Economic Development Queensland

Ripley Road design guideline

PDA guideline no. 19

March 2014

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Contents

Introduction

Purpose of the guideline

This guideline sets out the principles and standards for the planning and design of Ripley Road located in the Ripley Valley Priority Development Area (PDA). This guideline should be read in conjunction with the provisions of the Ripley Valley UDA Development Scheme and Interim Land Use Plan (ILUP). The Ripley Valley PDA Development Scheme or ILUP may specify a different standard.

Alternative, innovative solutions which do not comply with the following standards, but meet the PDA-wide criteria or related provisions of ILUPs, and have agreement of the relevant State or Local Government agency, will be considered.

This guideline should be read in conjunction with:

- relevant PDA Guidelines including:
- PDA Guideline 6 Street and movement network
- PDA Guideline 13 Engineering standards
- PDA Guideline 15 Protection from flood and storm tide inundation
- PDA Guideline 18 Development interfaces

Context

The Ripley Valley (PDA) is located in South East Queenslandís western growth corridor which includes existing and major employment generators. The PDA is bordered on the north by the Cunningham Highway - a major highway that links Brisbane to Warwick, Goondiwindi and beyond to New South Wales. The Centenary Highway extension from Springfield in the east bisects the PDA and links to the Centenary Highway (Yamanto interchange) in the west.

Ripley Road lies between the Cunningham Highway and the Centenary Highway, providing a critical connecting road between two major routes. The road network in the Valley will contribute greatly to the liveability and amenity of the area.

Character sectors

Ripley Road will be a safe, legible, attractive and functional roadway for drivers, pedestrians, cyclists and public transport users. The road corridor will exhibit a landscape character reflective of the surrounding valley environment, with opportunities for placemaking captured within the road setting. Public and private space is clearly defined and distinct landmark gateways herald the northern and southern entries to Ripley Road and the main route into the commercial heart of Ripley Valley.

For the purposes of the Guideline, Ripley Road is divided into five key character zones -

- Core
- Frame East
- Frame West
- Residential
- Gateways (North/South and Inner)

Guiding principles

The following guiding principles aim to provide an inspiring, functional framework for the future planning and design of Ripley Road.

A community space:

Public space along Ripley Road will be well defined, comfortable, inclusive and attractive. The road verge will exhibit carefully considered physical parameters - footpath widths, build-outs, setbacks, street furniture, planting areas, canopy shade trees, services, areas for sidewalk dining and display, and safety for users.

Landscape character and design:

The evolving landscape character of Ripley Valley will be expressed and celebrated in the Ripley Road corridor. The natural environment provides inspiration for design and for the selection of landscape palettes. Ripley Road features interpretive and artistic elements that complement and enhance the cohesive range of street furniture, signage, lighting, landscape palettes and built elements.

Wayfinding:

Ripley Road will be easy to navigate as a pedestrian, cyclist or as a motorist due to the key nodes, clearly defined edges, legible pedestrian pathways, landmarks and critical view corridors, distinct welcoming and arrival points, signage, landscape and built elements.

Circulation and access:

Ripley Road will be legible and easily navigable for drivers with key destinations and intersections clearly articulated and signed. Landscape treatments and the design of the road corridor promote safe driving speeds, especially at critical junctions and in busy pedestrian areas. Pedestrian and bicycle connections, pathways, road crossings and desire lines are simple, legible, safe and attractive - linking key destinations and crossroads. Trees, landscaping and rest points ensure there are comfortable places for pedestrians to stop and rest.

Safety:

Safety within the Ripley Road corridor, for pedestrians, cyclists, users of public transport and for drivers, is paramount, with clear sightlines along the road corridor maintained to avoid conflicts. Crime Prevention Through Environmental Design (CPTED) principles will be integrated throughout the planning and design stages.

Sustainability:

The Guidelines promote sustainable, innovative initiatives and measures with respect to planning, design, construction and maintenance of Ripley Road streetscape and landscape elements.

Landscape design / planting / vegetation

Significant existing trees / vegetation:

There may be opportunity to retain existing native vegetation along the proposed road corridor, and this should be explored and supported.

Canopy shade trees and understorey planting:

Along Ripley Road, regular tree plantings will be used to:

- provide shade and comfort for people
- minimise the urban heat island effect ensure clear sightlines are maintained
- soften the pavement impacts
- improve the visual quality and landscape amenity of the road corridor. Continuity of tree and plant species assists with wayfinding and the development of the local landscape character.

Plant palette and feature planting:

Subtropical, proven species and native plants are selected for their low maintenance requirements and contribution to landscape character. Feature trees are used at key nodes, gateways, and as landmarks.

Active transport

The design of Ripley Road will encourage the use of public and active (pedestrians and cyclists) transport. Over time increased residential density will improve opportunities for casual surveillance, contributing to safety for public transport users, cyclists and pedestrians. Pedestrian comfort is provided through good pavements, lighting, street shade trees, building awnings and other elements.

Pedestrian circulation:

Generous pedestrian pathways will be provided along the Ripley Road corridor road verge, with the minimum pathway width being 2.5 metres wide in the Residential sector. Landscape elements en route include furniture, planting, shade and bus stop shelter structures. Built form provisions in the Core and Frame sector may require that buildings include awnings for pedestrian comfort, whilst new development will serve to provide casual surveillance over the pedestrian pathways along Ripley Road.

Bicycle circulation:

Along the length of Ripley Road, safe bicycle movement is provided through:

- A shared Bicycle/Transit (Bus)/Parking lane - which is shared by bicycles and buses (during peak periods) and has parallel parking in non-peak periods. The lane is 4.5 metres in width and usually painted red (or in accordance with Queensland Transport guidelines). The lane runs the entire length of Ripley Road.
- Off-road pathways could serve as shared pathways, in particular in the residential and frame zones where less pedestrian conflict is likely to occur.

Bus services:

A bus service will run along Ripley Road providing important connections between the Residential, Frame and Core sectors. Bus shelters, seating, bins, signage and lighting infrastructure will be provided at bus stops.

Roadway elements for all users

The strategy for vehicular circulation includes limiting vehicular speeds, establishing and maintaining a high level of pedestrian safety and comfort and safety for cyclists, whilst ensuring legibility for drivers.

Roadway elements

Shade and comfort: provided through canopy shade tree planting along street edges, in medians and roundabouts.

Sightlines: clear sightlines are maintained via considered placement of trees and vegetation and the use of clear trunk tree planting combined with low groundcover/understorey planting.

Traffic calming devices: include central median islands, pavement treatments, roundabouts, traffic lights and roadway narrowing at critical junctions to ensure safety for pedestrians and cyclists.

Lighting: to relevant standards, for the road carriageway and pedestrian and cyclist routes.

Signage: regulatory and directional signage (to relevant Standards) for both vehicular and pedestrian traffic should employ a consistent language to enhance legibility and to provide continuity and predictability along Ripley Road. A Wayfinding and Regulatory Signage Strategy is recommended to ensure a consistent, well considered approach.

Landmarks:

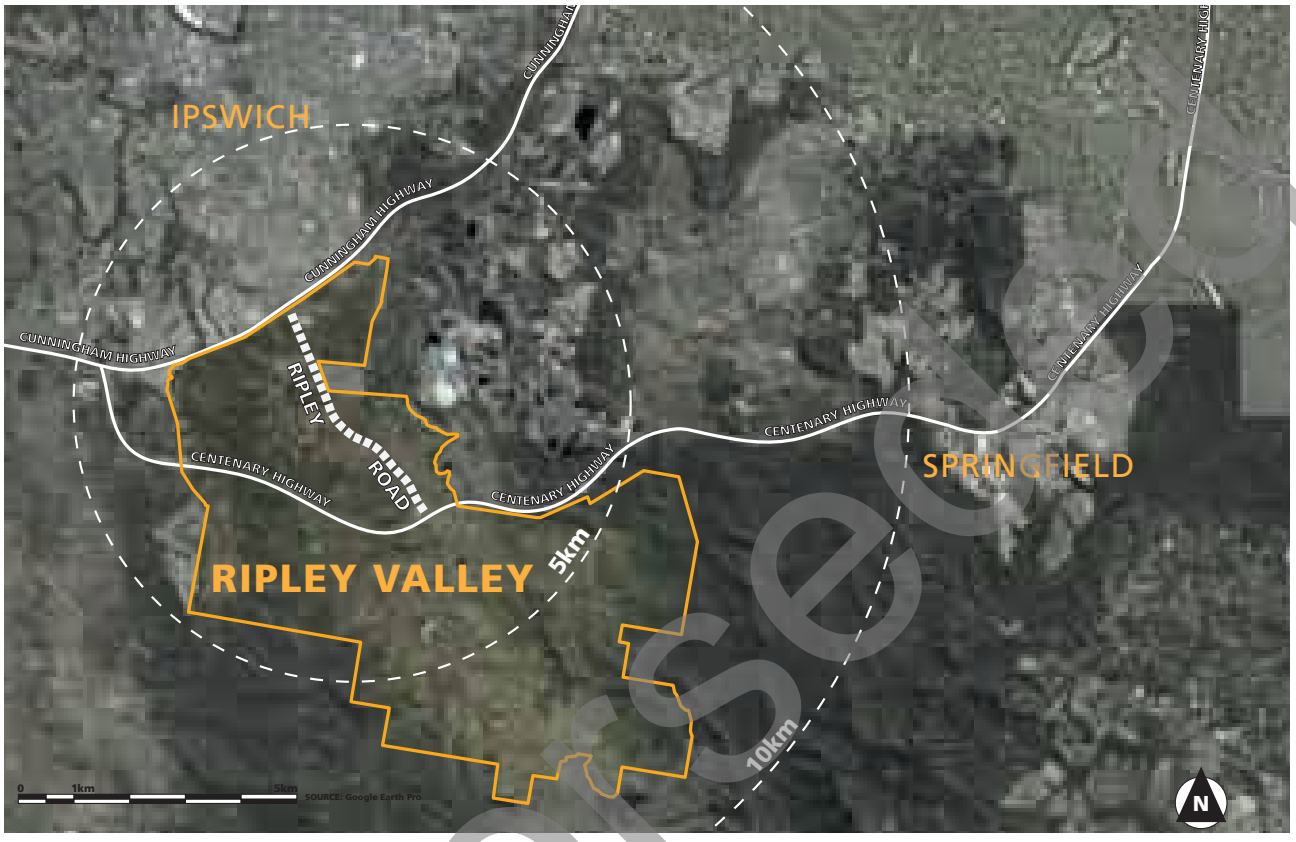
Landmarks will be used along key entry/exit points, at nodal points and within key destinations. They may be in the form of landmark planting, architectural expressions, art pieces or other elements that are visually prominent and memorable.

