8 Site specific Provisions

Contents

8 SITE SPECIFIC PROVISIONS 1

8.1 Goulburn City Business District 1

8.1.1 Land to which Plan applies 1
8.1.2 Background context material 3
8.1.3 Acknowledgements 57

8.2 Marulan Local Business Centre 58

8.2.1 Land to which Plan applies 58
8.2.2 Performance Criteria 59
8.2.3 Performance objectives for Environmental Heritage, Contributory Heritage and Non-Contributory buildings and places 63
8.2.4 Principal development controls – Residential Development in the Business B2 Local Centre Zone 64
8.2.5 Non-residential development in the Business, B2 Local Centre Zone 64
8.2.4 General Development Controls 64
8.2.5 Zoning Plans and lot size maps 68
8.2.5 George Street, Marulan Landscape Concept Plan 68

8.3 Marulan Estates Urban Release Area 69

8.3.1 Land to which Plan applies 69
8.3.2 Urban Release Area (Goulburn Mulwaree LEP 2009 – Part 6) 70

8.4 Charles Valley – Long Street Goulburn 87

8.4.1 Land to which Plan applies 87
8.4.2 Development potential 91
8.4.3 Subdivision 94
8.4.4 Residential development 96
8.4.5 Zoning plans and lot size maps 99

8.5 Clyde Street 99

8.5.1 Land to which Plan applies 99
8.5.2 Constraints 99
8.5.3 European heritage 103
8.5.4 Aboriginal *heritage* sites 103
8.5.5 Potentially contaminated sites 104
8.5.6 Development potential 104
8.5.7 Subdivision 106
8.5.8 Residential development 112
8.5.9 Other development 115

8.5.10 Zoning plans and lot size map 115

8.6 Common Street 115

8.6.1 Land to which Plan applies 116
8.6.2 Constraints 116
8.6.3 Developable land development potential 120
8.6.4 Subdivision 121
8.6.5 Road requirements 130

8.7 Marys Mount 131

8.7.1 Land to which Plan applies 131
8.7.2 Constraints 131
8.7.3 Development potential 134
8.7.4 Subdivision requirements 134
8.7.5 General road provisions 139
8.7.6 Residential development controls 145
8.7.7 Other development controls 147
8.7.8 Urban release areas 148

8 Site specific provisions

8.1 Goulburn City Business District

Preliminary

Aim

- Develop a plan for Goulburn City's Business District that facilitates future management by balancing development and conservation in a sustainable way.

Objectives

- Develop standards, guidelines and principles to improve the image, attractiveness and functionality of the Business District of Goulburn City
- Attract business, tourism and residents to Goulburn Mulwaree.
- Maintain, protect, enhance and promote Goulburn City's built and natural heritage.

8.1.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-1-1**

Figure 8-1-1: **Land to which Plan applies – Goulburn City Business District**

8.1.2 Background context material

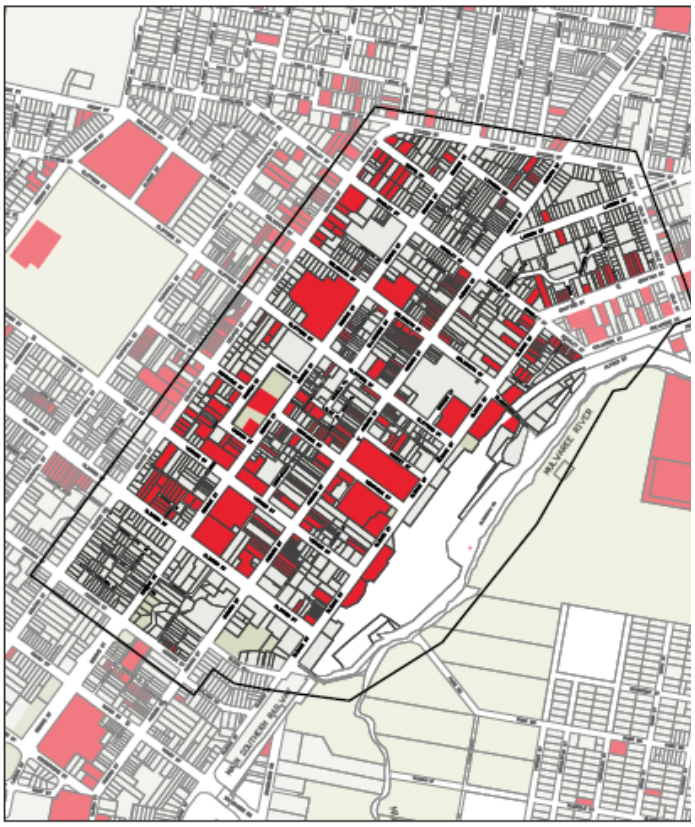
(a) Historic context

The CBD has developed around its original planned city centre incorporating a uniform grid subdivision pattern. The formal axis along Montague Street from Victoria Park through St. Saviours Church to Belmore Park was an important component of the original town plan.

1817-1820	Exploration by Hume, Thorsby, Meehan and Oxley alerted early colonists to good grazing potential of the southern highlands
1828	Governor Macquarie marked out the new town of Goulburn as a key service centre for the southern highlands – built at the confluence of the Wollondilly and Mulwaree Rivers
1833	Present city centre laid out on higher land to the south west to avoid repeated flooding
1841-1845	Town population increased from 655 to 1,200
1868	Construction of railway completed and physical connection of the City Centre with the river severed
1880s	Period of significant growth in the City (1881 Auburn Street Post Office opened);
1887	Court House opened
Early 20th C	Moderate expansion with only minor change. Rail as an employment focus diminished with growth in road transport
1950s>	Period of decline with many regional headquarters relocating to Sydney or other regional centres
1992	Hume Highway by-pass. Loss of highway traffic caused a change in business mix but not significant loss of business. Council began Main Street Improvement Program to capitalise on new opportunities for public domain improvement.

Reference: Goulburn CBD Plan, Interim Report 1, 29 August 2008 Edaw/AECOM.

b) Heritage Context



Scheduled Items of Heritage Significance (Draft LEP)

1882 Town plan of Goulburn

Reference: Heritage Report and Conservation Principles / Guidelines, City Plan Heritage July 2008.

A report on heritage matters as they pertain to planning for the CBD have been provided by City Plan Heritage. The results of this work are described in the report available on Council's website.

Items of Heritage Significance scheduled in the Goulburn Mulwaree Local Environmental Plan (LEP) 2009 are indicated in the heritage significance map.

"The City Plan report describes the following characteristics as being critical to the heritage significance of the CBD:

- The original grid form subdivision pattern dating from the establishment of Goulburn including nightsoil lanes, various rectangular allotment sizes addressing the street, and parks/open spaces.
- Predominately single-storey and uniform streetscapes with mostly intact Victorian and Federation housing stock.
- Relatively intact consistent main street commercial streetscape with two to three storey continuous historic character.
- Common residential architectural features such as street facing prominent gables, hipped or pitched corrugated iron or tile roofs, timber framed windows, front verandas, asymmetrical facades, face brick finished, and low fencing in keeping with the styles of the period.
- Common commercial architectural features including vertically proportioned above awning facades, decorative parapets with advertising evident in public and administrative buildings, two-storey continuous streetscape, verandas supported on posts over footpaths, dominant tower elements or splayed facades at the corner allotments, traditional shop windows and uncluttered above awning facades.
- Streetscapes that are dominated by mature trees creating a dense leafy setting generally concealing the houses in street-long views and frame views to houses close to the viewer.
- Maintained garden settings with generally low or no fencing to the street along residential zones of the CBD.
- Topography that is characterised by a number of small hills and ridges allowing the city to be experienced as a whole when approached from north whilst creating a distinctive view corridors and vistas towards north, south and particularly east from the ridge of the CBD (along Montague Street) in and out as well as within the study area.
- Well established public domain including roads with kerbed footpaths and grasses verges traffic management devices throughout, street trees and parks.

Conversely, the following elements are described as intrusive to the CBD's heritage values:

- Uncoordinated and unregulated advertising and business signs along consistent streetscape creating unpleasant presentation.
- Unsympathetic single-storey or oversized infill development within a consistent two to three storey streetscape.

- Corporate buildings with their respective designs, corporate colours and signs.
- Contemporary buildings with no regard to the established heritage streetscape.
- Vacant allotments, service stations, car parking or car repair workshops / car sales yards.
- Overhead wires and antennas in some residential areas."

Reference: Goulburn CBD Plan, Interim Report, 29 August 2008, EDAW/AECOM

(c) Street Character Statements

The character statements for each street that is located within the boundaries of the Goulburn Central Business District are provided in the form of dot points outlining the significant and dominant aspects of the street. The character statements also identified issues and negative aspects of the individual streets. The Statements are based on the Goulburn Mulwaree CBD Master Plan, Heritage Report and Conservation Principles / Guidelines, the Street Character Statements, July 2008, City Plan Heritage.

Note: The point of the statements and their accompanying photographs is to illustrate good and bad design elements.

It is the writers opinion and not necessarily the opinion of Council. It is not meant as a personal criticism and if taken that way please accept the writers apology.

(i) Addison Street

Good Elements:

- Consistent single storey residential streetscape (Photos 1 and 2)
- Wide footpath, street trees and small landscaped front garden (Photo 1)
- Setback building alignment (Photo 1)
- Pitched and multi gabled corrugated iron or tiled roofs (Photos 1 and 2)
- Low brick fence or no fence with open front gardens (Photo 2)
- Veranda with asymmetrical façade (Photo 3)
- Well established street trees (Photo 4)
- Significant dwelling cluster between Auburn Street and Addison Lane (Photo 5)

Intrusive Elements:

- TV antennas and street overhead wiring (Photo 6)
- Eastern block (north side is a disjointed character mix of open space, community, industrial and residential activities (Photo 7)


Photo 1


Photo 2


Photo 3


Photo 4


Photo 5


Photo 6

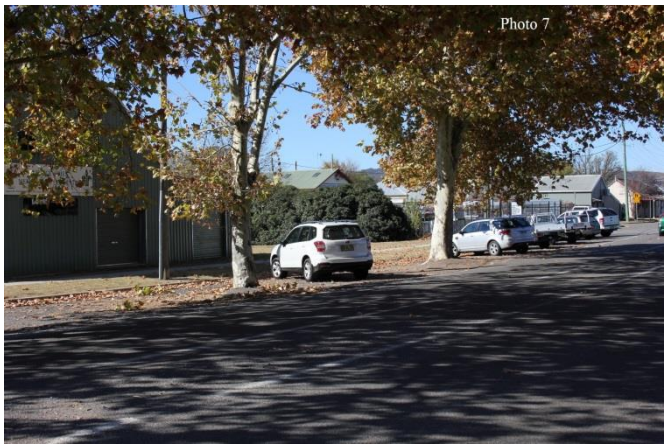
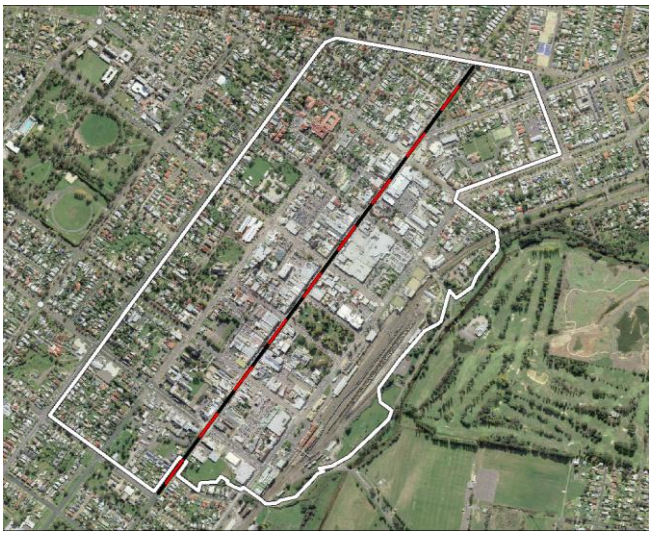


Photo 7

(ii) Auburn Street

Auburn Street is the main commercial street of the CBD since the establishment of the town featuring a high number of heritage items and consistent traditional commercial strips.



Good Elements:

- Two to three storey cohesive Victorian and Federation period. Shops with flats / offices above dominate the street particularly between Verner and Bradley Street (Photo 1).
- Important public and administrative domain buildings (Photo 2).
- Improvements to Belmore Park (Photo 3).
- Above awning façades (Photo 4).
- Well defined corner allotments with original buildings (Photo 5).
- Contemporary buildings reflecting some traditional design elements (Photo 6).

Intrusive Elements:

- Above awning signs (Photo 7).
- Infill buildings having no regard to the established character of the street (these include banks, government office, car yards, motels and shopping centre) (Photo 8).
- Loss of below awning and facia signs (Photo 9).
- Out of character corporate developments and signage (Photo 10).
- Service station development at the northern end of Auburn Street (Photo 11.1 & 11.2) – this is an important "gateway" entry.
- New building at the corner of Market Street complicates the simplicity of the traditional shops (Photo 12).

Photo 1

Photo 2

Photo 3


Photo 4
HIBERNIAN HO
Real Estate


Photo 5
nab
nab


Photo 6
JAKS AUTOSHOP
ARB


Photo 7
The Country Outfitters
DRIZA-BONE
AKUBRA
Goulburn Soap World
GOULBURN
INSURANCE BROKERS
Goulburn Soap World
GOULBURN INSURANCE


Photo 8
MOTEL
Free Internet
50


Photo 9
TARMTARA
TARMTARA


Photo 10
KFC
KFC


Photo 11.1

Photo 11.2

Photo 12

(iii) Beppo Street

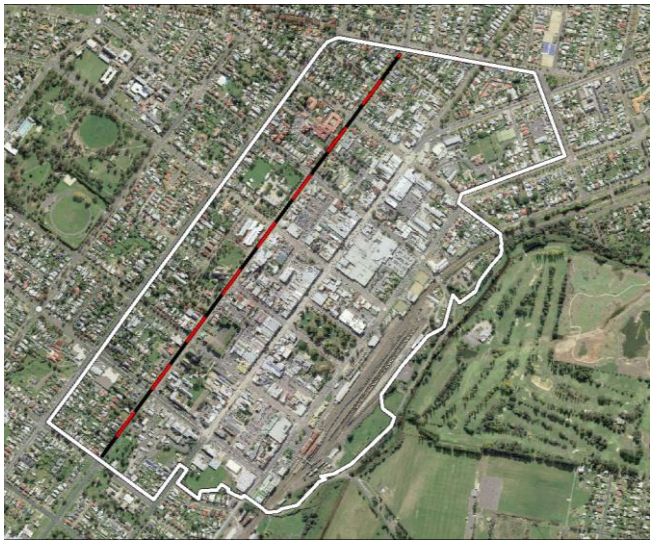
A short, residential and no thoroughfare street that runs between Cowper and Bourke Streets.

Good Elements:

- Mainly federation period residential dwellings (Photo 1).
- Established streetscape with dwellings ranging from two to single storey with large allotments (Photos 2 and 3).
- Tree lined quiet neighbourhood friendly street (Photos 2 and 3).

(iv) Bourke Street

Bourke Street is typified by mixed developments and features a number of scattered heritage items, residential housing, motels, Conservatorium Technical College, a number of churches, St Saviours Cathedral at the highest point, Goulburn civic centre, Goulburn Public School, St John of God Hospital, fire station, and Apex Park. The residential developments are located at the northern and southern ends of the Street with consistent streetscape character.



Good Elements:

- Two storey form and mass (Photo 1).
- Institutional and religious buildings providing interesting and dominant streetscape elements (Photo 2).
- Mixed uses with residential developments at north and south ends (Photo 3).
- Significant dwelling cluster between Clinton and Verner Streets on western side (Photo 4)
- Significant Churches and associated ecclesiastical buildings; St Peter & Pauls, St Saviours, Uniting & Baptist Churches (Photos 5, 6 ,7 & 8)

Intrusive Elements:

- Lack of street trees in some sections (Photo 9).
- Lack of streetscape consistency (Photo 10).


Photo 1


Photo 2


Photo 3


Photo 4


Photo 5


Photo 6

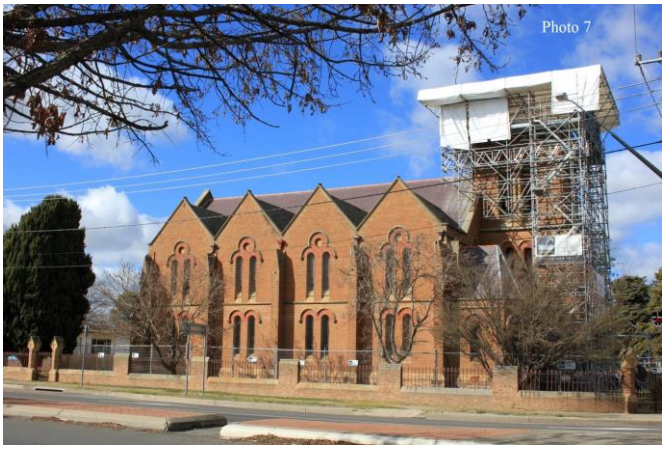


Photo 7

Photo 8


Photo 9


Photo 10

(v) Bradley Street

Bradley Street forms the northern boundary of the original grid town layout extending between Cowper Street on the west and Sloane Street on the east.

Good Elements:

- Good streetscape at western end with dominant residential use and roundabout treatment at Bourke Street intersection (Photo 1).
- Consistent street facades at Bourke Street (Photo 2).
- Good example of Commercial buildings that make a positive contribution to the streetscape (Photo 3).
- Good tree line and streetscape (Photo 4.1, 4.2).

Intrusive Elements:

- Service station at Auburn Street corner (Photo 5).


Photo 1


Photo 2

Photo 3


Photo 4.1


Photo 4.2


Photo 5

(vi) Citizen Street

Good Elements:

- Citizen Street has generally a leafy streetscape with a tree lined avenue at the eastern end where it meets Cole Street (Photo 1). The street trees lose their dominance between Bourke and Auburn Streets.
- It is characterised by single storey residential development dating from the Victorian, Federation and 20th Century. The northern side of the street contains a more cohesive and early building stock some of which are listed as heritage items. The southern side of the street also presents consistent but lesser early and intact building stock (Photo 2).

- Low height well maintained front fencing provides consistent and pleasant streetscape (Photo 3).
- Some good infill developments (Photo 4).
- Significant housing cluster (Photo 5).
- Towards the eastern end the street's character changes with the insertion of a corner shop and more established street trees creating a good tree lined streetscape (Photo 6).
- Roundabout treatment at the intersection of Citizen, Belmore, Cowper and Hurst Streets creates a good neighbourhood character (Photo 7).
- Garages are generally well setback to the rear of the allotments with concrete and grass strip driveways (Photo 8).

Intrusive Elements:

- Street trees lose their dominance between Bourke and Auburn Streets (Photo 9).


Photo 1


Photo 2


Photo 3


Photo 4


Photo 5


Photo 6


Photo 7


Photo 8


Photo 9

(vii) Clifford Street

Featuring the Council Chambers and Goulburn Public School, Clifford Street has only limited consistency mainly on the western end towards Cowper Street.

Good Elements:

- Some two to single storey building consistency at western end towards Cowper Street (Photo 1).
- Avenue street trees along western end to Cowper Street and beyond (Photo 2).
- Two key corner heritage item buildings at Auburn Street. Excellent examples of Goulburn's traditional corner buildings with their tower like structures (Photo 3).

Intrusive Elements:

- No particular character with a mix of building styles (contemporary civic centre / bank / church and contemporary shopping mall) (Photos 4.1, 4.2).


Photo 1


Photo 2


Photo 3


Photo 4.1


Photo 4.2

(viii) Clinton Street

Clinton Street is one of Goulburn's major transport streets and it's character is affected by service station and accommodation premises.

Good Elements:

- Two to single storey buildings (mainly residential) towards Cowper Street end on northern side (Photo 1).
- Some new central avenue street trees (Photo 2).
- View to west (Photo 3).
- Wide footpaths (Photo 4).
- Relatively consistent bulk and scale of commercial developments (Photo 5).

Intrusive Elements:

- Overhead wiring (Photo 6).
- Corners occupied by service station and motel buildings. The corner of Clinton and Auburn Street is an important "gateway" (Refer S.8.6.3(d)(i)) (Photo 7).
- Large corporate signage (Photo 8).
- Lack of streetscape character between Auburn and Sloane Streets (Photo 9).


Photo 1


Photo 2


Photo 3


Photo 4


Photo 5


Photo 6


Photo 7


Photo 8


Photo 9

(ix) Cole Street

Good Elements:

- Public park at the intersection of Lagoon and Citizen Streets – Park creates an open setting and link between early grid subdivision and the later expansion. Good approach point to focus on (Photo 1).
- Established character between Lagoon and Mulwaree Streets (Photo 2).
- Build fabric – interwar to late 20th century (Photo 3).
- Well established street trees (Photo 4).

Intrusive Elements:

- Motel development dominates (Photo 5).
- There are some poorly maintained houses


Photo 1


Photo 2


Photo 3


Photo 4

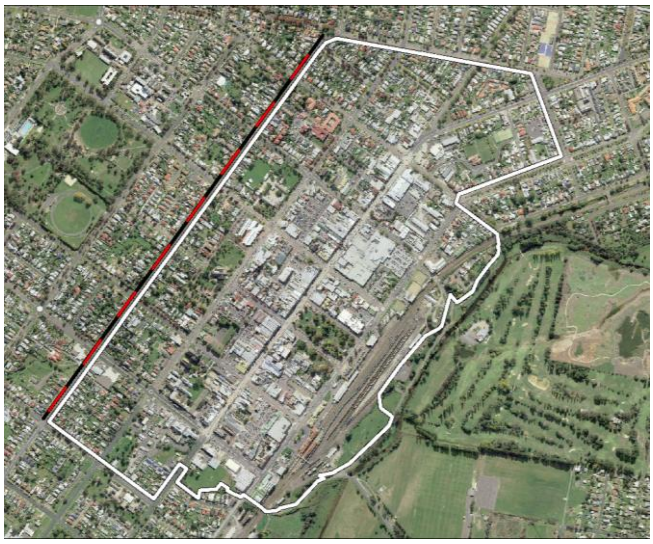

Photo 5

(x) Cowper Street

Creating the western boundary of the CBD, Cowper Street is a residential street with good examples of Victorian, Federation periods and Georgian style housing stock particularly on the western. Cowper Street has consistency at the north and south blocks of the street.

Good Elements:

- Consistent face brick single storey gabled houses with low traditional fencing (Photo 1).
- Infill residential development at the north east corner intersection with Clinton Street (Photo 2).
- Significant view corridors and vistas from highest point at the Montague Street intersection to the Central CBD, St Saviours Cathedral and the extended townscape (Photo 3).
- Laneway development in Little Addison Street, Hillview Road and Thorne Avenue (Photo 4).
- Neighbourhood character at the intersection of Addison Street (Photo 5).
- Vista looking north from Montague Street onto a well maintained tree lined street (Photo 6).
- Significant dwelling cluster between Montague and Clinton Street (Photos 7.1, 7.2, 7.3 & 7.4)



Intrusive Elements:

- Service station and industrial development at the southern intersection (Photo 8).
- Infill between Clifford and Goldsmith Street is unsympathetic to surrounding neighbourhood (Photo 9).


Photo 1


Photo 2


Photo 3


Photo 4


Photo 5


Photo 6


Photo 7.1


Photo 7.2


Photo 7.3


Photo 7.4


Photo 8


Photo 9

(xi) Goldsmith Street

Good Elements:

- Established streetscape west between Auburn and Cowper Streets (Photo 1).
- The early phase single storey free standing houses and shops (Photo 2).
- Methodist Church, Goulburn Public School garden and Georgian style cottages (Photo 3).
- Quality former bank building on the corner with Auburn Street. The brick building addresses both street frontages and makes a positive contribution to the streetscape (Photo 4).
- Significant dwelling clusters (Photos 5.1 5.2).

Intrusive Elements:

- Inconsistent streetscapes in the eastern and middle blocks (Photo 6).
- Unsympathetic buildings break the street wall appearance (Photo 7).
- Lack of street trees in the eastern block (Photo 7).
- Side elevations and central car parking of shopping mall further dominates the traditional streetscape character (Photo 8).
- The service station at Bourke Street intersection dominates the traditional streetscape character (Photo 9).


Photo 1


Photo 2


Photo 3


Photo 4


Photo 5.1


Photo 5.2


Photo 6


Photo 7


Photo 8


Photo 9

(xii) Grafton Street

Good Elements:

- Early major approach road to CBD to north (Photos 1.1, 1.2, 1.3, 1.4 & 1.5). This street, much of which is outside the study area, contains some 21 heritage items from an early phase.
- Good tree lined streetscape with mature trees and central tree island (Photo 2). Mostly sympathetic residential.

Intrusive Elements:

- Car yard (Photo 3).


Photo 1.1


Photo 1.2


Photo 1.3


Photo 1.4


Photo 1.5


Photo 2


Photo 3

(xiii) Lagoon Street

Good Elements:

- Mixed residential and commercial streetscape with some of the dwellings being adaptively reused offices (Photo 1.1 & 1.2).
- Some federation period houses remain intact and contribute to the streetscape with their low fencing and characteristic features of their style (Photo 2).
- Good tree lined pedestrian pathway in sections (Photo 3).
- Park at the intersection of Lagoon & Auburn Streets (photo 4)

Intrusive Elements:

- Number of motel designs (Photo 5).
- Unsympathetic signage (Photo 6.1, 6.2).


Photo 4

Photo 5


Photo 6.1

Photo 6.2

(xiv) Lithgow Street

Good Elements:

- A good tree lined residential streetscape with mature trees (Photo 1).
- Narrow allotments with few as early as 1840s – 60s semi-detached dwellings and former shop and residence (Photo 2).
- Single to two storey free standing or semi-detached housing with corrugated or tile hipped or pitched roofs (Photo 3).
- Asymmetrical façade and front veranda (Photo 4).
- Few garages placed discreetly to the rear of their respective sites with side driveways (Photo 5).
- Street parking is provided between the trees (Photo 6). Note: New colour scheme.

(xv) Market Street

Previously a busy commercial street Market Street has lost its integrity due to changes to the early buildings including the introduction of the uncharacteristic club building.

Good Elements:

- The surviving early buildings (heritage items) provide physical evidence of Market Street early commercial phase (Photo 1).
- Use of appropriate signs (Photo 2).
- Remaining Bull and Woodward Arch has been conserved (Photo 3).

Intrusive Elements:

- Street car parking dominance (Photo 4).
- Club building (Photo 5.1, 5.2) and street replacement building at Auburn Street. These two key corner sites have been compromised by these two buildings. The replacement building does have some traditional architecture elements but overstates them by the use of dominant vertical piers and moulded panels that make it an unsuccessful infill development.


Photo 1

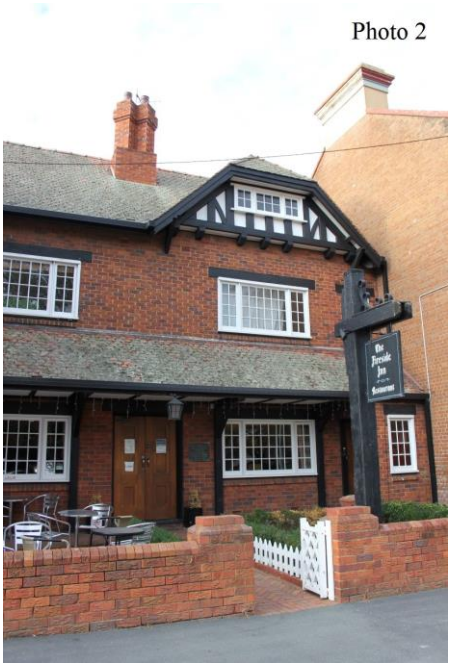


Photo 2


Photo 3


Photo 4


Photo 5.1


Photo 5.2

(xvi) Montague Street

Montague Street forms the central axis of the original street grid pattern with extensive view corridors up and down in both directions along the street focussed on the St Saviours Cathedral hill.

Good Elements:

- Good consistent streetscape between Auburn and Bourke Street terminating with St Saviours Cathedral (Photo 1.1, 1.2).
- Contains two of the most important early features of the City – Goulburn Court House group and Belmore Park (Photo 2.1, 2.2).
- Contains central axis view corridor to St Saviours Cathedral (Photo 3.1, 3.2).
- Contains significant portion of heritage architectural character of area (Photo 4.1, 4.2).
- Belmore Park with its important traditional street lights, good pedestrian friendly traffic managements and landscaped treatments (Photo 5.1, 5.2).
- Good adaptive reuse of early building as a Café (Photo 6).

