy must not be closer than two metres to another tree canopy. » Total tree canopies must cover no more than 15% of the area of the lot at maturity. This does not apply where the Country Fire Authority states in writing that a Section 173 agreement is not required for the subdivision or lot.
R21	Provide a road network that enables at least two safe egress routes away from the fire hazard.
R22	For the purposes of Clause 56.06-7, the requirements of the relevant fire authority are, unless otherwise approved by the CFA: • Constructed roads must be a minimum of 7.3m trafficable width where cars park on both sides, or: » A minimum of 5.4m in trafficable width where cars may park on one side only. » A minimum of 3.5m width with no parking and 0.5m clearance to structures on either side, and if this width applies, there must be passing bays at least 20m long, 6m wide, and located not more than 200m apart. • Roads must be constructed so that they are capable of accommodating a vehicle of 15 tonnes for the trafficable road width. • The average grade of a road must be no more than 1 in 7 (14.4% or 8.1°). • The steepest grade on a road must be no more than 1 in 5 (20% or 11.3°) with this grade continuing for no more than 50 metres at any one point. • Dips in a road must have no more than a 1 in 8 grade (12.5% or 7.1°) entry and exit angle. • Constructed dead end roads more than 60 metres in length from the nearest intersection must have a turning circle with a minimum radius of 8 m (including roll-over curbs if they are provided.
R23	Planting in streets and public spaces within defendable space must be designed to take into account impact on fire risk.
R24	Before the Commencement of works for a stage of subdivision, a Construction Management Plan that addresses Bushfire Risk Management must be submitted to and approved by the Responsible Authority and the CFA. The Conservation Management Plan must specify, amongst other things: • Measures to reduce the risk from fire within the surrounding rural landscape and protect residents from the threat of fire. • A separation buffer, consistent with the separation distances specified in AS3596-2009, between the edge of dvelopment and non-urban areas. • How adequate opportunities for access and egress will be provided for early residents, construction workers and emergency vehicles.
R25	A Construction or Engineering Plan required under a subdivision permit must show: • The location of static water supplies for fire fighting purposes that are: • Accessible to fire fighting vehicles • Have sufficient volume to support effective fire fighting; or • Strategically positioned fire hydrants installed on the potable water supply system in addition to the fire hydrants installed on the recycled water supply system (where present); and • Water supply design, connections and flow rates. All to the satisfaction of the CFA.

GUIDELINES

BUSHFIRE MANAGEMENT

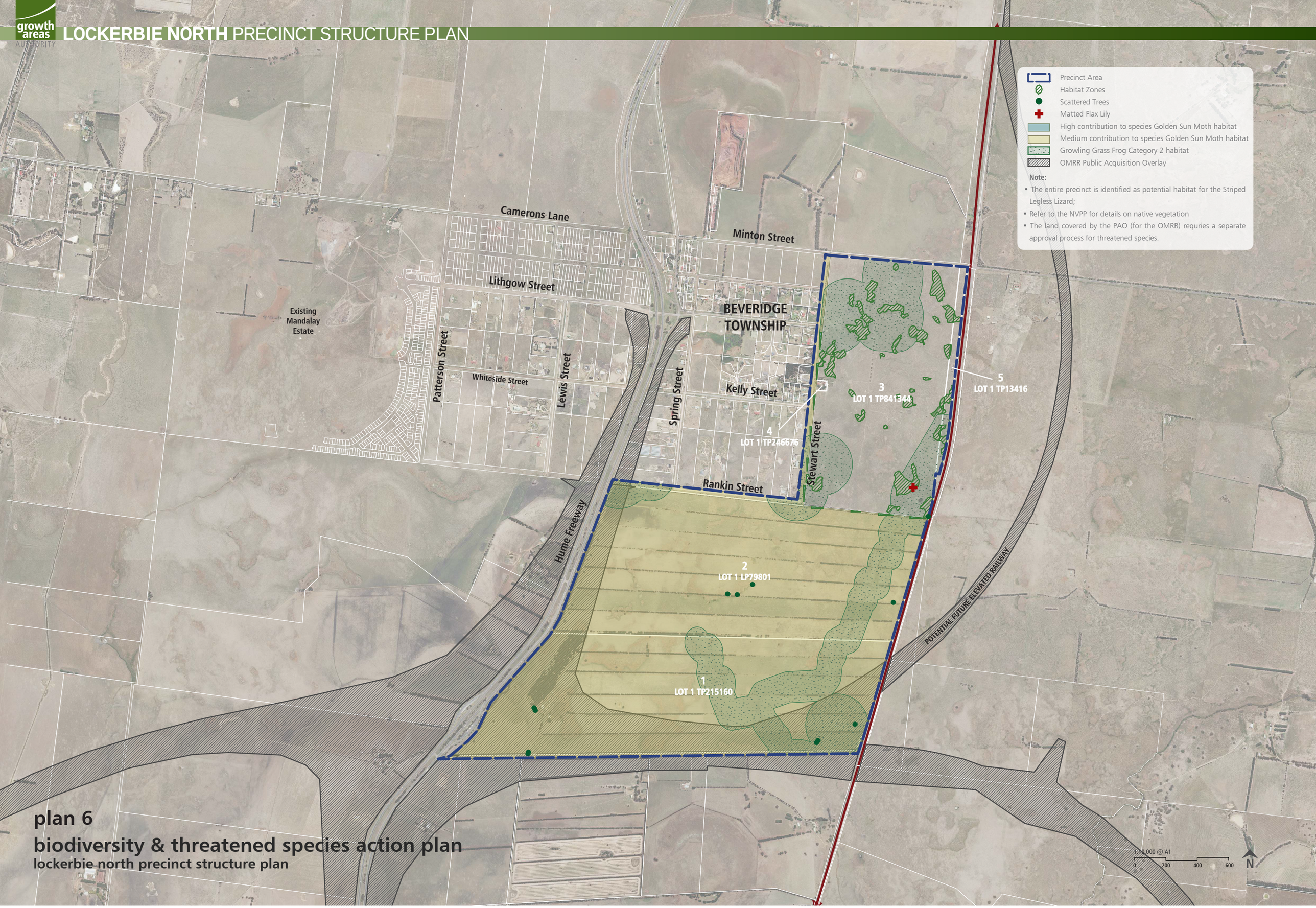
G32	Where a lot capable of accommodating a dwelling is proposed up slope or on flat land and adjacent to a Fire Threat Edge or Interim Fire Threat Edge identified on Plan 5 in this Precinct Structure Plan, provide for defendable space in the form of a 19 metre wide road reserve between the edge of the fire threat and the lot on which a dwelling may be developed. Specify in a restriction on a plan of subdivision registered under the Subdivision Act 1988 that a dwelling constructed on land shown within 60 metres of land identified as Fire Threat Edge or Interim Fire Threat Edge on Plan 5 of the Lockerbie North Precinct Structure Plan must not be constructed to a standard less than BAL 12.5. If, at the time of application for subdivision or works, the OMR has been constructed, the Interim Fire Threat Edge as identified on Plan 5 no longer exists and these provisions no longer apply.
G33	Where a lot capable of accommodating a dwelling is proposed down slope and adjacent to a Fire Threat Edge or Interim Fire Threat Edge identified on Plan 5 in this Precinct Structure Plan, provide for defendable space comprising a road reserve of at least 19 metres width between the edge of the fire threat and the lot on which a dwelling may be developed plus the additional width of defendable space specified below. The additional defendable space may be on public or private land:

DOWN SLOPE (METRES)	ADDITIONAL DEFENDABLE SPACE (METRES)	TOTAL DEFENDABLE SPACE
> 0-5	3	22
> 5-10	6	25
> 10-15	9	28
>15-20	13	32
>20	To the satisfaction of the relevant fire authority.	

Where defendable space is proposed on a lot capable of accommodating a dwelling, requirement R20 in this precinct structure plan applies.

Specify in a restriction on a plan of subdivision registered under the Subdivision Act 1988 that a dwelling constructed on land shown within 60 metres of land identified as Fire Threat Edge or Interim Fire Threat Edge on Plan 5 of the Lockerbie North Precinct Structure Plan must not be constructed to a standard less than BAL 12.5.

If at the time of application for subdivision or works, the OMR has been constructed, the interim fire threat as identified on Plan 5 no longer exists and these provisions no longer apply.



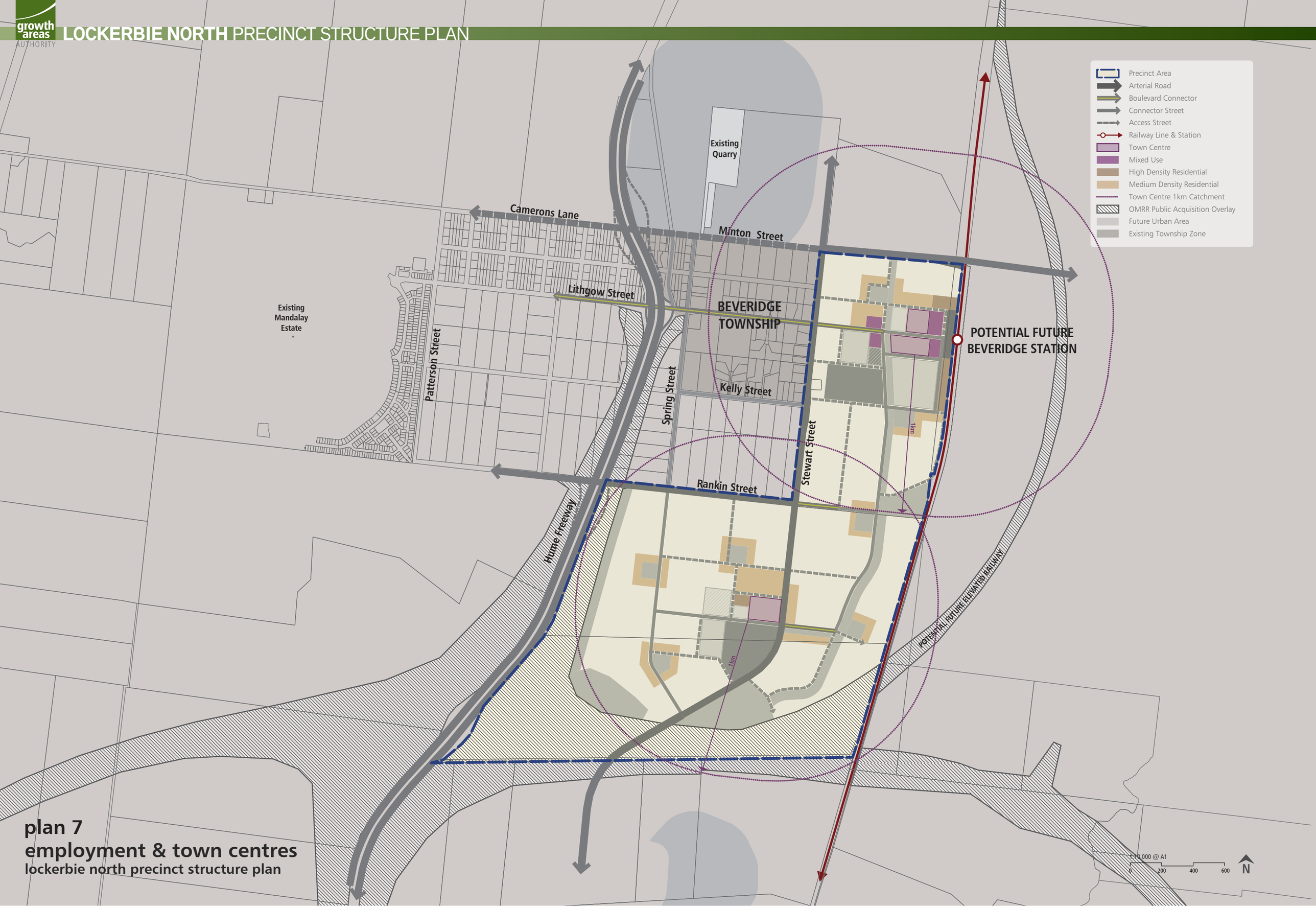
plan 6
biodiversity & threatened species action plan
lockerbie north precinct structure plan

REQUIREMENTS

BIODIVERSITY AND NATURAL SYSTEMS	
R26	A shared trail of at least three metres in width must be provided along one side of all waterways as a minimum.
R27	Design of paths, bridges and boardwalks must be above the 1:10 year flood level. Pedestrian & Vehicular bridges across the waterway must be above the 1:100 year flood level.
R28	Stormwater quality treatment for the PSP must be to the satisfaction of Mitchell Shire Council, City of Whittlesea and Melbourne Water. The strategy must consider Best Practice Environmental Management targets for discharge into waterways within any developed site and should consider both distributed and end of pipe systems. Sediment must be removed prior to discharge to any waterway.
R29	Landscaping must be complementary to the natural environment, particularly along the waterway.