Landmark elements along Ripley Road may include:

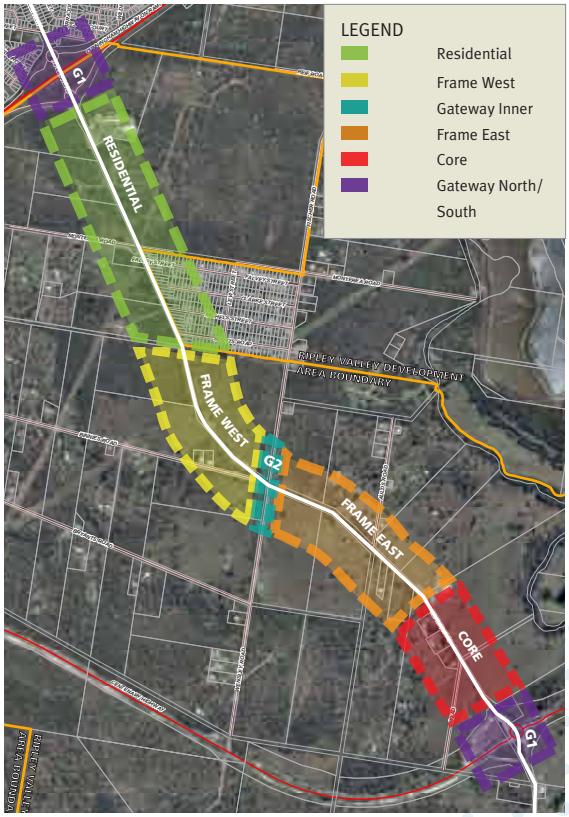
- Distinct feature, landmark trees
- Bus shelter structures
- Lighting, banners and other vertical elements
- Signage
- Public art/sculpture

Key views and sightlines:

Strong visual connections and key views and vistas are maintained along Ripley Road for safety, legibility and commercial opportunity. Views into and out of the site are maintained, including:


IPSWICH
CUNNINGHAM HIGHWAY
CUNNINGHAM HIGHWAY
CENTENARY HIGHWAY
CENTENARY HIGHWAY
CENTENARY HIGHWAY
CENTENARY HIGHWAY
SPRINGFIELD
RIPLEY
ROAD
RIPLEY VALLEY
5km
10km
0
1km
5km
SOURCE: Google Earth Pro
N


RIPLEY ROAD
0
0.5
1km
2km
3km
SOURCE: Digital Cadastre Database, Department of Environment and Resource Management August 2010


LEGEND
Residential
Frame West
Gateway Inner
Frame East
Core
Gateway North/ South
G1
RESIDENTIAL
RIPLEY VALLEY DEVELOPMENT AREA BOUNDARY
FRAME WEST
G2
FRAME EAST
CORE
G1

Core

Vision/intent

The Core is the commercial hub of Ripley Valley, which suggests a more urban treatment for Ripley Road in this sector. Design of the road carriageway in the Core minimises conflicts by reducing traffic speeds and maintaining a high level of pedestrian and bicycle safety, whilst also providing parking and public transport options. The road verge becomes a flexible community space for outdoor dining, pedestrian movement and shopping providing pedestrian and visual access to commercial and retail outlets there are casual surveillance opportunities both day and night.

Built form provides an active frontage to the street and awnings for pedestrian comfort, whilst generous pavement widths, street furniture, trees and planting are woven into the urban fabric. Wayfinding and placemaking elements increase legibility through identifiable elements that are expressed in the northern and southern Gateways and continue along the Ripley Road corridor.

Design outcomes

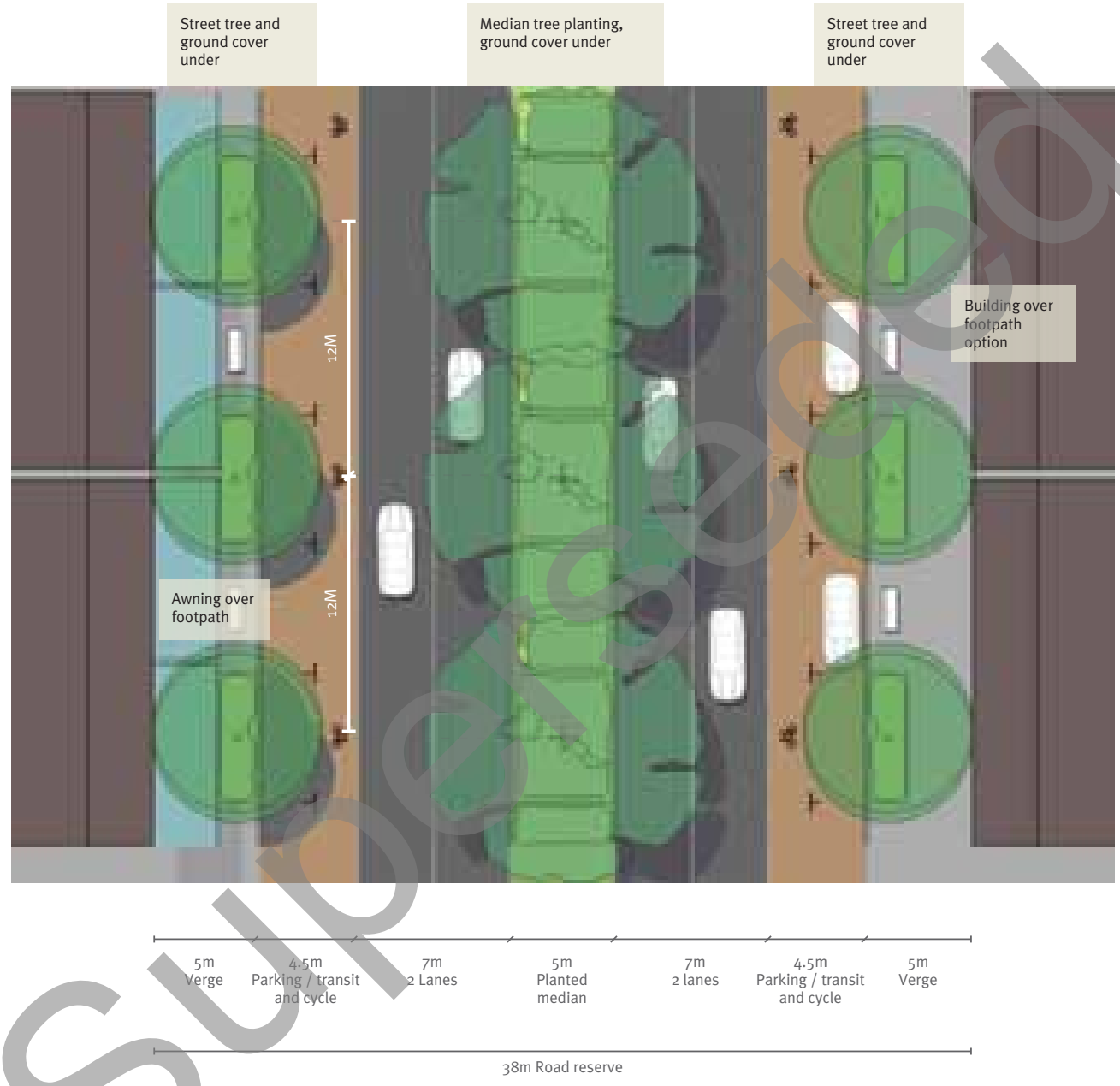
- Commercial, civic and residential land uses adjoin Ripley Road

Built form

- Up to twelve storey buildings, two storey minimum fronting Ripley Road
- Generally built to boundary
- Building architectural detailing and articulation to Ripley Road frontage
- Continuous awnings to be provided along Ripley Road frontage where applicable
- Vehicular access from rear

Road reserve

- On road commuter cycle lane (combined with parking/ peak time transit lane)
- Pedestrian pathway minimum 2.5 metres wide - full width fronting commercial areas
- Formal tree planting


Street tree and ground cover under
Median tree planting, ground cover under
Street tree and ground cover under
Building over footpath option
Awning over footpath
12M
12M
5m Verge
4.5m Parking / transit and cycle
7m 2 Lanes
5m Planted median
7m 2 lanes
4.5m Parking / transit and cycle
5m Verge
38m Road reserve

Frame east

Vision/intent

Ripley Road within the Frame East adjoins a mixed use area where the built form provides an active frontage to the street. Awnings, generous pavement widths, street furniture, trees and planting provide comfort for pedestrians. The road carriageway is designed to reduce traffic speeds and maintain a high level of pedestrian and bicycle safety, whilst also providing parking and public transport options. There are opportunities for casual surveillance day and night within this mixed use sector, whilst also providing a degree of acoustic and visual screening and privacy for residences through setbacks, changes of level and appropriate buffering. Wayfinding and placemaking elements continue along the Ripley Road corridor.

Design outcomes

- Mixed Use land uses adjoin Ripley Road

Built form - Non residential

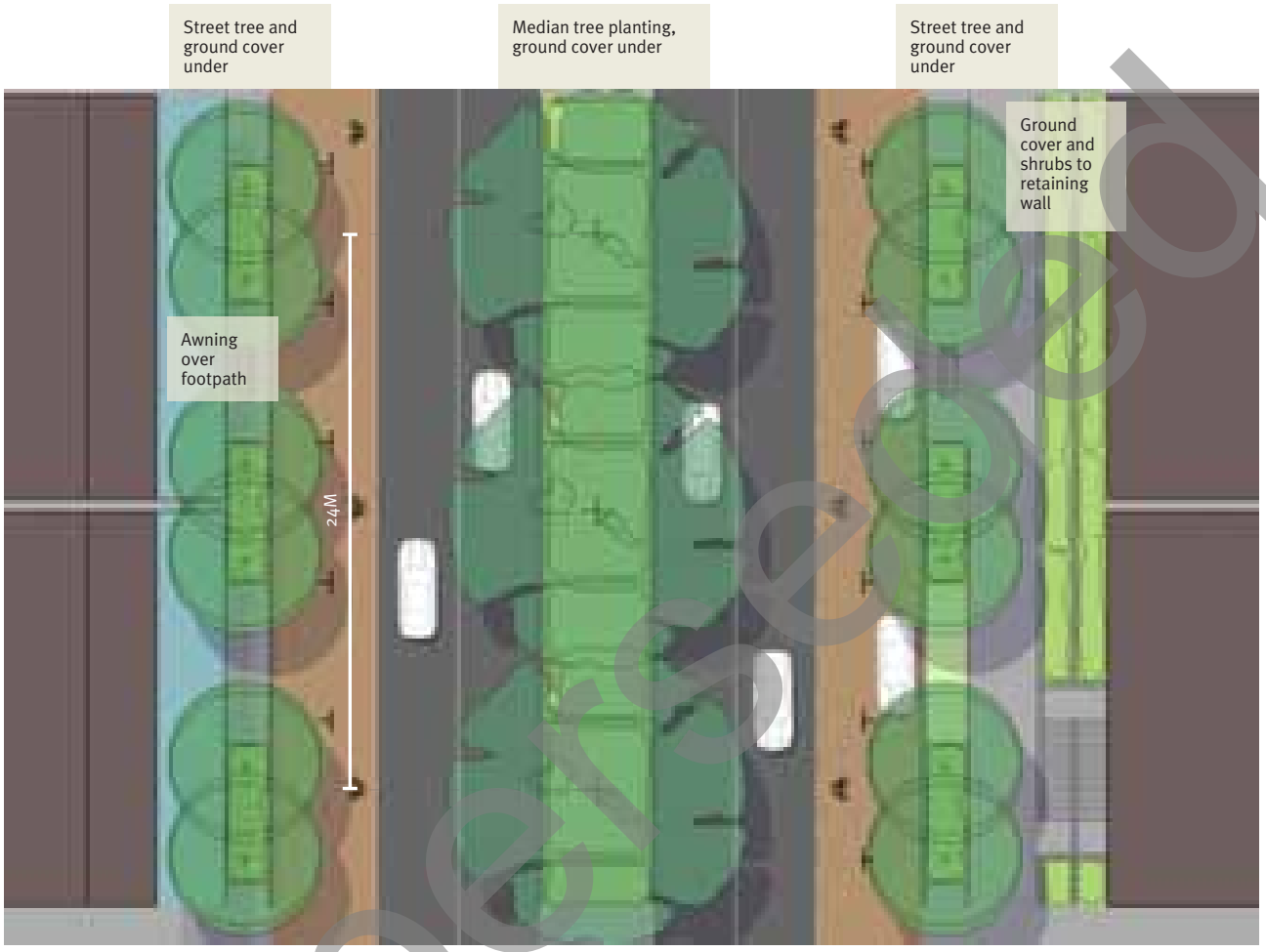
- Two to five storey, two storey minimum fronting Ripley Road
- Building architectural detailing and articulation to Ripley Road frontage
- Continuous awnings to be provided along Ripley Road frontage
- Vehicular access from rear