Intrusive Elements:

- Key corner occupied by unsympathetic bank building and signage which also breaks up the streetscape (Photo 7).


Photo 1.1


Photo 1.2

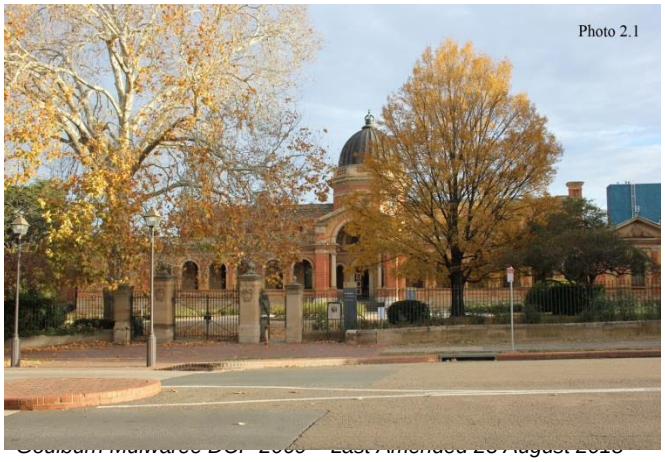


Photo 2.1


Photo 2.2


Photo 3.1


Photo 4.1

Photo 4.2


Photo 3.2


Photo 5.1


Photo 5.2

Photo 6

Photo 7

(xvii) Mulwaree Street

Good Elements:

- A street that is characterised by a row of single-storey semi-detached brick cottages associated with the railway development some of which present the same architectural detailing in groups suggesting their construction by the same builder(s) (Photo 1.1, 1.2).
- Good streetscape with mature trees along the railway line containing (together with Bradley Street) some of the oldest trees in Goulburn (Photo 2).

Intrusive Elements:

- Uncharacteristic and unsympathetic alterations and modifications to the buildings' fabric and fencing are evident (Photo 3).

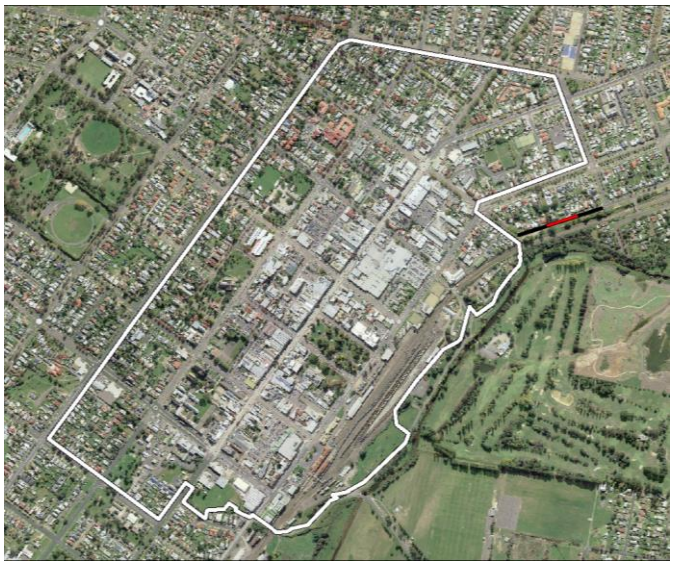



Photo 1.1


Photo 1.2


Photo 2

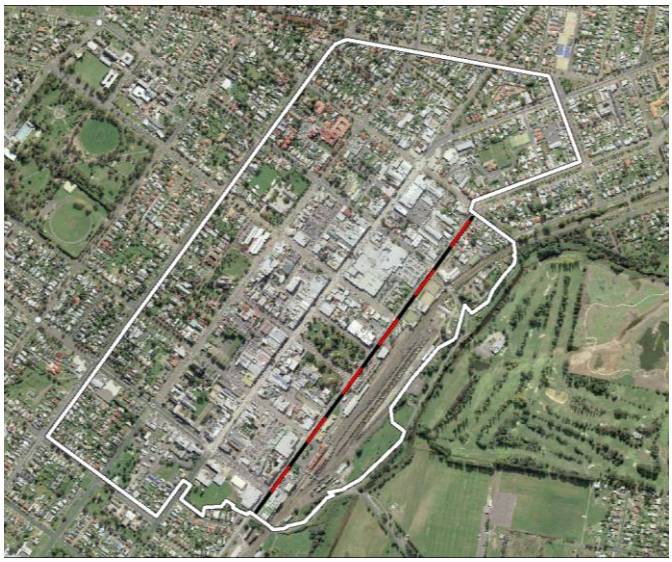

Photo 3

(xviii) Sloane Street

Sloane Street has a similar role and importance to Auburn Street as one of the main commercial and administrative streets of Goulburn from the early years of settlement. It contains a number of buildings from early period however it has lost its cohesive traditional appearance with the majority of public movements shifted to Auburn Street. Sloane Street contains a large number of heritage items of local and state significance.

Good Elements:

- Scattered two storey terraces at northern end (Photo 1).
- Warehouses including former railway workshop adaptively reused building in a sympathetic manner (Photo 2).
- Belmore Park, Courthouse precinct, railway precinct buildings and traditional hotels (Photo 3).
- View and vistas especially vistas towards St Saviours Cathedral along Montague Street (Photo 4).
- Early buildings adaptively reused – old Connolly's Mill (Photo 5).
- High quality government & privately owned buildings including the firmer Courthouse, Railway, Alpine Lodge Hotel & Railway/Coolavin Hotel (Photos 6.1, 6.2, 6.3 & 6.4)



Intrusive Elements:

- Bowling Club car park area, contemporary hotel, railway yards, open storage areas and major car parking for shopping mall break the continuity of the street (Photo 7).
- Corporate signage. Though it was incorporated some of the traditional design elements and compatible colour scheme, the signage makes it an unsuccessful development (Photo 8).
- Communication Tower (Photo 9).


Photo 3


Photo 4

Photo 5

Photo 6.1


Photo 6.2

Photo 6.3


Photo 6.4


Photo 7

(xix) Verner Street

Good Elements:

- Good streetscape with trees on both sides (Photo 1).
- Vista from Cowper Street to the town centre and the hills beyond on the eastern edge (Photo 1).
- Views to Cowper Street and Church from Sloane Street end (Photo 2).
- Traditional early buildings of similar scale on north side between Auburn and Sloane Streets (Photo 3).
- Well defined corner allotments by two storey buildings (Photo 4).
- Church buildings (Photo 5.1, 5.2).
- Significant housing cluster on western end both north and south sides (Photo 6).

Intrusive Elements:

- No uniform streetscape towards Bourke Street due to the dominance of motel car park and bank car park (Photo 7.1, 7.2).


Photo 1


Photo 2

Photo 3


Photo 4


Photo 5.1


Photo 5.2


Photo 6

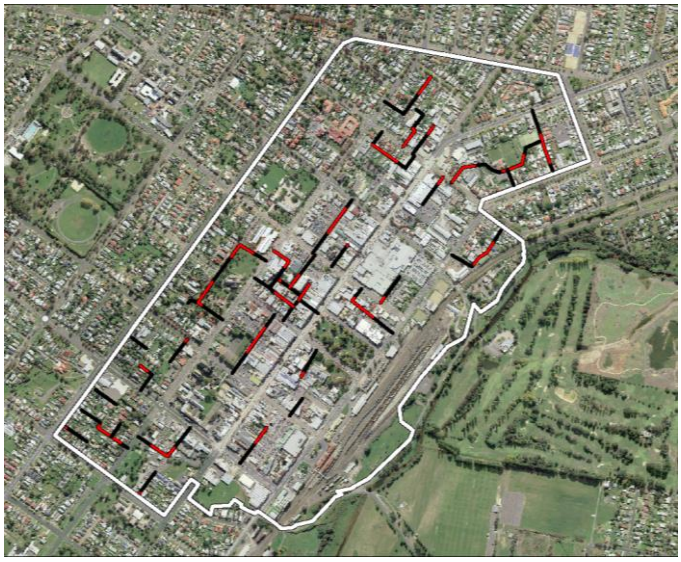

Photo 7.1

Photo 7.2

(xx) Laneways

Good Elements:

- Thorne Avenue – Good use of timber post and rail pedestrian balustrade, timber pailing and picket fencing and pavements grassed on one side and paved on the other (Photo 1).
- Hillview Road – Good laneway streetscape with mature garden landscaping (Photo 2).
- Little Addison Street – Established narrow streetscape with single to two-storey housing stock (Photo 3).
- Horne Square – Complete physical evidence of identical Victorian period detached dwellings built by former mayor c1869 – 1871 (Photo 4).



Intrusive Elements:

- Lanigan Lane – No particular consistency or dominate features (Photo 5).


Photo 5

(d) Levels of Heritage Significance

(i) Items of Environmental Heritage

These items are of key importance to the areas character eg. building works, relics, places, landscapes, gardens, trees or vegetation of historic, scientific, cultural, social, natural or aesthetic significance as listed in Schedule 5 of Goulburn Mulwaree Local Environmental Plan 2009 and shown in **Figure 8-1-2**.

(ii) Contributory Items

These items are of moderate significance and contribute to the predominant character and visual attractiveness of the Schedule 5 items above. Again shown in **Figure 8-1-2**.

(iii) Non-Contributory Items

These items are buildings or places that have either a neutral or detrimental contribution to the areas character. Such items are buildings and places not mapped as a Heritage Item or Contributory Item in **Figure 8-1-2**.

(iv) Heritage Conservation Areas (HCA)

Applicable HCA's are mapped in Goulburn Mulwaree Local Environmental Plan 2009 and shown in maps HER 004, 005, 006, 007, 008, 009 and 010. The objective of the HCA is to conserve the heritage significance of the Area included associated fabric, setting and views.

Clause 5.10 of Goulburn Mulwaree Local Environmental Plan 2009 details statutory requirements that need to be addressed in development applications which fall within the HCA.

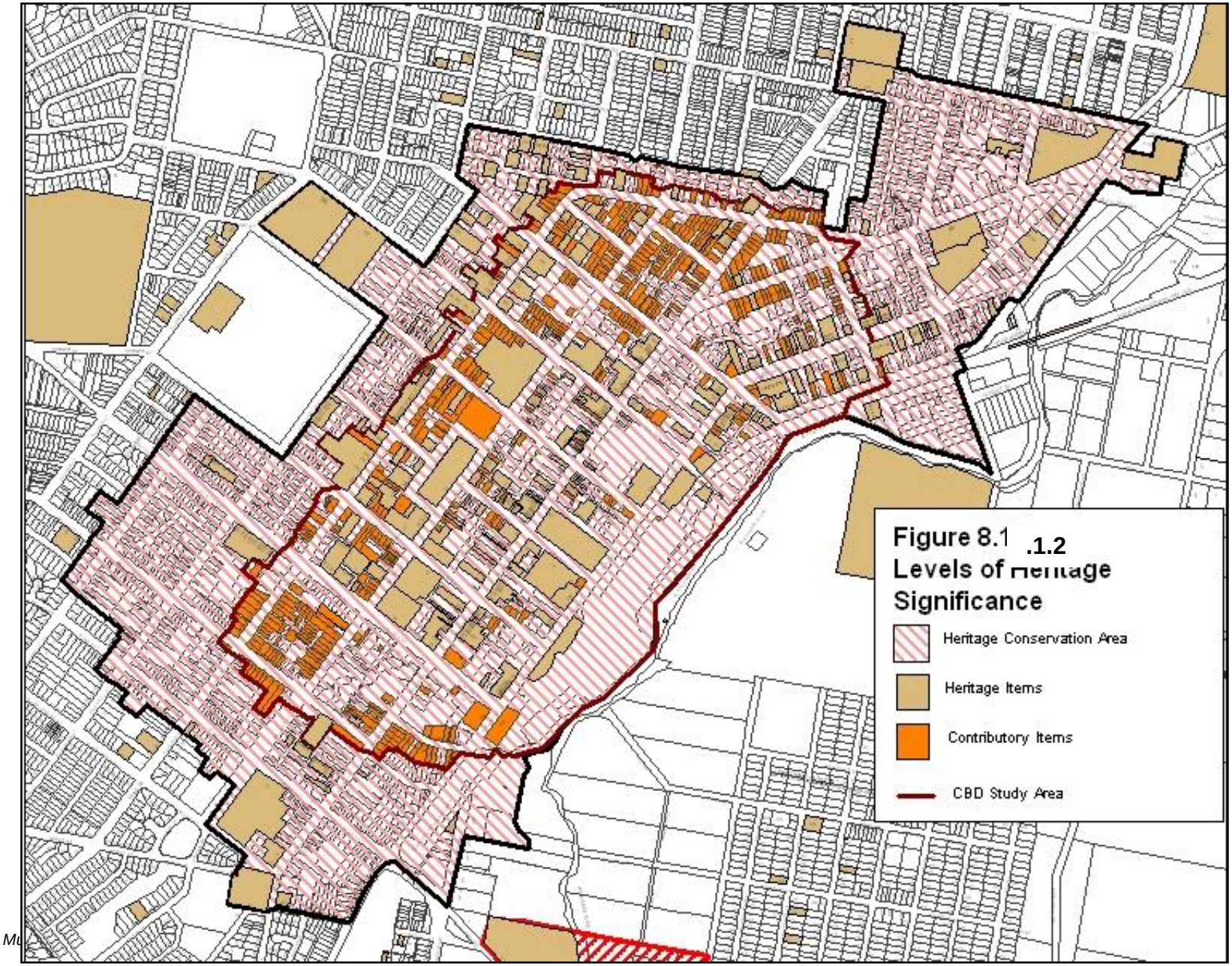


Figure 8.1 .1.2
Levels of Heritage Significance
Heritage Conservation Area
Heritage Items
Contributory Items
CBD Study Area

(e) Protective structures in the public domain

Objectives

Any structures within the public domain should principally serve to enhance public use and amenity in terms of shade, shelter, comfort, egress and safety.

The structure should enhance the building and streetscape.

Where restoring a lost structure this should be done on the basis of the known evidence and Burra Charter principles.

Structures that are new to the building should be identifiably modern whilst complementing the style and form of the building.

Structures can provide other benefits such as improved private open space or commercial opportunities such as outdoor dining, providing that these do not compromise the public amenity.

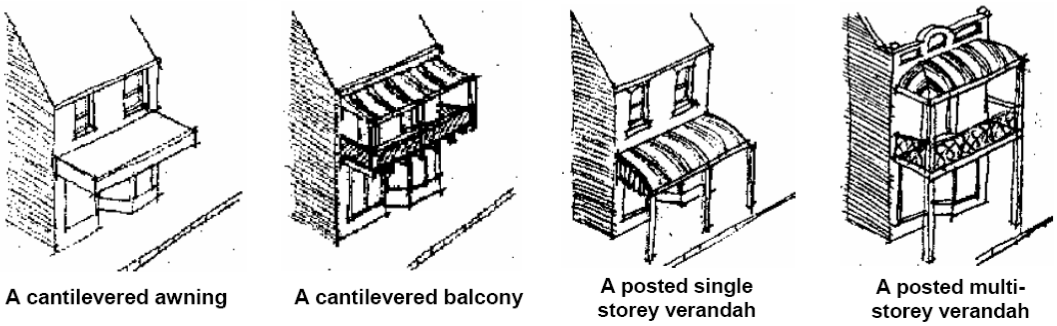
Controls

Generally all buildings in a commercial centre should have permanent protective structures over footpaths. The only exceptions are where such structures are not compatible with the heritage or architectural values of the building. This is usually the case with civic buildings, churches, and often with banks.

Where a building has heritage value either as a Heritage Item or is contributory to a heritage precinct or Heritage Conservation Area, the approach should be to restore on the basis of known evidence, preferably photographic, as well as by the detailed examination of the structure and surrounds. Where the evidence is lacking, appropriation of conjectural detail from a nearby structure of similar form and style may be reasonable.

Where an existing building is not consequential in heritage terms, or a new building is proposed, the protective structure should be complementary to the building in terms of form, material, detail etc, and compatible to the row if it is in a row of like buildings. The options are identified in **Figure 8-1-3** below.

Figure 8-1-3: Preferred public domain protective structures



Generally protective structures over footpaths are light, open, timber or steel structures. The structural members are normally exposed and the structure unlined so that any upper floor is exposed and any roofing is exposed to the underside. This gives them a light and airy appearance, appropriate to their function and location. All structures need to be carefully crafted as with a piece of joinery or street furniture, as the whole structure is exposed to view. All structures also need to be robust given their exposure to public use and risk.

The traditional materials are usually timber for the structure with often metals including cast iron for decorative elements. The timbers are always planed and usually shaped such as with stop chamfering, with hardwood tongue and groove flooring which falls to the kerb, and corrugated profile roofing. These materials are appropriate for reinstatements. It may be appropriate to use other materials such as steel and metals, or glass and acrylics with new structures.

Post supported structures are often appropriate in heritage precincts and Heritage Conservation Areas both for new structures and restorations. Posts can enhance the rhythm and composition of a building and streetscape, provide a protective edge to the pedestrian space, and frame the views in and out. They should be placed so as to minimise obstruction of pedestrian access, and the structure designed so that it will continue to stand intact even if a corner post or posts are damaged or removed due to a vehicle or similar collision.

(f) Principles for Goulburn City Business District

(i) Commercial Development

- New, infill and alteration developments are to respect and contribute to the special character of the CBD demonstrated in the street character statements;

- Prominent corner buildings are to maintain the traditional corner design element of addressing both street facades with a prominent tower-like corner element and generally splayed entrance or corner;
- Façade and restoration works are to be based on sound historical or physical evidence (Reference Main Street Study);
- New large scale developments are to respect and retain the existing grid subdivision street pattern;
- Intrusive elements such as uncomplimentary oversized buildings, unsympathetic alterations and additions, large sizes, horizontal facades, inappropriate colour schemes, and out of character design elements must be avoided.

(ii) Residential Development

- Proposed residential development in the mixed business area is to keep uniform single to two-storey cohesiveness of streetscapes including leafy quality in accordance with their identified street characteristics.
- No intrusive changes or elements will be permitted in the residential portions of the study area including high, visually impenetrable front fences, the painting and rendering of face brick facades, the removal of original detailing, or unsympathetic alterations and additions such as first floor additions.

Additions:

- must not impact upon the contribution of a building to the streetscape,
- should be restricted to the rear of a dwelling,
- must minimise impact upon original roof form when viewed from the public domain,
- should be recessive and not dominate the original form and character of the dwelling, and
- which interrupt the front roof plane of a heritage item or contributory building, will not be permitted.
- Established character of the main streetscapes should be reflected in the form, design, materials and signs of the infill and corporate developments.

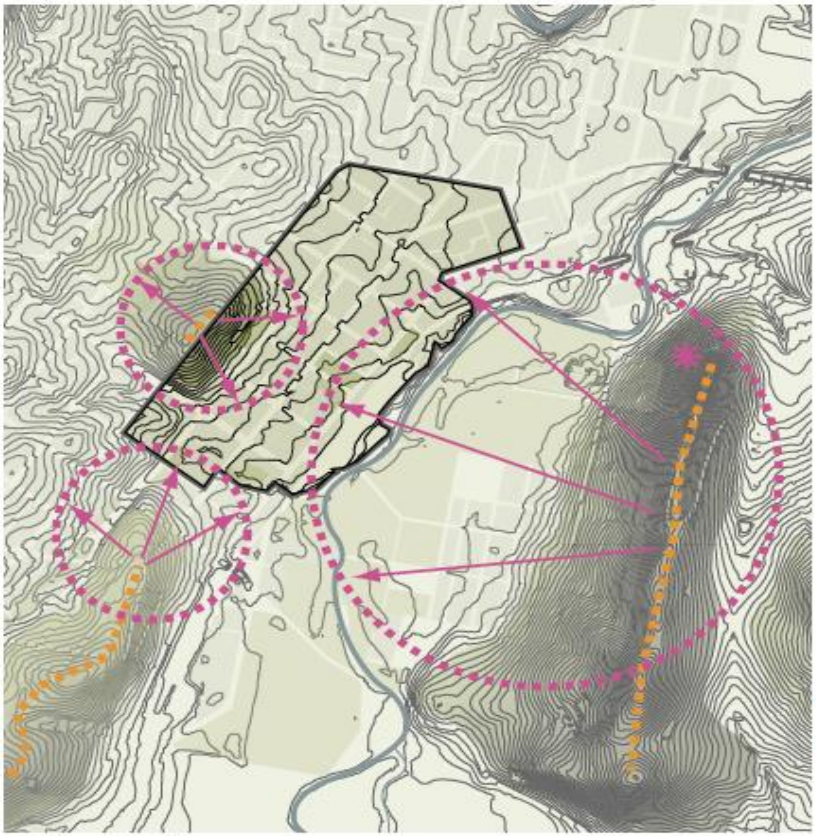
New developments should be compatible with the dominant streetscape and town centre character.

Reference: Goulburn Mulwaree CBD Master Plan, Heritage Report and Conservation Principles / Guidelines, July 2008, City Plan Heritage.

(iii) Demolition

- Buildings that are listed as heritage items and contributory items should not be demolished unless such demolition is justified in a Heritage Impact Statement (HIS). Applicants must retain as much as possible of the existing building fabric particularly those aspects that contribute towards the items visual / heritage significance and the identified streetscape qualities. This process must be informed by an assessment of the heritage / streetscape significance of the items (this does not apply to the removal of unsympathetic elements).
- Non – contributory items may be demolished but must be replaced by a building that will contribute to the character and significance of the streetscape.

(g) Views and Vistas



Panoramas into the CBD are available from the ridge line to the south east. These views illustrate the importance of the grid street pattern and the City's spires and towers to its visual character. Any development within the CBD must protect and enhance these elements of the city's viewscape.

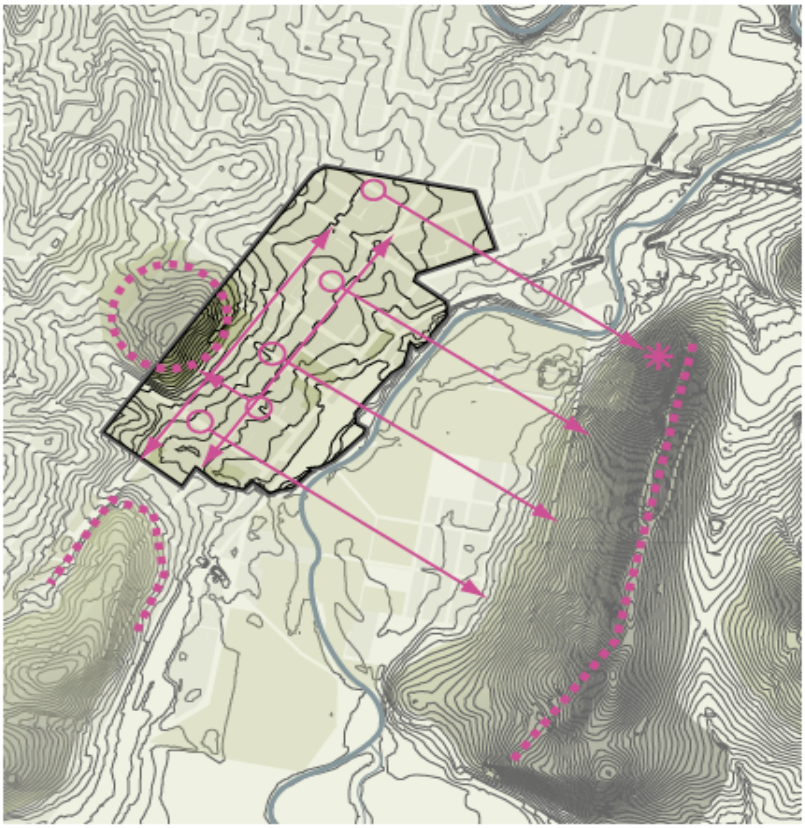
Views from knolls and ridges to the north-west and south-west of the City are less panoramic due to their orientation but they equally illustrate the significance of these visual elements.

War Memorial

Ridge line

Existing/ potential views

0 500



Views available from within the CBD are strongly influenced by the grid street and subdivision pattern. Long vistas east to the ridge line are available down most of the north-west to south-east streets. The ridge forms a green backdrop to the CBD in these views.

In north-east to south west streets, long views terminate at the ridge line to the south west of the centre.

Internally, important elements of the viewscape are in built form and include notably:

- the aerial view down Montague Street to St. Saviours Church;
- the spire of the Uniting Church (which is a particularly important element in views from the road when entering the CBD from the north-east (see view 5); and
- spires and towers across the cityscape generally which form focal points and points of orientation in numerous views with and across the city.

War Memorial

Ridge or edge to steep land

0 500

Reference: Goulburn Mulwaree CBD Plan, Interim Report 1, 29 August 2009, Edaw/AECOM.

(h) Economic Viability and Social Values

All new developments are to demonstrate a contribution to the economic viability of the Business District.

New development may achieve this outcome by:

(i) following Council's precinct based approach to land use distribution:

Concept Development Plan

Contributing to:

(ii) vibrant north south Auburn Street

accommodating a range of retail and commercial business:

(iii) an improved east west activity path, including redevelopment of laneways into supporting niche retail precincts below residential development to increase population mass.

(iv) the dedicated commercial office precinct at the western fringe of the CBD to allow the CBD to remain as a concentrated retail precinct with high pedestrian activity focused on hospitality services and shop front retailing.

(v) large format household goods retailing concentration at the northern end of the CBD. This area presents the leading location for larger format retail and commercial space given the size of the sites, their gateway location and high exposure to passing trade.

(vi) the development of residential development of different housing types throughout the precincts is fundamental to broadening the range of socioeconomic backgrounds of the CBD's residents. This enrichment of the social fabric of the CBD is necessary to maintain the values of the CBD as a social service centre and its commercial role for residents and visitors.

Reference: Goulburn CBD Plan, Master Plan, 29 August 2008, EDAW/AECOM

(i) Landscape and access

General Contextual Built Form Study

1.1 Existing Buildings and Concept Building Envelopes for Redevelopment Sites

New developments are to contribute, in-kind or by monetary means towards the following public domain treatments:

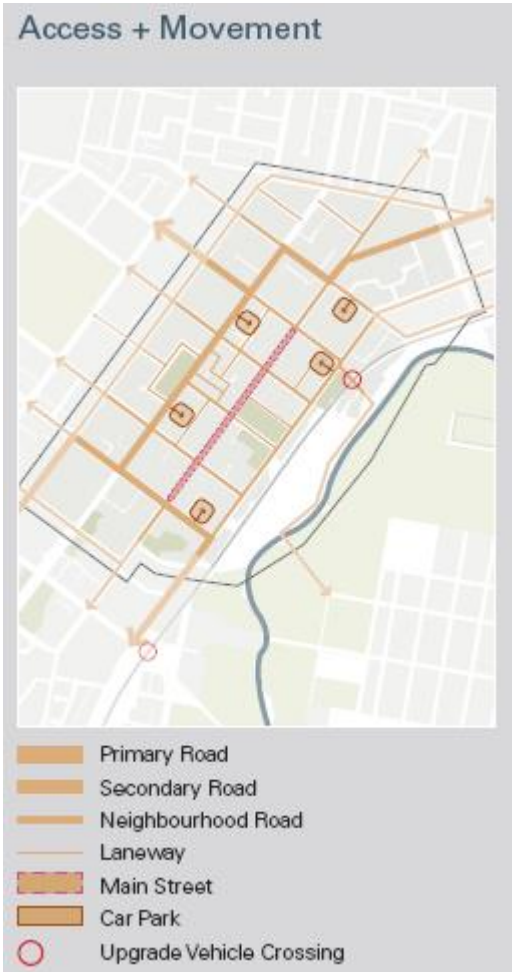
(i) heritage parks, plazas, urban and suburban walkways and lane ways.

(ii) green link connection following the line of drainage from south of the CBD through Manfred Park towards the Mulwaree River.

(iii) green link along the historic east-west axis connecting the CBD with the Mulwaree River foreshore and Victoria Park.

(iv) additional street tree planting in Sloane Street along the rail edge and in residential streets surrounding the CBD.

(v) traffic control measures.



Reference: Goulburn Mulwaree CBD Plan, Master Plan, 29 August 2008, EDAW / AECOM

(j) Strategies

Concept Plan – Strategies

The following diagram indicates the key strategies of this plan to guide future change in the Goulburn CBD. The key components of a planning framework to achieve the Vision for the CBD are derived from the Planning and Design Principles in the EDAW / AECOM Master Plan document.