GUIDELINES

BIODIVERSITY AND NATURAL SYSTEMS	
G34	Maximise the public use and enjoyment of the linear open space network as an important visual and recreation resource. This can be achieved through passive parks, linear trails and the establishment of destination nodes.
G35	Landscaping should be complementary to the natural environment, particularly along the drainage corridors.
G36	Net gain objectives of biodiversity protection and management should achieve a sustainable ecological benefit through: • protection and management of areas supporting ecological values; • significant improvements to habitat and connectivity within and adjacent to the Precinct • conservation and enhancement of significant native vegetation and fauna habitat; and • appropriate management of open space corridors to avoid conflict between their ecological, drainage and recreation functions.
G37	Where appropriate, the co-location of active recreation and open spaces areas is encouraged to assist in buffering of significant conservation reserves and waterways is encouraged.



plan 7
employment & town centres
lockerbie north precinct structure plan

3.3 EMPLOYMENT AND LOCAL TOWN CENTRES

Lockerbie North Local Town Centres

The Lockerbie North PSP allows for two Local Town Centres, one within the northern area of the PSP, adjacent to the potential future Beveridge station and in close proximity to the existing Beveridge Township, and one to the south of the PSP, central to the southern residential catchment.

Both Local Town Centres are located at major intersections to ensure a high level of exposure and are well connected by the proposed road and linear open space networks. Both of these centres will provide local services to their surrounding residential catchments while the Donnybrook Principal Town Centre (Lockerbie), located south of the Outer Metropolitan Ring Road, will provide regional services to the northern growth area.

REQUIREMENTS

LOCAL TOWN CENTRES / GENERAL	
R30	Supermarkets and secondary anchors must have frontages that directly address the main street or town square so that the use integrates with and promotes activity within the main street.
R31	Local Town Centres must include provision for commercial uses including office.
R32	Buildings as part of the Local Town Centre must: • Provide primary access to tenancies from the main connector street; • Be built to the street front. Where buildings are set back from the street front, the frontage of the building must be active and must be designed in a way which contributes to the public domain; • Include car parking and service infrastructure to the rear or side of the main street frontage.
R33	Building facades on side streets (excluding shop fronts) and continuous walls must not exceed 10m without articulation, fenestration, activity or visual interest.
R34	Use and development within a Local Town Centre must be generally in accordance with the role identified and the layouts shown as figures 1 & 2 of the Precinct Structure Plan.

REQUIREMENTS

LOCAL TOWN CENTRE NORTH	
R35	Shop floor space must not exceed 9000m^2 without a planning permit. Where floorspace is proposed above this cap, then a retail assessment must be provided with an application that addresses the following matters: • The local and catchment demand for the proposed increase of retail floorspace; • The affect on existing and future Local Town Centres within the region; • The affect on existing and future Principal and Major Town Centres within the region; and • The design and function of the proposed retail expansion and its affect on the existing Local Town Centre and surrounding uses.
R36	The local town centre must be located as shown on Plan 2 Future Urban Structure
LOCAL TOWN CENTRE SOUTH	
R37	Shop floor space must not exceed 4000m^2 without a planning permit.
R38	The local town centre must be located as shown on Plan 2 Future Urban Structure

LOCAL TOWN CENTRE PRINCIPLES	
1	Provide every neighbourhood with a Local Town Centre as a focus of the community with a fine grain, closely spaced distribution pattern.
2	Locate the Local Town Centre on a connector street intersection with access to an arterial road and public transport stop.
3	Locate the Local Town Centre in an attractive setting so that most people live within a walkable catchment of the Local Town Centre and relate to the centre as the focus of the neighbourhood.
4	Provide a full range of local community and other facilities including a supermarket, shops, medical and recreation uses.
5	Focus on a public space as the centre of community life.
6	Integrate local employment and service opportunities in a business friendly environment.
7	Include a range of medium and high density housing and other forms of residential uses within and surrounding the Local Town Centre.
8	Design the Local Town Centre to be pedestrian friendly and accessible by all modes including public transport, while enabling private vehicle access.
9	Create a sense of place with high quality engaging urban design outcomes.
10	Promote localisation, sustainability and adaptability.

Northern Local Town Centre

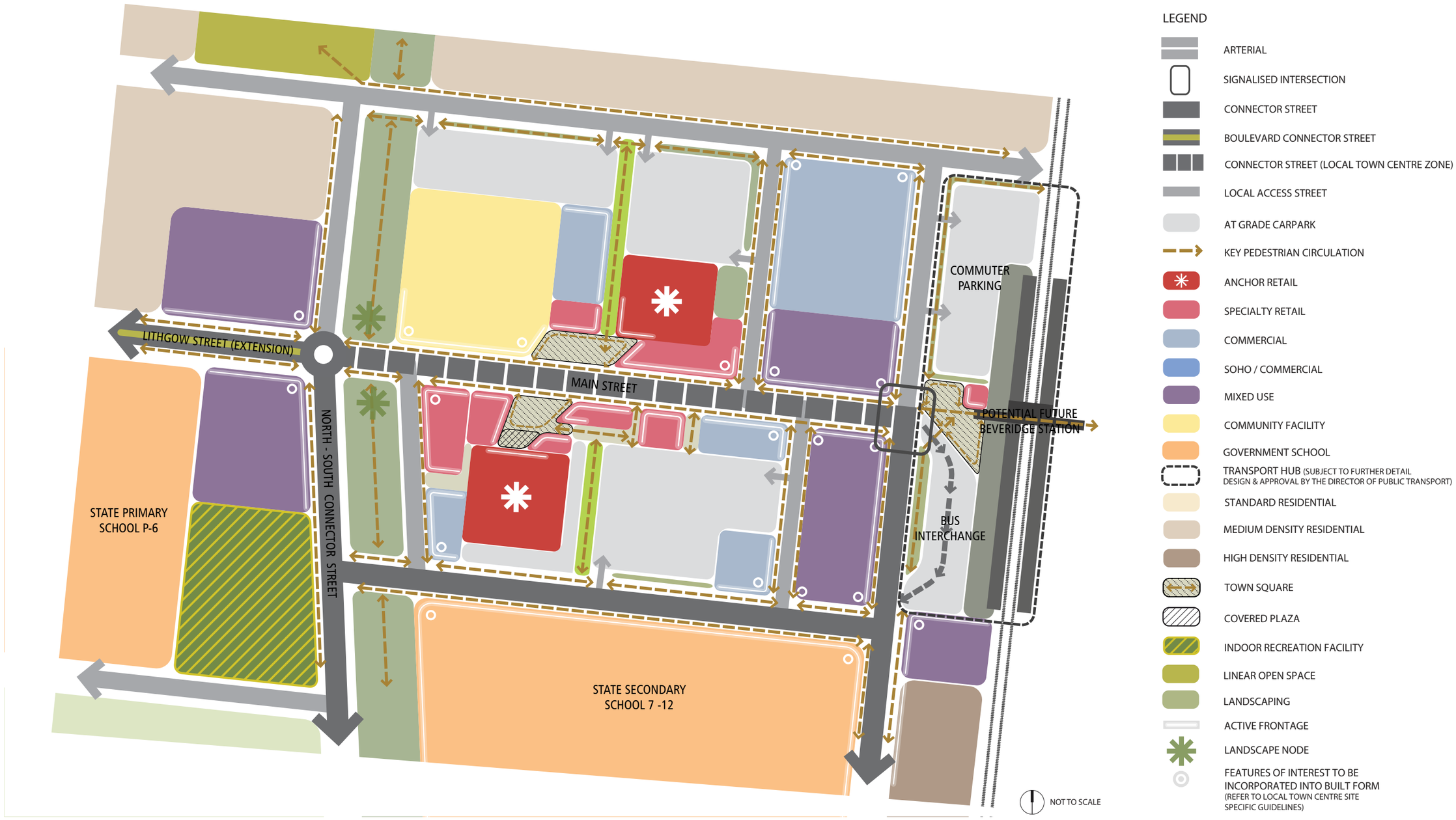
The northern Local Town Centre is positioned to maximise connection to and activity around the potential future Beveridge train station whilst maximising exposure to passing vehicular traffic. The northern Local Town Centre will act as the central node between the Beveridge Township, the north-south linear waterway link and the potential future Beveridge train station which will foster pedestrian, cycle, public transport and vehicular movements between these locations. The northern Local Town Centre is well positioned to become the central meeting place for this community providing a range of retail offerings and services to support the community.

Activity around the proposed future Beveridge train station will be maximised by the location of a station forecourt and bus interchange and surrounding uses which will benefit from close proximity to the train station (such as commercial, mixed use and high density residential outcomes). Within a 400m walkable catchment of the proposed future train station, other uses such as retail, town square, community facilities and education facilities add to the diversity and vibrancy of the Local Town Centre. Future growth and expansion of the Local Town Centre may occur to the north and west which may be triggered by the delivery of the potential future train station.

REQUIREMENTS

LOCAL TOWN CENTRE NORTH	
R39	Land uses must be located generally in accordance with the Lockerbie North Northern Local Town Centre Concept Plan (Figure 1) in particular, the concept plan proposes: • A full line supermarket with the potential for a small secondary retail anchor supported by specialty stores; • Cafe, restaurant and take-away premises; • Commercial locations including uses such as office, medical and child care uses; • Mixed use precincts including home/office and the provision of retail, commercial and/or residential use; • Opportunities for small office/home office (SOHO) outcomes; • Community facility; • Car parking; and • Medium and high density housing; and Additional convenience retail opportunities may be supported in the future adjacent to the potential future Beveridge station.
R40	The Local Town Centre must have a strong relationship and orientate towards the connector street (Local Town Centre Zone). The orientation of the Local Town Centre to the north-south waterway which sits on the western boundary of the Local Town Centre is also encouraged.
R41	The design of the Local Town Centre must address the key view lines into and throughout the centre. Key view lines to Mount Fraser should be considered as part of the design of the Local Town Centre. Particular consideration needs to be given to both the western entrance to the Local Town Centre (the intersection of the two connector streets) and the eastern entry into the Local Town Centre (the station precinct) and the built form outcomes on these corners due to their prominence and role as the 'arrival' points to the Local Town Centre. Consideration must also be given to appropriate built form outcomes to transition from the existing Beveridge township to the Local Town Centre.
R42	Key locations within the Local Town Centre will require features of interest to be incorporated into the built form and landscape outcomes (refer to Figure 1). Features of interest may include: • Two storey construction or elements of two storey construction (such as higher floor to ceiling heights, parapets, awnings, shade structures or roof elements); • Sculptured facades which include recesses and projections to provide variation and segmentation to the building facade; • Strong vertical elements; • Balconies; • Roof and/or wall articulation; and/or • Feature colours or materials which are sympathetic to the sites surrounds
R43	Circulation and permeability throughout the Local Town Centre must ensure that key destinations within the Local Town Centre are easily accessible by walking or cycling. Connections must be provided to the education and active open space precinct to the south. An opportunity exists to provide a north-south waterway connection from the residential area to the north to the retail core to the south through a series of public spaces which will provide further activation of the Local Town Centre.
R44	Active and articulated frontages must be located to face the connector street (Local Town Centre Zone) and town square. Active and articulated frontages to the north-south waterway are also encouraged.
R45	The town square (or similar) must have a strong relationship to the anchor retail, specialty retail, commercial uses, mixed use precincts and the community facility. In addition, the town square facilitates movement across the connector street (Local Town Centre Zone) and connects the uses on each side of the street. The town square should also be located in a position to facilitate pedestrian and cycle movement between the core of the Local Town Centre and the north-south waterway. The final location of the town square must consider passive surveillance opportunities, key pedestrian circulation and design outcomes which create an attractive destination supporting a range of uses.
R46	An additional public space should be located adjacent to the potential future Beveridge station with a strong connection to the entrance to the station and any active uses which establish around the station. The east-west connector street should provide strong visual, vehicular and pedestrian and cycle connections between the station and the town square within the Local Town Centre.
R47	Consideration must be given to pedestrian movement north-south across the connector street. Opportunities for a pedestrian crossing should be explored in conjunction with determining bus stop locations.