Built form - Residential

- Two storey minimum fronting Ripley Road (garage/ driveway access from the rear) at zero setback where practical
- Preferably in attached housing format (terraces) or if detached dwellings lot widths are no greater than 12.5 metres
- Front wall of dwellings to be on property boundary where topography allows or verandas or porches can be provided up to the front property boundary
- Dwellings to be constructed to meet internal acoustic levels at ultimate traffic volume of Ripley Road (approximately 53,000 vpd)

Road reserve

- On road commuter cycle lane (combined with parking/ peak time transit lane)
- Pedestrian pathway minimum 2.5 metres wide and full width where fronting commercial areas
- Formal tree planting in groups
- Limited turf


Street tree and ground cover under
Median tree planting, ground cover under
Street tree and ground cover under
Ground cover and shrubs to retaining wall
Awning over footpath
24M


5m verge
4.5m Parking / transit / cycle
7m 2 Lanes
5m Planted median
7m 2 Lanes
4.5m Parking / transit / cycle
5m verge
38m Road reserve


building level- masonry/ pool- fence + planting
50 per cent open durable materials
screening plants + retaining walls
street level wall- rock, masonry, stone facing
5m Verge
4.5m Parking / transit / cycle
7m 2 Lanes
5m Planted median
7m 2 Lanes
4.5m Parking / transit / cycle
5m Verge
2-4m Setback to wall om + setback to veranda/ balcony
38m Road reserve

Frame west

Vision/intent

The Frame West is a mixed use sector where the built form is separated from the Ripley Road carriageway through access lanes, on street parking and wide landscaped road verges that provide a buffer between the road and adjoining residences and commercial operations.

Pedestrians have good access and thoroughfare, as do cyclists, with regular connections to the local bus service provided. Generous pavement widths, street furniture, trees and planting provide comfort and shade for walkers and cyclists. There are opportunities for casual surveillance day and night within this mixed use sector, whilst visual screening and privacy for residences is maintained through built form provisions, setbacks and appropriate buffering. Wayfinding and placemaking elements continue along the Ripley Road corridor.

Design outcomes

- Mixed Use land uses adjoin Ripley Road

Built form - Non residential

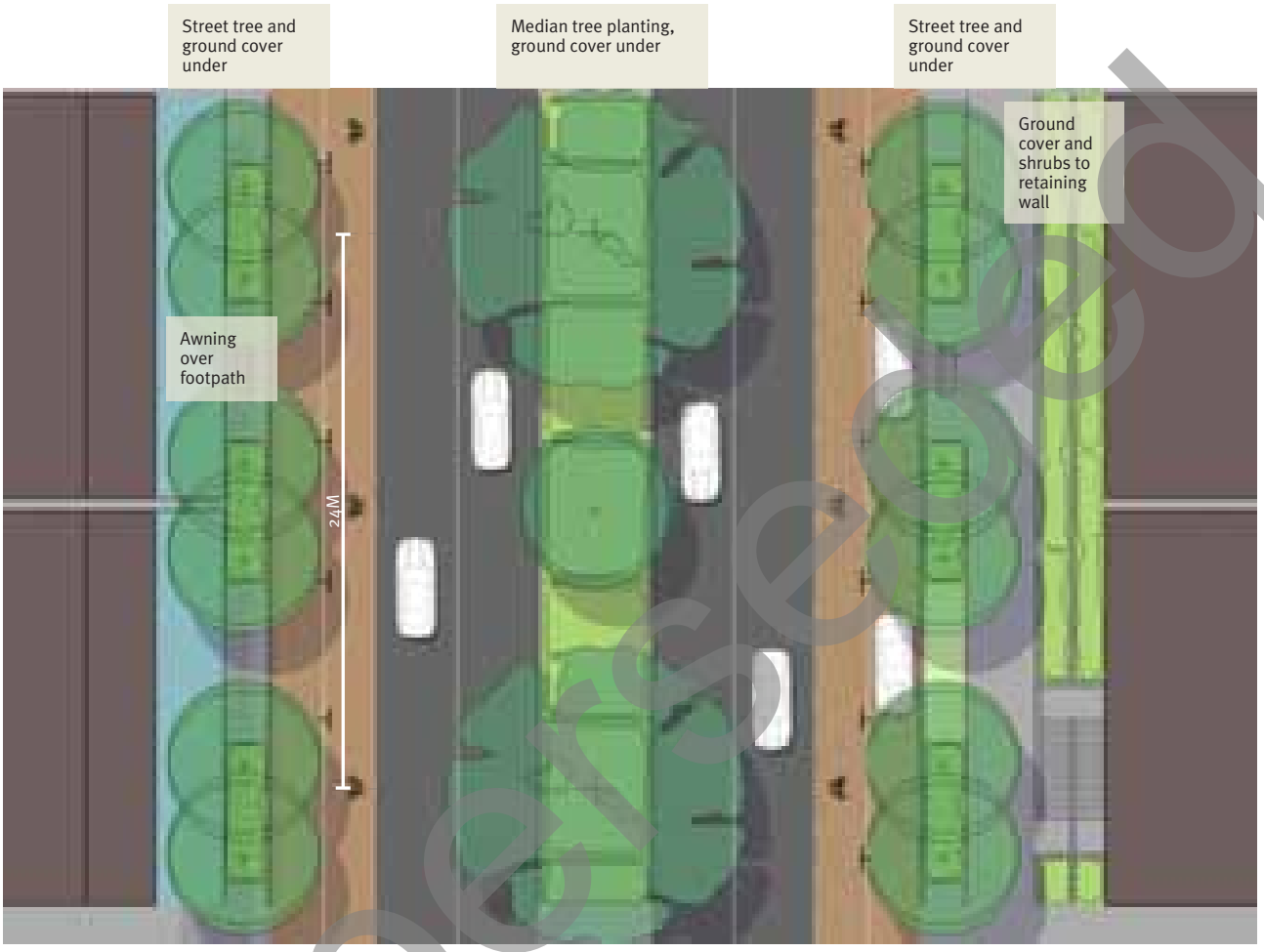
- Two to five storey, two storey minimum fronting Ripley Road
- Building architectural detailing and articulation to Ripley Road frontage
- Continuous awnings to be provided along Ripley Road frontage
- Vehicular access from rear