Consolidate

1. Define a CBD core and a series of land use precincts that support and enhance its function.

Integrate

2. New development zones including key redevelopment sites identified by Council at the northern and southern ends of the CBD are designed to enhance and strengthen the integrity of the CBD core.

Humanise

3. Define a pedestrian based precinct within the CBD core.

4. Encourage north – south through traffic to travel around the core via Goldsmith, Bourke and Clinton Streets.

5. Encourage service and local through traffic to travel east of the Core via Sloane Street.

6. Concentrate people orientated place making measures on Auburn and Montague Streets and the parks, streets and laneways in this vicinity.

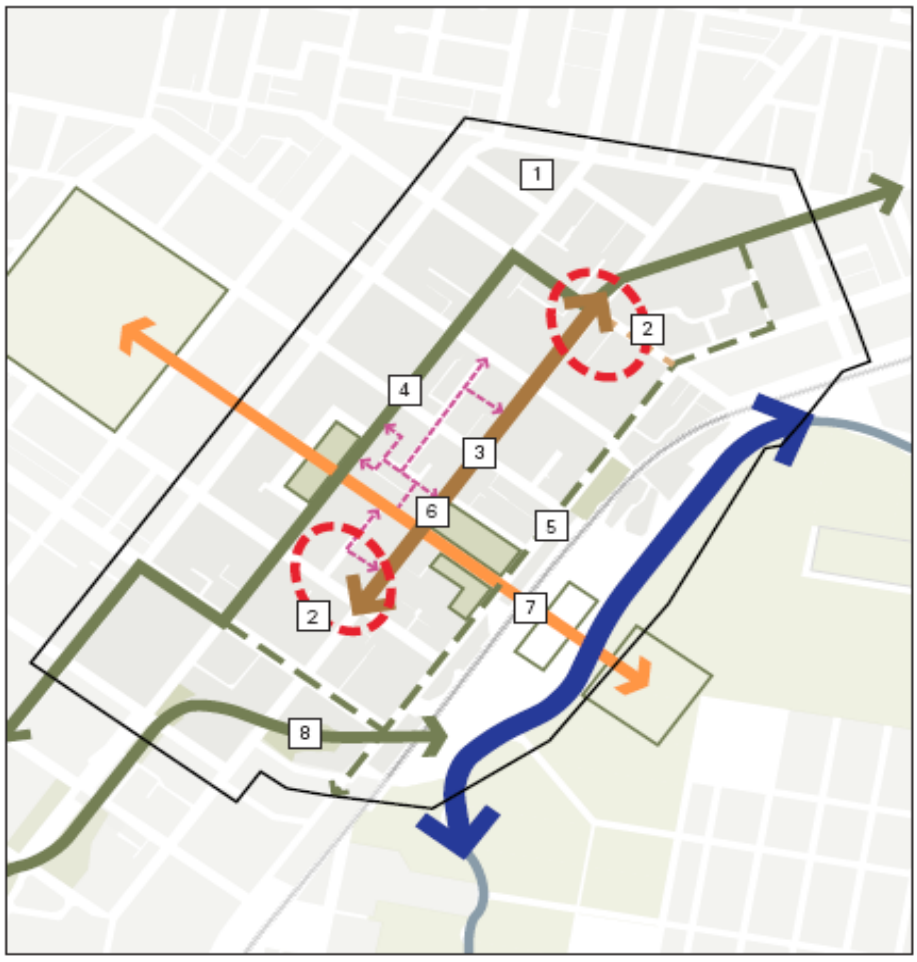
Connect

Reinstate the connection of the CBD with its context along two principle lines:

7. The historic east – west axis is reinforced and extended to reconnect the CBD with the Mulwaree River foreshore and Victoria Park.

8. The open space connection to the river at the southern edge of the CBD is reinstated and strengthened.

Concept Plan – Strategies



- Reference: Goulburn Mulwaree CBD Plan, Master Plan, 29 August 2008, *EDAW / AECOM.*

8.1.3 Acknowledgements

- Goulburn Mulwaree CBD Plan, Interim Report 1 and Part 2, Master Plan, 29 August 2008, EDAW / AECOM.
- Goulburn Mulwaree CBD Master Plan, Heritage Report and Conservation Principles / Guidelines, July 2008, City Plan Heritage.
- Goulburn Mulwaree CBD Plan, Master Plan Development Assessment, Traffic, Transport and Parking, 25 August 2008, GTA Consultants.
- Goulburn Mulwaree CBD Master Plan, Economic Assessment, July 2008, AEC Group

8.2 Marulan Local Business Centre

Aim

Develop a plan for Marulan's Local Business Centre that facilitates future management by balancing development and conservation in a sustainable way.

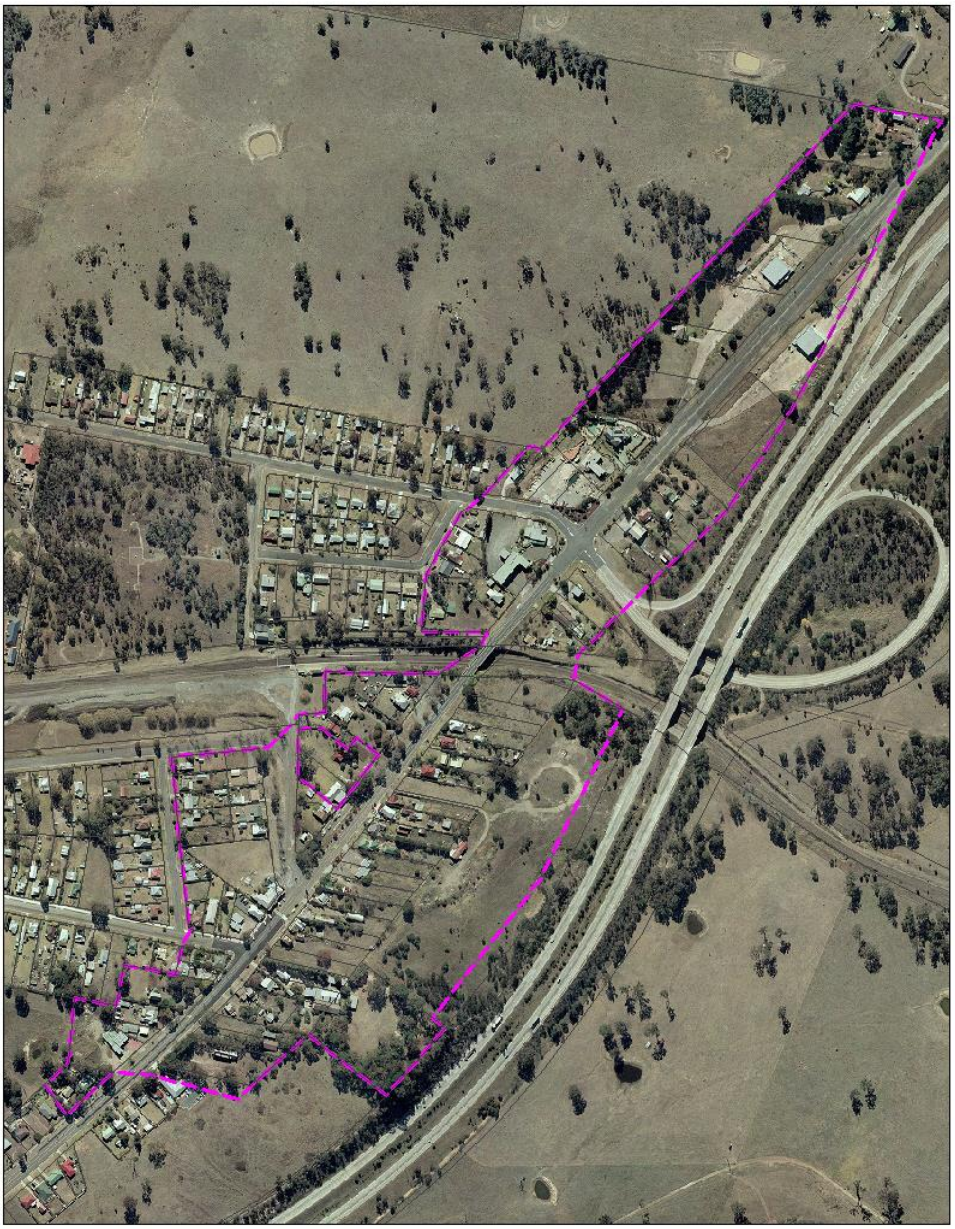
Objectives

- Create a plan that allows for the fulfilment of the aspirations of the Marulan community for their Local Business Centre;
- Maintain, protect and enhance the Local Business Centre's existing visual, built and environmental heritage and landscape character;
- Develop standards and recommendations to maintain and improve the image, attractiveness and functionality of the Local Business Centre in accordance with its existing character;
- Provide an appealing and sustainable living and working environment for existing residents;
- Attract new residents, business and tourism to Marulan;
- Describe Council's requirements in the form of performance criteria to achieve the objectives above;
- Plan for economic development and growth initiatives in accordance with the Goulburn Mulwaree Economic Development Plan 2008.

8.2.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-2-1** - George Street Marulan, Local Business Centre.

Figure 8-2-1: Land to which Plan applies – Marulan Local Business Centre



8.2.2 Performance Criteria

8.2.2.1 Visual Character of Marulan

Old Marulan was surveyed in 1834 by Surveyor Hoddle. Old Marulan was located at the junction of the Bungonia Road and the Hume Highway. When a location for the new Railway Station was chosen it was 2.5 km north of the old village. The railway station was built in 1867 adjacent to the Terminus Hotel that was built in 1866. Old Marulan declined and the town became one in 1878 on the site of the current Marulan. Old Marulan is now only an archaeological site.

In the 1890's the main part of town had ten stores, Police Station, Post Office, an Oddfellows Hall (also used as the Court House), School of Arts, a number of Churches and numerous residences. Many of these buildings can still be seen.

For fifty years Marulan was a highway town until it faded in importance following the construction of the freeway by-pass in 1985. Marulan Local Business Centre's role as a refreshment stop has been usurped by the vast roadhouses that have been built alongside the highway including the one at the south of the town. Marulan proper has reverted to a sleepier but more pleasant village.

Marulan's character in 2008 is a mixture of fine but often run down historic buildings and more recent buildings of various qualities. George Street has a number of now derelict service stations that do nothing to enhance the image of the town. A number of businesses are lifting the aesthetic quality of the precinct.

The length of George Street located in the Village Business Centre Zone can be divided into four character sections. Heading north;

- The southern section to the intersection with Goulburn Street has spaced out buildings of various uses and is primarily residential but also includes two churches on large blocks, a disused service station, the school and the former Baldock's General Store buildings. Baldock's store buildings are a fascinating time capsule from the past and are an important component of Marulan's character;
- Next the centre of town has something of a "gap toothed grin" in that quality items are interspersed with vacant, run down or poor quality items. This section contains the Terminus Hotel that dates from 1866 but now has a somewhat awkward Spanish Mission façade, the wonderful but underutilised Royal Hotel, the Post Office and Police Station and a number of small businesses and residences;
- The section of George Street to the north of the rail bridge to Brayton Road can't readily be perceived from the centre of town. This is because of the physical separation caused by the rail line and the way the land falls away from the rail bridge. This section is dominated by the former service station on the corner but also includes a number of residences. This is the image that visitors from the north see when approaching Marulan. All items north of the rail line are assessed as being non-contributory to Marulan's heritage;
- The area north of Brayton Road is open and in parts rather messy. It is dominated by the former RTA truck weigh stations and includes a number of residences and the nursery/landscape supply business.

Marulan is set amongst a landscape of mature specimen's of the Endangered Ecological Community – Yellow Box/ Blakely's Red Gum Woodland. The trees link to remnant vegetation in the surrounding farm land to provide fauna habitat. The mature gum trees, regardless of their environmental value give the town a leafy outlook and aspect.

The area also has mature examples of exotic tree and shrub species that are significant to the towns character e.g. Oak, Date Palm, Cypress etc. More recently part of George Street has been planted with Chinese Pistachio; the trees are well suited to the street.

8.2.2.2 Retention of Visual Character

The two significant elements that create visual character are the landscape and the built environments; gardens, parks, road reserves, public spaces and built structures contribute to the Local Business Centre's visual character;

8.2.2.3 Levels of Heritage Significance

(a) Items of Environmental Heritage.

These items are of key importance to the areas character e.g. buildings works, relics, places, landscapes, gardens, trees or vegetation of historic, scientific, cultural, social, natural or aesthetic significance as listed in schedule 5 of Goulburn Mulwaree Local Environmental Plan and shown on **Figure 8-2-2**;

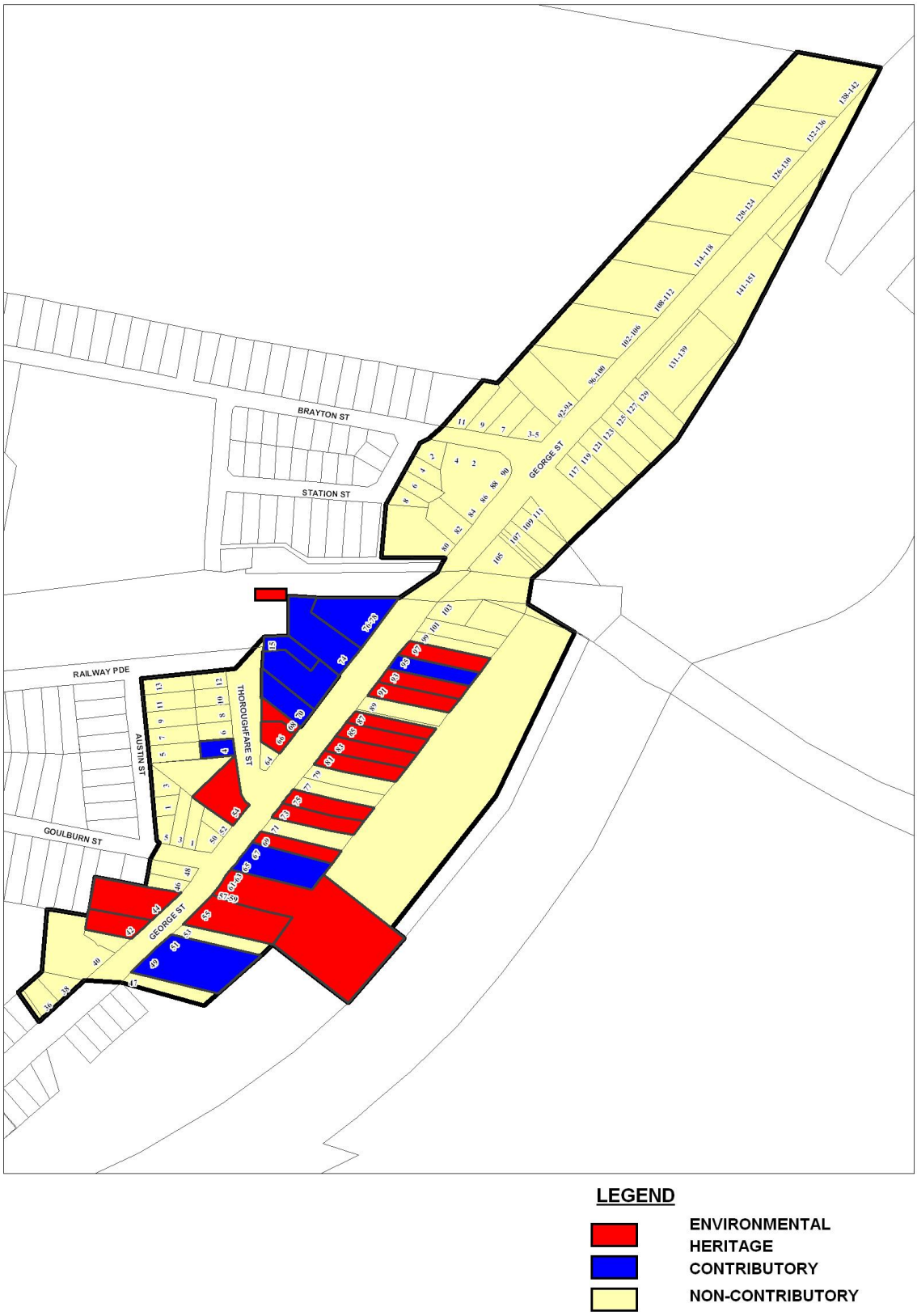
(b) Contributory items.

These items are of moderate significance and contribute to the predominant character and visual attractiveness of the schedule 5 items (Environmental Heritage items above) as shown in **Figure 8-2-2**.

(c) Non-contributory items

These items are buildings or places that have either a neutral or detrimental contribution to the areas character. Such items are also shown on **Figure 8-2-2**.

Figure 8-2-2: George Street Marulan Local Business Centre



8.2.3 Performance objectives for Environmental Heritage, Contributory Heritage and Non-Contributory buildings and places

The following performance objectives must be achieved by each development proposal in the area covered by this plan.

8.2.3.1 For environmental heritage items

(a) Retain as much as possible of the existing building fabric particularly those aspects that contribute towards the items visual/heritage significance. This process should be informed by an assessment of the heritage significance of the item;

(b) Where possible remove unsympathetic building elements and additions;

(c) Reconstruct original detail based on research and avoid mimicry e.g. mock details;

(d) Paint buildings and structures in colour schemes based on schemes of the relevant period and retain natural surface finishes;

(e) Avoid modification to door and window openings, spacings and proportions;

(f) Prohibit cladding of traditional building facades with modern materials and do not allow rendering or painting of external brick work or stone wall elements;

(g) Ensure building additions are sympathetic to the item and its setting in terms of setback, scale, building design and form, materials, proportion and spacing of openings, shopfront/awning treatment etc. and achieve a subtle contrast between old and new. The original item should be able to be distinguished from the new work;

(h) Ensure that development of items adjoining items of heritage significance is sympathetic in siting, design, scale and materials and where relevant maintain the group significance of a cluster of items;

(i) Site and design public on street infrastructure so as to maintain the significance of adjacent heritage items;

(j) Where subdivision occurs around heritage items ensure that an appropriate curtilage area is identified, retained and protected including gardens and landscape elements;

(k) Identify vistas both to and from heritage items and ensure that development does not encroach upon or diminish these vistas.

8.2.3.2 For contributory items

(a) Retain the qualities and details that form the stylistic character of the item and organise alterations and additions so as not to compromise that character;

(b) Discourage the introduction of building elements that are unsympathetic to the style of the building or adjacent heritage items;

8.2.3.3 Non-contributory items

(a) Restrain the visual prominence of non-contributory items by the use of subtle colour schemes, materials and finishes. Ensure that franchise type businesses respect the character of the area in the detailing of their buildings, signage and landscape treatments;

(b) New and redeveloped non-contributory items shall respect the scale, form and pattern of other development in the locality;

8.2.3.4 New buildings on vacant properties or sites to be wholly redeveloped

(a) Avoid large scale monolithic buildings and achieve small scale and discreet built forms by the use of sympathetic detailing;

(b) Respect the visual prominence and scale of existing items of heritage, contributory items and the streetscape generally by means of selective planning for setback, height, architectural design, materials and colour schemes;

(c) Retain sunlight penetration to footpaths and other public spaces;

(d) Avoid mock heritage building styles and fenestration (fenestration refers to windows and other openings).

(e) Enhance the landscape with thematic use of plant species and styles i.e. identify common local plant varieties used and styles of planting e.g. hedges etc.

8.2.4 Principal development controls – Residential Development in the Business B2 Local Centre Zone

8.2.5 Non-residential development in the Business, B2 Local Centre Zone

8.2.4 General Development Controls

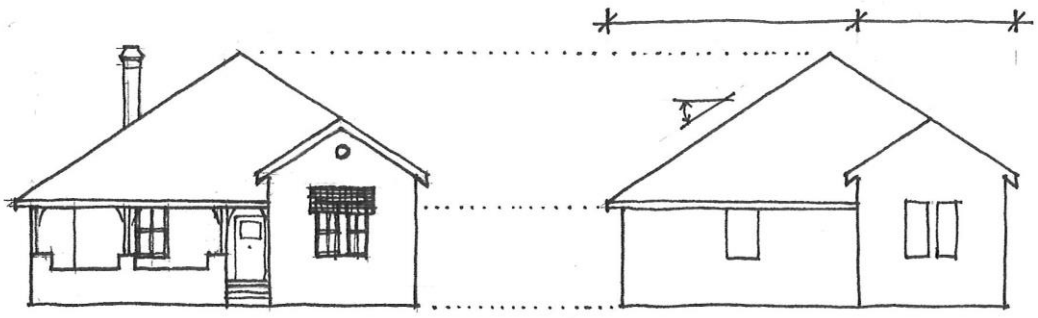
8.2.4.1 Street Frontage

The predominant character of smaller scale historic buildings is that the frontage is narrower than the depth. Modern housing and businesses etc tend to have a wider street frontages and this will detract from the existing character of the Local Business Centre zone, particularly in George Street.

To maintain the character of the village the front façade of buildings is to be narrower in width than it is deep or long.

Example of modest two storey dwelling where the second storey is contained in the roof area, this reduces the bulk and scale and therefore the impact of the building.

To reduce impact the bulk of larger buildings should be located set back from the front of the site. Designs for new buildings must respect the scale, height and massing of adjacent buildings. Refer to **Figure 8-2-3**.



Existing **New**

Respect adjacent scale, heights and massing;

Maintain roof form and rhythm;

Locate the bulk of new buildings to the rear.

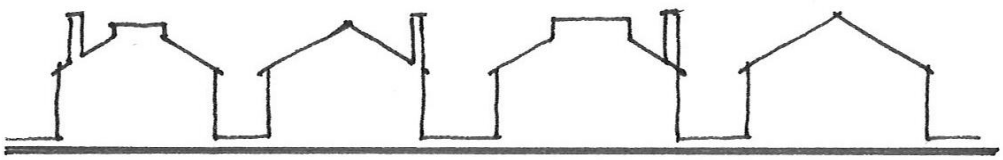


Figure 8-2-3: Building Design

8.2.4.2 Roof Pitch

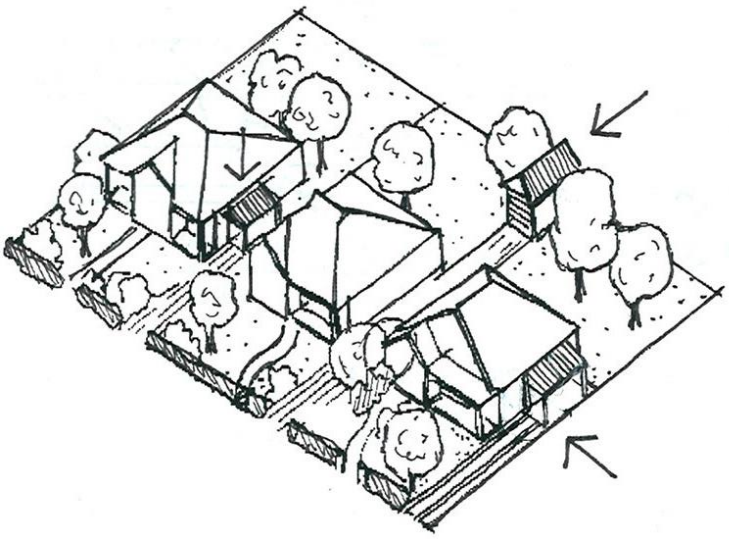
Historically roofs were pitched at 27.5 to 33 degrees. This is a steeper pitch than is used on modern buildings that tend to be pitched at around 22 degrees.

The roof pitch of new buildings or additions shall be similar to that of adjacent buildings e.g. above 27.5 degrees.

8.2.4.3 Garages and Outbuildings

The existing character of historic garages and outbuildings is that they are generally separate buildings set to the rear of the main building. It is preferred that garages not be incorporated into the main building in new work. Where garages are proposed they shall be located fronting the side or rear of the allotment as per **Figure 8-2-4**. Outbuildings shall also be located to the side or rear of the main building.

Figure 8-2-4: Siting of Carports and Garages

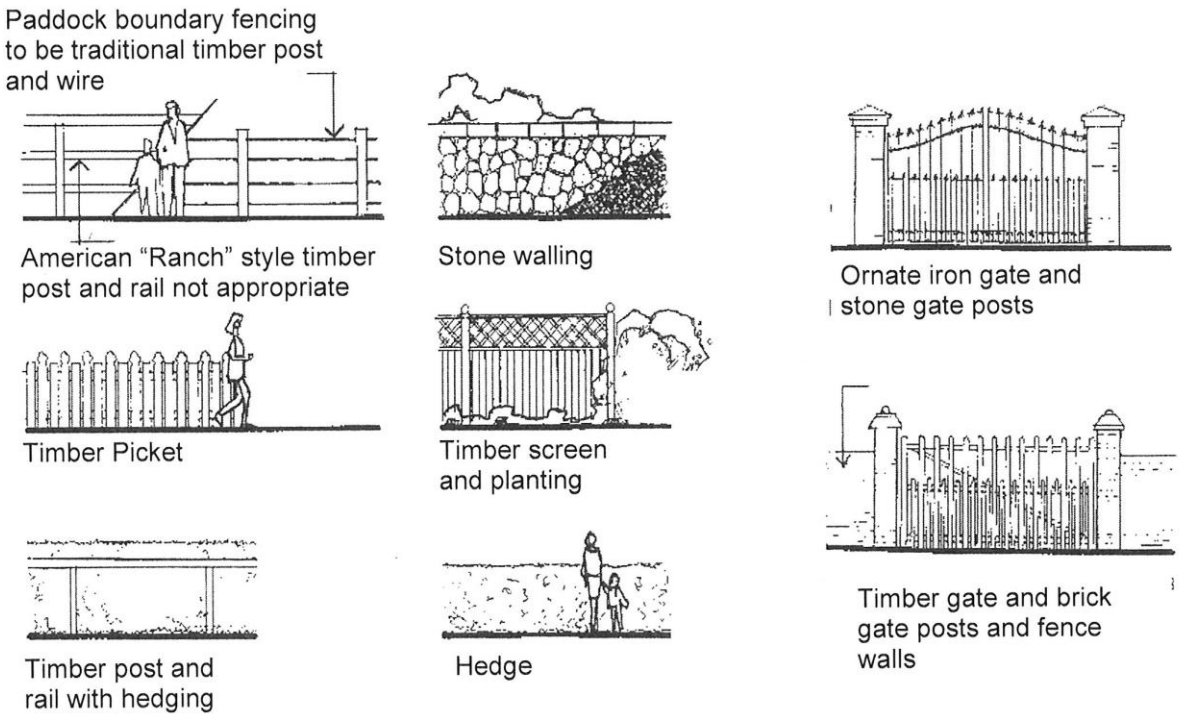


8.2.4.4 Fencing

Fencing, walling and gates should complement and enhance the existing streetscape and the locality where they are erected in the village. This is particularly so where they can be view from a public place. Materials used should reflect materials used historically. If timber, brick or stone was predominantly used then these materials should be used in new work.

The following materials have typically been used in Marulan and should be used in new work. Particular attentions should be paid to the type of building and type of fencing selected. In general simpler buildings used simpler fencing styles and materials.

Figure 8-2-5: Fence Diagrams



8.2.4.5 Landscape Character

Public and private landscapes contribute significantly to the character of the Local Business Centre. New development should be designed to minimise its impact on significant landscape elements. Avoid development in the vicinity of major plantings.

Prior to beginning design of a new development a site analysis is required. Significant vegetation including native vegetation and exotic trees and shrubs should be included in the site analysis. See Appendix G for information on preparing a Site Analysis.

If development proposes the removal of significant vegetation an assessment by a suitably qualified Arborist or Horticultural professional will be required. If vegetation is rated of moderate or high significance then a statement will be required in the application that discusses what alternatives have been considered and if removal is proposed justifying why removal is the selected outcome.

Where possible extend existing landscape themes e.g. planting, fence styles etc. into new work. See Appendix G for information on preparing a Landscape Plan.

8.2.5 Zoning Plans and lot size maps

8.2.5 George Street, Marulan Landscape Concept Plan

Council has prepared a George Street, Marulan Landscape Concept Plan. The actions proposed in the plan and endorsed by Council are;

Priority	Item
1	Street tree planting- 25 advanced trees & road treatment south end George street
2	Southern entry feature
3	In front of Post Office and adjacent areas
4	Pedestrian crossing
5	Northern entry feature

The Council adopted the recommendation;

"That the amount included in the adopted 2008/9 Management Plan for "George Street Marulan – Streetscape beautification be used to:

(a) undertake landscape works to the northern end of the "Post Office median strip" area specifically the replacement of the scoria garden and replanting;

(b) undertake replanting of the garden adjacent to the pedestrian crossing in George Street.

Funding for additional actions included in the table above will be considered in future Council Management Plan budgets.