Figure1: NORTHERN LOCAL TOWN CENTRE - CONCEPT



Southern Local Town Centre

The southern Local Town Centre will be the smaller of the two centres and will have a strong relationship with the community facility, education facilities and active open space which surround the centre.

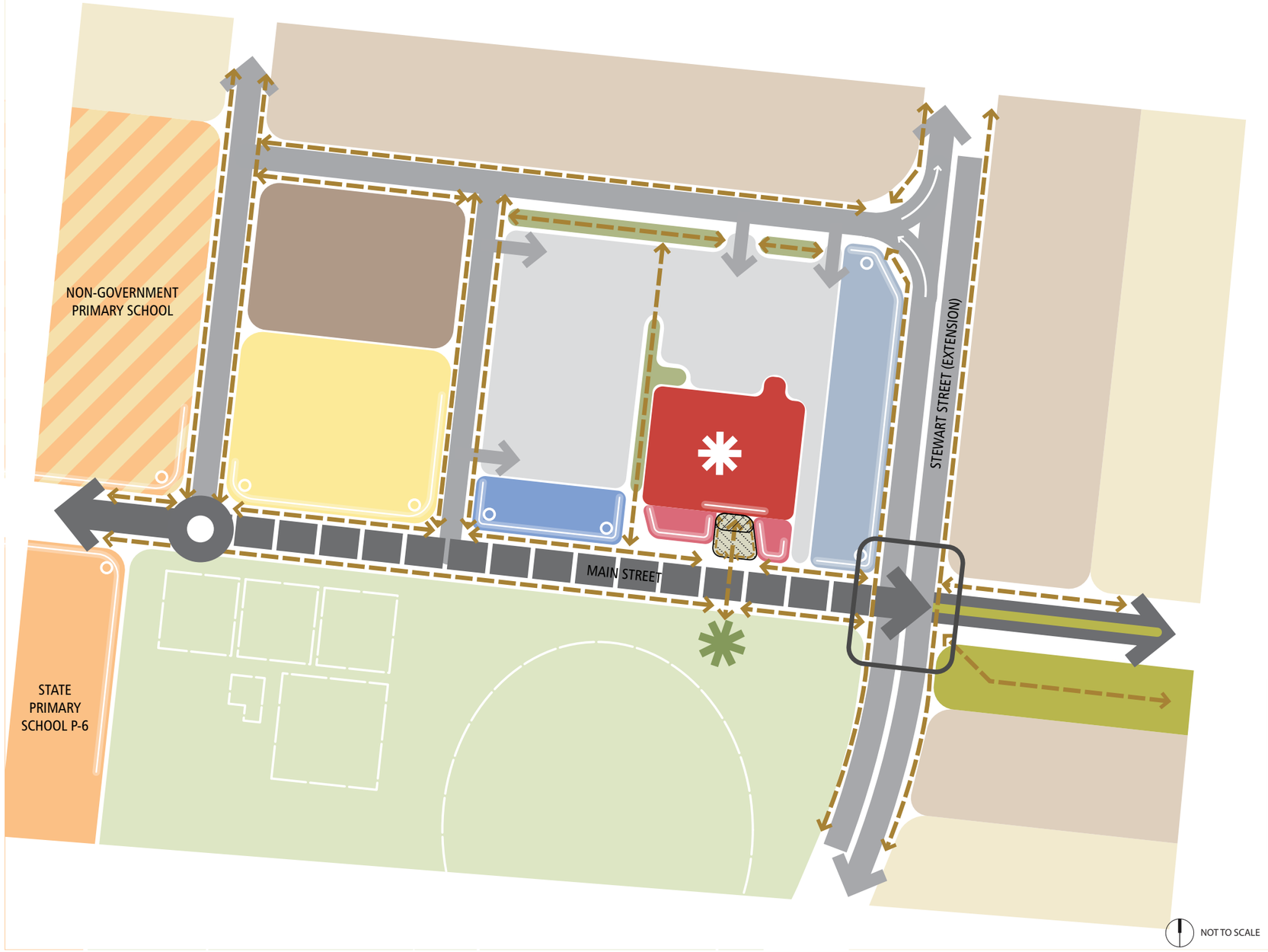
The southern Local Town Centre is located at the western end of the linear open space which will connect this Local Town Centre precinct with the local residential community and to the wider community via the north-south linear waterway. Between the active open space and the Local Town Centre a town square is planned which connects the core retail and commercial activities with the amenity and activity of the active open space.

In addition, this town square will facilitate movement to and from the schools and community facility and create a distinctive space dominated by active frontages and a 'green' and 'active' setting.

REQUIREMENTS

LOCAL TOWN CENTRE SOUTH	
R48	Land uses must be located generally in accordance with the Lockerbie North Northern Local Town Centre Concept Plan (Figure 1) in particular, the concept plan proposes: • A full line supermarket and supporting specialty stores; • Cafe, restaurant and take-away premises; • Commercial locations including uses such as office, medical and child care uses; • Opportunities for small office/home office (SOHO) outcomes; • Car parking; • Medium and high density housing; and • Education, community facility, local park and active recreation uses
R49	The Local Town Centre must have a strong relationship and orientate towards the connector street (Local Town Centre Zone) and to the active open space located to the south of the Local Town Centre.
R50	The design of the Local Town Centre must address the key view lines into and throughout the centre. Particular consideration needs to be given to the intersection of the arterial and connector street (Local Town Centre Zone) and the built form outcomes on this corner due to its prominence and role as the 'arrival' point to the Local Town Centre. In addition, consideration must be given to the frontage of the schools and the community facility to the north and how built form and landscape outcomes in these locations can further enhance the connector street (Local Town Centre zone) and terminate key view lines.
R51	Key locations within the Local Town Centre will require features of interest to be incorporated into the built form and landscape outcomes (refer Figure 2). Features of interest may include: • Two storey construction or elements of two storey construction (such as higher floor to ceiling heights, parapets, awnings, shade structures or roof elements); • Sculptured facades which include recesses and projections to provide variation and segmentation to the building facade; • Strong vertical elements; • Balconies; • Roof and/or wall articulation; and/or • Feature colours or materials which are sympathetic to the sites surrounds.
R52	Circulation and permeability throughout the Local Town Centre must ensure that key destinations within the Local Town Centre are easily accessible by walking or cycling. Strong connections between the retail core of the Local Town Centre, the active open space and the linear open space to the south-east of the Local Town Centre is encouraged.
R53	Active and articulated frontages must be located to face the Connector Street (Local Town Centre Zone), town square, local park and active recreation precinct.
R54	The town square (or similar) must create a strong relationship between the anchor retail, specialty retail, commercial uses and community and school facilities. There is an opportunity to create a central meeting place with strong connections across the connector street (Local Town Centre Zone) to the active open space. The final location of the town square must promote passive surveillance opportunities, key pedestrian circulation and design outcomes which create an attractive destination which supports a range of uses.
R55	Consideration must be given to pedestrian movement (north-south) across the connector street. Opportunities for a pedestrian crossing should be explored in conjunction with determining bus stop locations.

Figure 2: SOUTHERN LOCAL TOWN CENTRE - CONCEPT



LEGEND

- ARTERIAL
- SIGNALISED INTERSECTION
- CONNECTOR STREET
- BOULEVARD CONNECTOR STREET
- CONNECTOR STREET (LOCAL TOWN CENTRE ZONE)
- LOCAL ACCESS STREET
- AT GRADE CARPARK
- KEY PEDESTRIAN CIRCULATION
- ANCHOR RETAIL
- SPECIALTY RETAIL
- COMMERCIAL
- SOHO / COMMERCIAL
- COMMUNITY FACILITY
- GOVERNMENT SCHOOL
- NON-GOVERNMENT SCHOOL
- STANDARD RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- TOWN SQUARE
- COVERED PLAZA
- ACTIVE OPEN SPACE
- LINEAR OPEN SPACE
- LANDSCAPING
- ACTIVE FRONTAGE
- LANDSCAPE NODE
- FEATURES OF INTEREST TO BE INCORPORATED INTO BUILT FORM (REFER TO LOCAL TOWN CENTRE SITE SPECIFIC GUIDELINES)

Existing Quarry
Camerons Lane
Minton Street
Lithgow Street
BEVERIDGE TOWNSHIP
POTENTIAL FUTURE BEVERIDGE STATION
Existing Mandalay Estate
Patterson Street
Spring Street
Kelly Street
Stewart Street
Rankin Street
1km
3km
Hume Freeway
POTENTIAL FUTURE ELEVATED RAILWAY

- Precinct Area
- Arterial Road Potential Bus Route
- Connector Street Potential Bus Route
- Potential Future Transport Hub (Bus Interchange/Station/Parking)
- Potential Future Bus Interchange (location indicative)
- Railway Line & Station
- Station 1km & 3km Catchment
- Potential Future Principal Public Transport Network (PPTN)
- On Road Bike Facilities
- Shared Path (within open space)
- Shared Path (within widened road reserve)
- Pedestrian Operated Traffic Signals
- Pedestrian Operated Crossing (at signalised intersection)
- OMRR Public Acquisition Overlay
- Future Urban Area
- Existing Township Zone

Note: Any public transport infrastrucutre shown on this plan is subject to further investigation & approval by the Director of Public Transport

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plan 8
public & active transport networks
lockerbie north precinct structure plan

3.4 TRANSPORT , WATER , AND UTILITIES

REQUIREMENTS

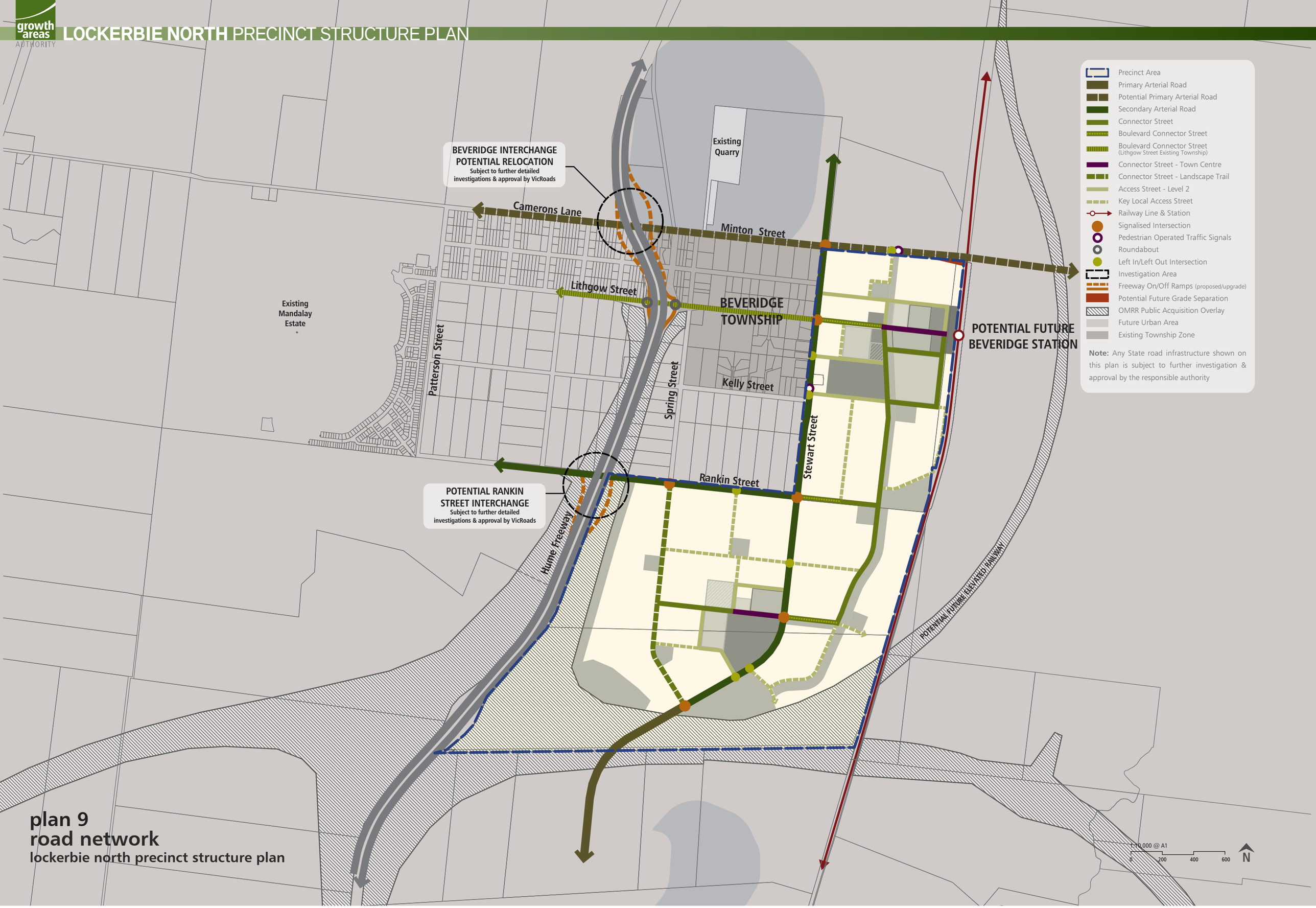
TRANSPORT: PUBLIC TRANSPORT	
R56	Bus stop facilities must be constructed by development proponents as part of the subdivision works (prior to the issue of a statement of compliance for the relevant stage) in accordance with the requirements of the Public Transport Guidelines for Land Use and Development to the satisfaction of the Director of Public Transport.
R57	Bus Stop facilities must be provided with DDA compliant direct and safe pedestrian access connected to an existing pedestrian / shared path.
R58	Bus Stop facilities must be designed as an integral part of town centres and activity generating land uses, such as schools, sports fields and employment areas.
R59	Visually transparent fencing along the boundary abutting the rail reserve is to be provided to the satisfaction of the Director of Public Transport and VicTrack.
R60	Development adjacent to the railway reservation is to include an Acoustic and Vibration Assessment Report prepared by a qualified and experienced Acoustic Consultant. Such report is to: • Ensure the design of the proposed development provides high acoustic standards to minimise the amenity impact of the railway line; and • Provide an innovative design response to ensure the design addresses the opportunities and constraints of the site.