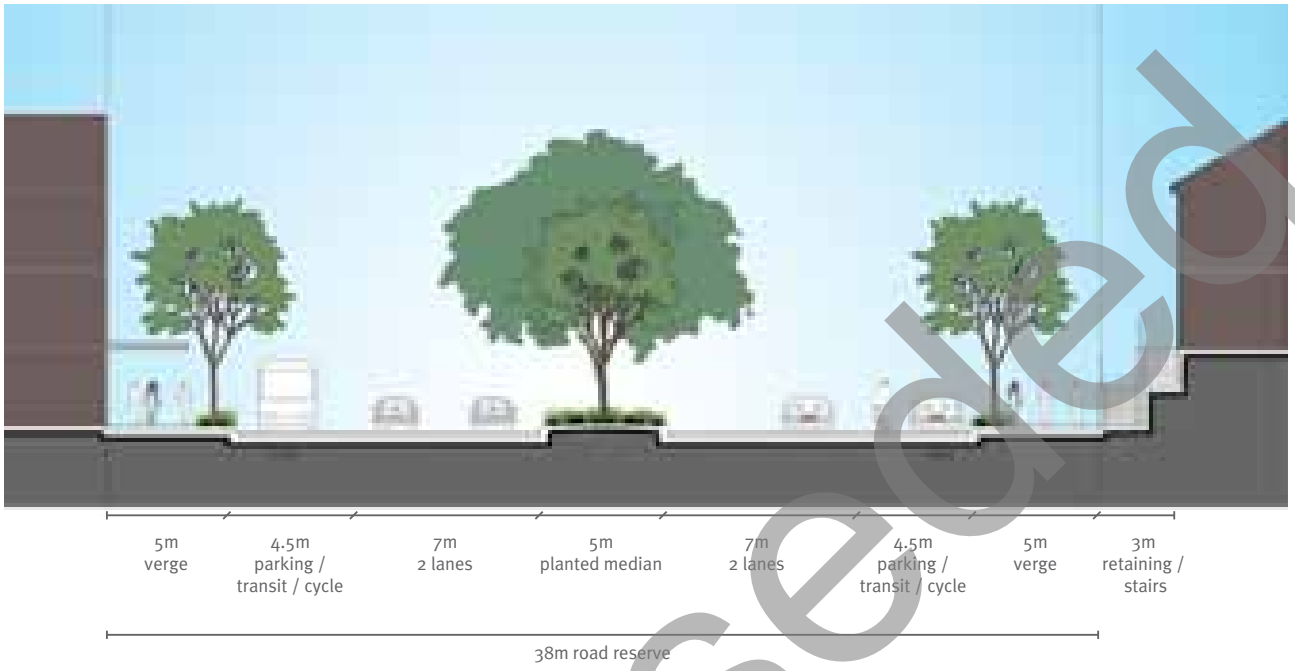
Built form - Residential

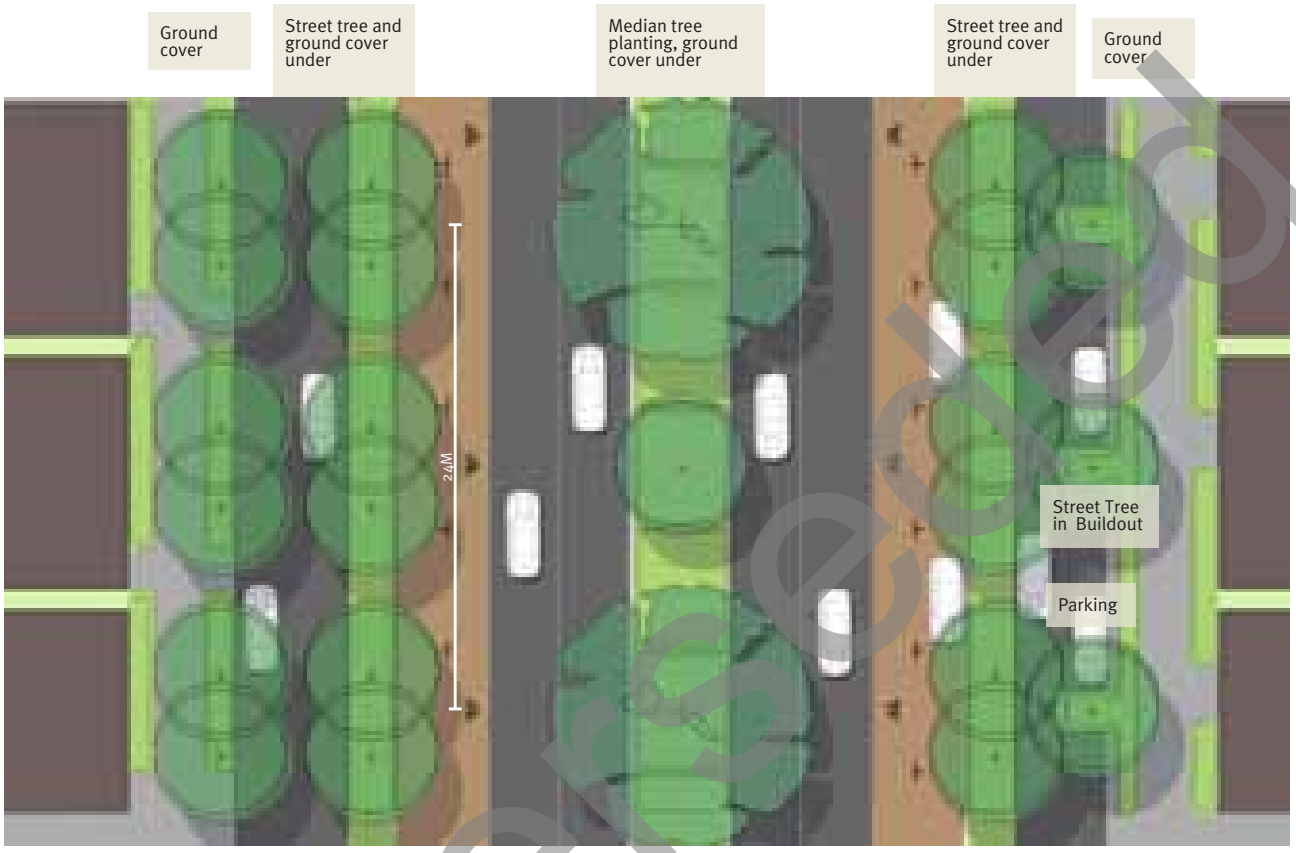
- Two storey minimum fronting Ripley Road (garage/ driveway access from the rear)
- Preferably in attached housing format (terraces) or if detached dwellings lot widths are no greater than 12.5 metres
- Front wall of dwellings to be on property boundary where topography allows or verandas or porches can be provided up to the front property boundary
- Dwellings to be constructed to meet internal acoustic levels at ultimate traffic volume of Ripley Road (approximately 53,000 vpd)

Road reserve

- On road commuter cycle lane (combined with parking/ peak time transit lane)
- Pedestrian pathway minimum 2.5 metres wide full width where fronting commercial areas
- Semi formal tree planting in groups
- Limited turf


Street tree and ground cover under
Median tree planting, ground cover under
Street tree and ground cover under
Ground cover and shrubs to retaining wall
Awning over footpath
24M
5m Verge
4.5m Parking / transit / cycle
7m 2 Lanes
5m Planted median
7m 2 Lanes
4.5m Parking / transit / cycle
5m Verge
3m Retaining / stairs
38m Road reserve


5m
verge
4.5m
parking /
transit / cycle
7m
2 lanes
5m
planted median
7m
2 lanes
4.5m
parking /
transit / cycle
5m
verge
3m
retaining /
stairs
38m road reserve



Note:
* For residential frontage this option will only be considered for approval based on merit of design.
* Where bus stops and associated infrastructure are required, this width may need to be increased to accommodate required dimensions

1.3m	2.5m path	1.2m	6.5m 2 way access lane	1.5m	4.5m transit / cycle/ parking	7m 2 lanes	5m planted median	7m 2 lanes	4.5m transit/ cycle/ parking	1.5m	5.5m 1 way access lane and parking / buildouts	1.2m	2.5m path	1.3m

53m road reserve

1.3m	2.5m path	1.2m	6.5m 2 way access lane	1.5m	4.5m transit / cycle	7m 2 lanes	5m planted median	7m 2 lanes	4.5m transit / cycle	1.5m	5.5m 1 way access lane and parking / buildouts	1.2m	2.5m path	1.3m

53m road reserve

Residential

Vision/intent

Ripley Road in the Residential sector exhibits a more informal character, with street tree groupings and generous planting and turf areas. The extent of public space is clearly defined through a well considered interface between the residents and Ripley Road carriageway that includes access lanes, acoustic fencing, landform mounding and wide landscaped road verges. Opportunities for surveillance are encouraged, whilst acoustic and visual screening and privacy requirements are maintained for adjoining residences. There is ample opportunity for pedestrians and cyclists to move in either direction, with good access also to the bus service. Wayfinding and placemaking elements continue along the Ripley Road corridor.

Design outcomes

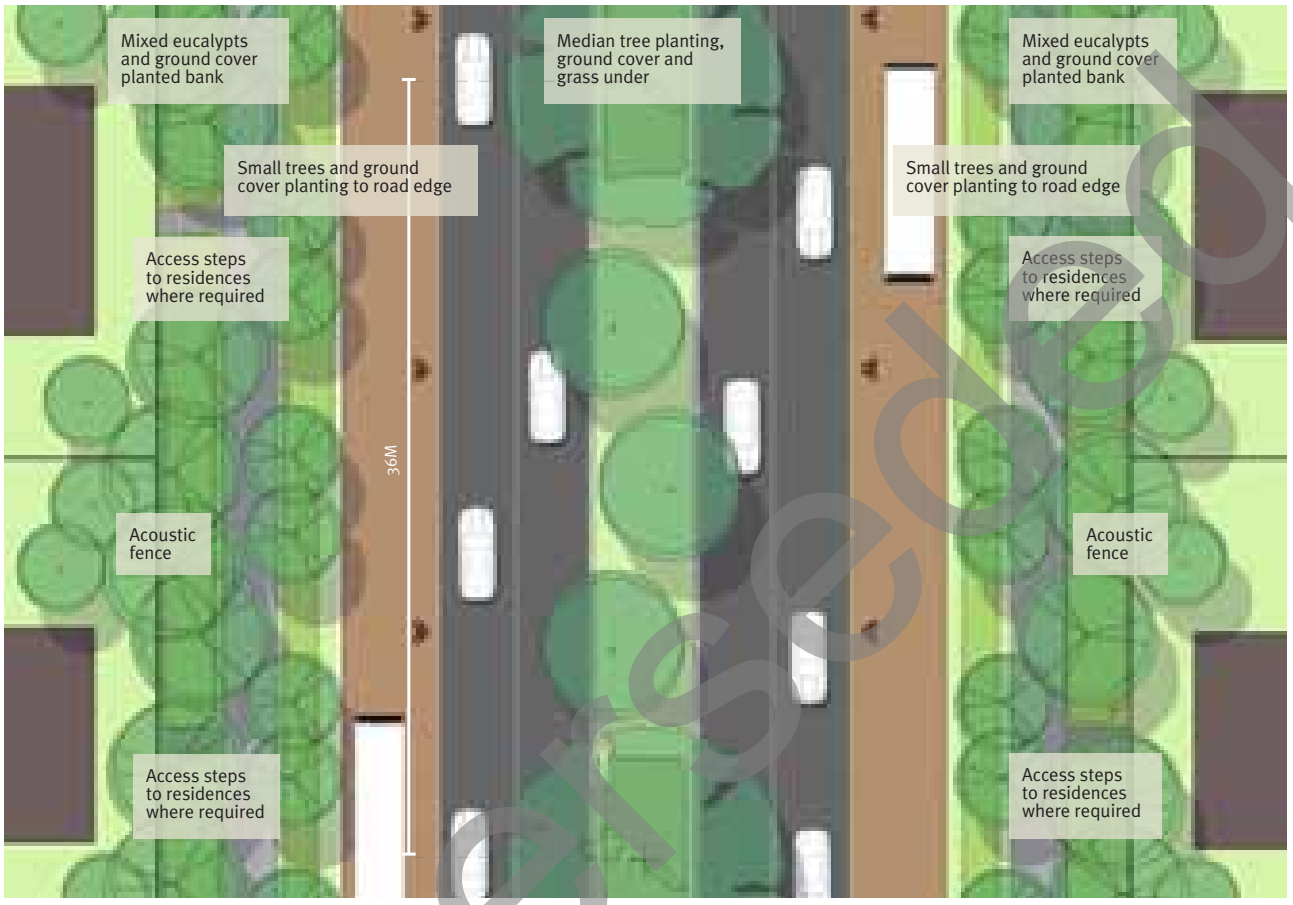
- Residential land uses adjoin Ripley Road

Built form - residential

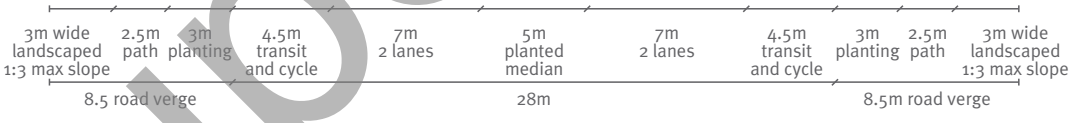
- Built form single or two storey
- Front of dwellings to be setback 3 metres minimum from property boundary
- Dwellings to be constructed to meet internal acoustic levels at ultimate traffic volume of Ripley Road (approximatly 53,000 vpd)