Acknowledgement.

Acknowledgement is made of material used from Wingecarribee Shire Council Development Control Plan No. 54 - Exeter including text and sketches.

8.3 Marulan Estates Urban Release Area

8.3.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-3-1**.

Figure 8-3-1: Land to which Plan applies – Marulan Estates

8.3.2 Urban Release Area (Goulburn Mulwaree LEP 2009 – Part 6)

8.3.2.1 Staging Plan

Figure 8-3-2 shows the staged residential land release area for the Marulan precinct. Approximately half of the southerly zoned R1 General Rresidential area off Wilson Drive is proposed to be staged released.

This area will not be released until Council has made an assessment off:

(a) the stock of vacant, serviced, undeveloped or underdeveloped residential land and the potential housing opportunities available within the general Marulan R1 General Rresidential zone; and

(b) the rate of supply, the degree of choice and the current and projected rate of take-up and demand for residential land and housing types within the Marulan R1 General Residential zone; and

(c) Council is satisfied that:

- there is insufficient land available within the R1 General Rresidential zone to cater for projected household growth having regard to the need to ensure the efficient functioning of the housing market or
- the land available within the R1 General Rresidential zone is inadequate to satisfy housing preferences or requirements of all segments of the housing market; and
- adequate arrangements via a planning agreement have been made with Council for the provision of infrastructure and services to the land including essential services of:
    - the disposal and management of sewage;
    - reticulated water supply;
    - stormwater drainage management; and
    - the modification of the 'at grade' intersection at George Street – Portland Avenue and the Hume Highway intersection to left turning traffic only.

Figure 8-3-2: Staging Plan

8.3.2.2 Transport movement hierarchy

Marulan is serviced by a major arterial road (Hume Highway) and a number of Collector Roads:

(a) Brayton Road, connecting the Hume Highway to the northern end of Portland Avenue;

(b) George Street, connecting Brayton Road to the southern end of Portland Avenue;

(c) Portland Avenue south, and George Street intersection connecting the Hume Highway to Wilson Drive; and

(d) Wilson Drive connecting Portland Avenue to the Urban Release Area.

Staged release area is required to contribute towards the upgrading of collector roads Wilson Drive, Portland Avenue and George Street.

Figure 8-3-3 shows the road hierarchy.

Chapters 7.2 and 7.3 of this plan sets out detailed requirements for access roads, general road provisions, drainage and water sensitive urban design principles.

Figure 8-3-3: Road Hierarchy and Remnant Vegetation Map

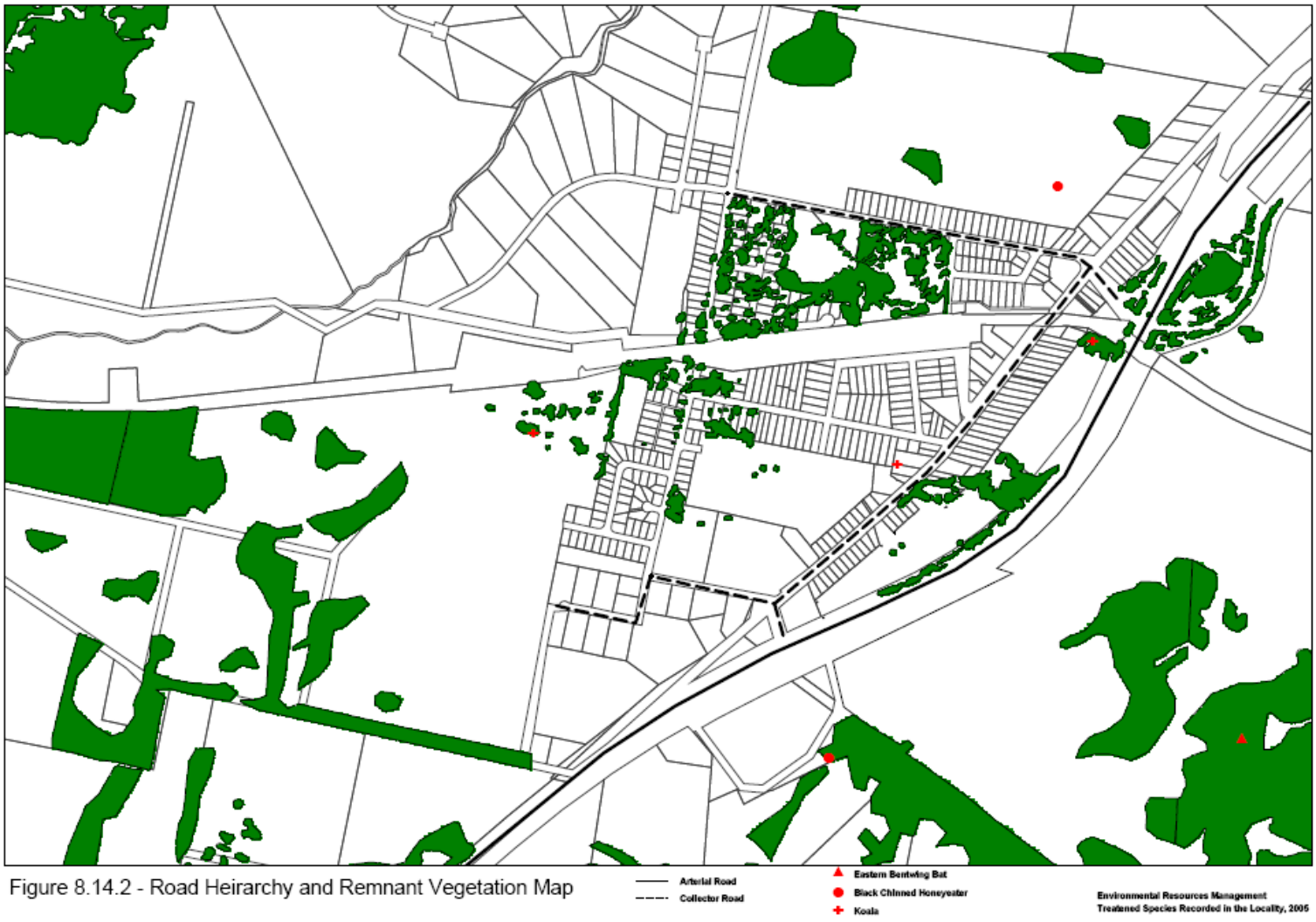


Figure 8.14.2 - Road Heirarchy and Remnant Vegetation Map

8.3.2.3 Overall landscape strategy

The overall landscape strategy for the urban release area is to protect, enhance and retain:

- remnant vegetation shown on **Figure 8-3-3**; and
- important vegetated areas within land zoned RU2 Rural Landscape and RU6 Transition.

Chapter 3.3 of this plan sets out detailed landscaping requirements for future development applications.

8.3.2.4 Passive and active recreation areas

Further to the landscape strategy recreation areas in the Wilson Drive urban release area include:

(a) Passive:

(i) Area of land zoned RU2 adjacent to the Main Southern Railway; and

(ii) Bio - retention swales and basins and proposed artificial wetlands to be developed as part of the stormwater management plan; and

(b) Active:

(i) Bio - retention basin proposed in the south-eastern corner could also be utilised for playing fields; and

(ii) the main active playing fields are located adjacent to the north-eastern corner and zoned RE1 – Public Recreation and are known as the Portland Avenue sporting fields.

8.3.2.5 Stormwater and water quality management

Stormwater and water quality management controls are detailed in chapter 7.3 – Drainage and soil and water management.

Patterson, Britton and Partners, December 2005 have developed an "indicative stormwater management plan and a water sensitive urban design (WSUD)" strategy for the Wilson Drive urban release area. Both documents' principles are recommended for inclusion in development applications.

Principles:

"The WSUD strategy includes measures such as:

(a) Residential areas:

(i) rainwater tanks for reuse of roof runoff in washing machines;

(ii) use of recycled water (treated effluent) for toilet flushing and irrigation;

(iii) water saving devices on all residential development;

(iv) gross pollutant traps; and

(v) bio-retention / detention basins / swales along the edges of parkland corridors / and artificial wetlands to remove pollutants and to reduce peak flow rates. In some instances, detention storage to attenuate peak flow rates can either be separate or incorporated into the bio-retention basins or artificial wetlands.

(b) Industrial areas:

(i) use of recycled water and rainwater for non-potable uses;

(ii) installation of water saving devices;

(iii) gross pollutant traps;

(iv) bio-retention / detention basins / swales along the edges of hard stand areas to remove pollutants and to reduce peak flow rates. In some instances, detention storage to attenuate peak flow rates can either be separate or incorporated into the bio-retention basins; and

(v) permeable pavers for car parking areas, although, permeable pavers would not be used on high traffic hard stand areas (eg. delivery access ways) because of the greater load of vehicles using these areas."

(c) Ground water management:

(i) limit additional impervious areas on the site; and

(ii) encourage water infiltration at the base of bio-retention basins and swales.

(d) River protection:

The site is at the top of two drainage catchments and as such:

(i) significant existing vegetation is to be retained through the middle of the site as part of the drainage corridor; and

(ii) the perimeter of the drainage corridor is to incorporate further run off water quality treatment measures like retention swales / basins and artificial wetlands.

8.3.2.6 Natural and Environmental hazards

Figure 8-3-4 depicts identified environmental hazards and indicative solutions that need to be addressed and satisfied in future development applications for the Wilson Drive residential and industrial zoned areas.

These include:

(a) Flooding hazard

(i) Patterson, Britton and Partners, December 2005 have approximated the 100 year ARI flood extent and the PMF flood extent. Both these events have been plotted onto **Figure 8-3-4**. The accompanying report concludes that the catchment flood flows are relatively minor and should be incorporated into the piped trunk drainage system and overland flow areas in roadways and

drainage reserves for up to the 100 year ARI flood extent in accordance with industry best management practice.

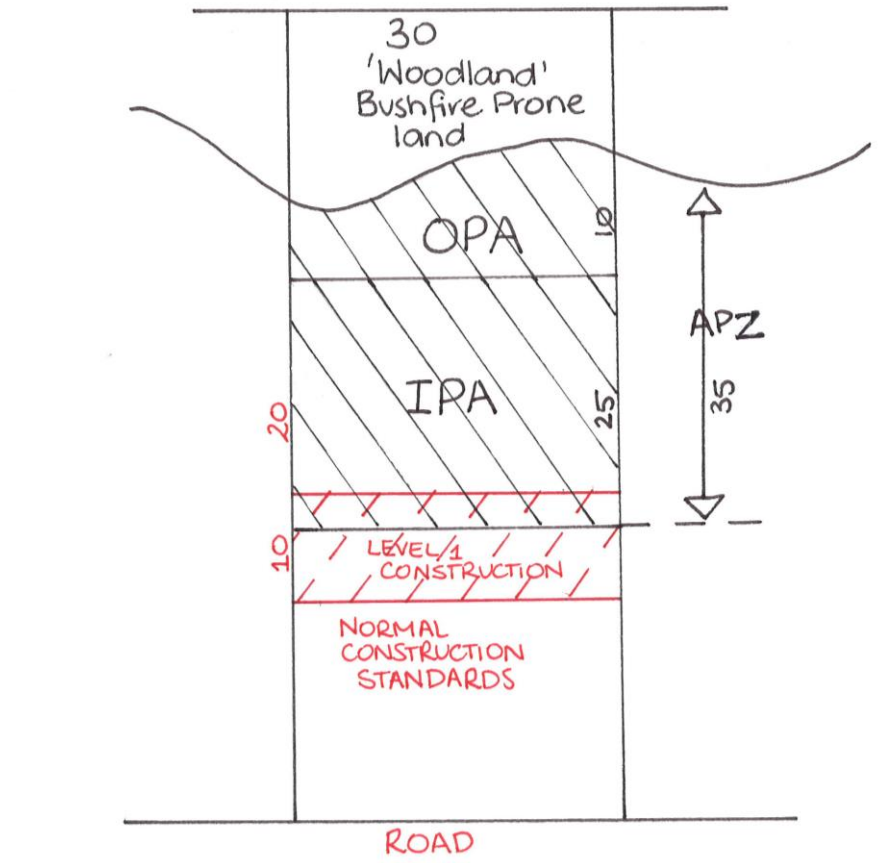
(b) Bushfire prone land

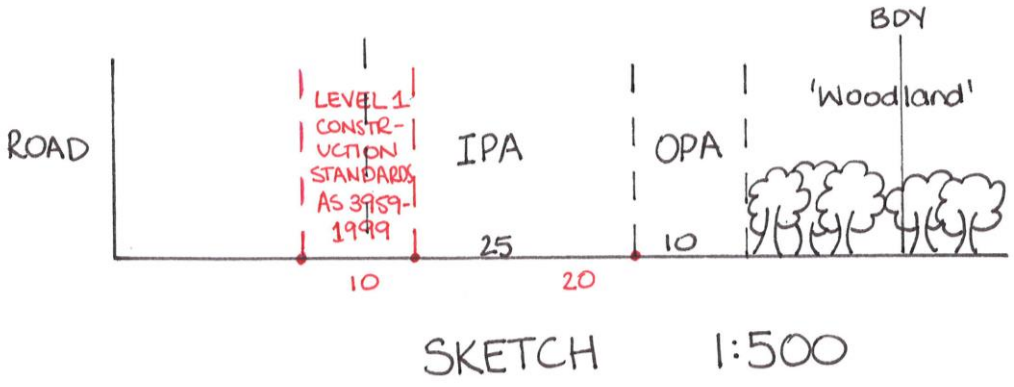
(ii) Environmental Resources Management (ERM), November 2005 have identified bushfire prone land for the Wilson Drive Marulan site. This map has been incorporated into **Figure 8-3-4**. The ERM report concludes that development within the identified bushfire prone land will require:

(iii) a preliminary assessed APZ (asset protection zone) of 35m, which incorporates and OPA (outer protection area) of 10m and an IPA (inner protection area) of 25m. This will need to be reassessed at DA stage;

(iv) "Level 1 construction standards (AS 3959-1999) are required for any development within bushfire prone land that is between 20m and 30m from the hazard (woodland) (not including the OPA)"; and

(v) "no construction standards will be required for development that will be more than 30m from the hazard (not including the OPA) or within land outside that classified as bushfire prone".


30
'Woodland'
Bushfire Prone
land
OPA
10
APZ
IPA
25
35
20
10
LEVEL 1
CONSTRUCTION
NORMAL
CONSTRUCTION
STANDARDS
ROAD


BDY
'Woodland'
ROAD
LEVEL 1
CONSTR-
UCTION
STANDARDS
AS 3959-
1999
IPA
OPA
25
10
10
20

SKETCH 1:500

(c) Noise assessment

Noise sources include:

(i) existing industries (Boral Concrete batching plant);

(ii) operation of Marulan's waste management facility;

(iii) Main Southern Railway adjoining on the north;

(iv) Hume Highway to the east;

(v) proposed State significant hard rock quarry to the west; and

(vi) proposed industrial zone on the southern side of Wilson Drive.

(vii) Proposed Quarry

(viii) ERM Consulting (November 2005) advise as follows:

(ix) "A proposed Readymix quarry is understood to have been granted approval nearby the site. A review of the noise and blasting assessment part of the May 2005 Environmental Impact Statement (EIS) has been undertaken. Based on this document, noise and blasting at the proposed quarry are predicted to be within appropriate limits at proposed residences subject of this review. Hence, no development restrictions are anticipated as a result of the quarry."

(x) Further to this report the quarry has been granted Part 3A development consent.

(xi) In addition, the proposed quarry's current owners have objected against the proposed residential development on land zone R1 at Wilson Drive, Marulan.

(xii) ERM noise control requirements:

(xiii) ERM have recommended an acoustic barrier at the eastern edge of the land zoned IN2 light industrial.

(xiv) Design of such barrier and future residential dwellings will depend on quantification of noise coming from the proposed quarry, and industrial areas to the west and south of residential release area.

(xv) House design may take the form of reducing openings facing noise sounds, providing air conditioning and double brick and window construction.

(xvi) Noise from industrial sources, freeway and rail traffic can also be controlled by employing noise barriers and buffer zones. These can take the form of solid panels or an earth type bund forming part of a nature strip or a combination of both.

(xvii) The following ERM Consulting recommendations have been adopted:

- 3m high solid noise barriers adjacent to the Main Southern Railway and proposed residential development along the northern boundary.

- 4m high solid noise barrier adjacent to the Boral batching plant and the Wilson Drive Road reserve along the eastern and southern boundaries (for a distance of 300m along the southern boundary).
- acoustic buffer between the proposed industrial zone, and the residential zone.

(xviii) This plan also recommends that:

- acoustic buffer also be included adjacent to the southern road reserve of Wilson Drive from the 4m high solid barrier to the RU6 zone.

(xix) All barriers to be positioned along the north, east, south and west residential boundaries are to ensure that any proposed dwellings are to be shielded so that the line-of-sight from the noise source, be it rail, Hume Highway or the future industrial development to the south and west and the receptor location is blocked.

(d) Heritage assessment

(i) Aboriginal sites

- ERM Consulting (November 2005) have located some five sites within the subject Wilson Drive precinct. A section 90 consent under the NPW Act is required from DECC for the two sites found within the residential release area (Lot 1 DP 221236). Also respective Aboriginal representatives have expressed the wish to collect Aboriginal objects from those sites. Lot 3 DP 517713 which contain the remaining three sites is to be maintained as a conservation area. This area has been zoned RU2 Rural Landscape.

(ii) European items

- There are no European heritage items within the residential urban release area.

(iii) Soil and contamination

- Coffey Geosciences Pty Ltd, February 2004 advise that there appears to be no significant geotechnical constraints and that likelihood of contamination being present that would pose constraints to residential development of the subject release site is considered to be low.

(iv) Drainage lines

- Indicative stormwater management plan has been prepared by Patterson, Britton and Partners, December 2005 though the locations of swales etc may vary the principles developed in this plan will remain the same for the subject residential release area.

Figure 8-3-4: Natural and Environmental Hazards (Part 1)

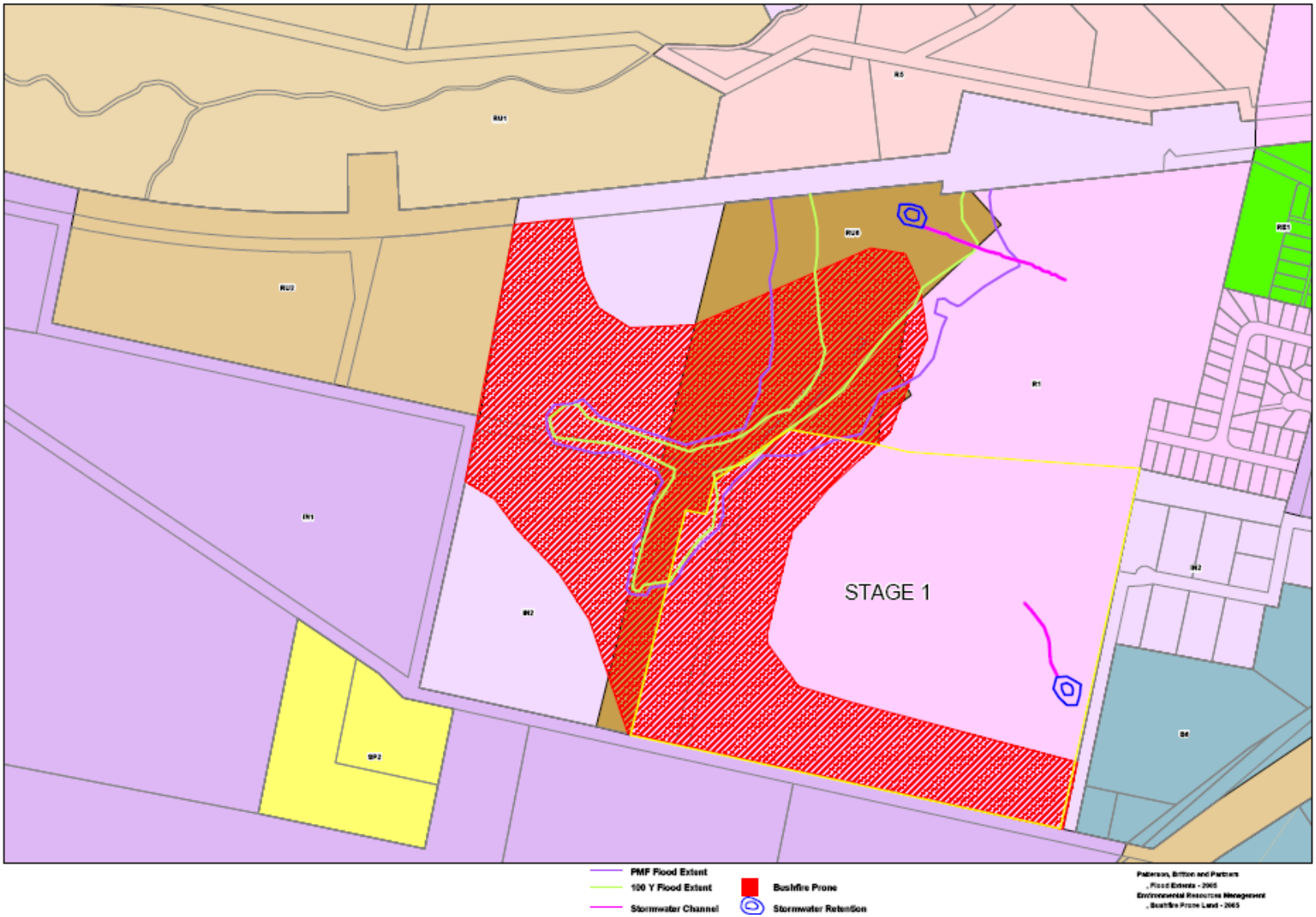


Figure 8-3-5: Natural and Environmental Hazards (Part 1)

8.3.2.7 Urban Design controls

8.3.2.8 Higher density living – (refer to figure 8-12 zoning and lot size map).

8.3.2.9 Neighbourhood shops

8.3.2.10 Public facilities and services

Council has put in place a Section 94A levy development contributions plan and a Marulan Infrastructure Contributions Plan.

Wilson Drive urban release area is subject to both of these plans. However with the Infrastructure Contributions Plan only the identified works in that plan are to be funded.

All other works required in the release area must be fully funded by the relevant developer.

The following figures identify the public facilities and their location for which contributions will be required pursuant to S94A Contributions Plan:

Figure 8-3-7 – public facilities

(a) George Street landscape works including:

(i) street tree planting and road treatment at the southern end;

(ii) southern and northern entry features;

(iii) post office median strip and adjacent areas;

(iv) garden area adjacent to the pedestrian crossing.

(b) Meridian Park development including:

(i) picnic facilities, playground equipment, landscaping and off street parking.

(c) Portland Avenue public recreation area development including:

(i) sporting fields, access roads and parking area.

(d) Health care and community centre in George Street(completed):

(e) Traffic facilities upgrading including:

(i) modification works on the north and south bound lanes of the Hume Highway at the southern “at-grade” intersection with Portland Avenue and George Street roundabout;

Figure 8-3-7 – Marulan Infrastructure Contributions Plan public infrastructure utilities including:

- water supply infrastructure;
- sewerage infrastructure;
- stormwater design infrastructure.

The staged urban release area will not be consented to until chapter 8.4.9(2) has been satisfied and Council is satisfied that any public utility undertaking infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when required.

The recommended means to satisfy the above requirements is for a mutually agreed planning agreement to be put in place between Council and the developer.