REQUIREMENTS

TRANSPORT: WALKING AND CYCLING	
R61	Walking and cycling networks, including bridges across the waterway, must be constructed by development proponents as part of subdivision works, prior to the issue of a statement of compliance for the relevant stage.
R62	Pedestrian paths must be provided on both sides of connector and access streets in accordance with the cross-sections in this Precinct Structure Plan, unless adjacent to open space areas where pedestrian paths may be incorporated into the open space design.
R63	Pedestrian and cycle crossing points must be provided at all intersections and on key desire lines.
R64	Bicycle parking facilities must be provided by development proponents in convenient locations at key destinations such as parks and town centres, to the satisfaction of the Responsible Authority.

GUIDELINES

TRANSPORT: WALKING AND CYCLING	
G38	Cycle connections should be designed to allow for the safe and convenient transition between on-road and off-road networks
G39	Waterways and open space links should be designed to accommodate walking and cycling networks by providing shared paths of three metres in width.



plan 9
road network
lockerbie north precinct structure plan

REQUIREMENTS

TRANSPORT: STREET NETWORK	
R65	Street layouts of individual subdivisions must integrate to: • Form a coherent movement network across the wider precinct; and, • Ensure no dwelling is disadvantaged by poor access to open space or facilities.
R66	Staging of subdivisions must provide for the timely connection of road links between properties. It must also provide for off-road pedestrian and bicycle networks to the satisfaction of the Responsible Authority.
R67	Roads must be constructed to property boundaries where inter-parcel connections are indicated in the structure plan, by any date or stage of development required or approved by the Responsible Authority.
R68	Driveway access to lots fronting arterial or sub-arterial roads must be provided from local roads or rear lanes only. Service roads may be considered in exceptional circumstances, subject to the agreement of the coordinating Responsible Authority.
R69	Street block lengths must not exceed 200 metres. Intervals between blocks may take the form of either a trafficable street or pedestrian passage of no less than four metres in width.

GUIDELINES

TRANSPORT: STREET NETWORK	
G40	Street layouts should be legible and provide multiple routes to key destinations, such as town centres, to allow direct access for all modes of transport and assist with dispersal of traffic across the precinct.
G41	Use of cul-de-sacs should not detract from convenient pedestrian and vehicular connections
G42	Intersections of local connector streets and arterial roads should be designed to facilitate the safe and convenient movement of all transport modes.
G43	Alignment of arterial roads may be altered so long as intended performance and function are maintained to the satisfaction of the Responsible Authority.

REQUIREMENTS

WATER	
R70	Final design of the waterways, water treatment infrastructure and wetlands/retarding basins must be approved by Melbourne Water.
R71	Storm water conveyance, wetlands/retarding basins and water treatment infrastructure, must be designed in accordance with the Developer Services Scheme established by Melbourne Water.
R72	Drainage systems must provide for a suitable buffer from urban development and contain ephemeral water bodies to enable the replication of natural flows and provide habitat for local species.
R73	Development must conform to relevant policies and strategies being implemented by Council, Melbourne Water and the water retail authority, including any approved Integrated Water Management Plan.

GUIDELINES

WATER	
G44	The width and grades of the waterways may change during the detailed design process and may incorporate the use of pilot channels. Stormwater runoff should be directed along vegetated creekbeds which vary in width, generally between two and ten meters. Batter slopes of waterways between the creekbeds and the surrounding surface should be between 1:5-1:10 grade and to the satisfaction of Melbourne Water.
G45	Corridors and buffers along waterways should be managed to protect water quality and public health and safety.
G46	Development should aim to maintain existing flow regimes (flow intensity, duration) at pre-development levels.
G47	Integrated water management systems should be designed to maximise habitat values for local flora and fauna species.

REQUIREMENTS

UTILITIES	
R74	All new electricity supply infrastructure (excluding substation and cables with a voltage greater than 66kv) must be provided underground.
R75	New substations must be identified at the subdivision design response stage to ensure effective integration with the surrounding land uses and to minimise amenity impacts.
R76	All dwellings and businesses must have access to broadband.

GUIDELINES

UTILITIES	
G48	Electricity substations should be located outside of key view lines and screened with vegetation.
G49	The design of subdivision electricity infrastructure must consider the practicality of removing existing above ground electricity lines in the local and arterial road network both within and abutting the subdivision and re-routing lines underground through the subdivision.

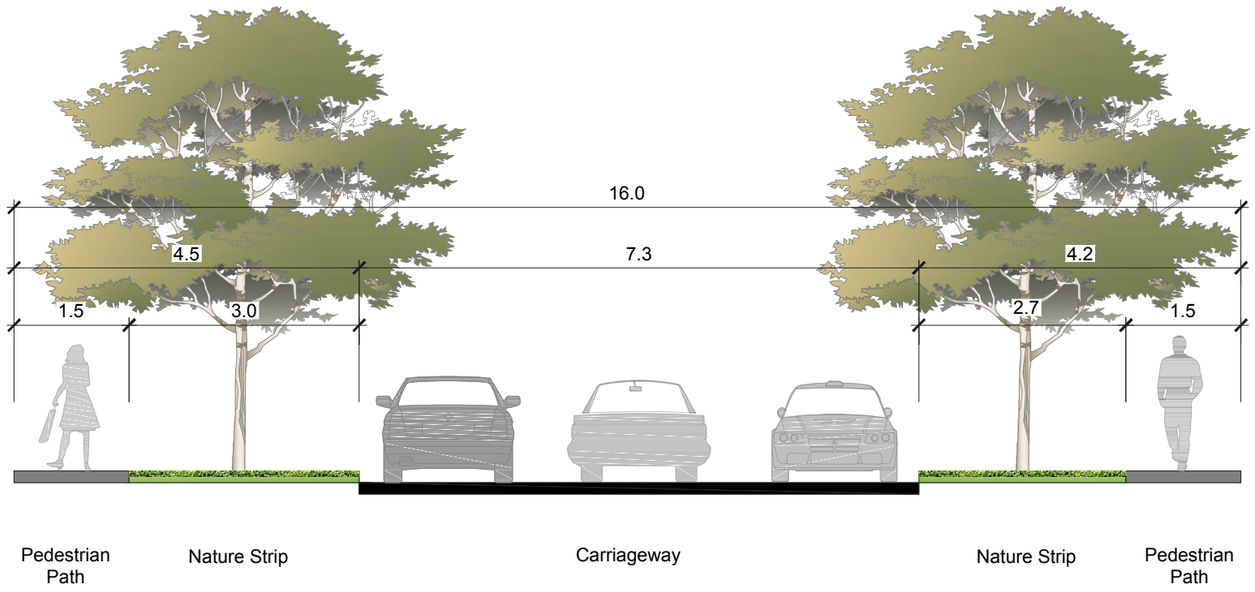
REQUIREMENTS

DEVELOPMENT STAGING	
R77	Due to capacity issues, access to the existing Beveridge Interchange (at Lithgow Street) will be reviewed at the issue of statement of compliance for 1100 lots. Subdivision beyond 1100 lots must be referred to VicRoads for their consideration to determine whether a permit can be issued prior to the construction of a new interchange at Rankin Street. The 1100 lot capacity restriction is not limited to the Lockerbie North Precinct Strucutre Plan.

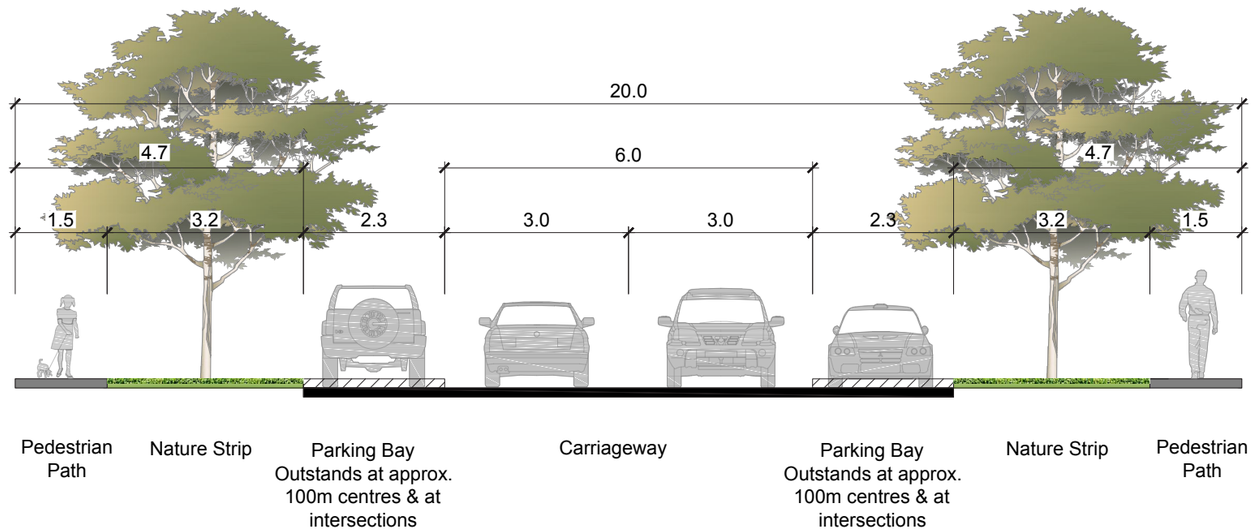
GUIDELINES

DEVELOPMENT STAGING	
G50	Staging will be determined largely by the development program of proponents within the Precinct and the availability of infrastructure services. Within this context, the following should be achieved: • Development staging should not create circumstances in which residents will be unreasonably isolated from community facilities or public transport. • Development staging should, to the extent practicable, be integrated with adjoining developments, including the timely provision of connecting roads and walking/cycling paths. • Access to each new lot is to be via a sealed road
G51	The early delivery of active open space, community facilities, local parks and playgrounds should be encouraged within each neighbourhood and may be delivered in stages.