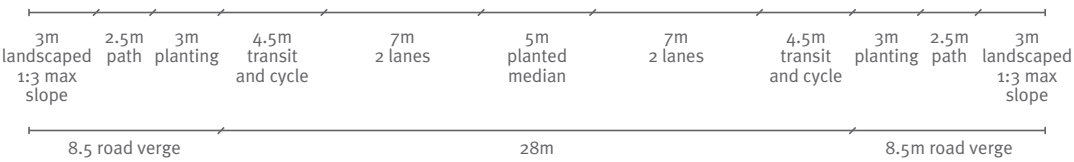
Road reserve

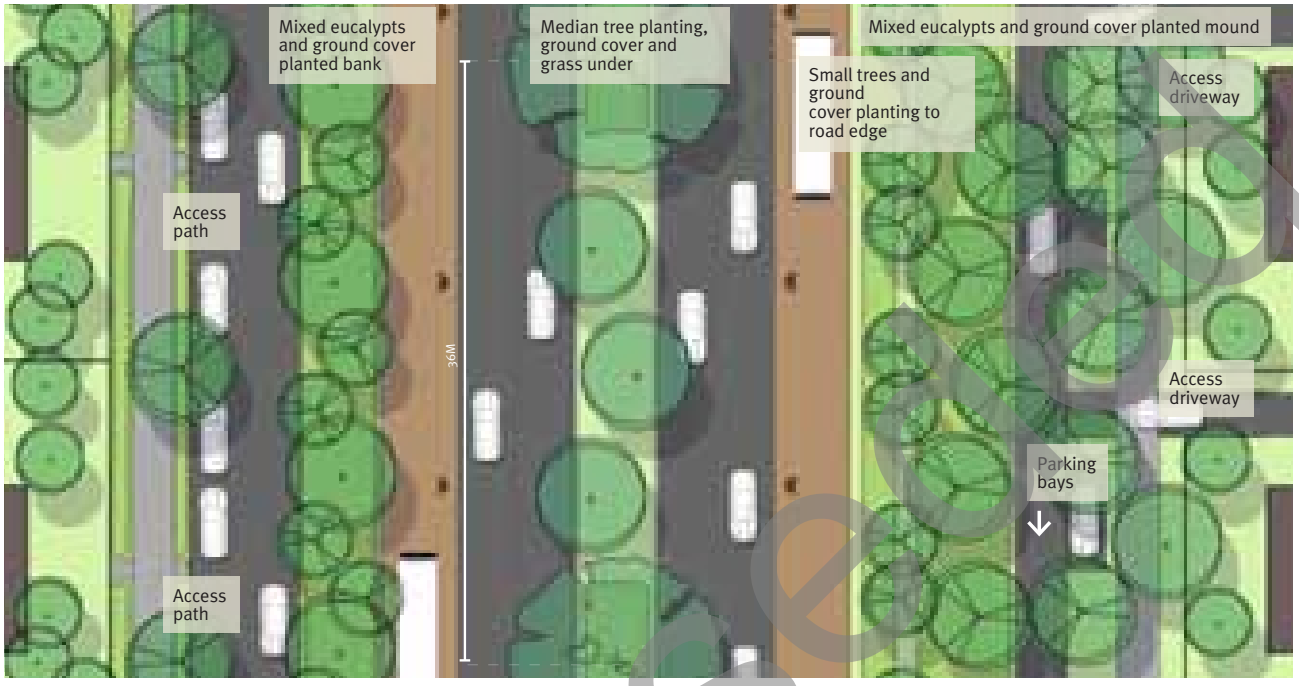
- On road commuter cycle lane (combined with transit lane)
- Option to have a well landscaped service lane for access to lots and to provide a greater buffer from Ripley Road based on design merit
- Pedestrian pathway minimum 2.5 metres wide
- Limited street furniture
- Informal tree planting in groups
- Open grass areas
- Mounded areas with planting for buffers
- Water sensitive urban design (WSUD) in road corridor where applicable
- Acoustic fence screened by landscape



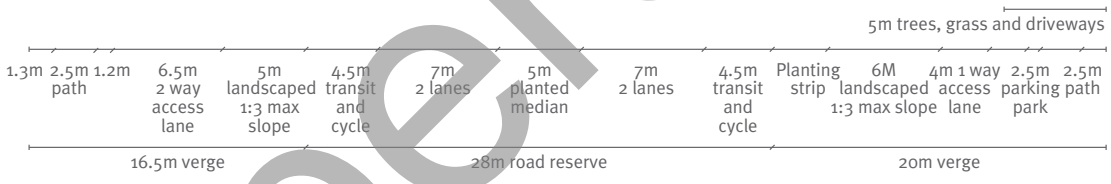
NOTE:
* For residential frontage this option will only be considered for approval based on merit of design.
* Where bus stops and associated infrastructure are required, this width may need to be increased to accommodate required dimensions.
* Stormwater treatment preference is for end of line solution, however, other WSUD solutions wtihin the road reserve may be considered on their merit

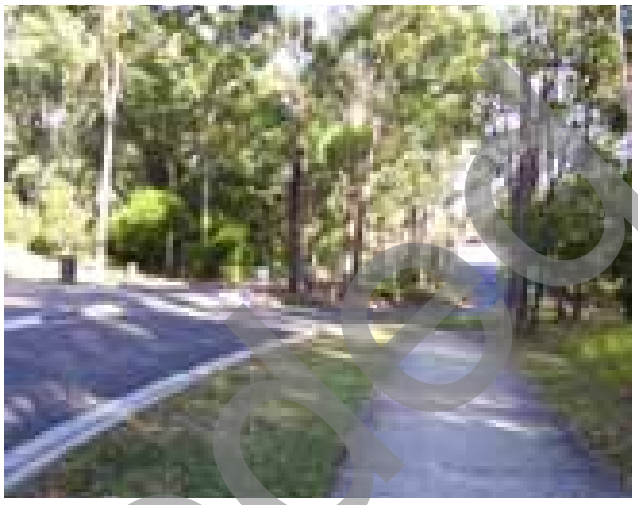






NOTE:
* For residential frontage this option will only be considered for approval based on merit of design.
* Where bus stops and associated infrastructure are required, this width may need to be increased to accommodate required dimensions.
* For details of the Ripley VIllage frontage please refer to the Engineering Design Guide, pg 7. - must have 6.5m 2 way access lane not 4m with parking bays as shown here.
* Stormwater treatment preference is for end of line solution, however, other WSUD solutions wtihin the road reserve may be considered on their merit





Gateways north, south and inner

Vision/intent

The Gateways North and South mark the entry/arrival experience with a strong landscape visual solution for wayfinding and placemaking. Distinct vegetation and landmark planting combine with entry markers and creative, vertical elements in key positions central to primary view corridors.

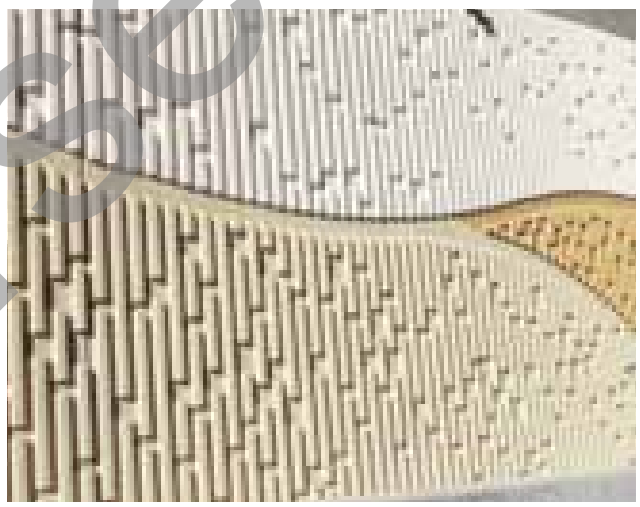
The Inner Gateway consists of open space adjacent to the intersection, landmark buildings or both depending on the level of impact and land availability. The corners of the intersection could be open space combined with distinct vegetation, landmark planting and entry markers/public art. This would form a defined green setting to off-set the wide road intersection. If adjacent land is to be utilised for buildings then the corner buildings would be distinct from those adjacent. The buildings would be well articulated and of a distinct character to define the junction. Additional height would offset the wide road intersection.

Landform/built elements:

- Visually striking landform to include undulations and mounding
- Large open areas of grass to offset wide roads
- Use of retaining walls to provide bold changes in level
- Public art - could include sculptural elements of a relevant scale to aid in wayfinding/placemaking
- Water sensitive urban design (WSUD)

Planting:

- Use of iconic vegetation - large vertical or broad spreading tree species
- Mass planting of low ground cover/shrub species



Open space elements:

- Visually striking landforms to include mounding or large open space
- Use of iconic vegetation - large vertical tree species to aid in wayfinding and offset scale of intersection
- Public art - could include notable sculptural elements of a vertical nature to aid in wayfinding/placemaking

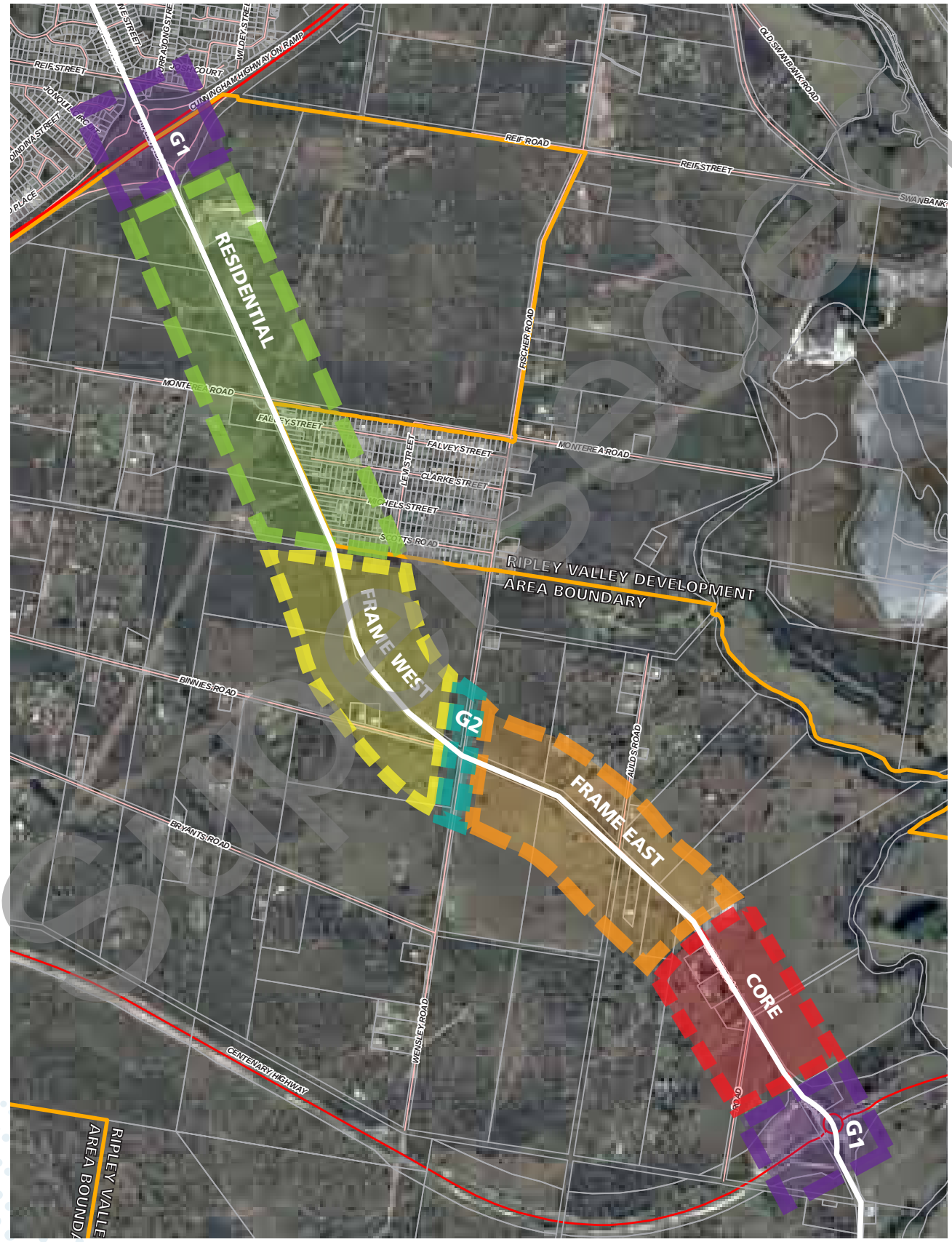
Built elements:

- Tall buildings to be placed on corners
- Facades to be well articulated, interesting and address all street frontages
- Public/private realm at street level to be activated

Palettes

The hard and soft landscape palettes (planting, paving, lighting, street furniture, materials and finishes) are consistent throughout the Ripley Road public realm, with minor variations in the different sectors, ensuring an integrated approach.