Figure 8-3-6: Zoning and Lot Size Map

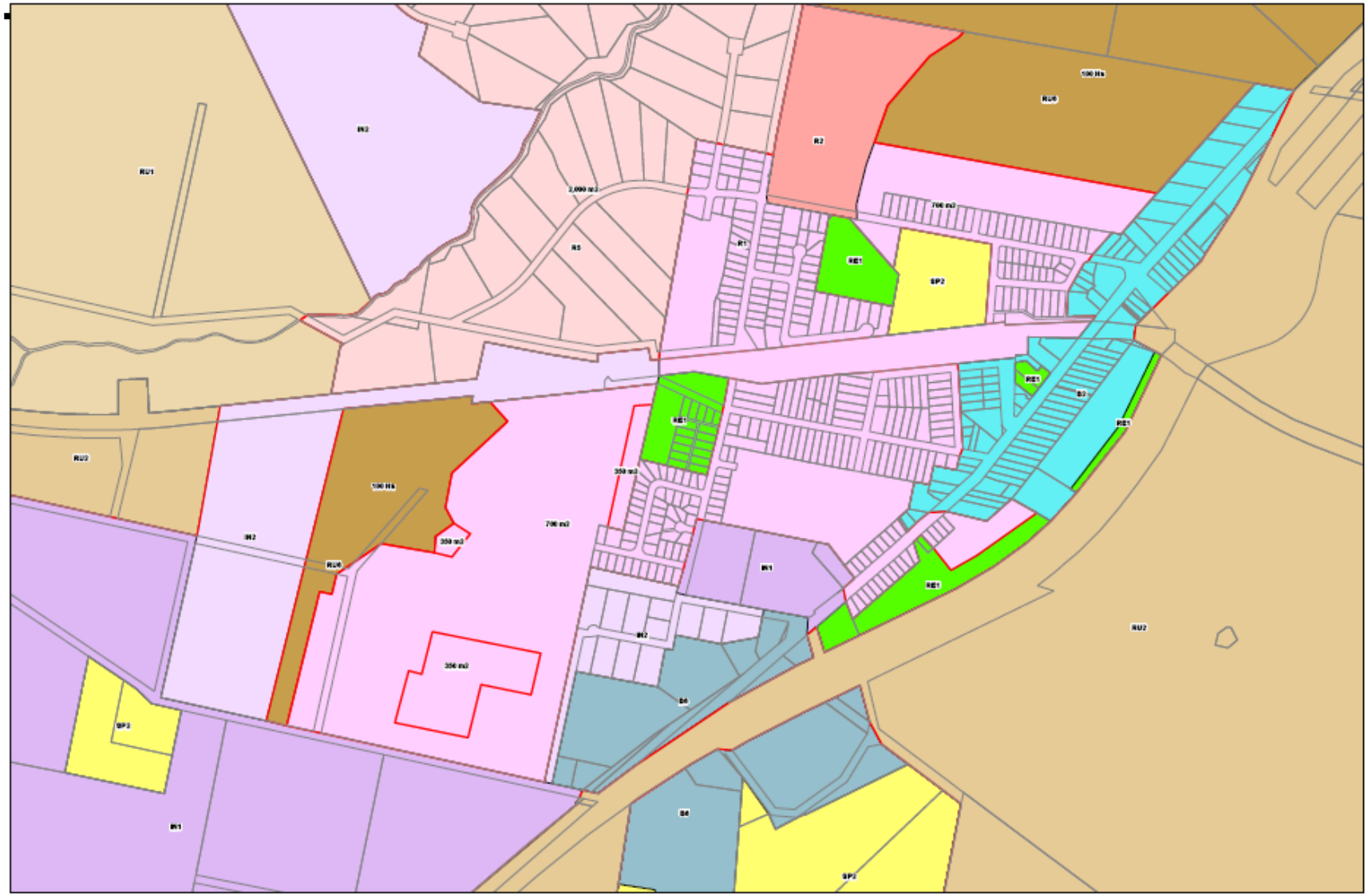


Figure 8-3-7: Public Facilities

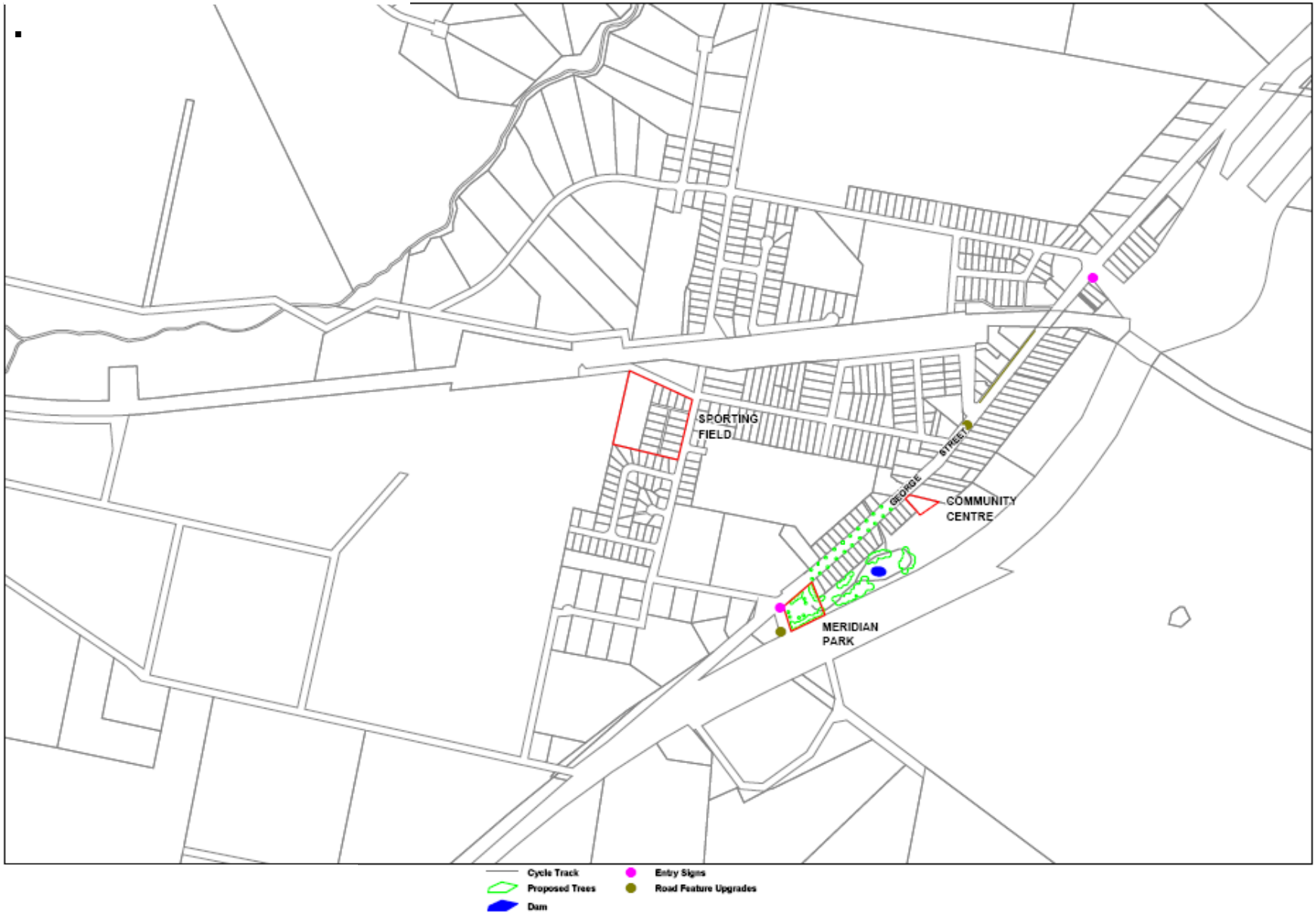


Figure 8-3-8: Stormwater

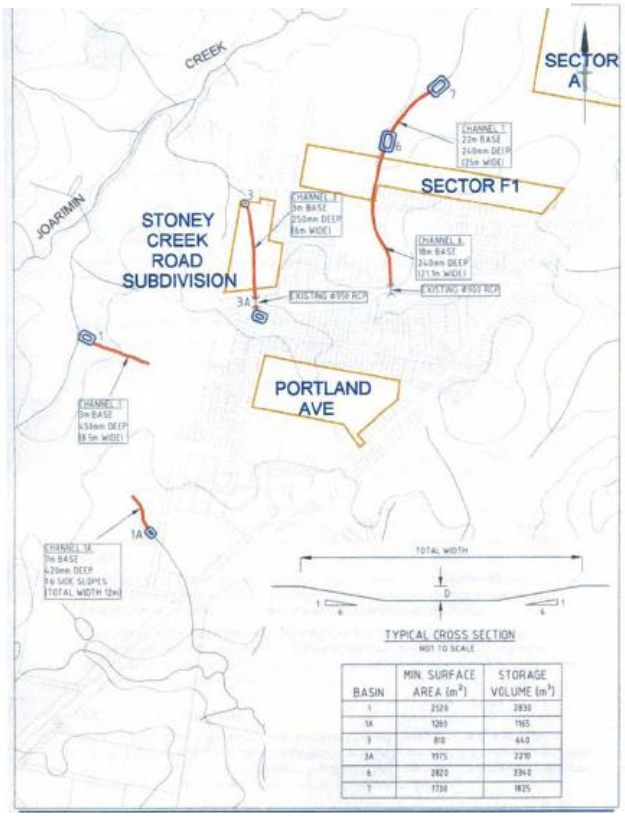
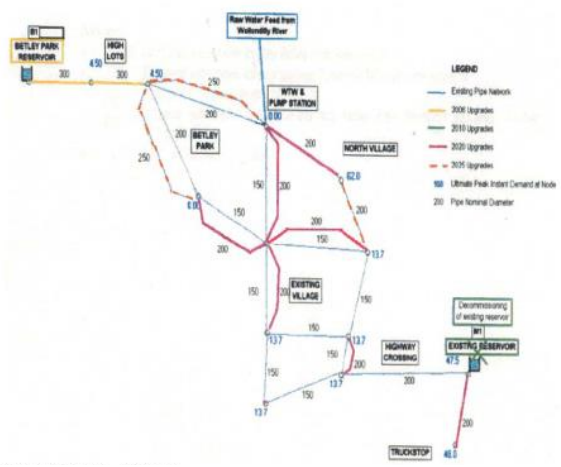


Figure 8-3-9: Sewer

Figure 8-3-10: Water



8.4 Charles Valley – Long Street Goulburn

Objectives

The overall objectives of this plan are:

- to identify the development constraints to urban development of land in the Study area
- to provide an indicative plan for the future land use, subdivision and development of the area
- to identify and protect natural and heritage assets in the study area

8.4.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-4-1**.

Constraints

Investigations have been undertaken into the potential for residential development in the land subject to this plan. The reasons for these investigations were to identify opportunities and constraints to development to guide future residential development and to be used for any rezoning of land in the area.

The initial planning process included the identification of main constraints to development within the area, which includes:

- water infrastructure requirements (and estimated costs)
- road requirements (access is not available off Memorial Drive)
- drainage lines

- stormwater runoff
- land capabilities for on site effluent disposal and building envelopes
- land ownership patterns
- existing development, including house locations
- remnant vegetation
- historic features
- potentially contaminated land
- bushfire hazards
- steep land
- the adjoining public recreation area to the west and environmental conservation area to the east
- preservation of rural character
- potential aboriginal artefacts

The major constraints of bushfire hazard/buffer, drainage lines, vegetation and steep land (contours) were mapped on cadastre and aerial photograph which identified potential developable land. The other constraints identified will require consideration and investigation at the development application stage.

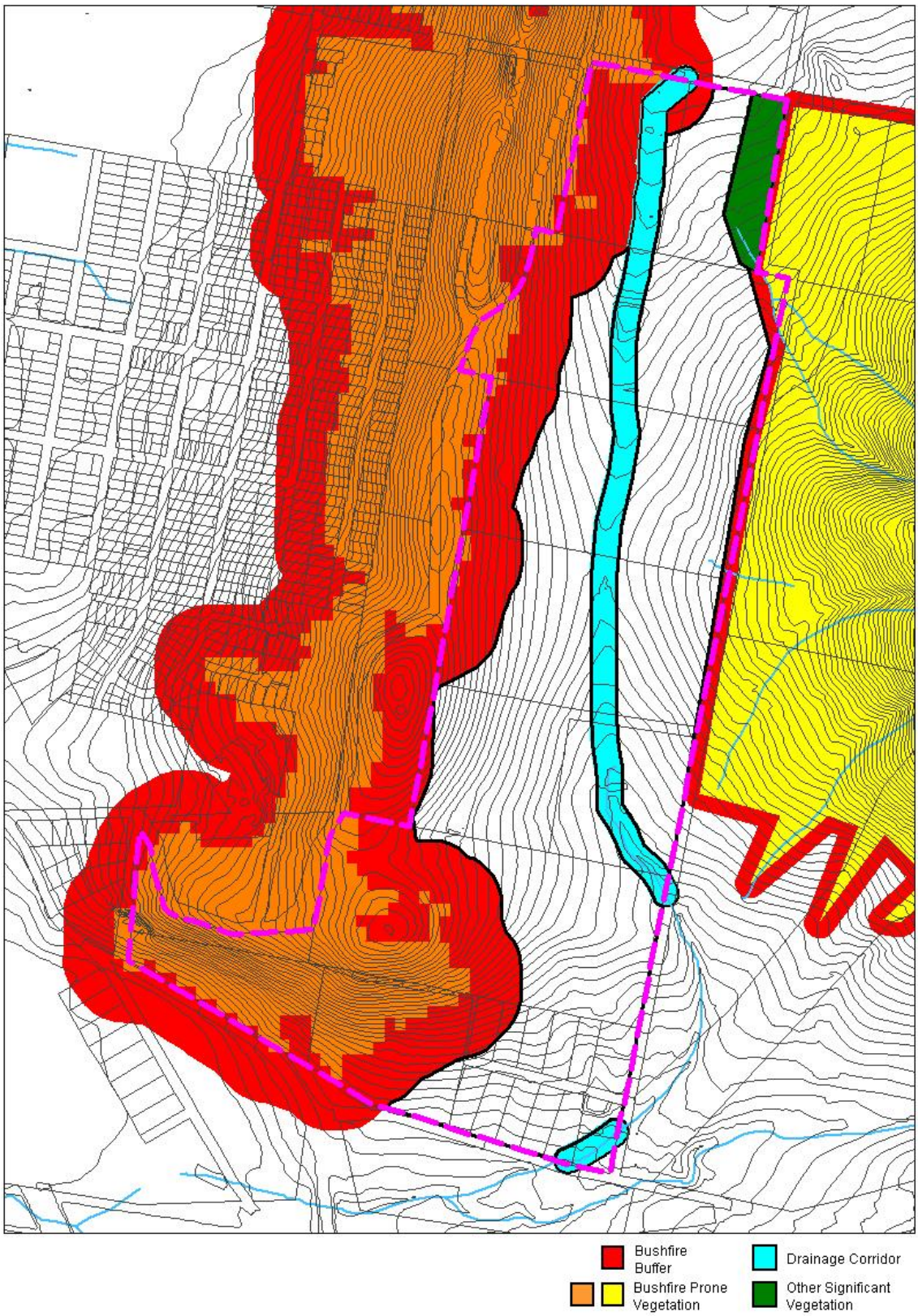
The land subject to major constraints is not considered suitable for rural lifestyle development.

Any development application for the locality will need to reflect all potential constraints and produce an overall master plan for the locality.

These major main constraints to development are mapped and shown in **Figure 8-4-2**.

Figure 8-4-1: Land to which Plan applies – Charles Valley

Figure 8-4-2: Constraints


Bushfire Buffer
Drainage Corridor
Bushfire Prone Vegetation
Other Significant Vegetation

8.4.1.1 Aboriginal sites

The Goulburn Mulwaree Council Aboriginal Archaeological Survey Policy identifies specific criteria as being an indicative of a site/area in which Aboriginal artefacts are likely to occur. Several of these criteria are located within the Charles Valley development area.

In accordance with the Aboriginal Archaeological Survey Policy, where a particular site within the Charles Valley development area is deemed to meet one or more of these criteria the following procedure must be followed.

A preliminary assessment to determine the likelihood of artefacts at the site. This assessment to include:

- review of the site history
- identification of the level of disturbance
- literature review and consultation with the National Parks and Wildlife Service on information they hold
- site inspection by a person skilled in identifying Aboriginal artefacts
- any consultation with the local Aboriginal community
- a statement as to the likelihood of artefacts being found and the need, if any, for a more detailed Archaeological survey

An Archaeological Survey undertaken by an appropriately accredited person/organisation in accordance with relevant guidelines on the preparation of such documentation.

8.4.1.2 Potentially contaminated sites

Grazing has been the main agricultural use in the area and no sites have been identified as being potentially contaminated.

8.4.2 Development potential

Land that has potential for development has been identified by removing land subject to the major constraints identified. The total area covers 120ha and the area of land available for development totals approximately 66ha. The existing lot pattern is shown in **Figure 8-4-3**. The minimum lot size to be created within the areas is 2ha.

Factoring in the major land constraints, the approximate developable area has a potential for an approximate additional 33 dwellings.

It is important that an estimate is made on the number of potential dwellings, rather than calculating that all available land will become lots of 2ha. This is because infrastructure must be designed to meet the needs of the expected population. If infrastructure is designed that overcompensates for the actual population, the cost of providing the infrastructure would effectively stifle any further development in this locality.

With occupancy rate of 2 persons per household (from Goulburn Mulwaree Strategy 2020) and assuming each lot will be used for a single dwelling there is the potential for an ultimate population of 66 people.

POTENTIAL DWELLINGS: 33 dwellings (excluding existing dwellings)

POTENTIAL POPULATION: Between 60 and 100 people

Note: Range of population figures is given because individual lots have the right to a "secondary dwelling".

Figure 8-4-3: Developable land

8.4.3 Subdivision

Note: Reference chapter 7 of this Plan.

Objectives

To encourage subdivision layouts that:

- allow integration of neighbourhoods between "natural" boundaries or barriers and connections between the neighbourhoods
- minimise environmental impact by ensuring subdivision into rural residential lots only occurs on land free of development constraints
- are based on a hierarchy of roads for the efficient movement of vehicle traffic. Roads will be connective and efficient, giving motorist multiple travel paths. Long cul-de-sacs are unsuitable for efficiency and safety reasons
- focus open space on the drainage constraints and network
- incorporate water sensitive urban design principles into subdivision design
- encourage northern orientation of dwellings for energy efficiency benefits and passive solar access
- ensure rural residential lots have a sufficient area to allow for the siting of a dwelling and ancillary buildings (including private open space, vehicle access and parking)
- provide for protection/enhancement of visually prominent sites/locations
- protect riparian areas and native vegetation areas
- consider existing residential development

Controls

8.4.3.1 Subdivision lot size

Minimum lot size, is 2ha. However this minimum will need to take into account the suitability of the site and the infrastructure that will have to be provided.

Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded.

8.4.3.2 Lot orientation

(a) Solar access

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

(i) Align streets east-west and north-south. Aim for north-south streets within 20° west and 30° east of true north and east-west streets within 30° south and 20° north.

(ii) Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

(iii) Allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.

(iv) Allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

(v) Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3 pm.

(vi) Regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.

(vii) On sloping sites, north-facing sites improve opportunities for solar access.

(b) Passive surveillance

(i) Lots shall face toward public open space areas, vegetation conservation areas and public roads to encourage passive surveillance from dwellings over these public spaces to assist with safety and security.

(ii) Where this cannot be achieved open style fencing is required to promote passive surveillance of public open space and public road area with some landscape screening to provide privacy.

8.4.3.3 Bicycle and pedestrian movements

Bicycle and pedestrian movements to be addressed in accordance with Council's Bicycle Strategy 2007.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities.

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

8.4.3.4 Streetscape

Existing trees are to be retained where possible and appropriate.

Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer Council Policy – Bushfires and Vegetation Controls)

Streetscape planting themes are to be developed based on native tree species suitable for the locality and in an urban context.

Boundary fencing shall be rural timber style fencing i.e. post and rail with mesh. This is to maintain semi-rural amenity of this locality.

8.4.3.5 Open space

Areas identified as being as a drainage line shall be set aside as a drainage reserve.

The open space network is to be focused on these drainage lines.

Drainage lines are to be re-established as "natural" watercourses largely through revegetation with native species. These will meet the passive outdoor recreation needs.

Environmental management plans for the natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.

8.4.3.6 Sites of visual importance

Areas of visual importance have a building form of significant architectural and design merit or a prominent landscape feature. For this area the following sites/areas have identified:

- gateway entries to neighbourhood entrances within the plan area
- ridgelines
- treed hilltops or ridgelines
- subdivision design must address areas of visual importance and demonstrate how they will be protected or enhanced

8.4.4 Residential development

Objectives

To encourage residential development in which:

- there is a diversity of housing stock and type to meet diverse housing needs
- dwellings to face public spaces for passive surveillance

- living areas are orientated to the north for energy efficiency benefits
- dwelling design and siting respects the privacy of neighbours
- on site vehicle parking is provided to minimise congestion within the streets
- garages and fences do not dominate the streetscape
- there is easy access to community facilities
- Rainwater tanks are provided to supplement water supply and control stormwater runoff.

Controls

8.4.4.1 Detached dwellings and "secondary dwellings"

(a) Streetscape

Dwellings are to face public spaces (roads and open space areas).

Dwellings are not to be hidden by high fences.

Garages are to be located behind the building facade so that they do not dominate the streetscape.

Fences shall be of a design that is sympathetic to the existing semi-rural character of this locality.

(b) Height

Maximum recommended height is two storeys.

(c) Energy efficiency

To maximise energy efficiency the internal and external living areas should be located to the north side of the dwelling. Further requirements are specified in **clause 4.1.3** of this plan.

(d) Privacy

Private open spaces and living rooms of adjacent dwellings should be protected from direct overlooking, by:

- appropriate dwelling layout
- use of distance or slope
- screening devices like screen vegetation and courtyard walls

First floor decks, balconies and the like, are not supported where they overlook or have the potential to directly overlook habitable rooms or private open space of adjoining properties.

Windows of one dwelling should not be located opposite the windows of another dwelling unless direct views are restricted:

- off-set windows
- use of narrow, translucent or obscured windows
- provide sufficient distance between dwellings

(e) Acoustic privacy

Noise generating area of a development (e.g. driveway, air conditioning units, swimming pool areas) should be adequately screened or located away from the bedroom areas to minimise impact on neighbours.

Bedroom windows to be a minimum 3m from shared streets, driveways and parking areas of other dwellings.

Transmission of noise between adjoining properties should be minimised.

Locate active recreation areas (swimming pools, spas, tennis courts, BBQs), driveways, carports, garages and garbage collection areas, pumps and air conditioners, away from bedrooms of adjacent dwellings.

Dwellings adjoining and other noise generating land uses should be designed and sited to minimise noise impacts.

Locate bedrooms and other noise sensitive rooms away from the road.

(f) Parking

Provision for a least one covered parking space per dwelling (e.g. carport or garage) and one tandem vehicle space (e.g. driveway area in front of garage or carport).

(g) Rainwater tanks

A rainwater tank is to be provided per dwelling to supplement water supply and control stormwater runoff.

The tank shall have a minimum capacity of 10,000 litres.

The rainwater tank supply shall be connected to the hot water service, laundry and toilet facilities with a top up connection into the tank.

(h) Water sensitive urban design

House design should include water sensitive urban design features such as porous paving, infiltration devices and landscaping.

8.4.5 Zoning plans and lot size maps

8.5 Clyde Street

8.5.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-5-1**, an area of approximately 213 hectares. This land is bounded by:

- Wollondilly River to the north
- the catchment boundary to the south (i.e. contour line running to the south west between Clinton Street and Addison Street)
- the catchment boundary to the east and west

8.5.2 Constraints

Investigations have been undertaken into the potential for residential development in the land subject to this plan. The reasons for these investigations were to identify opportunities and constraints to development to guide future residential development and to be used for any rezoning of land in the area.

The initial planning process included the identification of main constraints to development within the area, which includes:

- water and sewer infrastructure requirements (and estimated costs)
- road requirements
- drainage lines
- flooding
- land capabilities
- land ownership
- existing development, including house locations
- remnant vegetation
- historic features
- potentially contaminated land

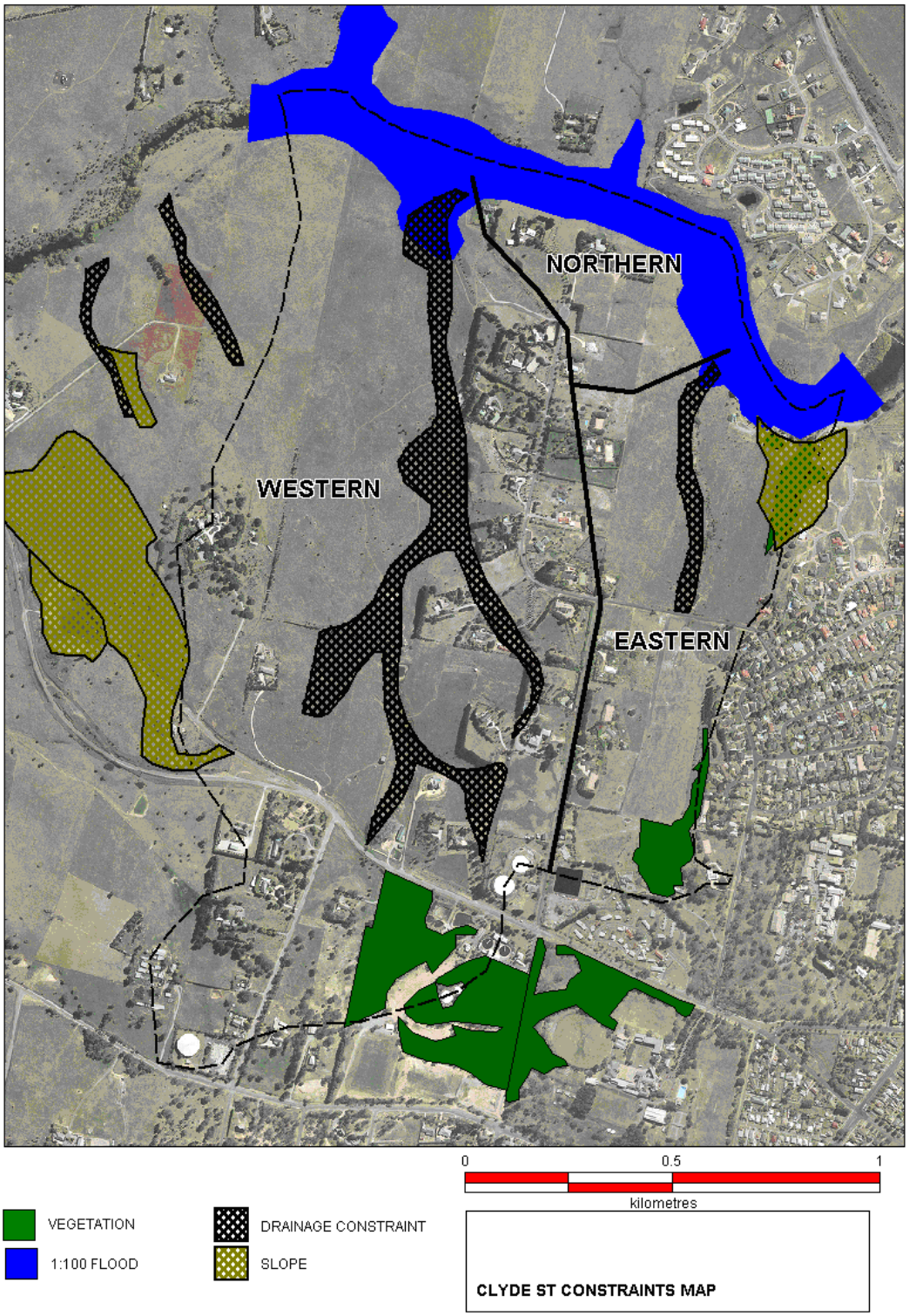
The constraints were mapped on cadastre and an aerial photograph, which identified land free of constraints i.e. developable land. The developable land was then refined with the provision of a Ring Road and stormwater management areas identified. Demand for

shops, schools and other community facilities were then considered based on potential population numbers.

The main constraints to development are mapped and shown in **Figure 8-5-2**. The land subject to constraints is not suitable for urban development and this will need to be reflected in any development applications.

Figure 8-5-1: Land to which Plan applies – Clyde Street

Figure 8-5-2: Constraints



8.5.3 European heritage

In the LEP 2009, Schedule 5 the following heritage items have been identified:

- 199 River Street
- 24 Gilmore Street

All development proposals are subject to clause 5.10 of the LEP.

It will be necessary to impose design guidelines for future residential development in the vicinity of these items to ensure that the new development does not compromise the elements of heritage significance.

8.5.4 Aboriginal heritage sites

The Goulburn Mulwaree Council Aboriginal Archaeological Survey Policy identifies specific criteria as being an indicative of a site/area in which Aboriginal artefacts are likely to occur. Several of these criteria are located within the Clyde Street development area, namely, land that is in proximity to a watercourse, identified by a "blue line" on the 1:25,000 topographic map; land in close proximity to the Wollondilly River; lower slopes of undulating hills; ridgelines and hilltops.

According to the studies completed for Goulburn on Aboriginal archaeology and site location, there are no specific Aboriginal sites have been identified in the Clyde Street area.

In accordance with the Aboriginal Archaeological Survey Policy, where a particular site within the Clyde Street development area is deemed to meet one or more of these criteria the following procedure must be followed.

A preliminary assessment to determine the likelihood of artefacts at the site. This assessment to include:

- review of the site history
- identification of the level of disturbance
- literature review and consultation with the National Parks and Wildlife Service on information they hold
- site inspection by a person skilled in identifying Aboriginal artefacts
- any consultation with the local Aboriginal community
- a statement as to the likelihood of artefacts being found and the need, if any, for a more detailed Archaeological survey

An Archaeological Survey undertaken by an appropriately accredited person/organisation in accordance with relevant guidelines on the preparation of such documentation.

8.5.5 Potentially contaminated sites

Grazing has been the main agricultural use in the area and no sites have been identified as being potentially contaminated.

8.5.6 Development potential

Land that is suitable for development has been identified by removing land subject to the constraints identified. The total area covers 213ha and the area of land available for development totals approximately 169ha. The distribution of these lots is shown in **Figure 8-5-3**. The minimum lot size to be created within the developable land areas is 2000m^2. This would yield approximately 845 lots if all land could be developed to the 2000m^2 minimum. Factoring in land constraints, location of existing houses and road requirements, the yield is estimated to be 500 (including existing houses). The overall density of development expected within this locality following further development is one dwelling per 3300m^2. In reality the land constraints in the area will result in a variety of lot sizes.

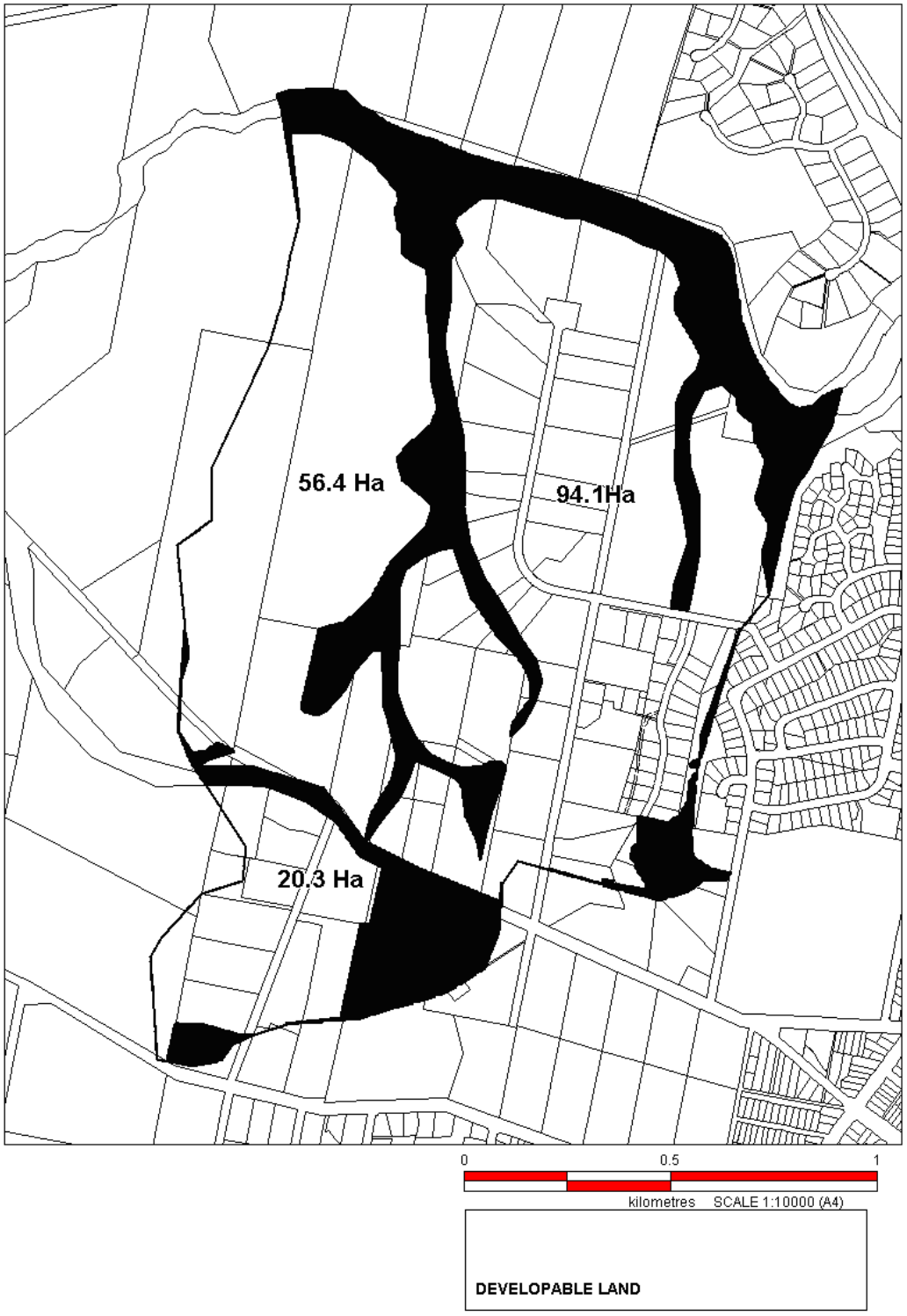
The number of lots for the area has been calculated based on the anticipation that owners of parcels of land greater than an area of 5 hectares will account for the majority of new lots created. It is also anticipated that approximately half of owners of parcels of land of between 1 and 5 hectares in area will subdivide their land to create an additional lot. It is important that an estimate is made on the number of new lots created, rather than calculating that all developable land will become lots of 2000m^2. This is because infrastructure must be designed to meet the needs of the expected population. If infrastructure is designed that overcompensates for the actual population, the cost of providing the infrastructure would effectively stifle any further development in this locality.