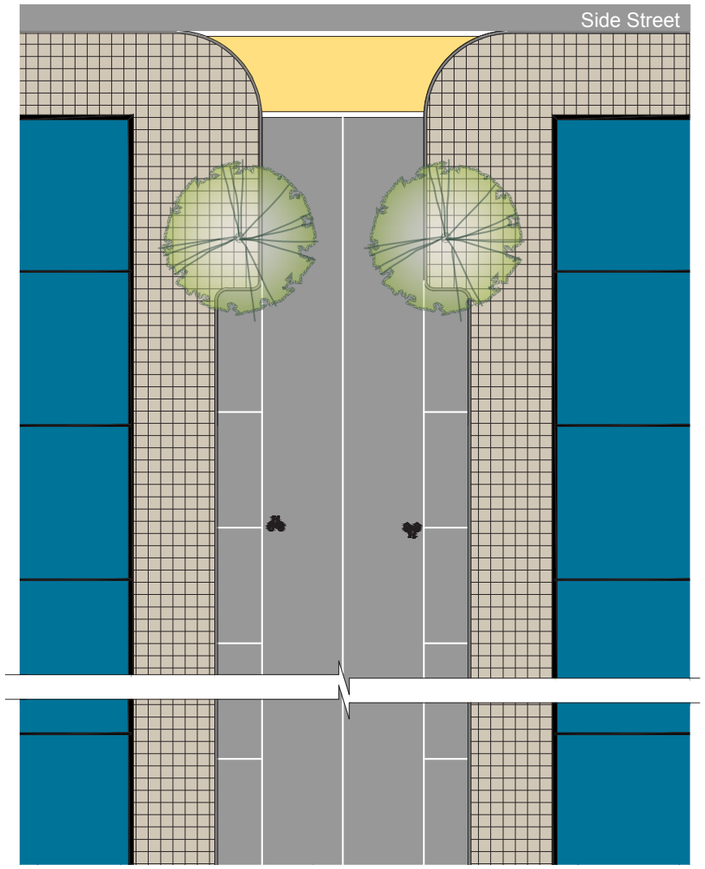
Figure 3: CROSS SECTIONS



Cross Section 1: **ACCESS PLACE / ACCESS STREET LEVEL 1, 16m, <2000VPD**



Cross Section 2: **ACCESS STREET LEVEL 2, 20m, 2000 - 3000 VPD**



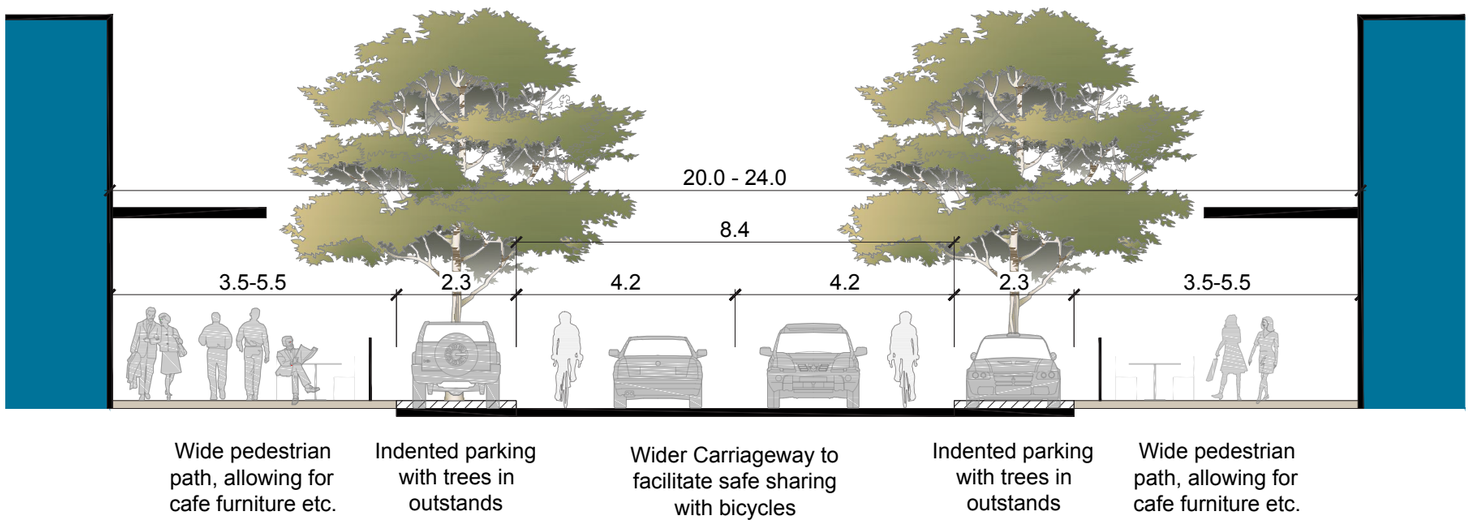
An undivided connector road through the Local Town Centre (LTC) must have a cross section containing a parking lane of 2.3m, a bicycle lane of 1.7m and a traffic lane of 3.5m for each direction of travel (as in "Undivided Connector Road - A" of the *Public Transport Guidelines for Land Use and Development 2008)*, unless otherwise approved in writing by the Director of Public Transport.

The Director may approve an alternative cross section providing a parking lane of not less than 2.3m and a shared bicycle/traffic lane of not less than 4.2m for each direction of travel (as in "Undivided Connector Road - B" of the Guidelines). This option is shown here.

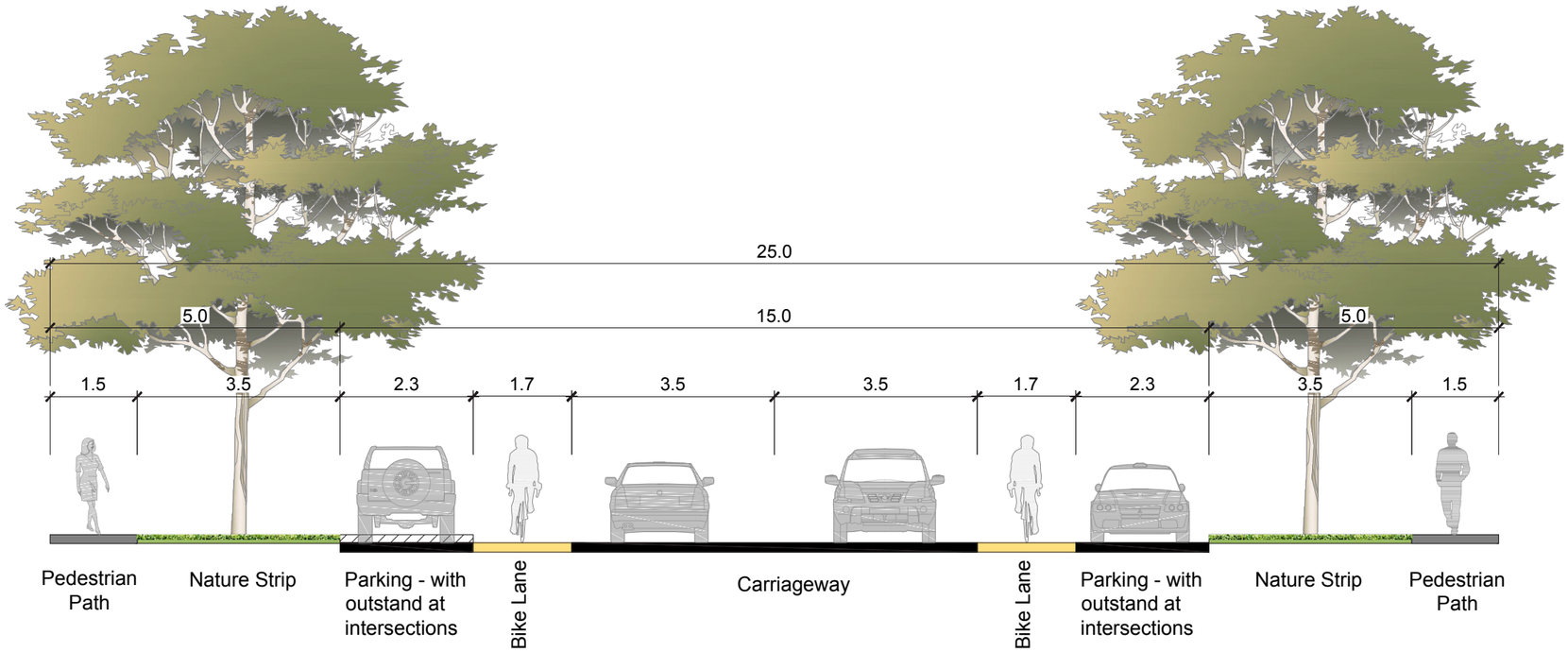
A request to construct an alternative cross section may be made where a main street Local Town Centre (LTC) with retail and commercial development on both sides of the connector road is proposed and:

1. a bus service is not expected to utilise that segment of the LTC connector (e.g. an alternative route is proposed); or
2. a bus service is expected to utilise that segment of the LTC connector and:

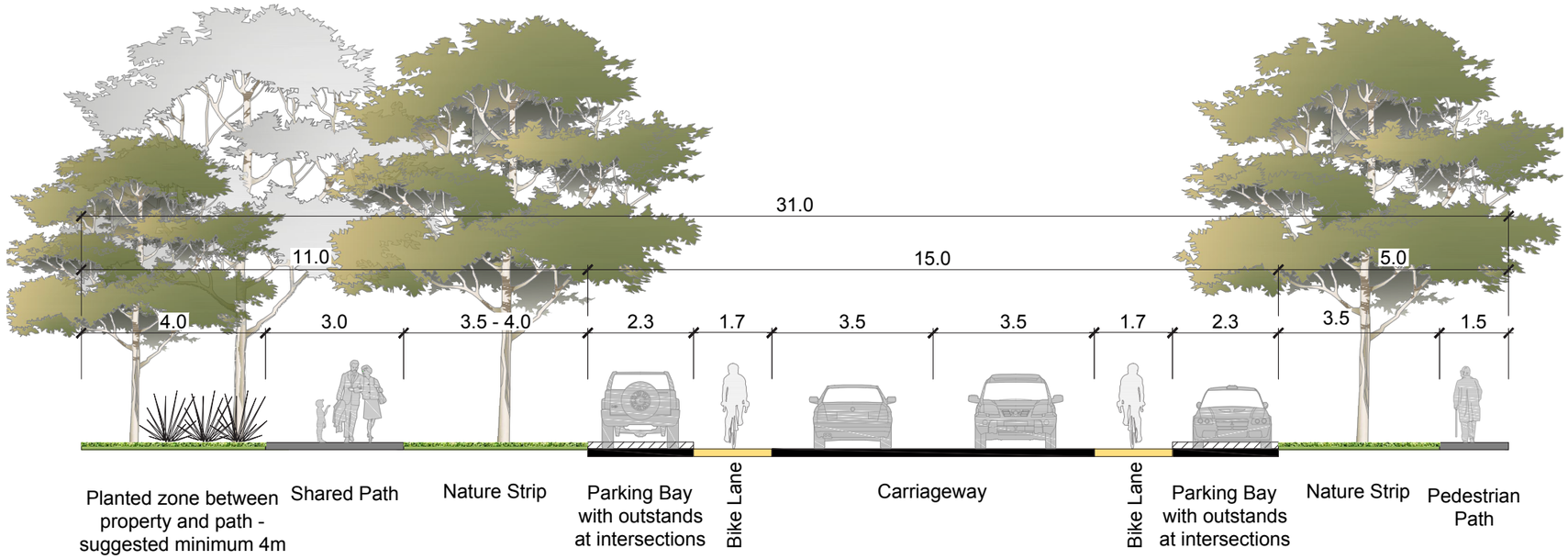
    pedestrian accessibility and safety is the primary transport objective,
    there will be no prejudicial impact on public transport services,
    the connector does not form part of the Principal Public Transport Network,
    the connector is expected to carry three (3) services or less per hour each way under current bus service provision standards,
    the posted speed limit is proposed to be 40km/h or lower,
    the length of the "Undivided Connector Road - B" section is less than 250m and
    there is no proposal to locate a use which would generate significant volumes of bicycle traffic such as a school, community facility, sporting facility or place of assembly, in or adjacent to the LTC and a nearby alternative cycling route is available.