The design of Ripley Road will support the creation of identifiable images of the streetscape and public realm. Distinguishable landmarks, nodes, wayfinding markers, key views and pathways ensure a distinct image of Ripley Valley is delivered and to enhance legibility. The palettes will ensure a continuity of elements along Ripley Road.


G1
RESIDENTIAL
REIF ROAD
REIF STREET
CUNNINGHAM HIGHWAY ON RAMP
WILDEY STREET
CLOVERDALE PLACE
OLDSWAMPBANK ROAD
FISCHER ROAD
MONTEREA ROAD
FALVEY STREET
LEVI STREET
CLARKE STREET
SCOTTS ROAD
RIPLEY VALLEY DEVELOPMENT AREA BOUNDARY
FRAME WEST
G2
BINNIES ROAD
ALLIDS ROAD
FRAME EAST
BRYANTS ROAD
CORE
WENSLEY ROAD
CENTENARY HIGHWAY
RIPLEY VALLEY AREA BOUNDARY
G1

Design asset matrix:

The design asset matrix provides a quick reference to the types of constructed elements that are to be included within the particular character sector. More information on general arrangements can be found within the character sector sections.

	G1 - gateway one (North / south)	Core	Frame east	G2 - Gateway two (inner)	Frame west	Residential
Land use association						
Residential low density						•
Residential high density			•			
Mixed use medium density					•	
Mixed use high density		•				
Road design elements						
Six lanes overall		•	•	•	•	•
Transit / bus lane		•	•	•	•	•
Parallel parking		•		•	•	
Cycle path on road		•	•		•	•
Cycle path off road						
Pedestrian pathway	•	•	•	•	•	•
Service lane			•			•
Full paved verge		•			•	
Planted / grassed verge			•	•		•
Planting						
Large canopy feature tree	•	•	•	•	•	•
Medium canopy feature tree	•	•	•	•	•	•
Columnar shaped feature tree	•	•		•	•	
Ornamental feature shrubs		•		•	•	
Screening shrubs						•
Feature climbers		•			•	
Seasonal planting	•	•		•	•	
Formal arrangement	•	•	•	•		
Informal arrangement	•				•	•
Surface Finishes						
High quality unit paving		•		•	•	
High quality concrete pavement		•		•	•	
Feature road crossover treatment		•		•		

	G1 - gateway one (North / south)	Core	Frame east	G2 - Gateway two (inner)	Frame west	Residential
Standard concrete pathway			•			•
Furniture						
Shade structure		•		•	•	
Bench seats		•	•	•	•	•
Rubbish bins		•	•	•	•	•
Drink fountains		•	•	•	•	
Directional signage	•	•	•	•	•	•
Feature signage	•	•		•		
Tree grates		•				
Bicycle racks		•		•	•	
Public art	•	•		•		
Lighting						
Street lighting	•	•	•	•	•	•
Pedestrian lighting		•	•	•	•	•
Feature lighting	•	•		•	•	
WSUD						
Grassed / planted swales	•			•		•
Stormwater filtration devices	•	•	•	•	•	•
Special uses						
Outdoor dining		•			•	
Pedestrian pause point			•	•		•
Entry signage	•	•		•		

Tree canopy concept and spacing:

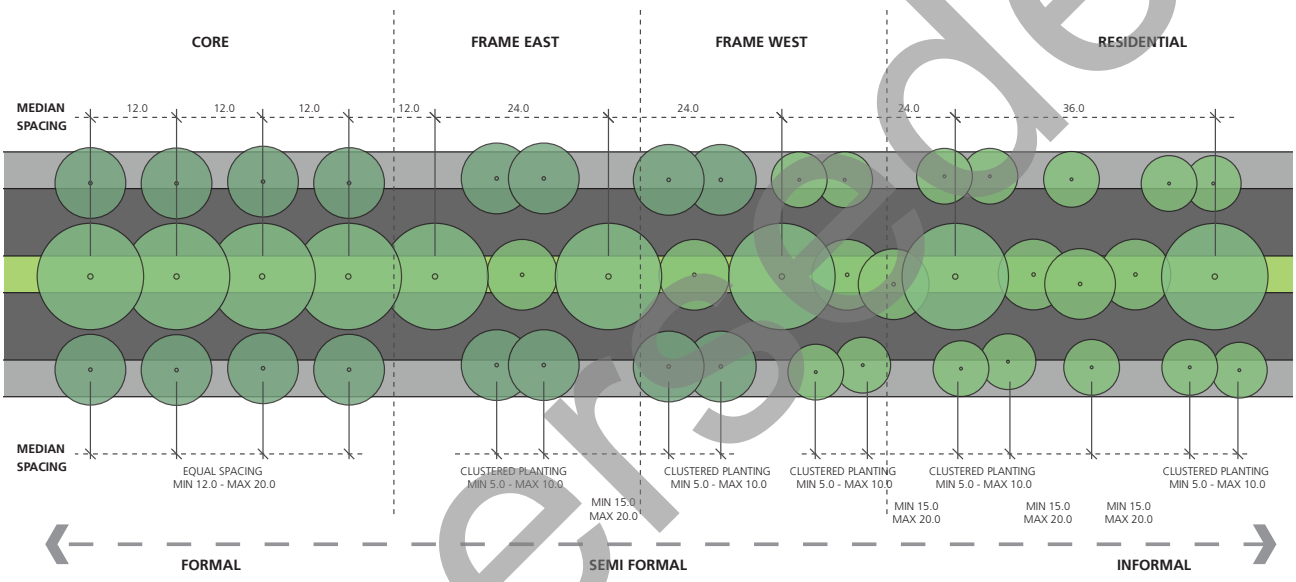
The tree canopy concept provides a quick reference to the layout of trees within the particular character sectors. More information on tree layouts can be found within the specific character sector sections.

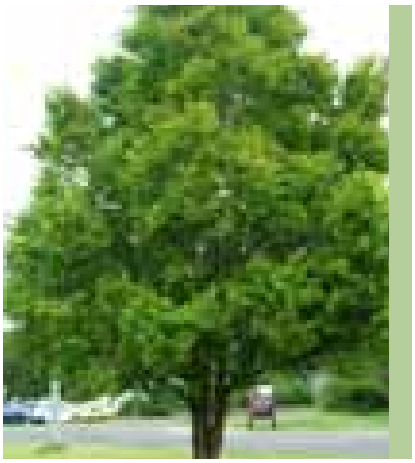
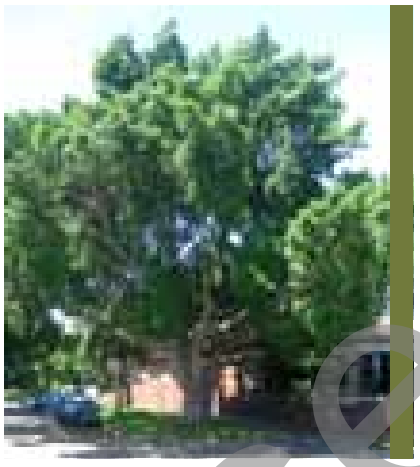
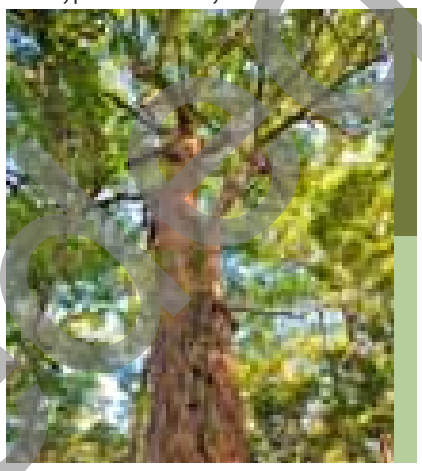
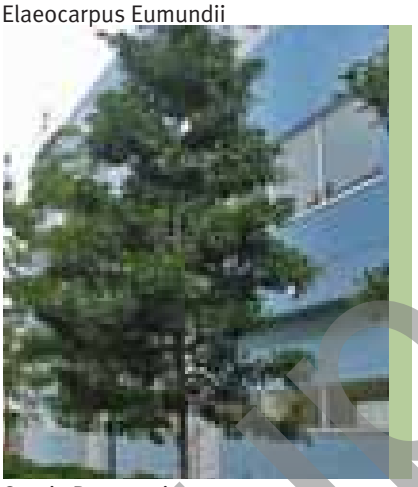
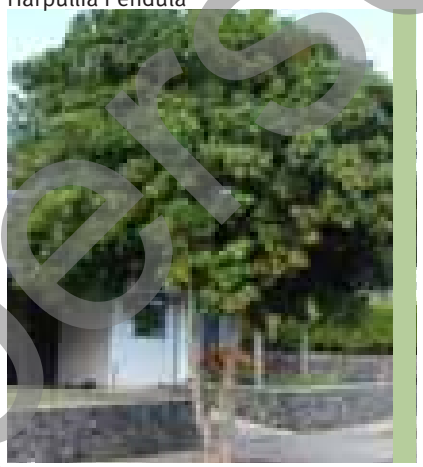
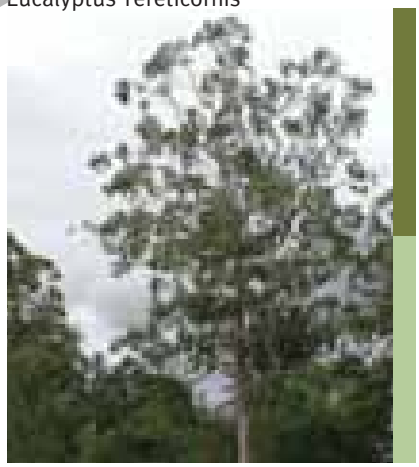
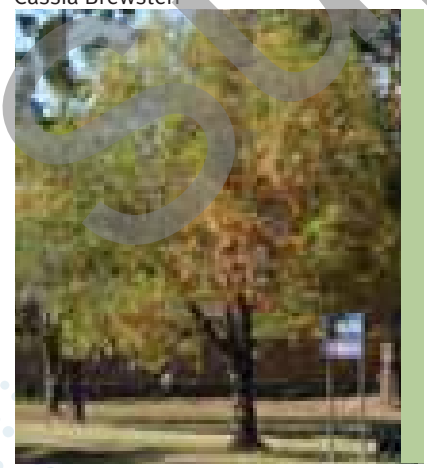
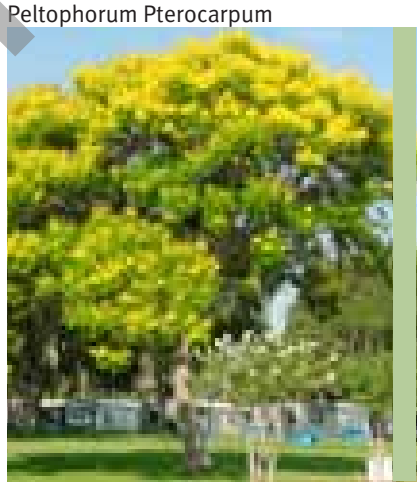
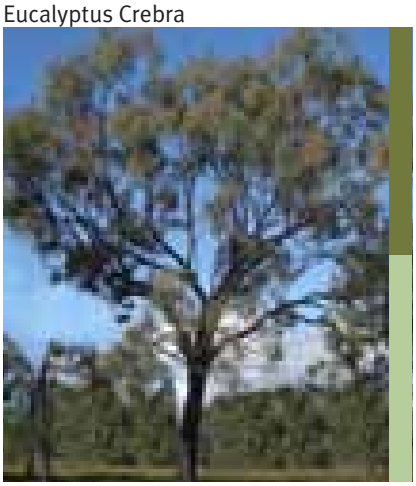
Root barriers:

Root barriers are to be used along the roads where large shade trees are planted so they can reach mature heights while minimising impacts on road infrastructure.

Structural soil cell:

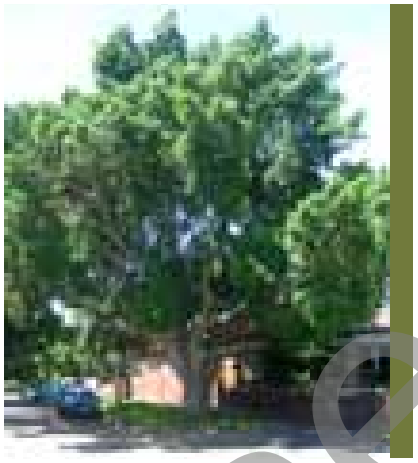
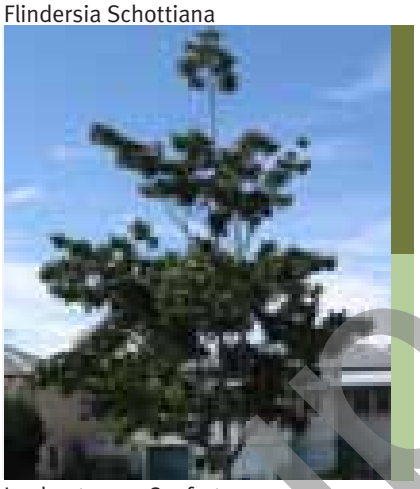
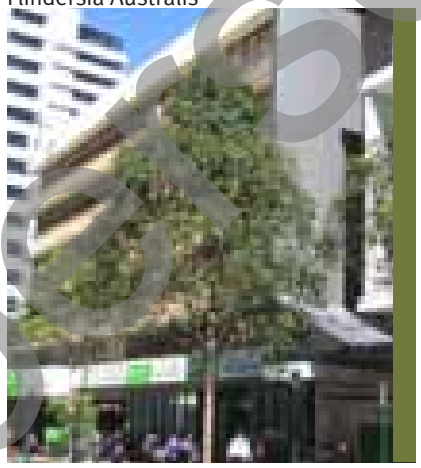
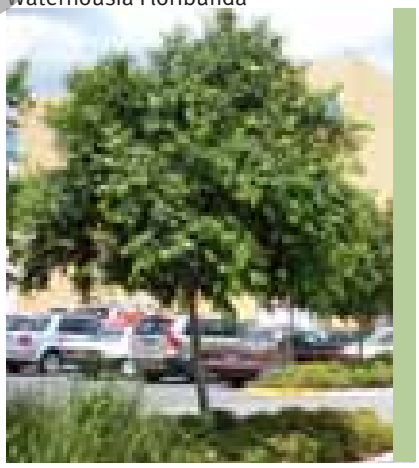
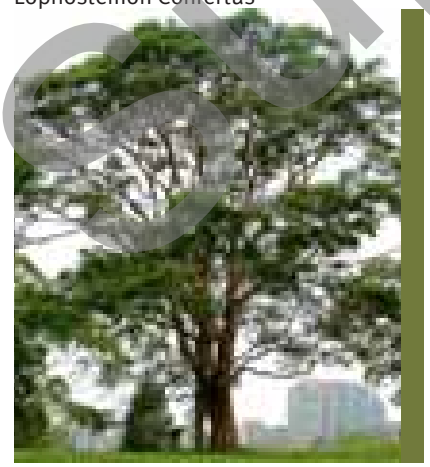
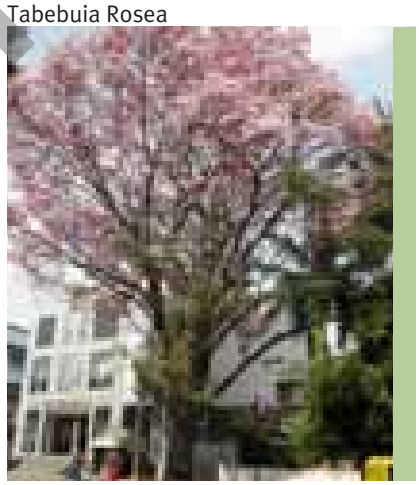
Structural soil cells are to be used along the central median edges so that large shade trees thrive and reach mature heights. Details of structural soil solutions will be approved at the design stage.



Frame east	Core	Gateway north / south
Syzygium Luehmannii	Ficus Hilli	Eucalyptus Microcorys
		
Elaeocarpus Eumundii	Harpullia Pendula	Eucalyptus Tereticornis
		
Cassia Brewsteri	Peltophorum Pterocarpum	Eucalyptus Crebra
		

tree located in road verge

tree located in road median

Residential	Frame west	Inner gateway
Corymbia Citriodora	Ficus Hilli	Agathis Robusta
		
Flindersia Schottiana	Flindersia Australis	Waterhousia Floribunda
		
Lophostemon Confertus	Tabebuia Rosea	Brachychiton Acerifolius
		

tree located in road verge

tree located in road median

Street furniture

» The Ripley Valley development provides opportunity for a complete modern range of street furniture to be realised.

» A bespoke range of street furniture could be very effective in terms of production costs and would provide an iconic selection of furniture, specific and reflective of Ripley Valley, that will contribute to the strong branding of this new urban centre.

Key considerations:

» Materials - modern, durable

» Functionality - all abilities, serviceable, vandal resistance, comfort, multi-use

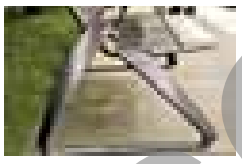
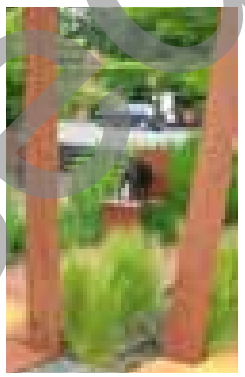
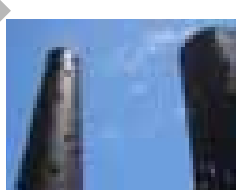
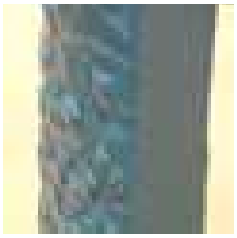
» Aesthetics - clean, simple design

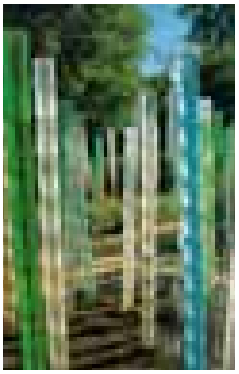
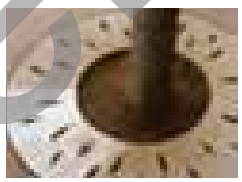
» Public art - could include combined street furniture and sculpture

» Consistency along Ripley Road

Materials	Functionality	Aesthetics	Public art



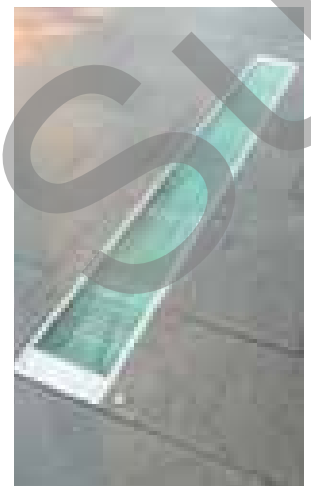





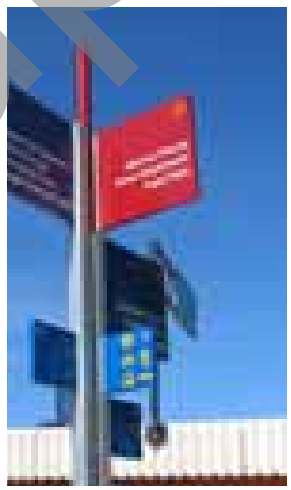







Street furniture range:

- The furniture range should provide a clear and concise sense of identity and aid in brand recognition.
- The furniture range should include all elements of furniture - benches, seat, bins, bike racks, bollards, lights, tree grates, signage, banners and drinking fountains
- A variety of material options should be used to suit different durability requirements but visually should be seen as part of a coherent range eg. bench slats could be timber, aluminium or a wood/plastic composite.