With occupancy rate of 2 persons per household (from Goulburn Mulwaree Strategy 2020) and assuming each lot will be used for a single dwelling there is the potential for an ultimate population of 1,000 people.

POTENTIAL RESIDENTIAL LOTS: 500 lots (including existing lots)

POTENTIAL POPULATION: 1000 people

Figure 8-5-3: Development potential



8.5.7 Subdivision

Note: Reference chapters 7.4.3 and 7.6 of this Plan.

Objectives

To encourage subdivision layouts that:

- allow integration of neighbourhoods between "natural" boundaries or barriers and connections between the neighbourhoods
- minimise environmental impact by ensuring subdivision into residential lots only occurs on land free of development constraints
- are based on a hierarchy of roads for the efficient movement of vehicle traffic. Roads will be connective and efficient, giving motorist multiple travel paths. Long cul-de-sacs are unsuitable for efficiency and safety reasons
- focus open space on the drainage constraints and network
- incorporate water sensitive urban design principles into subdivision design
- encourage northern orientation of dwellings for energy efficiency benefits and passive solar access
- ensure residential lots have a sufficient area to allow for the siting of a dwelling and ancillary buildings (including private open space, vehicle access and parking)
- residential lots face public areas (including open space areas) for passive surveillance
- provide for protection/enhancement of visually prominent sites/locations
- protect riparian areas and native vegetation areas
- consider existing residential development

Controls

8.5.7.1 Subdivision lot size

Minimum lot size is 2000m². However this minimum will need to take into account the suitability of the site and the infrastructure provided (refer to clause 7.3 of the LEP 2009).

Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded.

Allotments should be able to accommodate a building envelope of 150m^2 with the minimum dimensions of 10m by 15m, within a 6m front building setback and a 1m side and rear setback and clear of any easements.

8.5.7.2 Lot orientation

(a) Solar access

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

(i) Align streets east-west and north-south. Aim for north-south streets within 20^{o} west and 30^{o} east of true north and east-west streets within 30^{o} south and 20^{o} north.

(ii) Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

(iii) Allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.

(iv) Allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

(v) Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3 pm.

(vi) Regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.

(vii) On sloping sites, north-facing sites improve opportunities for solar access.

(b) Passive surveillance

Lots shall face toward public open space areas, vegetation conservation areas and public roads to encourage passive surveillance from dwellings over these public spaces to assist with safety and security.

Where this cannot be achieved open style fencing is required to promote passive surveillance of public open space and public road area with some landscape screening to provide privacy.

8.5.7.3 Bicycle and pedestrian movements

Bicycle and pedestrian movements to be addressed in accordance with Council's Bicycle Strategy 2007.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities.

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

8.5.7.4 Streetscape

Existing trees are to be retained where possible and appropriate.

Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer Council Policy – Bushfires and Vegetation Controls)

Streetscape planting themes are to be developed based on native tree species suitable for the locality and in an urban context.

Boundary fencing shall be rural timber style fencing i.e. post and rail with mesh. This is to maintain semi-rural amenity of this locality.

8.5.7.5 Open space

Areas identified as being as a drainage line shall be set aside as a drainage reserve.

The open space network is to be focused on these drainage lines.

Drainage lines are to be re-established as "natural" watercourses largely through revegetation with native species. These will meet the passive outdoor recreation needs.

Environmental management plans for the natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.

8.5.7.6 Sites of visual importance

Areas of visual importance have a building form of significant architectural and design merit or a prominent landscape feature. For this area the following sites/areas have identified:

- gateway entries to neighbourhood entrances within the plan area
- ridgelines
- treed hilltops or ridgelines
- subdivision design must address areas of visual importance and demonstrate how they will be protected or enhanced

8.5.7.7 Drainage and water sensitive urban design

Principles of water sensitive urban design are to be incorporated into subdivision design.

Development must comply with the neutral or beneficial effect on water quality test (refer State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011).

Drainage lines are to focus on the "natural" or existing drainage lines and integrated into the open space network (refer to **Figure 8-5-4**).

A Detention basin may be required to regulate and control runoff to rates equal with "natural" runoff.

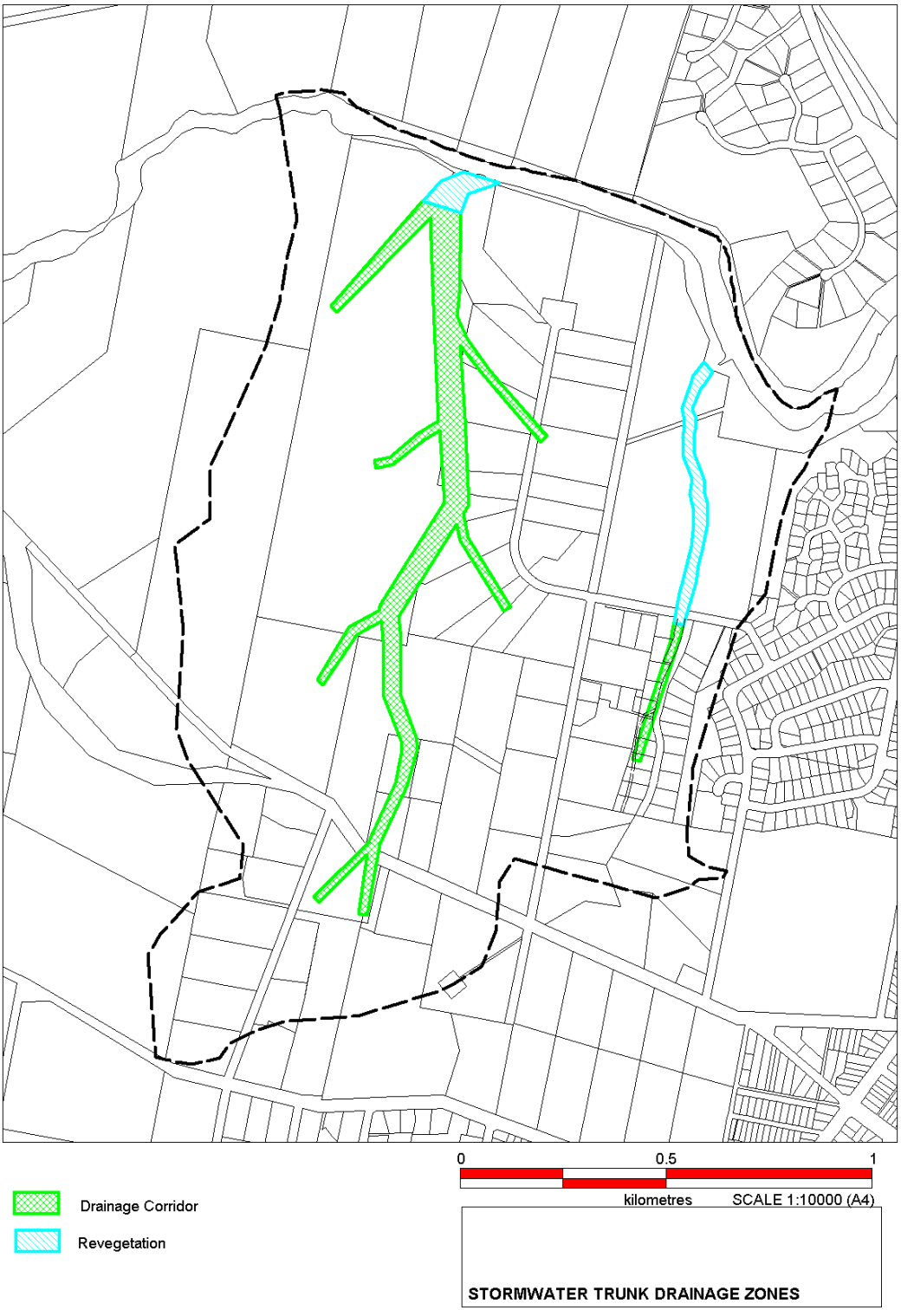
Detention ponds and other stormwater treatment devices are to be "offline" and "at source" to ensure stormwater runoff is treated prior to entering these areas.

Use of rainwater tanks will assist with minimising runoff associated with minor rainfall events.

Stormwater drainage systems are to be designed in accordance with the current version of Council's Standards for Engineering Works.

Note: Development within this plan is to be constructed in accordance with the principles of Water Sensitive Urban Design and specifically in accordance with the report, "Water Sensitive Urban Design for Clyde Street Precinct, Goulburn", Storm Consulting Pty Ltd (Storm), August 2004.

Figure 8-5-4: Trunk drainage zones



8.5.7.8 Road requirements

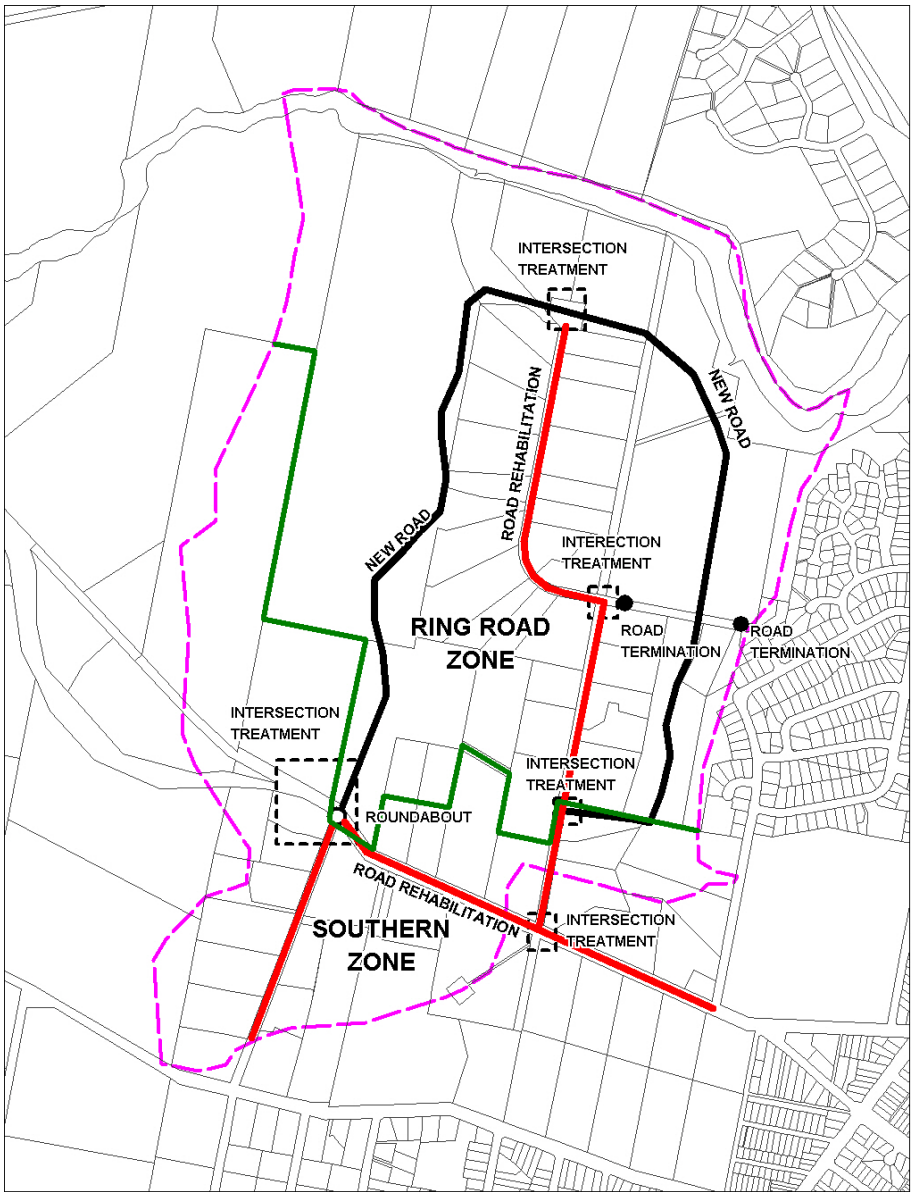
8.5.7.9 Sanctuary Drive

Provision for a Ring Road, which will distribute traffic more evenly and provide greater access to Clinton Street. This will reduce traffic pressure on existing residential areas to the east of the study site and allow for easy access to the town centre for new residents.

New road to be sufficient to accommodate linkage to Clyde Street for a potential school bus service.

Consideration is to be given to the Environment Protection Authority *Environmental Criteria for Road Traffic Noise May 1999*.

Figure 8-5-5: Proposed road network



8.5.7.10 General road provisions

All roads are to be designed and constructed in accordance with Council's Standards for Engineering Works.

Residential development shall be designed to:

- ensure satisfactory and safe operation with the adjacent road system
- take into account water sensitive road design practices
- have regard to contours and avoid large cuts and fills, steep slopes, prominent hilltops and creeks
- avoid long dead ends and cul-de-sac heads on the down slope end of roads
- not dam gullies, creeks or drainage lines
- stabilise, replant and/or top dress exposed batters and table drains and improve slope stability on all earthworks

All proposed road, splay and road widening shall be dedicated to Council, free of cost as public roads.

Where the design of the access road involves realignment, provided the Council egress to acquire any adjoining land, which may be necessary to affect such realignment, the applicant shall bear full cost of such acquisition.

The use of decorative paving such as brick, interlocking pavers or coloured concrete is encouraged as these materials can enhance the appearance of the street and signify to motorists it's residential function and corresponding appropriate driver behaviour. (This is of particular importance for the proposed T-intersection at the junction of Clyde Street and the proposed Ring Road, and at the potential Clyde Street/Turner Street junction).

Where cul-de-sacs are included in road design, when all other options are considered, alternative cul-de-sac heads that may be considered are square offset, T-Heads and Y-Heads.

Include appropriate traffic calming devices on the collector roads.

Roads should be placed between houses and open space areas/vegetation conservations areas to provide a buffer separation for fire management and vegetation preservation along with passive surveillance benefits.

8.5.8 Residential development

Objectives

To encourage residential development in which:

- there is a diversity of housing stock and type to meet diverse housing needs
- dwellings to face public spaces for passive surveillance
- living areas are orientated to the north for energy efficiency benefits
- dwelling design and siting respects the privacy of neighbours
- on site vehicle parking is provided to minimise congestion within the streets
- garages and fences do not dominate the streetscape
- there is easy access to community facilities
- rainwater tanks are provided to supplement water supply and control stormwater runoff.

Controls

8.5.8.1 Detached dwellings

(a) Streetscape

Dwellings are to face public spaces (roads and open space areas).

Dwellings are not to be hidden by high fences.

Garages are to be located behind the building facade so that they do not dominate the streetscape.

Fences shall be of a design that is sympathetic to the existing semi-rural character of this locality.

(b) Height

Maximum recommended height is two storeys.

(c) Energy efficiency

To maximise energy efficiency the internal and external living areas should be located to the north side of the dwelling. Further requirements are specified in **chapter 4** of this plan.

(d) Privacy

Private open spaces and living rooms of adjacent dwellings should be protected from direct overlooking, by:

- appropriate dwelling layout
- use of distance or slope
- screening devices like screen vegetation and courtyard walls

First floor decks, balconies and the like, are not supported where they overlook or have the potential to directly overlook habitable rooms or private open space of adjoining properties.

Windows of one dwelling should not be located opposite the windows of another dwelling unless direct views are restricted:

- off-set windows
- use of narrow, translucent or obscured windows
- provide sufficient distance between dwellings

(e) Acoustic privacy

Noise generating area of a development (e.g. driveway, air conditioning units, swimming pool areas) should be adequately screened or located away from the bedroom areas to minimise impact on neighbours.

Bedroom windows to be a minimum 3m from shared streets, driveways and parking areas of other dwellings.

Transmission of noise between adjoining properties should be minimised.

Locate active recreation areas (swimming pools, spas, tennis courts, BBQs), driveways, carports, garages and garbage collection areas, pumps and air conditioners, away from bedrooms of adjacent dwellings.

Dwellings adjoining and other noise generating land uses should be designed and sited to minimise noise impacts.

Locate bedrooms and other noise sensitive rooms away from the road.

(f) Parking

Provision for a least one covered parking space (e.g. carport or garage) and one tandem vehicle space (e.g. driveway area in front of garage or carport).

(g) Rainwater tanks

A rainwater tank is to be provided to supplement water supply and control stormwater runoff.

The tank shall have a minimum capacity of 10,000 litres.

The rainwater tank supply shall be connected to the hot water service, laundry and toilet facilities with a top up connection into the tank.

(h) Water sensitive urban design

House design should include water sensitive urban design features such as porous paving, infiltration devices and landscaping.

(i) Dual occupancy and multi dwelling housing accommodation

Development and density requirements in the subject R5 Large Lot Residential zone are contained in chapter 4 and also chapter 6 for development in Zone R5, Large Lot Residential

8.5.9 Other development

8.5.9.1 Community and commercial facilities

No sites have been identified specifically within this plan to be used for community or commercial facilities. Provision of community facilities will be the responsibility of individual landholders who may wish to operate or partner community or commercial facilities. Development other than residential development is largely prohibited in the Large Lot Residential zone (refer to the LEP 2009 Land Use table for Zone R5).

8.5.9.2 Schools

No additional school facilities have been identified for the area to serve the estimated population.

8.5.9.3 Open space

Council's Leisure – Recreation and Social Planning Study identifies that there is sufficient active recreational reserves and sports grounds provided elsewhere in the City, which are adequate to cater for any organised sporting needs from the area. However, identified detention basins can have a dual function to any unidentified active sporting recreation needs if required.

The balance of the open space can be satisfied via the passive open space created along the drainage lines along with any neighbourhood park requirements. These areas can also provide for informal active recreation areas.

8.5.10 Zoning plans and lot size map

8.6 Common Street

Objectives

- to identify the development constraints to urban development of land in the Study area

- to provide an indicative plan for the future land use, subdivision and development of the area
- to identify and protect natural and heritage assets in the study area

8.6.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-6-1**. This land is bounded by:

Harris Street, Gorman Road, Waste Management Centre, Chiswick Street, Hetherington Street, Arthur Street, Eaton Street, Sydney-Melbourne Rail Line, Long Street (north).

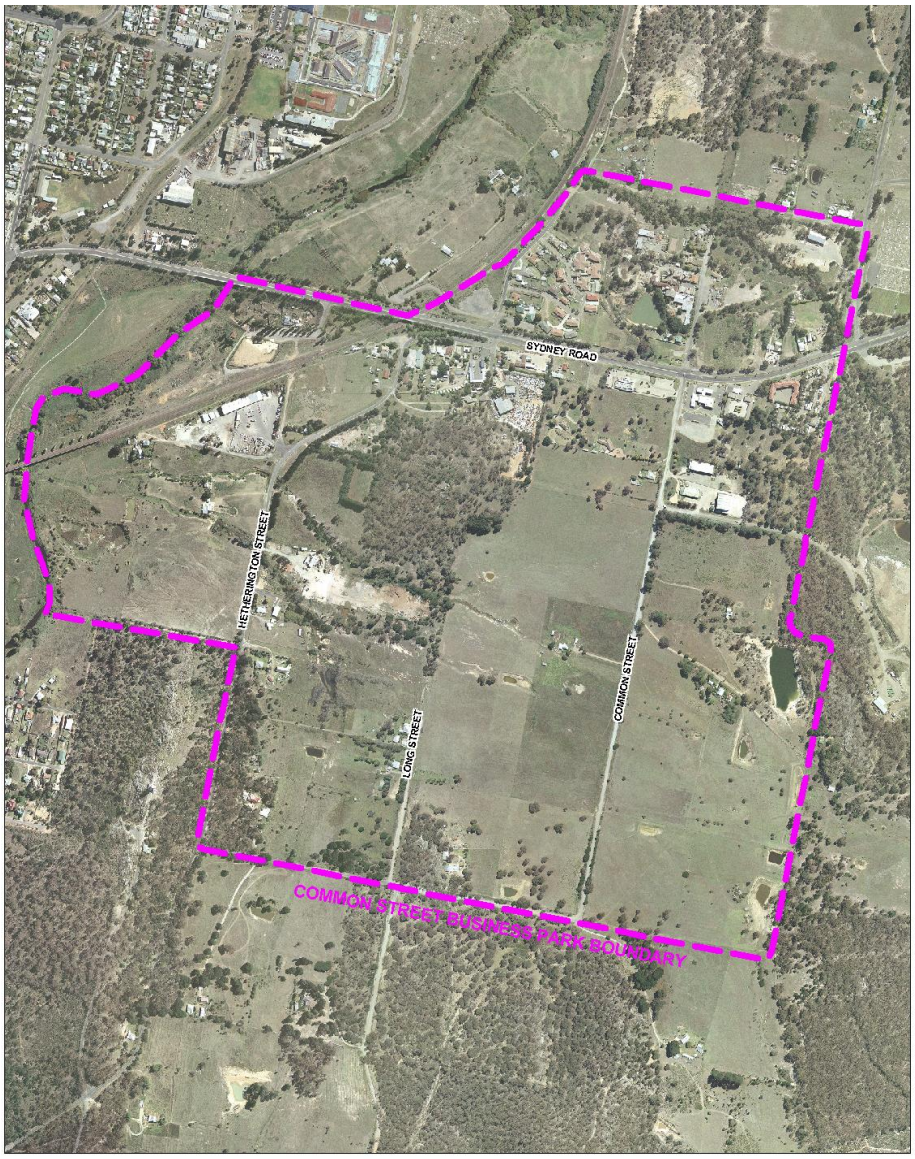
8.6.2 Constraints

Investigations have been undertaken into the potential for industrial development in the land subject to this plan. The reasons for these investigations were to identify opportunities and constraints to development to guide future development and to be used for any rezoning of land in the area.

The initial planning process included the identification of main constraints to development within the area, which includes:

- Water and sewer infrastructure requirements (and estimated costs)
- Road requirements
- Drainage lines
- Flooding
- Land capabilities
- Land ownership
- Remnant vegetation
- Ridgelines, steep land and visually prominent sites
- Historic features
- Bushfire hazard

Figure 8-6-1: Land to which Plan applies – Common



Street

The constraints were mapped on cadastre and an aerial photograph, which identified land free of constraints (i.e. developable land).

The developable land was then refined with collector roads and open space areas identified.

The main constraints to development are mapped and shown in **Figure 8-6-2**.

The land subject to constraints is not suitable for urban development and this needs to be reflected in any development applications.

8.6.2.1 European heritage

In Schedule 5 to the LEP 2009 the following heritage items have been identified:

- 2-12 Common Street
- 14 Common Street
- 110 Long Street

All development proposals are consequently subject to the provisions of clause 5.10 of the LEP.

While not identified as a heritage item the oldest dwelling in Goulburn is located on the western side of Long Street (central). Any redevelopment of this building or site must be sympathetic to the heritage values of the building.

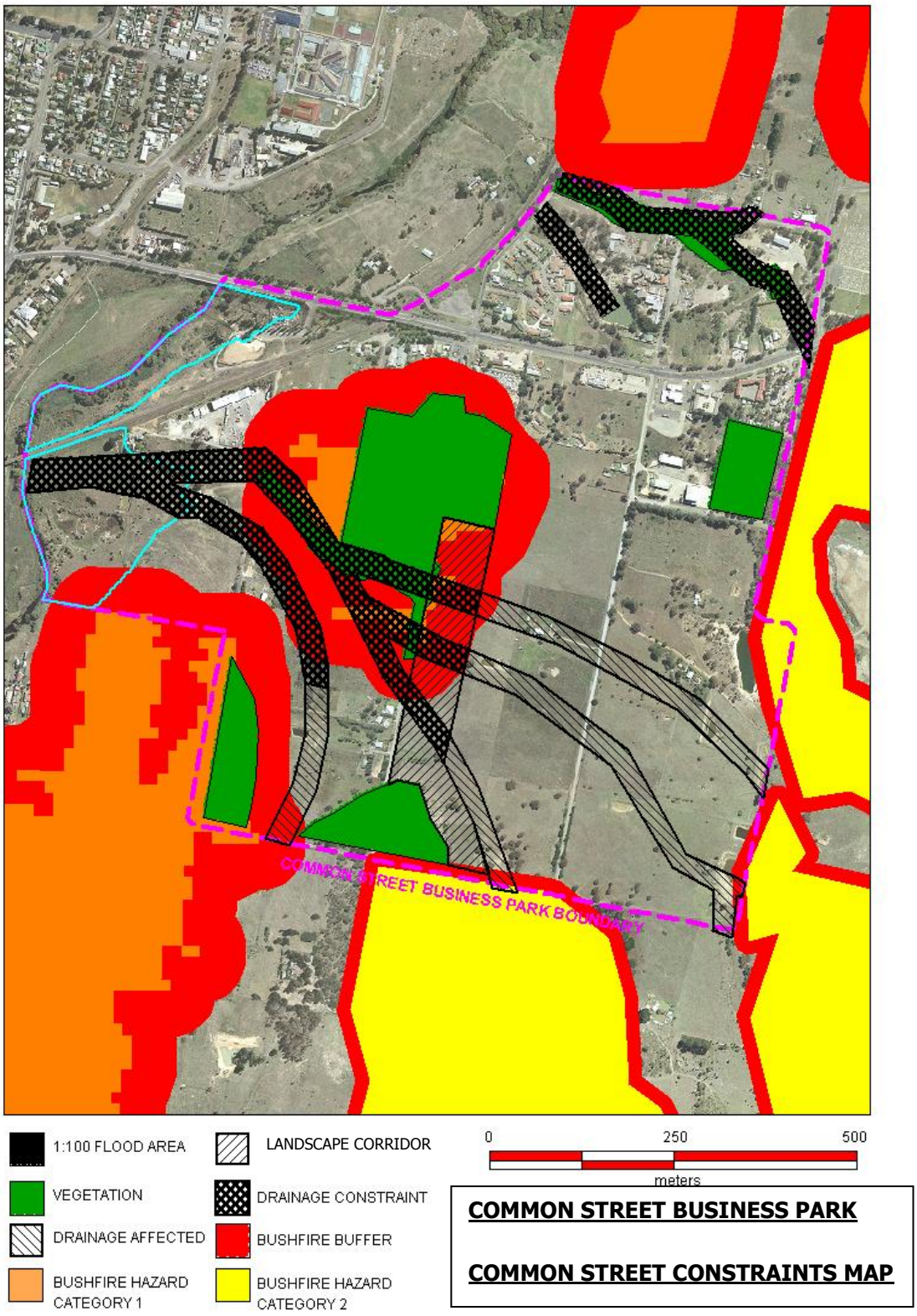
In addition, the Railway viaduct is of historic interest and the former Railway Gatehouse is a National Trust recorded building.

8.6.2.2 Aboriginal heritage sites

According to Council studies completed for Goulburn on Aboriginal archaeology and site location, there are no Aboriginal sites identified in the Common Street area.

A site inspection with a representative of the Pejar Aboriginal Land Council has established that likely sites for artefacts area those that are relatively undisturbed such as watercourses, natural vegetation areas and landmarks sites (e.g. rock outcrops, hilltops). These areas have been generally recognised as being constrained for any development and are to be left undisturbed or restored to “natural” conditions (e.g. revegetation).