Cross Section / 3: **MAIN STREET / CONNECTOR FOR LOCAL TOWN CENTRES, 20m - 24m, 2000 - 12000 VPD**

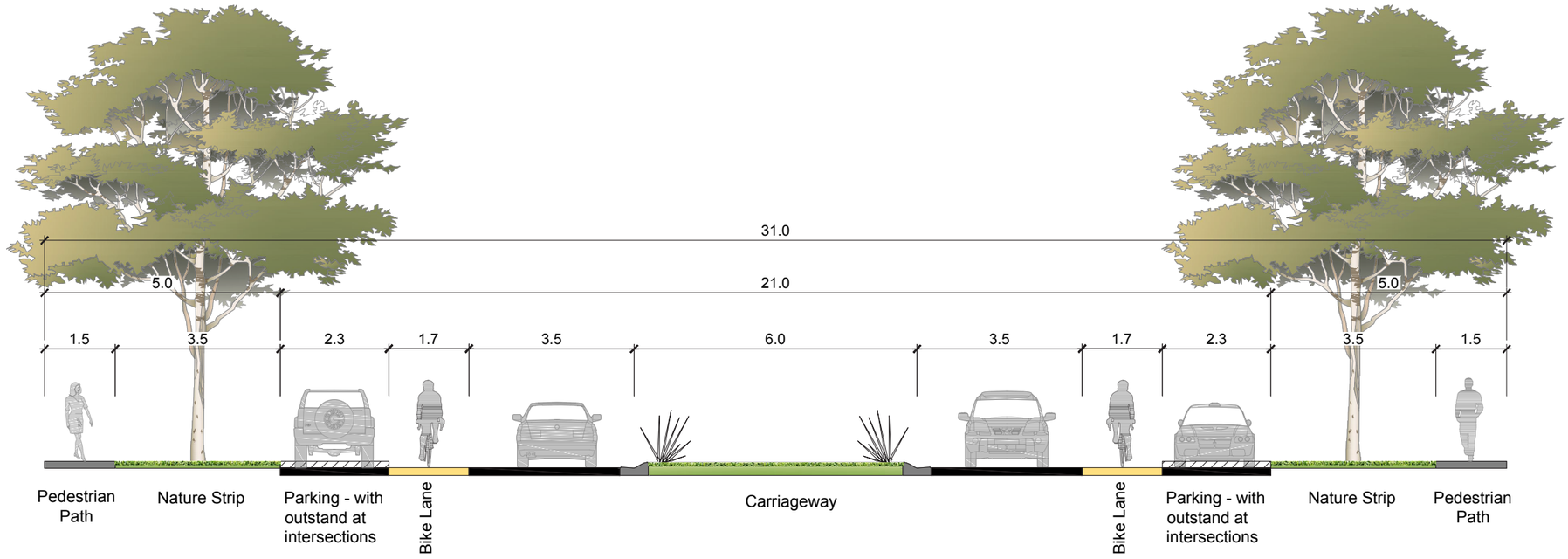


Cross Section 4: **CONNECTOR STREET RESIDENTIAL, 25m, 3000 - 7000 VPD**

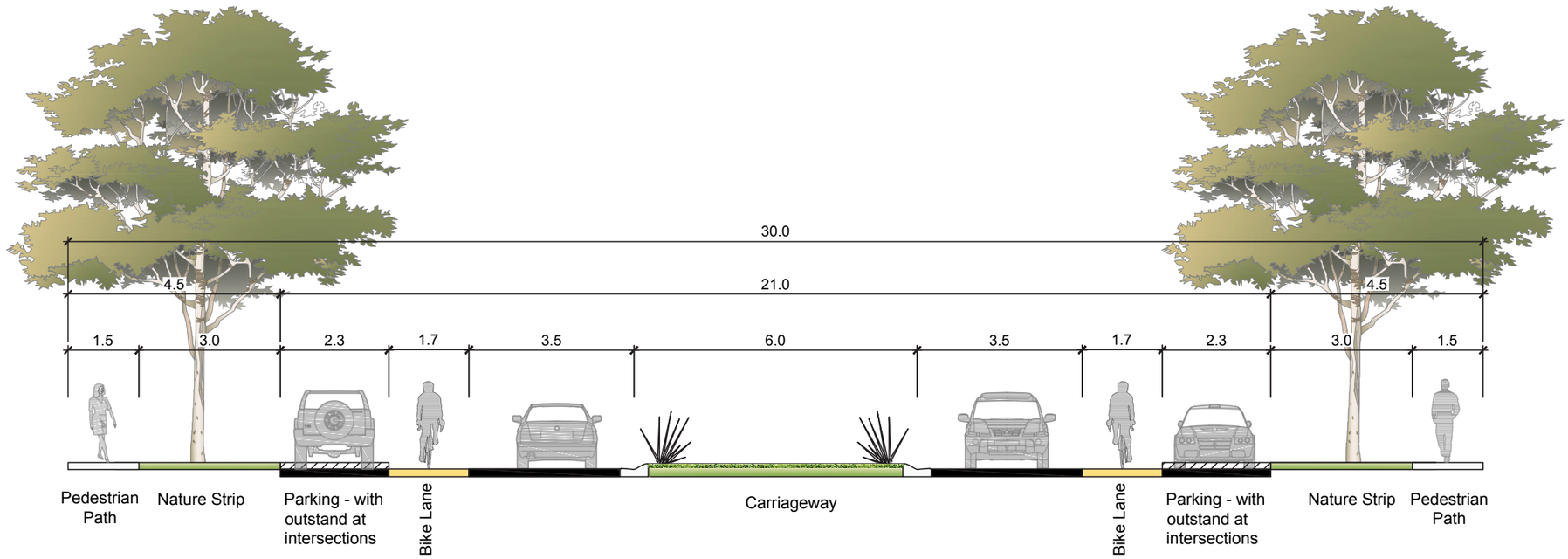


Note
Shared landscaped trails to be used along targetted strategic streets, connecting key destinations and activities.
Where they are used, a minimum appropriate offset from property boundaries, to allow for sufficient sight-lines, is required.
Measures to reduce the frequency and number of vehicle crossings, and the frequency of street intersection should also occur along these trails.

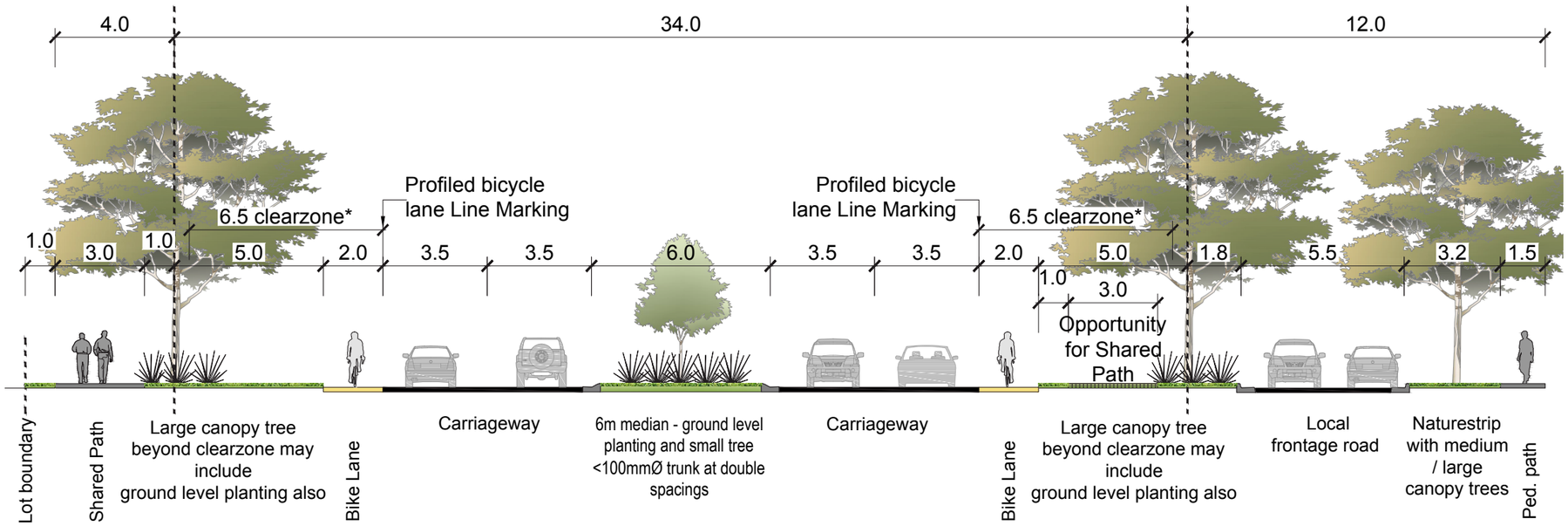
Cross Section 5: **CONNECTOR STREET RESIDENTIAL WITH SHARED LANDSCAPE TRAIL, 31m, Typically 3000 - 7000 VPD**



Cross Section 6: **BOULEVARD CONNECTOR STREET RESIDENTIAL, 31m, 7000 - 12000 VPD**



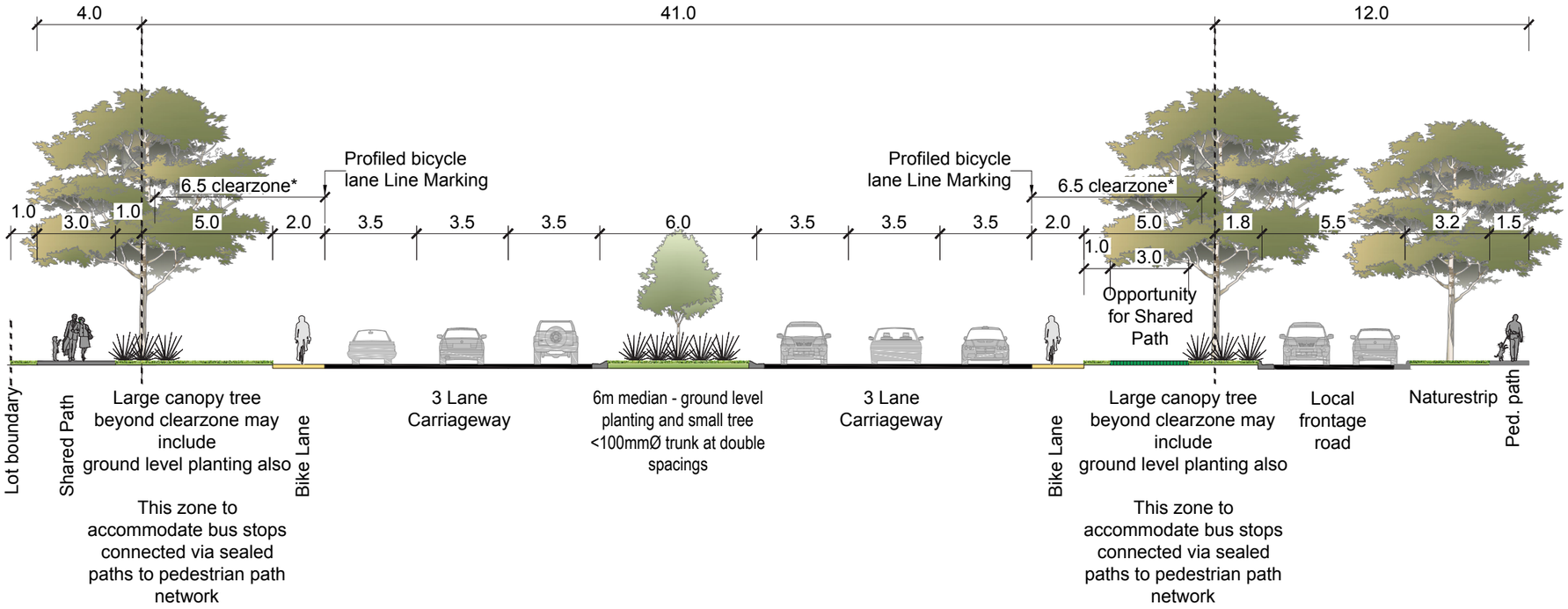
Cross Section 7: **LITHGOW STREET (EXISTING TOWNSHIP) BOULEVARD CONNECTOR STREET, 30m, 7000 - 12000 VPD**



Note

- Includes typical residential frontage roads each side
- investigation and use of physical barriers such as wire rope fencing is encouraged to enable more extensive canopy tree planting.
- *Clearzone assumes 80km/h speed limit >5,000 VPD
- Reservation width will be affected by clearzone & service infrastructure clearance requirements

Cross Section 8: 4 LANE SECONDARY ARTERIAL, 34m, 12,000 - 40,000 VPD



Note

- Includes typical residential frontage roads each side
- investigation and use of physical barriers such as wire rope fencing is encouraged to enable more extensive canopy tree planting.
- *Clearzone assumes 80km/h speed limit >5,000 VPD
- Reservation width will be affected by clearzone & service infrastructure clearance requirements

Cross Section 9: 6 LANE PRIMARY ARTERIAL, 41m, > 40,000 VPD

3.5 PRECINCT INFRASTRUCTURE

The Precinct Infrastructure Plan (PIP) at Table 4 sets out the infrastructure and services required to meet the needs of development of the precinct. The infrastructure items and services are to be provided through a number of mechanisms including:

- Subdivision construction works by developers;
- Agreement under Section 173 of the Act;
- Utility service provider requirements; and
- Capital works projects by Council, State government agencies and non-government organisations.

REQUIREMENTS

INFRASTRUCTURE DELIVERY	
R78	Subdivision must provide and meet the total cost of delivering the following infrastructure: • Connector roads and local streets; • Local bus stop infrastructure; • Landscaping of all existing and future roads and local streets; • Intersection works and traffic management measures along arterial roads, connector streets, and local streets, unless funded through the Development Contributions Plan; • Council approved fencing and landscaping (where required) along arterial roads; • Local pedestrian and bicycle paths along local arterial roads, connector roads and local streets and within local parks (except those included in the Development Contributions Plan); • Bicycle parking facilities in convenient locations at key destinations such as parks and activity centres; • Basic improvements to local parks / open space including leveling, grassing, tree planting and local paths consistent with the Councils required construction standards; • Local drainage systems and associated pedestrian bridges; and • Infrastructure as required by utility services providers including water, sewerage, drainage (except where the item is funded through a Drainage Scheme) , electricity, gas, and telecommunications.

REQUIREMENTS

LAND BUDGET	
R79	The detailed land budget included in Section 2.3 clearly sets out the NDA for every property included in the PSP. The NDA will not be amended to respond to minor changes to land budgets that may result from the subdivision process unless the Responsible Authority agrees to a variation.

REQUIREMENTS

PROVISION OF PASSIVE OPEN SPACE	
R80	Passive open space must be provided in accordance with Clause 52.01. If a development site has equal to or less than the percentage nominated in Clause 52.01 this land must be provided to the Responsible Authority at no cost. If a property has less than the percentage nominated in Clause 52.01 the land owner must make up the balance by way of a cash in lieu payment. The cash in lieu rate per net developable hectare is revised annually in accordance with the Lockerbie North Development Contributions Plan. • Where the amount of passive open space nominated on a property exceeds the percentage nominated in Clause 52.01 the Responsible Authority must negotiate with the land owner to agree on the value of the amount of land in excess of 3.24% of NDA.

Table 4: PRECINCT INFRASTRUCTURE ITEM TABLE

Item Number	Project Group	Project Category	Title	Project Description	Lead Agency	Timing: S = 2010 – 14 M = 2015 – 19 L = 2020+	Included in Lockerbie North DCP
ROAD & INTERSECTION INFRASTRUCTURE							
1	Transport	Road	Stewart Street & Stewart Street Extension (North-South Primary & Secondary Arterial) Land Acquisition and First Carriageway	Stewart Street & Stewart Street Extension (North-South Primary & Secondary Arterial) Land and Construction. Acquisition of ultimate road reserve and construction of first carriageway of Stewart Street & Stewart Street Extension Secondary Arterial between Minton Street & Spring Street Extension. Acquisition of ultimate road reserve and construction of first carriageway of Stewart Street & Stewart Street Extension Primary Arterial between Spring Street Extension & Donovans Lane.	Council	S – M	Yes
2	Transport	Road	Stewart Street & Stewart Street Extension (North-South Primary & Secondary Arterial) Duplication and Triplication	Construction of second carriageway of Stewart Street & Stewart Street Extension between Minton Street & Spring Street Extension and a third lane in each direction between Spring Street Extension & Donovans Lane.	VicRoads	L	No
3	Transport	Road	Rankin Street (East-West Secondary Arterial) First Carriageway	Rankin Street (East-West Secondary Arterial) Construction. Construction of first carriageway of Rankin Street between Stewart Street & Hume Freeway	Council	S – M	Yes
4	Transport	Road	Rankin Street (East-West Secondary Arterial) Duplication	Construction of second carriageway of Rankin Street	Council	L	No
5	Transport	Intersection	Minton Street / Stewart Street Interim Intersection	Minton Street / Stewart Street Intersection. Land Acquisition for an ultimate signalised intersection at the intersection of Minton Street / Stewart Street.	Council	S – M	Yes
6	Transport	Intersection	Lithgow Street / Stewart Street Interim Intersection	Lithgow Street / Stewart Street Intersection. Land Acquisition for ultimate and construction of an interim signalised intersection at the intersection of Lithgow Street / Stewart Street.	Council	S – M	Yes
7	Transport	Intersection	Lithgow Street / Stewart Street Ultimate Intersection	Lithgow Street / Stewart Street Intersection. Construction of an ultimate signalised intersection at the intersection of Lithgow Street / Stewart Street.	VicRoads	L	No
8	Transport	Intersection	Kelly Street / Stewart Street Pedestrian Signals	Kelly Street / Stewart Street Pedestrian Signals. Construction of pedestrian signals at the intersection of Kelly Street / Stewart Street.	Council	S – M	Yes
9	Transport	Intersection	Rankin Street / Stewart Street Interim Intersection	Rankin Street / Stewart Street Intersection. Land Acquisition for ultimate and construction of an interim roundabout intersection at the intersection of Rankin Street / Stewart Street.	Council	S – M	Yes
10	Transport	Intersection	Rankin Street / Stewart Street Ultimate Intersection	Rankin Street / Stewart Street Intersection. Construction of an ultimate signalised intersection at the intersection of Rankin Street / Stewart Street.	VicRoads	L	No
11	Transport	Intersection	Connector Street (Southern LTC) / Stewart Street Extension Interim Intersection	Connector Street (Southern LTC) / Stewart Street Extension Intersection. Land Acquisition of ultimate and construction of an interim signalised intersection at the intersection of Connector Street (Southern LTC) / Stewart Street Extension.	Council	S – M	Yes
12	Transport	Intersection	Connector Street (Southern LTC) / Stewart Street Extension Ultimate Intersection	Connector Street (Southern LTC) / Stewart Street Extension Intersection. Construction of an ultimate signalised intersection at the intersection of Connector Street (Southern LTC) / Stewart Street Extension.	VicRoads	L	No
13	Transport	Intersection	Spring Street Extension / Stewart Street Extension Interim Intersection	Spring Street Extension / Stewart Street Extension Intersection. Land Acquisition of ultimate and construction of an interim signalised intersection at the intersection of Spring Street Extension / Stewart Street Extension.	Council	S – M	Yes
14	Transport	Intersection	Spring Street Extension / Stewart Street Extension Ultimate Intersection	Spring Street Extension / Stewart Street Extension Intersection. Construction of an ultimate signalised intersection at the intersection of Spring Street Extension / Stewart Street Extension.	VicRoads	L	No
15	Transport	Intersection	Left in-left out intersections to Minton Street, Stewart Street, Rankin Street	Construction of left in - left out intersections for development access onto future arterial roads.	Council	S - L	No
Infrastructure outside the PSP area required to support the development of the precinct							
16	Transport	Interchange	Beveridge Interchange	Upgrade of existing interchange to improve safety and allow for greater capacity	VicRoads	S	No
17	Transport	Interchange	Rankin Street Interchange (South Bound Ramps)	Rankin Street Interchange. Construction of future interchange including overpass and south bound ramps. (Subject to further detail design & approval by VicRoads.)	VicRoads	L	No
18	Transport	Interchange	Camerons Lane Interchange - Relocation of Beveridge Interchange	Camerons Lane Interchange. Construction of future interchange including overpass and northbound & southbound ramps. (Subject to further detail design & approval by VicRoads.)	VicRoads	L	No
19	Transport	Road	Lithgow Street Upgrade (Boulevard Connector Street)	Lithgow Street Upgrade (Boulevard Connector Street.) Upgrade of existing carriageway to an urban standard based on the Lithgow Street (Existing Township) Boulevard Connector cross section between Hume Freeway & Stewart Street.	Council	S	Yes
21	Transport	Intersection	Lithgow Street / Beveridge Interchange Western Ramps Intersection	Lithgow Street / Beveridge Interchange Western Ramps Intersection. Construction of an ultimate roundabout at the intersection of Lithgow Street / Beveridge Interchange Western Ramps.	Council	S	Yes
22	Transport	Freeway / Interchange	OMR / E6 Corridor	Land aquisition and construction of OMR / E6 Corridor	VicRoads	L	No

PUBLIC TRANSPORT INFRASTRUCTURE							
23	Public Transport	Bus	Lockerbie North Bus Services	Progressive extension of local bus services to service the precinct.	Director of Public Transport	M – L	No
24	Public Transport	Bus	Bus Stops	Provision of bus stops to be delivered with local street system as part of subdivision.	Council / Director of Public Transport	S – L	No
25	Public Transport	Bus	Transport Hub	Construction of a potential future Bus Interchange, Commuter Parking adjacent to the potential future Beveridge Rail Station. (Subject to further detailed design)	Director of Public Transport	L	No
Infrastructure outside the PSP required to support the development of the precinct							
26	Public Transport	Bus	Potential Future Beveridge Train Station	Construction of a train station (including platforms, forecourts, buildings & shelters) (subject to further detailed design)	Director of Public Transport	L	No
EDUCATION INFRASTRUCTURE							
27	Education	School	Lockerbie North Northern Primary School	Provision of new primary school	DEECD	M - L	No
28	Education	School	Lockerbie North Northern Secondary School	Provision of new secondary school	DEECD	M - L	No
29	Education	School	Lockerbie North Southern Primary School	Provision of new primary school	DEECD	M - L	No
OPEN SPACE INFRASTRUCTURE							
30	Open Space	Active	Land for Northern Recreation Reserve	Northern Recreation Reserve establishment. Land acquisition for the Northern Recreation Reserve.	Council	S - M	Yes
31	Open Space	Active	Construction of Northern Recreation Reserve	Construction of playing fields (two football fields/cricket ovals), landscaping, car parking, irrigation & civil works for the Northern Recreation Reserve.	Council	S - M	Yes
32	Open Space	Active	Construction of Northern Recreation Reserve Pavillion	Construction of sports facilities, including pavilion, at the Northern Recreation Reserve.	Council	M - L	No
33	Open Space	Active	Land for Southern Recreation Reserve	Southern Recreation Reserve establishment. Land acquisition for the Northern Recreation Reserve.	Council	S - M	Yes
34	Open Space	Active	Construction of Southern Recreation Reserve	Construction of playing fields (two football fields/cricket ovals or three soccer pitches), tennis courts, netball courts, landscaping, car parking, irrigation & civil works for the Southern Recreation Reserve.	Council	S - M	Yes
35	Open Space	Active	Construction of Southern Recreation Reserve Pavillions	Construction of sports facilities, including pavilion, at the Southern Recreation Reserve to serve the tennis courts & netball courts.	Council	M - L	No
36	Open Space	Passive	Construction of Local Passive Parks	Earthworks, drainage works, landscape construction, trail development and passive park development works.	Council	S-L	No
37	Open Space	Passive	North-South Waterways & associated wetlands	Earthworks, drainage works, landscape construction, trail development and passive park development works.	Melbourne Water / Council	S-L	No
Infrastructure outside the PSP required to support the development of the precinct							
38	Open Space	District Active	Land for District Active Recreation	Land acquisition for District Active Recreation Reserve. Location to be determined by Council. (7.5ha required - based upon demand generated to cater for future population)	Council	M - L	Yes
COMMUNITY INFRASTRUCTURE							
39	Community Services	Community Centre	Land for Community Centres	Lockerbie North Community Centres. Acquisition of land for future community centre establishment.	Council	S - M	Yes
40	Community Services	Community Centre	Construction of Community Centres	Lockerbie North Community Centres. Construction of future community centres.	Council	S - M	No
41	Community Services	Community Centre	Land for Indoor Recreation Facility	Indoor Recreation Facility. Acquisition of land for future indoor recreation facility establishment.	Council	M - L	Yes