Figure 8-6-2: Environmental constraints



Council has adopted an interim policy on Aboriginal Archaeological Survey. Under this policy sites of potential artefacts have been identified. For development proposals in any of the areas identified an assessment will be required in accordance with the policy. The

areas identified for Common Street are sites along the watercourses downstream of Long Street and the Mulwaree Ponds floodplain area.

8.6.2.3 Potentially contaminated sites

Grazing has been the main agricultural use in the Common Street area and no sites have been identified as being potentially contaminated.

Existing service station, former fuel depots, brickworks/landfill and car wrecking yard are sites, which may involve activities that could lead to contamination. Redevelopment at these sites will need to address this issue initially by undertaking a preliminary hazard analysis and possible testing.

8.6.2.4 Bushfire hazards

There are two bushfire categories affecting the study area each with different buffer distances to the hazard source:

- Category 1 – 100m vegetation buffer.
- Category 2 – 30m vegetation buffer.

These categories govern the type and extent of construction in these areas. For further details refer to the Rural Fire Service Planning for Bushfire Protection Guidelines 2006.

8.6.3 Developable land development potential

Land that is suitable for development has been identified by removing land subject to the constraints identified. The area of land available for development totals approximately 120 hectares (refer to **Figure 8-6-3**).

The zone proposed for the land available for development is B6 Enterprise Corridor.

Refer to the LEP 2009, Land Use table for B6 Zone for permissible uses.

8.6.4 Subdivision

Note: Reference chapters 7.4.2 and 7.6 of this Plan.

Objectives

To encourage subdivision layouts that:

- minimise environmental impact by ensuring subdivision into lots only occurs on land free of development constraints
- are based on a hierarchy of roads for the efficient movement of vehicle traffic and prevent infiltration of industrial traffic into residential areas
- focus open space on the drainage constraints and network
- incorporate water sensitive urban design principles into subdivision design
- ensure lots have a sufficient area to allow for the siting of buildings, landscaping vehicle access and parking
- have lots and buildings facing public areas (including open space areas) for passive surveillance
- provide for protection/enhancement of visually prominent sites/locations
- protect riparian areas and native vegetation areas

Controls

8.6.4.1 Subdivision lot size

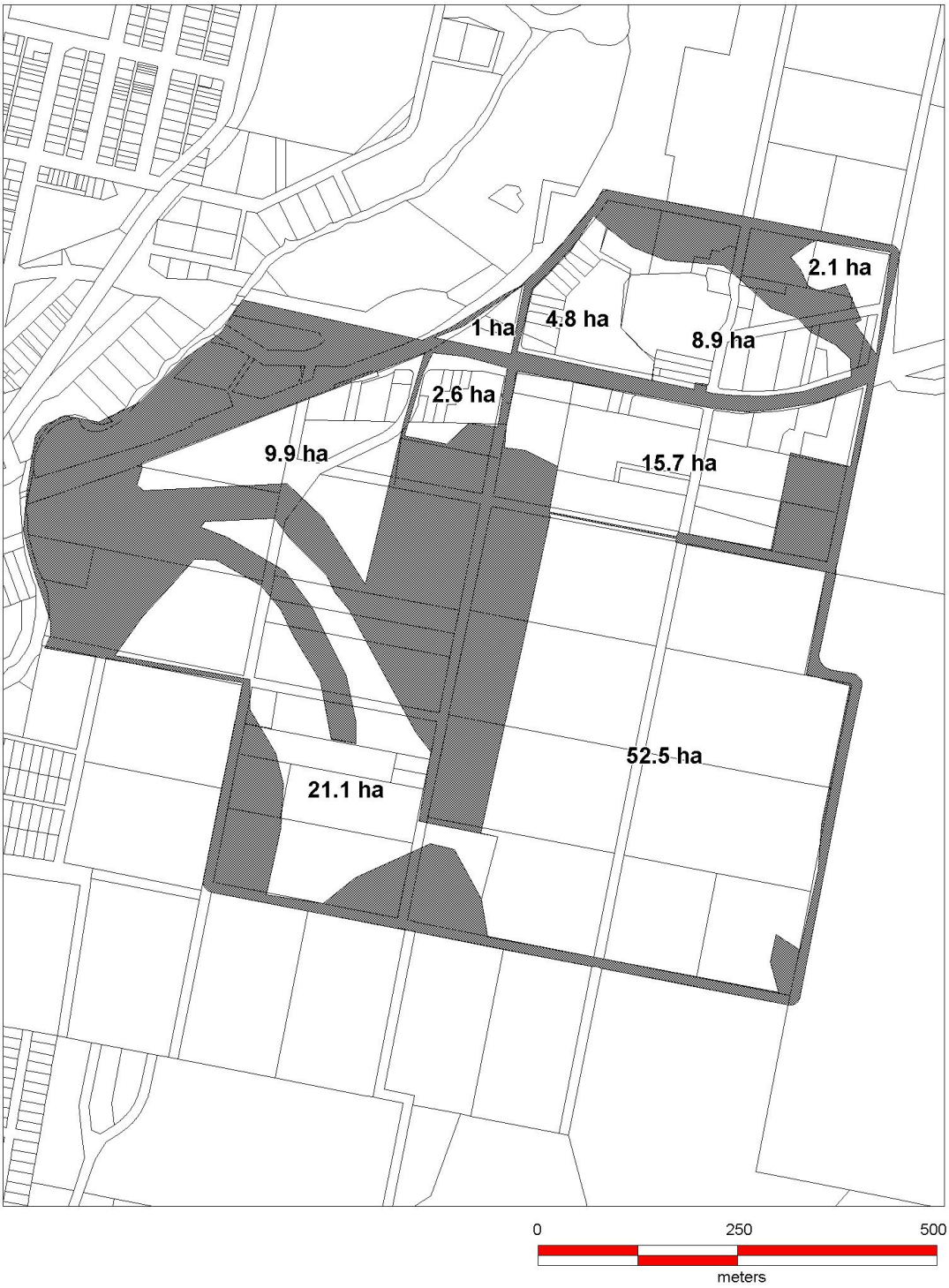
No minimum lot size specified

Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded. For industrial type lots the access handle should have a minimum width of 15 metres.

The ratio of enterprise type lots sizes and frontages are detailed in the following table:

Lot Size	Minimum Frontage
1 ha	60m
6,000m^2	50m
2,000m^2	20m
1,000m^2	20m

Figure 8-6-3: Developable land



Lots for residential use should be a minimum of 700m² and able to accommodate a building envelope of 150m2 with the minimum dimensions of 10m by 15m, within a 6m front building setback and a 1m side and rear setback and clear of any easements.

8.6.4.2 Lot orientation

(b) Solar Access

The following design techniques are to be adopted for residential and rural residential type lots to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

(i) Align streets east-west and north-south. Aim for north-south streets within 20° west and 30° east of true north and east-west streets within 30° south and 20° north.

(ii) Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

(iii) Allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.

(iv) Allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

(v) Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3 pm.

(vi) Regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.

(vii) On sloping sites, north-facing sites improve opportunities for solar access.

(c) Passive surveillance

Lots (residential and light industrial/warehouse) shall face toward public open space areas and public roads to encourage passive surveillance from buildings/dwellings over these public spaces to assist with safety and security.

8.6.4.3 Bicycle and pedestrian movements

Bicycle and pedestrian movements to be addressed in accordance with Council's' Bicycle Strategy 2007.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities.

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

8.6.4.4 Streetscape

Existing trees are to be retained where possible and appropriate.

Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer Council Policy – Bushfires and Vegetation Controls)

Streetscape planting themes are to be developed based on native tree species suitable for the locality and in an urban or semi-rural context.

8.6.4.5 Open space

Areas identified as being a drainage line shall be set aside as a drainage reserve (refer to **Figure 8-6-2**) other than the drainage line upstream of Common Street, which will be combined into a single channel.

The open space network is to be focused on these drainage lines and the landscape corridor.

Drainage lines are to be re-established as “natural” watercourses largely through revegetation with native species. These will assist in recreating the natural landscape and providing opportunities to link remnant bushland areas.

Detention basins to have a dual function – stormwater control and bushland revegetation areas.

Environmental management plans for the natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.

8.6.4.6 Sites of visual importance

Areas of visual importance have a building form of significant architectural and design merit or a prominent landscape feature. The following sites/areas have identified:

- Bushland gateway entry to the City along Sydney Road opposite the General Cemetery

- Ridgelines.
- Treed hilltops or ridgelines

Subdivision design must address areas of visual importance and demonstrate how they will be protected or enhanced.

Sites of visual importance have been identified as "environment protection" and constrained for development.

8.6.4.7 Enterprise Corridor Development

Refer to chapter 6.10 of this plan.

(a) Enterprise Corridor – Outline Plan

Combining the constraints (**Figure 8-6-2**) and developable land (**Figure 8-6-3**) mapping with the development objective of the enterprise corridor zone gives an indication of what the area may look like into the future. **Figure 8-6-1** – Outline Plan provides a diagrammatic representation of this situation.

The enterprise corridor zone allows a mixed use of land uses including business and office premises, warehouse or distribution centre, light industrial, retail premises (except retailing of food and clothing – so as to maintain the economic strength of the main business centres)

The outline plan also indicates preferred location for the nominated land uses of:

- Business/Retail; and
- Light industrial/warehouse.

(b) Landscape Corridor / Drainage Reserve

For the light industrial development of the Common Street area it is essential that a buffer separation, by way of a landscape corridor is provided to separate existing residential development from future light industrial/warehouse development. The landscape corridor / Drainage Reserve is required to protect the amenity of residential properties, existing and proposed and to limit intrusion of residential activities into the operation of the light industrial/warehouse precinct.

The landscape corridor / drainage reserve has been sited along the eastern side of Long Street (central) because it is:

- At the junction of drainage lines/overland flow paths.
- At the head of the identified watercourses.

- At the periphery of the light industrial/warehouse precinct.
- A potential vegetated corridor link between stands of remnant vegetation, and
- Not restricted by the existing pattern of residential development on the western side of the street.
- A nominated drainage reserve area under previous planning controls, titled Common Street Business Park, trunk drainage corridor.

The landscape corridor / drainage reserve will be required to be set-aside at the development application stage. The nominated area shall be free of buildings and used essentially for trunk drainage corridors, wetlands and / or on-site detention and reuse schemes as well as landscape corridors.

This corridor has been zoned Rural RU6 Transition and will link the environmental zones to the north and south.

The required width of the landscape corridor / drainage reserve has been estimated at approximately 100m. Final width will be dependant on design and the area needed to accommodate naturalised drainage systems (trunk drainage corridors), wetlands and / or on site detention and reuse schemes and landscape corridor widths.

The naturalised drainage systems required varies in width from 31 – 46 metres (upper catchment) and 44 – 66 meters (lower catchment) (Trunk Drainage Management Plan, Storm Consulting).

Where conventional “pit and pipe drainage” systems are accepted in lieu of naturalised drainage corridors the loss of natural drainage area shall be incorporated into the nominated landscape corridor / drainage reserve area.

Designs shall incorporate water sensitive urban design principles and reference *“Water Sensitive Urban Design for Common Street Business Park Goulburn,” Storm Consulting Pty Ltd, March 2004.*

8.6.4.8 Zoning Plans and lot size maps

8.6.4.9 Drainage and water sensitive urban design

The principles of Water Sensitive Urban Design are to be incorporated into subdivision design.

Development must comply with the neutral or beneficial effect on water quality test (refer State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*)*

Drainage lines are to focus on the natural drainage lines and integrated into the open space network.

Drainage design is to minimise run off into vegetation conservation areas to assist with ongoing preservation.

Detentions basins may be required to regulate and control the runoff to rates equal with "natural" runoff.

Detention ponds and other stormwater treatment devices are to be "offline" and "at source" to ensure stormwater runoff is treated prior to entering these areas.

Use of rainwater tanks is mandatory to assist with water supply and stormwater infrastructure requirements.

Stormwater drainage systems are to be designed in accordance with the current version of Council's Standards for Engineering Works.

The piped drainage system to be designed for storm events with the following ARI's:

- Commercial/industrial 10 years
- Residential and rural residential 5 years.

Higher order storms events to be based on overland flow systems along "natural" drainage lines.

Note: Development within this plan is to be constructed in accordance with the principles of Water Sensitive Urban Design and specifically in accordance with the report commissioned by Council: Water Sensitive Urban Design Common Street Business Park, Goulburn by Storm Consulting Pty Ltd December 2003.

Figure 8-6-4: Common Street trunk drainage corridor

Figure 8-6-5: Common Street Outline Plan

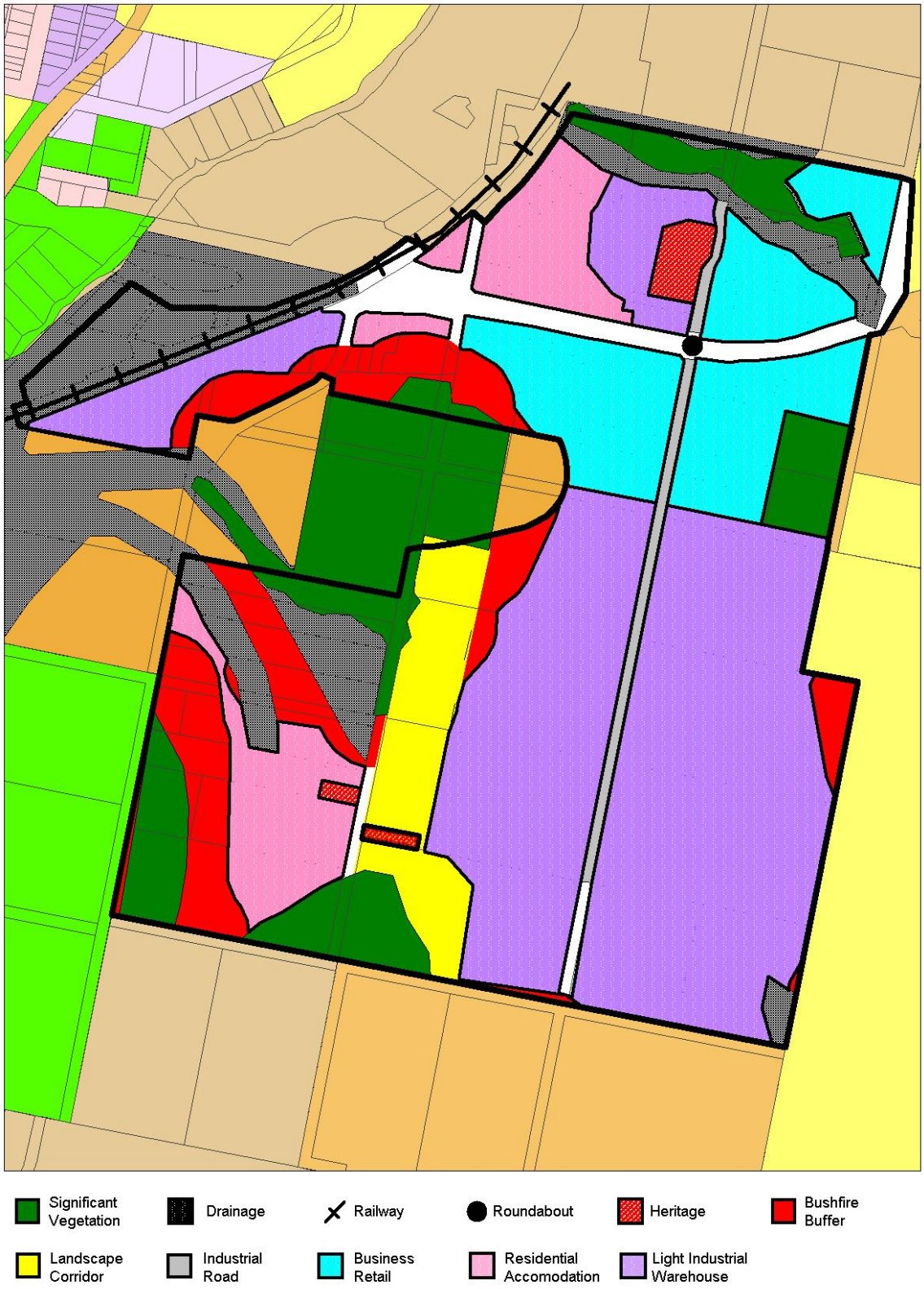


FIGURE 8.6.1 - Outline Plan

8.6.5 Road requirements

8.6.5.1 Common Street

Common Street North is to have a 10m wide carriageway pavement.

Common Street South is to have a 13m wide carriageway pavement

8.6.5.2 Enterprise development roads

Proposed roads widths are to be 22m with a 13m pavement plus kerb and gutter.

8.6.5.3 Sydney Road

Sydney Road is a Classified Road.

Direct access from Sydney Road or a new road access off Sydney Road requires Roads and Maritime Services approval, with the exception of existing development.

8.6.5.4 General road provisions

All roads are to be designed and constructed in accordance with the current version of Council's Standards for Engineering Works.

Development shall be designed to:

- ensure satisfactory and safe operation with the adjacent road system
- take into account water sensitive road design practices
- have regard to contours and avoid large cuts and fills, steep slopes, prominent hilltops and creeks
- avoid long dead ends and cul-de-sac heads on the down slope end of roads
- not dam gullies, creeks or drainage lines
- stabilise, replant and/or top dress exposed batters and table drains and improve slope stability on all earthworks

All proposed road, splay and road widening shall be dedicated to Council, free of cost as public roads.

Where the design of the access road involves realignment, provided the Council agrees to acquire any adjoining land, which may be necessary to affect such realignment, the applicant shall bear full cost of such acquisition.

The use of decorative paving such as brick, interlocking pavers or coloured concrete is encouraged as these materials can enhance the appearance of the street and signify to motorists it's residential function and corresponding appropriate driver behaviour.

Where cul-de-sacs are included in road design, when all other options are considered, alternative cul-de-sac heads that may be considered are square offset, T-Heads and Y-Heads.

Include appropriate traffic calming devices on the collector roads.

Roads should be placed between houses and open space areas/vegetation conservations areas to provide a buffer separation for fire management and vegetation preservation along with passive surveillance benefits.

8.7 Marys Mount

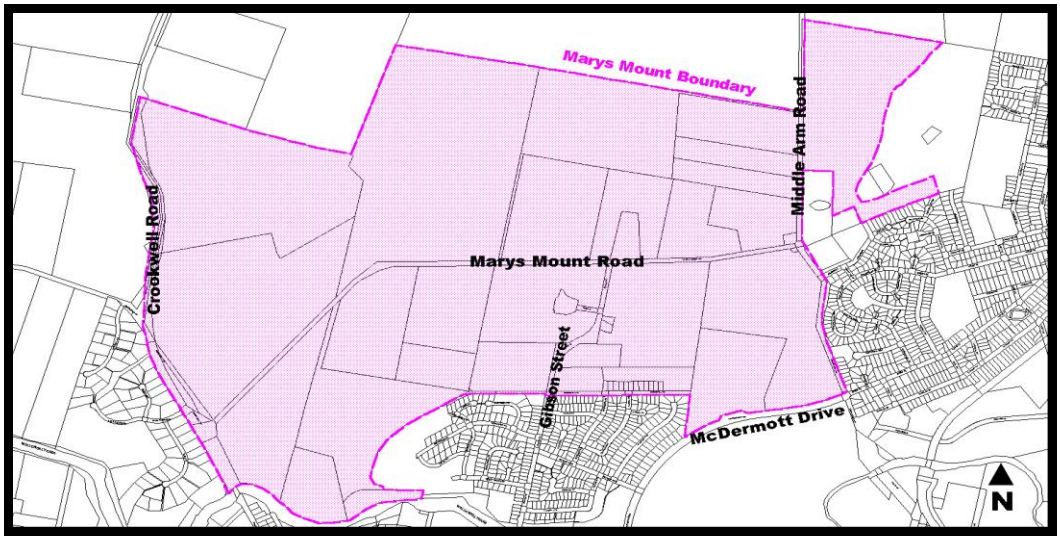
Objectives

- To provide an indicative plan for the future residential subdivision and development of the area based on the development constraints and infrastructure design.
- To identify and protect natural and heritage assets in the Marys Mount development area.

8.7.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-7-1**.

Figure 8-7-1*:* **Land to which Plan applies – *Marys Mount***



8.7.2 Constraints

Opportunities and constraints to development have been identified to guide future residential development and for any future planning proposals.

The initial planning process included the identification of the main constraints to development within the area, which includes:

a) Water and sewer infrastructure requirements (and estimated costs)
b) Road requirements
c) Drainage lines
d) Flooding
e) Land capabilities
f) Land ownership
g) Remnant vegetation
h) Historic features
i) Potentially contaminated land

These constraints were mapped on cadastre and an aerial photograph, which identified land free of constraints (i.e. developable land).

The developable land was then refined with collector roads and open space areas identified. Demand for shops, schools and other community facilities were then considered based on potential population numbers.

The main constraints to development are mapped and shown in **Figure 8-7-2**.

8.7.2.1 European heritage

In the LEP 2009, Schedule 5 the following heritage items have been identified:

- 133 Marys Mount Road; and
- 38 Marys Mount Road.

All development proposals involving these sites are subject to clause 5.10 of LEP 2009.

It will also be necessary to impose design guidelines for future residential development in the vicinity of these items to ensure that the new development does not compromise the elements of heritage significance.

The Ledgerville property also has some local heritage value and a similar approach is to be taken.

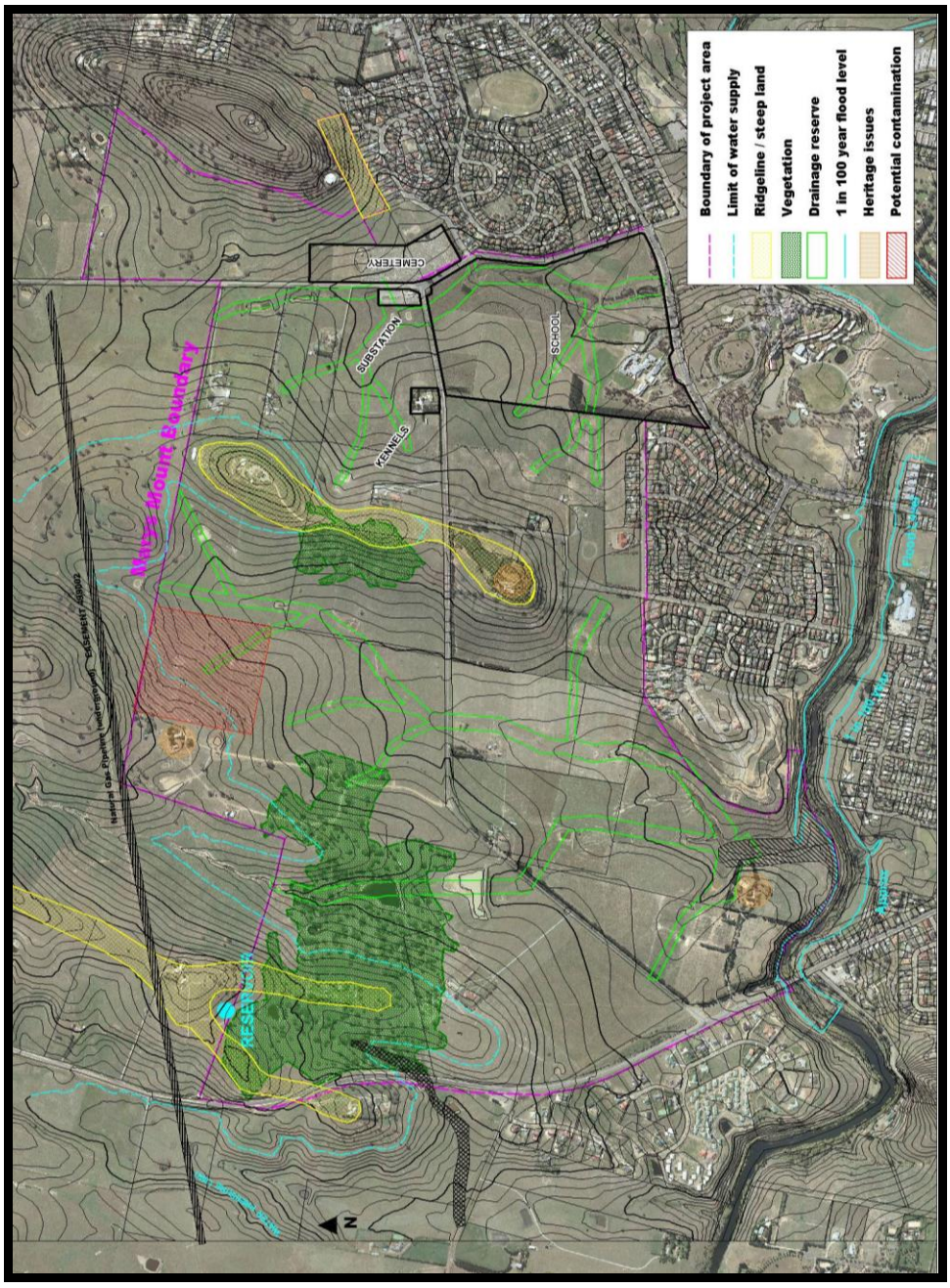
8.7.2.2 Aboriginal heritage sites

According to the studies completed for Goulburn on Aboriginal archaeology and site location, no aboriginal sites have been identified in the Marys Mount area. However, there may be potential for some sites near the Wollondilly River.

8.7.2.3 Potentially contaminated sites

Pastoral grazing has been the main agricultural use in the area and no sites have been identified as being potentially contaminated. However, the orchard area around "Tenneriffe" may have involved the use of chemical sprays. An assessment in accordance with State Environmental Planning Policy No.55 – Remediation of Land will be necessary prior to any rezoning/subdivision proposal for the site.

Figure 8-7-2: Environmental constraints



8.7.3 Development potential

Land that is suitable for development has been identified by removing land subject to the constraints identified. The area of land available for development is approximately 234 hectares based on an average residential lot size of approximately 1,000 m^2.

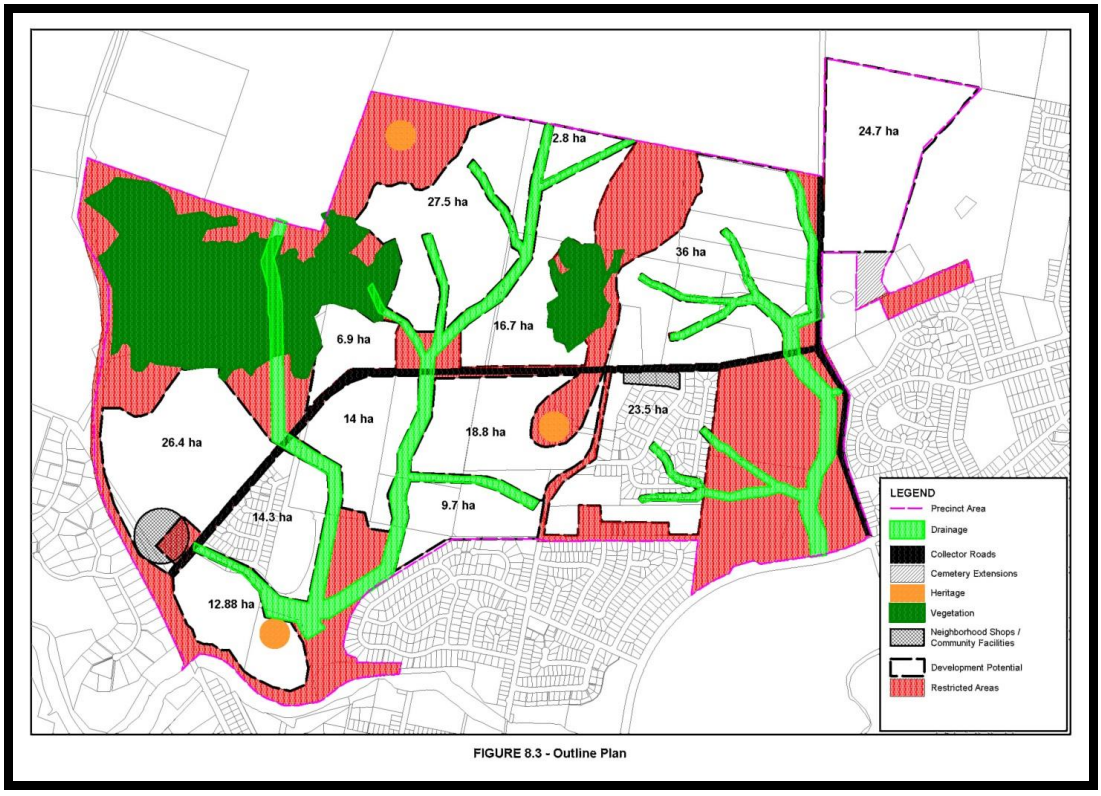
With an occupancy rate of 2 persons per household (from Goulburn Mulwaree Strategy 2020) and assuming each lot will be used for a single dwelling there is the potential for an ultimate population of 4,000 people.