APPENDICES

Local Town Centre Principles

APPENDIX A

PRINCIPLES

LOCAL TOWN CENTRES	
Principle 1 Provide every neighbourhood with a viable Local Town Centre as a focus of the community with a fine grain, closely spaced distribution pattern.	• Deliver a fine grain distribution pattern of highly accessible Local Town Centres generally on a scale of one Local Town Centre for every neighbourhood of 8,000 to 10,000 people. • Locate Local Town Centres with a distribution pattern of around one Local Town Centre for every square mile (2.58km2) of residential development. • Deliver a network of economically viable Local Town Centres including a supermarket and supporting competitive local shopping business, medical, leisure, recreation and community needs while allowing opportunities for local specialisation.
Principle 2 Locate Local Town Centres on a connector street intersection with access to an arterial road and transit stop.	• Locate the Local Town Centre on an arterial/connector intersection and ensure that the Local Town Centre is central to the residential catchment that it services while optimising opportunities for passing trade. • Locate the Local Town Centre with future railway stations or other forms of transit stops to benefit the Local Town Centre and to offer convenience for public transport passengers. • Other Local Town Centre locations may be considered where the location results in the Local Town Centre being central to the residential catchment that it serves and/or the location incorporates natural or cultural landscape features such as rivers and creeks, tree rows, topographic features or other heritage structures which assist in creating a sense of place.
Principle 3 Locate Local Town Centres in an attractive setting so that most people live within a walkable catchment of a Local Town Centre and relate to the centre as the focus of the neighbourhood.	• Ensure that 80-90% of households are within a 1km walkable catchment of a local or higher order Town Centre. • Locate Local Town Centres in attractive settings and incorporate natural or cultural landscape features such creeks and waterways, linear open space, pedestrian and cycle links and areas of high aesthetic value. • The design of the Local Town Centre should respect existing views and vistas to and from the Local Town Centre location.
Principle 4 Provide a full range of local community and other facilities including a supermarket, shops, medical and recreation uses.	• Land uses should be located generally in accordance with the locations and general land use terms identified on the Local Town Centre Concept Plan. • The design of the Local Town Centre should facilitate development with a high degree of community interaction and provide a vibrant and viable mix of retail, recreation and community facilities. • The creation of land use precincts within the centre is encouraged to facilitate the clustering of uses. For example a 'medical precinct' where similar or synergistic uses should be sited together to promote stronger trading patterns. • The design of the Local Town Centre should also encourage a pattern of smaller scale individual tenancies and land ownership patterns within the Local Town Centre to attract investment and encourage greater diversity and opportunities for local business investment. • The Local Town Centre should generally be anchored by one full line supermarket and supported by specialty stores unless otherwise noted on the Local Town Centre Concept Plan. • Supermarkets and other commercial or community anchors or secondary anchors within the Local Town Centre should be located diagonally opposite one another across the main street and/or town square to promote desire lines that maximise pedestrian movement within the public realm. • A small access mall that address a supermarket/other 'large box uses' may be considered as part of the overall design. Such access malls may have a limited number of internalised shops. The primary access to the mall should be from the main street and/or the town square. • Active building frontages should address the main street and town square to maximise exposure to passing trade, and promote pedestrian interaction. • Shopfronts should have varying widths and floor space areas to promote a diversity of trading opportunities throughout the Local Town Centre. • Flexible floor spaces (including floor to ceiling heights) should be incorporated into building design to enable localised commercial uses to locate amongst the activity of the Local Town Centre. • Mixed Use precincts should provide retail and/or office at ground level, and office, commercial and residential above ground level. • Childcare, medical centres and specialised accommodation (e.g. aged care/nursing home, student accommodation, and serviced apartments) should be located within the Local Town Centre and at the edge of the Local Town Centre to contribute to the activity of the centre and so these uses are close to the services offered by the centre. • Car parking areas should be located centrally to the site and to the rear and or side of street based retail frontages. • Car parking areas should be designed to accommodate flexible uses and allow for long term development opportunities. • Public toilets should be provided in locations which are safe and accessible and within the managed area of the property.
Principle 5 Focus on a public space as the centre of community life.	• A public space which acts as the central meeting place within the Local Town Centre must be provided. This public space may take the form of a town square, town park, public plaza space, public market place or a similar locally responsive option. • The public space should be located in a position where the key uses of the Local Town Centre are directly focuses on this public space to ensure that it is a dynamic and activated space. • The public space should be designed to function as the identifiable 'centre' or 'heart' with a distinctive local character for both the Local Town Centre and the broader residential catchment. • The public space should be designed as a flexible and adaptable space so that a range of uses can occur within this space at any one time. Such uses may include people accessing their daily shopping and business needs as well as providing a space where social interaction, relaxation, celebrations and temporary uses (such as stalls, exhibitions and markets) can occur. • The public space should be well integrated with pedestrian and cycle links around and through the Local Town Centre so that the public space acts as a 'gateway' to the activity of the centre. • The main public space or town square within the Local Town Centre should have a minimum area of 500sq m. Smaller public spaces which are integrated within the built form design, are surrounded by active frontages and facilitate high levels of pedestrian movement are also encouraged. • Footpath widths within and around the public space as well as along the main street should be sufficient to provide for pedestrian and mobility access as well as provide for outdoor dining and smaller gathering spaces.

Principle 6 Integrate local employment and service opportunities in a business friendly environment.	• A variety of employment and business opportunities should be planned through the provision of a broad mix of land uses and commercial activities. • A range of options and locations for office based businesses should be provided within the Local Town Centre. • Services and facilities to support home based and smaller businesses are encouraged within the Local Town Centre. • Appropriate locations for small office/home office ('SOHO') housing options which maximise the access and exposure to the activity of the Local Town Centre should be considered as part of the design process.
Principle 7 Include a range of medium and high density housing and other forms of residential uses within and surrounding the Local Town Centre.	• Medium and high density housing in and around the Local Town Centre is required to provide passive surveillance, contribute to the life of the centre and to maximise the amenity of the centre. • Medium and high density housing should establish in locations of high amenity around the Local Town Centre and be connected to the activity of the Local Town Centre through strong pedestrian and cycle links. • A range of housing types for a cross section of the community (such as retirement living) should be included in and around the Local Town Centre. • Specialised accommodation (such as aged/nursing care, student accommodation and serviced apartments) is encouraged at the edge of Local Town Centres with strong pedestrian and cycle links to the central activity area of the Town Centre. • The Local Town Centre design should avoid potential land use conflicts between residential and commercial uses by focusing on retail operations on the main street and around the town square and locating residential uses predominantly at the edge of the Local Town Centre and/or on upper levels. • Refer to the Small Lot Housing Code for further information about housing requirements for small lots around Local Town Centres.
Principle 8 Design the Local Town Centre to be pedestrian friendly and accessible by all modes including public transport, while enabling private vehicle access.	• The Local Town Centre should be easily, directly and safely accessible for pedestrians, cyclists, public transport modes, private vehicles, service and delivery vehicles with priority given to pedestrian movement, amenity, convenience and safety. • The Local Town Centre should provide a permeable network of streets, walkways and public spaces that provide linkages throughout the centre and designated pedestrian crossing points. • The main street should be designed to comply with the relevant cross sections found within the Precinct Structure Plan. • A speed environment of 40km/h or less should be designed for the length of the main street. • Public transport infrastructure/facilities should be planned for commuter friendly/convenient locations within the Local Town Centre. • Bus stops should be provided in accordance with the Department of Transport Public Transport Guidelines for Land Use and Development, to the satisfaction of the Department of Transport. • Bicycle parking should be provided within the street network and public spaces in highly visible locations and close to pedestrian desire lines and key destinations. • Supermarket and other 'large format' buildings should not impede on the movement of people around the Local Town Centre. • Key buildings within the Local Town Centre should be located to encourage pedestrian movement along the length of the street through public spaces. • The design of buildings within the Local Town Centre should have a relationship with and should interface to the public street network. • Car parking areas should be designated to ensure passive surveillance and public safety through adequate positioning and lighting. • Car parking areas should be designed to provide dedicated pedestrian routes and areas of landscaping. • On street car parking should be provided either as parallel or angle parking to encourage short stay parking. • Car parking ingress and egress crossovers should be grouped and limited. • Car parking ingress or egress and car parking areas accommodating heavy vehicle movements should be designed to limit the pedestrian/vehicle conflict. • Heavy vehicle movements (i.e. loading and deliveries) should be located to the rear and or side of street based retail frontages • Streets, public spaces and car parks should be well lit to Australian standards and with pedestrian friendly (generally white) light. Lighting should be designed to avoid unnecessary spill to the side or above. • All public spaces should respond appropriately to the design for mobility access principles.

Principle 9
 	
Create a sense of place with high quality engaging urban design.
	• Development should complement and enhance the character of the surrounding area by responding appropriately to key visual cues associated with the topography of the Local Town Centre location and its surrounds.
	• The Local Town Centre design should seek to minimise amenity and noise impacts resulting from the mix of uses by maintaining separation and transitional areas between retail and housing activities, such as open space, road networks and community facilities.
	• The design of each building should contribute to a cohesive and legible character for the Local Town Centre as a whole.
	• Sites in prominent locations (such as at key intersections, surrounding public spaces and terminating key view lines and vistas) should be identified for significant buildings or landmark structures.
	• The design of building frontages should incorporate the use of a consistent covered walkway or verandah to provide for weather protection.
	• The built form should define the main street and be aligned with the property boundary.
	• Street facades and all visible side or rear facades should be visually rich, interesting and well articulated and be finished in suitable materials and colours that contribute to the character of the Local Town Centre.
	• Corner sites, where the main street meets an intersecting and/or arterial road should:
	  • Be designed to provide built form that anchors the main street to the intersecting road. This can be achieved through increased building height, scale and articulated frontages;
	  • Incorporate either 2 storey building or 2 storey elements (such as awnings and roof lines);
	  • Be developed to have a ground floor active frontage and active floor space component to the main street frontage; and
	  • Not be developed for standard single storey fast food outcomes.
	• Materials and design elements should be compatible with the environment and landscape character of the broader precinct.
	• The supermarket and secondary anchors should have frontages that directly address the main street and/or town square so that the use integrates with and promotes activity within the main street and public spaces/ thoroughfares.
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	• Supermarkets or large format retail uses with a frontage to the main street should use clear glazing to allow view lines into the store from the street. (Planning permits for buildings and works should condition against the use of white washed windows, excessive window advertising and obtrusive internal shelving or 'false walls' offset from the glazing).
	• Secondary access to the supermarket from car parking areas should be considered where it facilitates convenient trolley access and does not diminish the role of the primary access from the main street and or town square.
	• The design and siting of supermarkets and other 'large format retail uses' should provide an appropriate response to the entire public domain. This includes but is not limited to car parking areas, predominantly routes and streets.
	• Retail uses along street frontages should generally include access points at regular intervals to encourage activity along the length of the street.
	• Retail and commercial buildings within the Local Town Centre should generally be built to the property line.
	• Public spaces should be oriented to capture north sun and protect from prevailing winds and weather.
	• Landscaping of all interface areas should be of a high standard as an important element to complement the built form design.
	• Urban art should be incorporated into the design of the public realm.
	• Street furniture should be located in areas that are highly visible and close to or adjoining pedestrian desire lines/gathering spaces and designed to add visual interest to the Local Town Centre.
	• Wrapping of car parking edges with built form, to improve street interface, should be maximised.
	• Car parking areas should provide for appropriate landscaping with planting of canopy trees and dedicated pedestrian thoroughfares.
	• Screening of centralised waste collection points should minimise amenity impacts with adjoining areas and users of the centre.
	• Where service areas are accessible from car parks, they should present a well designed and secure facade to public areas.
	• Mechanical plant and service structure roofs should be included within roof lines or otherwise hidden from view.

Principle 10
 	
Promote localisation, sustainability and adaptability.
	• The Local Town Centre should promote the localisation of services which will contribute to a reduction of travel distance to access local services and less dependence on the car.
	• The Local Town Centre should be designed to be sympathetic to its natural surrounds by:
	  • Investigating the use of energy efficient design and construction methods for all buildings;
	  • Including Water Sensitive Urban Design principles such as integrated stormwater retention and reuse (e.g. toilet flushing and landscape irrigation);
	  • Promoting safe and direct accessibility and mobility within and to and from the Local Town Centre;
	  • Including options for shade and shelter through a combination of landscape and built form treatments;
	  • Ensuring buildings are naturally ventilated to reduce the reliance on plant equipment for heating and cooling;
	  • Promoting passive solar orientation in the configuration and distribution of built form and public spaces;
	  • Grouping waste collection points to maximise opportunities for recycling and reuse;
	  • Promoting solar energy for water and space heating, electricity generation and internal and external lighting; and
	  • Investigating other opportunities for the built form to reduce greenhouse gas emissions associated with the occupation and the ongoing use of buildings.
	• Encourage building design which can be adapted to accommodate a variety of uses over time.
	• Ensure the Local Town Centre has an inbuilt capacity for growth and change to enable adaptation and the intensification of uses as the needs of the community evolve.

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partners in creating new communities