The development potential is displayed in **Figure 8-7-3** (below).

POTENTIAL RESIDENTIAL LOTS: 2,000

POTENTIAL POPULATION: 4,000

Figure 8-7-3: Development potential



8.7.4 Subdivision requirements

8.7.4.1 Subdivision lot size

(a) Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded.

(b) Allotments should be able to accommodate a building envelope of 150m^2 with the minimum dimensions of 10 metres by 15 metres, within a 6 metre front building setback and a 1m side and rear setback and clear of any easements.

8.7.4.2 Lot orientation

a) Solar Access

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses.

i. Align streets east-west and north-south. Aim for north-south streets within 200 west and 300 east of true north and east-west streets within 300 south and 200 north.

ii. Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

iii. Allotments on the south side of a street should have a sufficient depth so that buildings can be set well back to allow north facing rooms to look onto larger front yards.

iv. Allotments on south-north streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

v. Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3pm.

vi. Regular rectangular shaped allotments maximises site opportunities and increases potential lot yield

vii. On sloping sites, north-facing sites improve the opportunities for solar access.

b) Passive Surveillance

(i) Lots shall face toward public open space areas, vegetation conservation areas and public roads. Where this cannot be achieved open style fencing is required to promote passive surveillance of public open space and public road area with some landscape screening to provide privacy.

(ii) Visually contain the carriageway to promote steady, predictable traffic speeds by:

- Encouraging hedging or front fences;
- Using upright kerbs;
- Provide on-street parking;
- Providing wide verges;
- Planting street trees at regular spacing within the carriageway or verge; and
- Only use narrow streets, when lot frontages are wide (at least 15 metres).

8.7.4.3 Bicycle and pedestrian movements

(a) Provision for bicycle and pedestrian movements are to be provided throughout the area.

(b) Provide footpaths on both sides of the street. They must be provided in accordance with Council's Standards for Engineering works.

(c) Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking and clusters of community and commercial facilities (Refer to Council's Bicycle Strategy 2008-2018).

(d) On -road and off-road cycle networks will be clearly highlighted with signposting and pavement logos.

8.7.4.4 Streetscape

(a) Street trees and landscaping

(i) A 5 metre landscape buffer area is to be provided along each side of Marys Mount Road. Dedication of this land to Council will attract offsets as provided for in the Section 94 Plan. This area will be planted with suitable native tree species to promote reestablishment of threatened or endangered species. A list of preferred planting species tree species is included in **Appendix B.**

(ii) Existing trees are to be retained where possible and appropriate.

(iii) Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer to Council Policy-Bushfires and Vegetation Controls).

(iv) Streetscape planting themes are to be developed based on native tree species suitable for the locality in an urban context.

(v) Use robust tree guards to protect immature trees.

(vi) Extensive landscaping to arterial and collector roads in order to soften their appearance and create a more attractive environment for users.

(b) Marys Mount Road presentation

(i) All subdivisions must provide an appealing streetscape presentation to Marys Mount Road that provides for amenity (including adequate separation of dwellings from the road) and surveillance of the road reserve. This may be achieved via one of the following outcomes:

- The incorporation of a slip road so that the front of adjacent dwellings are visible from but not directly accessible from Marys Mount Road. The verge between the main carriageway and the slip road must be landscaped consistent with any Council prepared landscape design for the relevant section of the road.
- Dwellings with direct frontage to Marys Mount Road will only be permitted pedestrian access to Marys Mount Road. In this case all vehicular access is to be provided via rear lane(s) within the development.
- Where it can be demonstrated that the other outcomes cannot be practically achieved Council may accept a subdivision layout whereby the rear of dwellings face Marys Mount Road if a minimum separation distance of 10m from the road reserve to the dwelling can be accommodated within the lot. At a minimum the boundary of the lot is to be landscaped and fences are to comply with (b)(ii)-(iv) below.

(ii) Where rear fences are proposed to front Marys Mount Road fencing details are to be submitted with the development application for subdivision taking into account the matters in (b)(iii) below. The approved fencing design shall be installed by the developer prior to the release of a subdivision certificate or provided for within a Section 88B (*Conveyancing Act 1919*) Instrument with Council as the varying authority.

(iii) Fencing along Marys Mount Road shall have regard to the following matters:

- avoidance of long expanses of high fences with same materials;
- the use of multiple materials with differing colours and textures such as pedestrian gates or other measures to activate the streetscape (particularly where the rear of dwellings front Marys Mount Road);

- the inclusion of landscaping to compliment fencing design;
- any existing Council prepared design for the landscaped buffer required by 8.1.4.4 (a)(i) of this Plan; and
- any adjoining existing or proposed fencing.

(iv) Council will not accept colourbond fencing adjoining or within the road reserve of Marys Mount Road.

8.7.4.5 Open space

(a) Open space should be dispersed throughout the locality to ensure equity of access for residents.
(b) Areas identified as being a drainage line shall be set aside as a drainage reserve and the open space network shall be focused on these drainage lines.
(c) Drainage lines are to be re-established as 'natural' watercourses largely through revegetation with native species.
(d) Environmental Management plans for natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.
(e) Council's Leisure- Recreation and /social Planning Study identifies that there is sufficient active recreational reserves and sports grounds provided elsewhere in the City.
(f) Goulburn Mulwaree Contributions Plan details community facilities and open space requirements.

8.7.4.6 Sites of visual importance

Subdivision design must address sites of visual importance and demonstrate how they will be protected or enhanced. The sites that have been identified, include:

(a) Monastery Hill;
(b) Ridgelines;
(c) Vegetated hilltops.

8.7.4.7 Water sensitive urban design

(a) Development must comply with the neutral or beneficial effect on water quality test *(NorBE) (Refer to State Environmental Planning Policy Sydney Drinking Water Catchment 2011).*

(b) Drainage lines are to focus on the 'natural' or existing lines and integrated into the open space network.
(c) Drainage design is to minimise run off into vegetation conservation areas to assist with ongoing preservation.
(d) Detention basins are required upstream of Marys Mount Road to regulate and control the runoff back to rates equal with 'natural' runoff. Detention basins may also be required to regulate and control runoff to rates equal to with 'natural' runoff.
(e) Detention ponds and other stormwater treatment devices are to be 'offline' and 'at source'.
(f) Stormwater drainage systems are to be designed in accordance with Council's Engineering Standards for Engineering Works 1996.
(g) The piped drainage system to be designed for a 1 in 5 year storm event. Higher order storm events to be based on overland flow systems along 'natural' drainage lines.

8.7.5 General road provisions

All access and road layouts will generally conform to the Indicative Road Layout Plan **Figure 8-7-4,** Transport Movement Hierarchy **Figure 8-7-5** and:

(a) Give consideration to NSW Road Noise Policy (July 2011);
(b) Give consideration to Council's Standards for Access Driveways and Parking Areas (2001);
(c) Be designed and constructed in accordance with Council's Standards for Engineering Works (July 2009);
(d) Should border all open space areas to provide a buffer separation;
(e) All proposed road, splay and road widening shall be dedicated to Council, free of cost as public roads;
(f) Where the design of the access road involves realignment, provided the Council agrees to acquire adjoining land, which may be necessary to affect such realignment, the applicant shall bear full cost of such acquisition; and
(g) Take into account Water Sensitive Road Design Practices (Refer to **Chapter 8.7.4.7**).
(h) All roads will provide upright kerbs to prevent informal use of verges for car parking.

8.7.5.1 Arterial roads

(a) With the exception of existing dwellings, direct access off Crookwell Road is prohibited and is to be controlled by an appropriate mechanism (e.g. restriction as to user on property title).

8.7.5.2 Collector roads

(a) Collector roads will provide reference to the Indicative Road Layout Plan (**Figure 8-7-4**)
(b) Collector roads need to be designed to enable easy-way finding. They must demonstrate connectivity by generally being more direct than access roads.
(c) Collector roads are to have a minimum road reserve width of 30 metres and a minimum pavement width of 10 metres (Refer to **Table 8-7-1 – Road Hierarchy**).
(d) Entry statements (such as signage marking the 'gateway' to an estate) should be avoided or temporary (e.g. for the sales period only) as it effectively isolates the development.
(e) Collector roads must be designed to enable uses by buses and bus stops and should be located where there is likely to be passive surveillance at most times of the day and night (e.g. outside dwellings rather than in open space).
(f) Must provide street trees in line with Council's Standards for Engineering Works (July 2009).
(g) Street parking must be provided in the carriageway and in line with Council's Standards for Access Driveways and Parking Areas (2001).
(h) A minimum of 5 metres of land should be provided to Marys Mount Road to achieve an overall road reserve width of 30 metres. This provides the necessary width required to provide for the carriageway, footpaths, bicycle path and landscaping.
(i) Direct access to Marys Mount Road from private property is prohibited.
(j) Marys Mount Road is part of the stock route network connecting Chinaman's Lane/Crookwell Road to Middle Arm Road. This can be provided as part of the landscaped roadside verge area.

8.7.5.3 Access roads

(a) Access roads should prioritise pedestrians and cyclists- they should provide a pleasant environment that encourages walking and social interaction.
(b) Houses on access road corners should address both street frontages.
(c) Avoid cul-de-sacs wherever possible. If they are used:
    (i) Limit their length so the end point is visible from the access point;
    (ii) Provide access to 10 house at the most
    (iii) Avoid cul-de-sac at activity centres (i.e. near shops) & where they would limit direct access to transport.
(d) Level 1 Access Roads are roads servicing more than 15 lots and that have direct access to a collector road are to have a minimum road reserve width of 20 metres and a pavement width of 9 metres, unless the road has:
    (i) Trees in the verge, a pavement width of 9.6m are required;
    (ii) With trees in the carriageway + verge, a pavement width of 9.6m is required;

(iii) With parking bays, a pavement width of 10.4m is required;

(iv) With trees in the carriageway and swales, a pavement width of 9.6m is required.

(e) Level 2 Access roads are roads servicing more than 15 lots are to have a minimum road reserve width of 18 metres and a pavement width of 9 metres, unless the road has:

(i) Trees in the verge, a pavement width of 9.6m are required;

(ii) With trees in the carriageway + verge, a pavement width of 9.6m is required;

(iii) With parking bays, a pavement width of 10.4m is required;

(iv) With trees in the carriageway and swales, a pavement width of 9.6m is required.

(f) Level 3 Access Roads are roads servicing less than 15 lots are to have a minimum road reserve width of 15 metres and a pavement width of 6 metres.

8.7.5.4 Intersections

(a) Design intersections to reflect street hierarchy.

(b) On collector and access roads use four-way intersections where possible.

(c) Avoid roundabouts wherever possible by:

(i) ensuring the design indicates the presence of the intersection on all approaches; and

(ii) using short block lengths (<70metres) on access roads.

8.7.5.5 Road hierarchy

(a) **Figure 8-7-4 & 8-7-5** illustrate the arterial roads, cycle-ways, existing and future collector roads.

(b) All developments in the precinct are required to contribute towards the upgrading of collector and arterial roads.

Table 8-7-1: Road Hierarchy

Street Type	Road Reserve Width (M)	Carriageway Width (M)	Appropriate Use	Reference
Arterial Road	N/A	N/A	Arterial roads are generally used to link and pass through a town or suburban regional/sub regional centres.	Crookwell Road
Collector Road - with landscaped buffer	30	10	Collector Roads link neighbourhoods together. They usually carry bus routes within as well as between neighbourhoods.	~~1~~ Marys Mount Road
Level 1 Access Road - with trees in verge - with trees in the carriageway + verge - with parking bays - with trees in the carriageway + swales	20	9 9.6 9.6 10.4 9.6	Level 1 Access Roads are roads servicing more than 15 lots and that have direct access to a collector road. They the predominant street type within a neighbourhood. They provide access to the dwellings, parks and neighbourhood edges.	2
Level 2 Access Road - with trees in verge - with trees in the carriageway + verge - with parking bays - with trees in the carriageway + swales	18	9 9.6 9.6 10.4 9.6	Level 2 Access roads are roads servicing more than 15 lots that do not have direct access to a collector road. They the predominant street type within a neighbourhood. They provide access to the dwellings, parks and neighbourhood edges.	3
Level 3 Access Road	15	6	Level 3 Access Roads have limited use. Use only where: - traffic volumes are low - there is low parking demand and - where the lot width is 15m or more.	4

EXAMPLE ROAD HIERARCHY

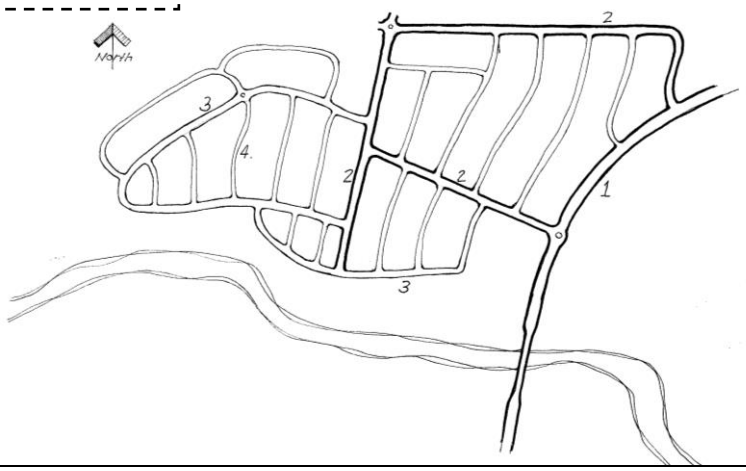


Figure 8-7-4: Indicative Road Layout Plan

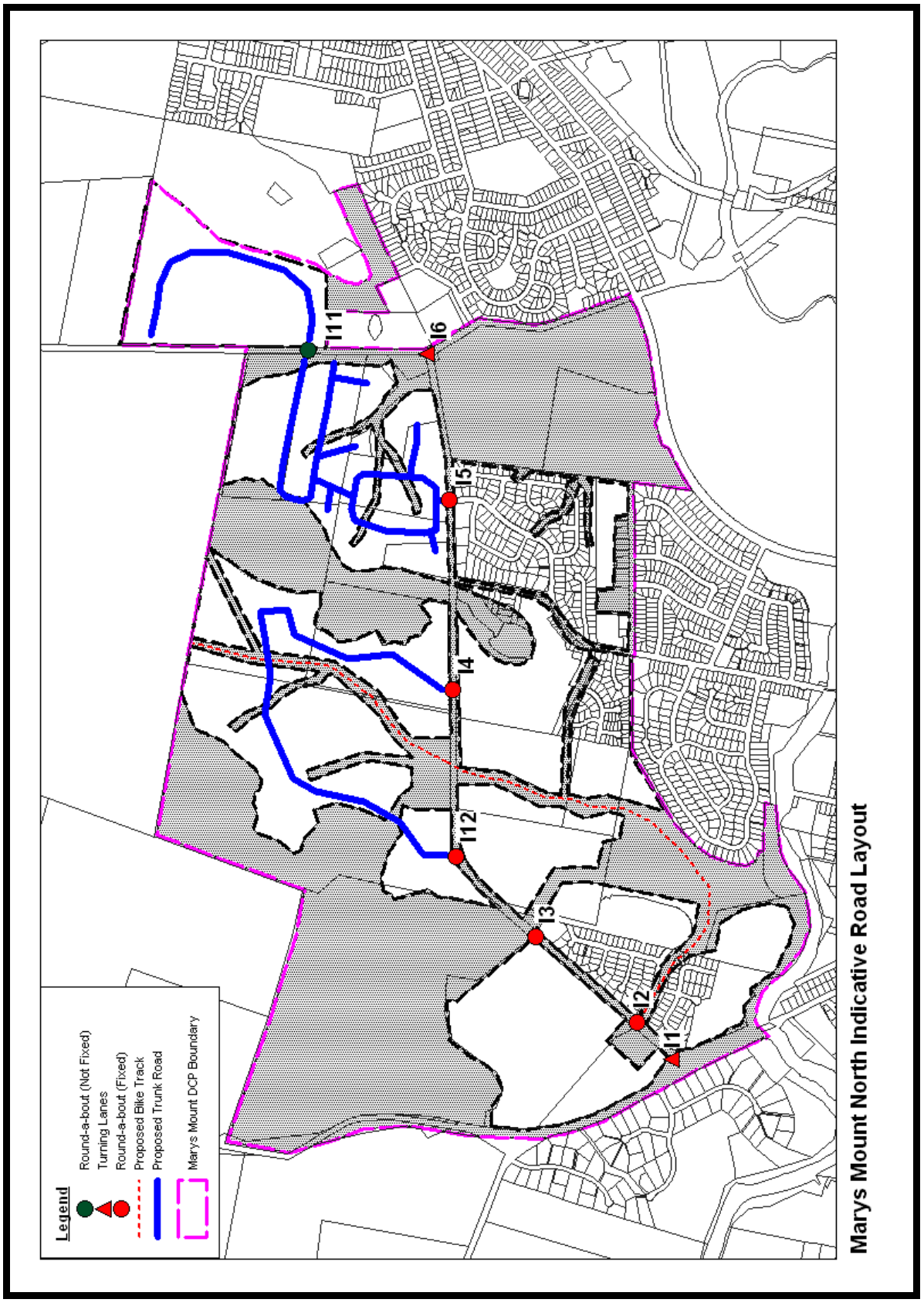
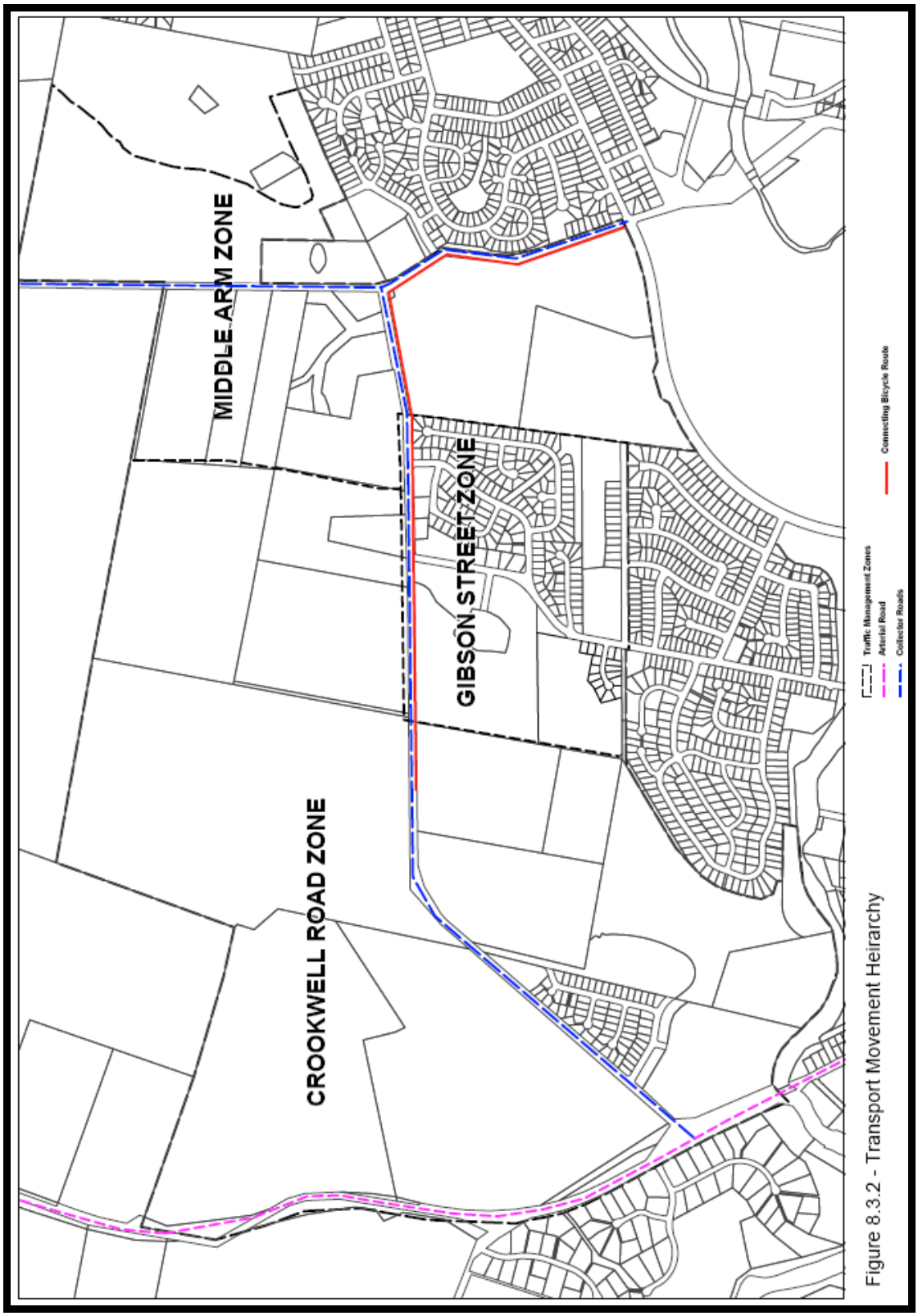


Figure 8-7-5: Transport Movement Hierarchy



8.7.6 Residential development controls

Objectives

To encourage residential development in which:

- There is a diversity of housing stock and type to meet diverse housing needs
- Dwellings to face public spaces for passive surveillance
- Living areas are oriented to the north for energy efficiency benefits
- Dwelling design and siting respects the privacy of neighbours
- On site vehicle parking is provided to minimise congestion within the streets
- Garages and fences do not dominate the streetscape
- There is easy access to community facilities
- Rainwater tanks are provided to supplement water supply and control stormwater runoff

8.7.6.1 Detached dwellings

Controls

a) Streetscape

i. Dwellings are to face public spaces (roads and open space areas)

ii. Limit the height of front fences and hedges to 1.2 metres to enable surveillance of the street and to contribute to the streets amenity.

iii. Garages are to be located behind the building façade so that they do not dominate the streetscape.

iv. Rear private open space areas are to be accessible by vehicles.

b) Height

(i) Maximum recommended height is 2 storeys.

c) Energy Efficiency

(i) Internal and external living areas should be located to the north side of the dwelling.

(ii) A BASIX Certificate shall support all approvals for a dwelling.

d) Visual Privacy

(i) Private open spaces and living rooms of adjacent dwellings should be protected by:

- appropriate dwelling layout
- use of distance or slope
- screening devices like fences, window screens, screen vegetation and courtyard walls

(ii) First floor decks, balconies and the like are not supported where they overlook or have the potential to directly overlook habitable rooms or private open space.

(iii) Windows of one dwelling should not be located opposite the windows of another dwelling unless direct views are restricted.

(iv) Use of narrow, translucent or obscured windows is encouraged

e) Acoustic Privacy

(i) Noise generating areas of a development (such as a driveway, air conditioning unit or swimming pool areas) should be adequately screened or located away from bedroom areas to minimise impact on neighbours.

(ii) Bedrooms of one dwelling shall not share walls with living rooms or garages of adjacent dwellings.

(iii) Bedroom windows to be a minimum 3 metres from shared streets, driveways and parking areas of other dwellings

(iv) Transmission of noise between adjoining properties should be minimised.

(v) Location of active recreation areas (swimming pools, spas, tennis courts, BBQs), driveways, carports, garages and garbage collection areas, pumps and air conditioners should be away from bedrooms of adjacent dwellings.

(vi) Dwellings adjoining Marys Mount Road and other noise generating land uses should be designed and sited to minimise noise impacts.

(vii) Location of bedrooms and other noise sensitive rooms should be away from the road.

f) Parking

(i) Provision for at least one covered parking space and one tandem vehicle space.

g) Water

(i) Rainwater tanks of a minimum capacity of 10,000 litres shall be connected to the hot water service, laundry and toilet facilities with a top up connection into the tank.

(ii) House design should include water sensitive urban design features such as porous paving, infiltration devices and appropriate landscaping.

8.7.7 Other development controls

(a) Community Facilities

(i) Community facilities should be clustered, which will assist in promoting multi-use trips, reducing traffic impacts and improving accessibility.

(ii) Community facilities should be located at the periphery of residential neighbourhoods to avoid traffic impact intruding into residential areas.

(b) Schools

(i) No additional school facilities have been identified for the area to serve the estimated population.

(c) Retail Premises & Neighbourhood Shops

(i) Land at corner of Crookwell Road and Marys Mount Road has been zoned 'B1 Neighbourhood Centre'. A wider range of retail uses are permissible in this zone.

(ii) Two appropriate sites for neighbourhood shop development are identified in **Figure 8-7-3** - Development Potential.

(iii) Additional neighbourhood shops within the residential zones will only be considered where supported by an economic supply and demand analysis. A proposal should demonstrate consistency with the Draft Centres Design Guidelines (Department of Planning 2011) and any relevant strategy of Council.

8.7.8 Urban release areas

8.7.8.1 Staging plan

(a) **Figure 8-7-6** shows the sequence of staged residential land release areas.

(b) Stage 1, is the first residential land release area is on the corner of Marys Mount and Middle Arm Roads while the second stage is on the Eastern side of Middle Arm Road.

(c) Once stage 1 has been assessed and released, stage 2 will then go through the same process before released.

(d) Neither stage will be released until Council has made an assessment of:

(i) the stock of vacant, serviced and undeveloped or underdeveloped land and the potential housing opportunities available within the low density residential zone R2 and;

(ii) the rate of supply, the degree of choice and the current and projected rate of take-up and the current and housing types within the R2 Residential zone and;

(iii) Council is satisfied that there is insufficient land available within the R2 Residential zone to cater for projected household growth and having regard to the need to ensure the efficient functioning o the housing market or;

(iv) the land available within the R2 residential zone is inadequate to satisfy housing preferences or requirements of all segments of the housing market, and;

(v) adequate arrangements have been made with Council for the provision of infrastructure and services to the land including essential services of:

- the disposal and management of sewerage;
- reticulated water supply;
- the upgrading of Marys Mount Road;
- landscaping provisions; and
- stormwater drainage infrastructure, to support an orderly residential land release of stage 1 than stage 2.

8.7.8.2 Overall landscape strategy

(a) **Figure 8-7-6** shows the areas that need protection and enhancement for the Marys Mount precinct. They include:

i. ridgelines and steep land;

ii. remnant vegetation areas;
iii. riparian area;
iv. drainage reserve areas;
v. neighbourhood riverside park; and
vi. cycle ways

(b) Chapter 3.3 of this plan sets out detailed landscaping requirements

(c) Stage one residential release area is affected by extensive drainage reserves and Stage Two residential release area is affected by steep land.

(d) All developments in the precinct are required to contribute towards the enhancement of drainage reserve areas, cycle-ways and the neighbourhood riverside park.

8.7.8.3 Passive and active recreation areas

(a) **Figure 8-7-6** shows the recreation network consisting of:
(i) drainage reserves to be used as passive and active recreation areas;
(ii) cemetery reserve
(iii) passive remnant vegetation areas to be protected and enhanced; and
(iv) the precincts active neighbourhood riverside park site.

(b) Stage 1 of the residential release area is directly affected by extensive drainage reserves and stage 2 by the cemetery reserve. Drainage reserves are subject to the provisions of **Chapter 7.3** of this plan.

(c) The part of stage 2 (**Figure 8-7-6**) that is the cemetery reserve extension should be excluded from potential residential development. Dedication of such land by future applications would be treated as a 'material public benefit' for the purpose of Goulburn Mulwaree s94 Development Contributions Plan 2009.

8.7.8.4 Stormwater and water quality management

(a) Stormwater and water quality management controls are detailed in **Chapter 7.3** of this plan.

(b) Stage 1 of the residential release area is subject to extensive drainage lines which are to be constructed and designed in accordance with water sensitive urban design principles (**Chapter 7.3.2**) and soil and water management requirements (**Chapter 7.3.3**).

8.7.8.5 Public facilities and services

(a) **Figure 8-7-6** identifies the following public facilities and services in the Marys Mount Precinct:

(i) cemetery reserve
(ii) electricity substation
(iii) high school site;
(iv) neighbourhood riverside park site;
(v) required drainage reserves; and
(vi) traffic management zones.

(b) Residential release area stage 1 is affected by an electricity substation and proposed drainage reserves while stage 2 is affected by existing cemetery reserve and steep land.

(c) Goulburn Mulwaree Section 94 Development Contributions Plan 2009 Chapter 6- 'Marys Mount' details required development contributions towards 'neighbourhood riverside park', 'rustic cycle parks', and 'road upgrading and traffic management' for both release areas.

Figure 8-7-6: Staging Plan