Acoustic fences

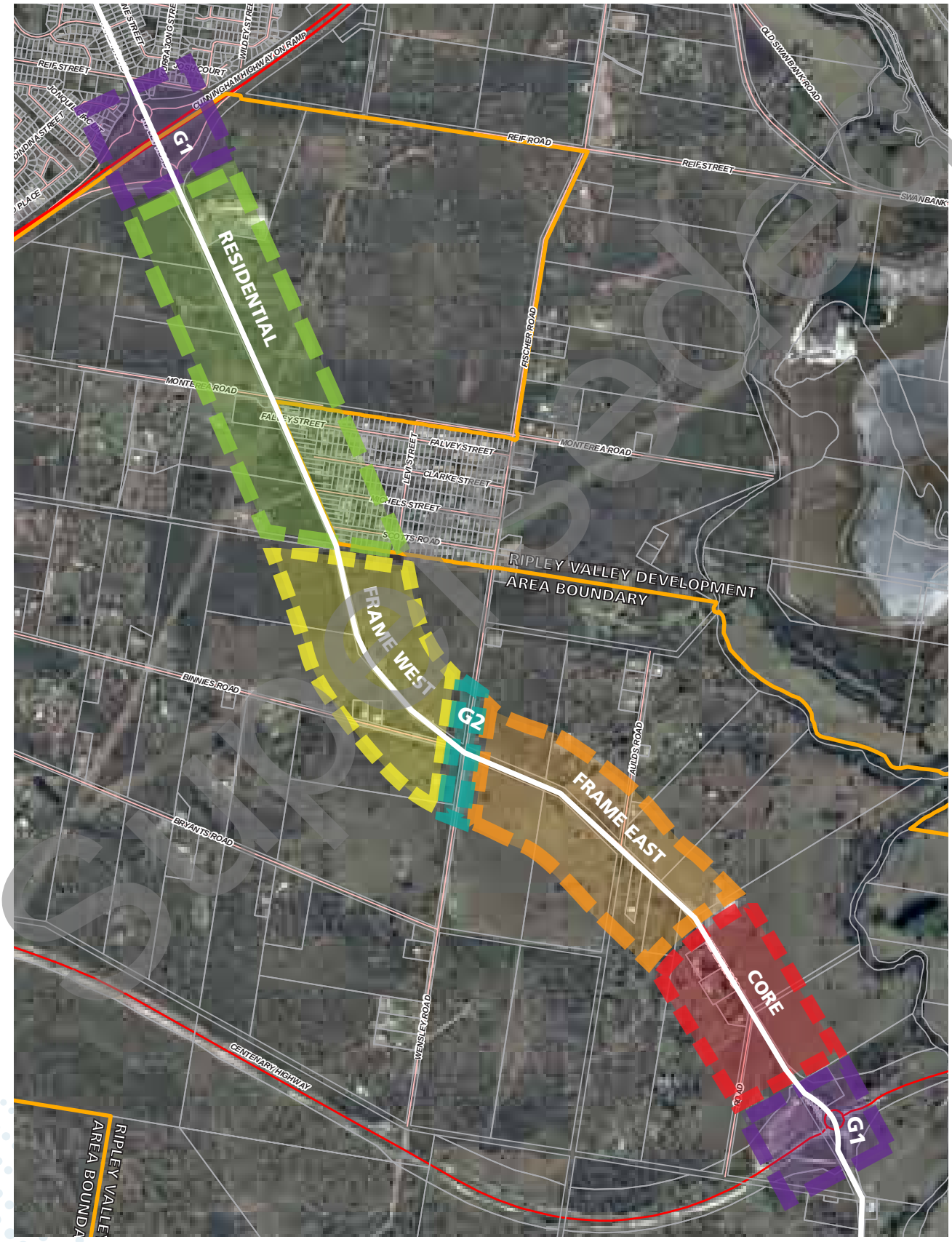
- To include a variety of materials and textures
- Fence Materials - durable, low maintenance
- Planting - long lasting, fast growing, low maintenance

Fast growing screening trees and shrubs:

Acacia sp	Wattle
Allocasuarina littorallis	Forest She-oak
Callistemon "Endeavour"	Bottlebrush cultivar
Callistemon "Little John"	Bottlebrush cultivar
Callistemon "Wilderness White"	Bottlebrush cultivar
Callistemon viminalis	Weeping Bottle Brush
Casuarina cunninghamiana	River She-oak
Leptospernum "Pacific Beauty"	Tea Tree
Melaleuca "Claret Tops"	Melaleuca cultivar
Melaleuca linarifolia	Snow in Summer
Melaleuca "Snow Storm"	Melaleuca cultivar
Metrosiderus sp	NZ Christmas Tree
Syzygium "Aussie Southern"	Glossy Lilly Pilly
Syzygium "Cascade"	Cascade Lilly Pilly
Syzygium luehmannii	Small Leaf Lilly Pilly

Part B: Engineering design guide

Part B: Engineering design guide


G1
RESIDENTIAL
REIF ROAD
REIF STREET
CUNNINGHAM HIGHWAY ON RAMP
OLD SWANBANK ROAD
FISCHER ROAD
MONTEREA ROAD
FALVEY STREET
LEVI STREET
CLARKE STREET
SCOTTS ROAD
RIPLEY VALLEY DEVELOPMENT AREA BOUNDARY
FRAME WEST
G2
BINNIES ROAD
FRAME EAST
BRYANTS ROAD
WELSLEY ROAD
CENTENARY HIGHWAY
CORE
G1
RIPLEY VALLEY AREA BOUNDARY

Design standards

Aspect	Standard/specification
Geometry	1. Austroads guide to road design; or 2. Department of Transport and Main Roads [DTMR] Road Planning and Design Manual
Pavement	DTMR Pavement Design Manual
Bridges	DTMR Bridge Design Manual
Road drainage	1. Ipswich Planning Scheme Policy 3 - General Works 2. Queensland Urban Drainage Manual 3. DTMR Drainage Design Manual (in that order of precedence)
Signs and lines	1. Manual of Uniform Traffic Control Devices; and 2. DTMR Guide to Pavement Marking
Street lighting	Australian Standard AS1158 series
Traffic signals	1. DTMR standards 2. Austroads Guidelines (in that order of precedence)
Bus stops	Should accord with Translink Standards and should be installed by ICC preferred supplier.
Roadside hazards	DTMR standards (eg. clear zones, frangibility)
All other aspects	1. ICC Standards; 2. DTMR standards; and 3. Austroads (in that order of precedence)

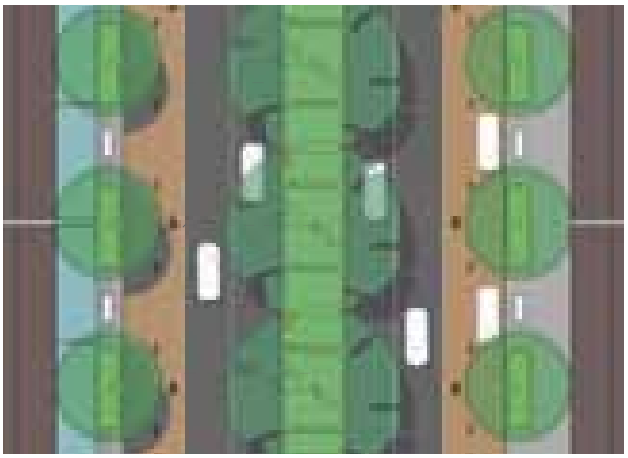
Design speed

Section	Design speed	Posted speed limit
Cunningham Hwy - Fischer Rd / Wensley Rd	80km/h *	70km/h
Fischer Rd / Wensley Rd - to Barrams Rd	70km/h	60km/h

* NOTE: At isolated locations a lower design speed (minimum of 70km/h) for vertical geometry will be accepted if it can be demonstrated that an 80km/h design speed will cause large / impractical amounts of earthworks.

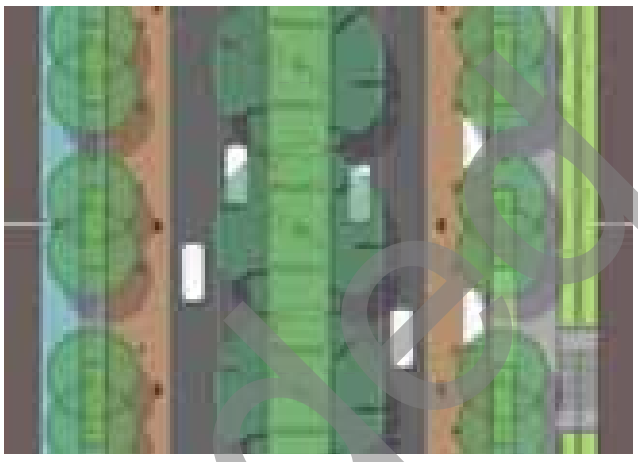
Typical cross sections

The following diagrams provide a guide to the preferred typical cross sections for both the ultimate dual carriageway 6-lane configuration (Figure 1) and the interim 2 lane single carriageway configuration (Figure 2).



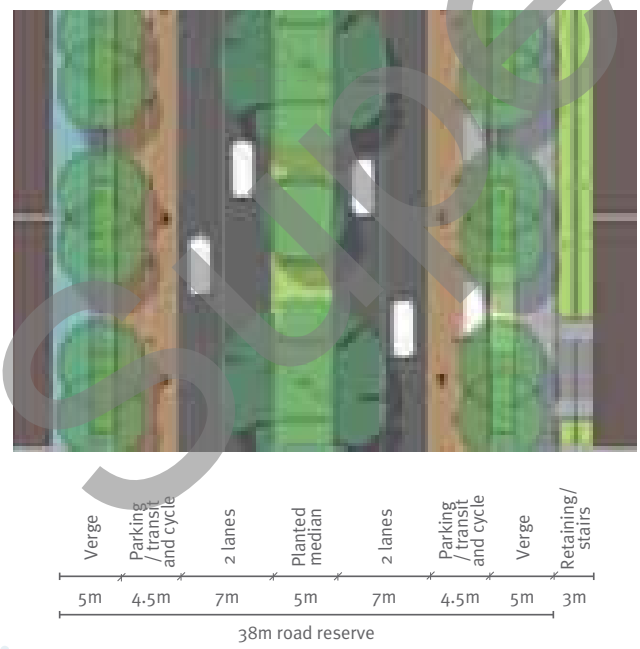
CORE (North and South of Centenary Highway)

NOTE: Total width of verge paved at ultimate development with 2.5 metres shared pedestrian/cycle path in interim except eastern verge to south of centenary highway to include 2.5 metres shared pedestrian/cycle path in the interim.

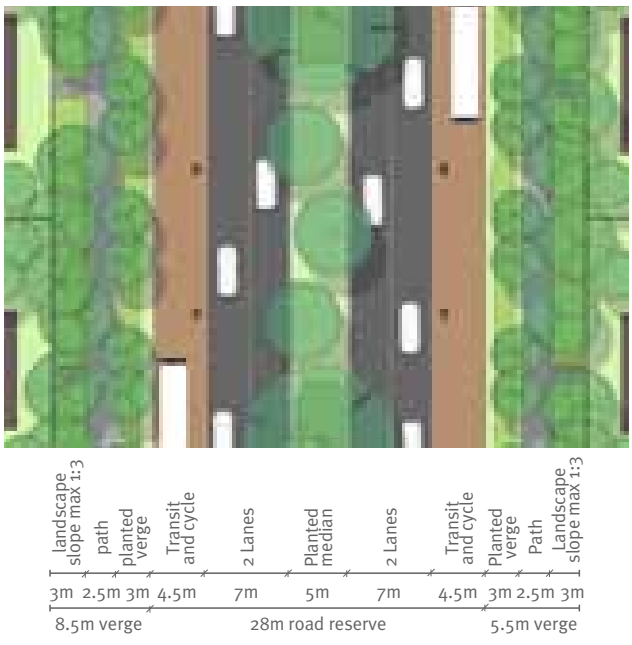


FRAME EAST (North and South of Centenary Highway)

NOTE: parking/cycle lane converted to transit/cycle lane at ultimate development.



FRAME WEST (Fischer Rd and Wensley Rd to Scotts road)

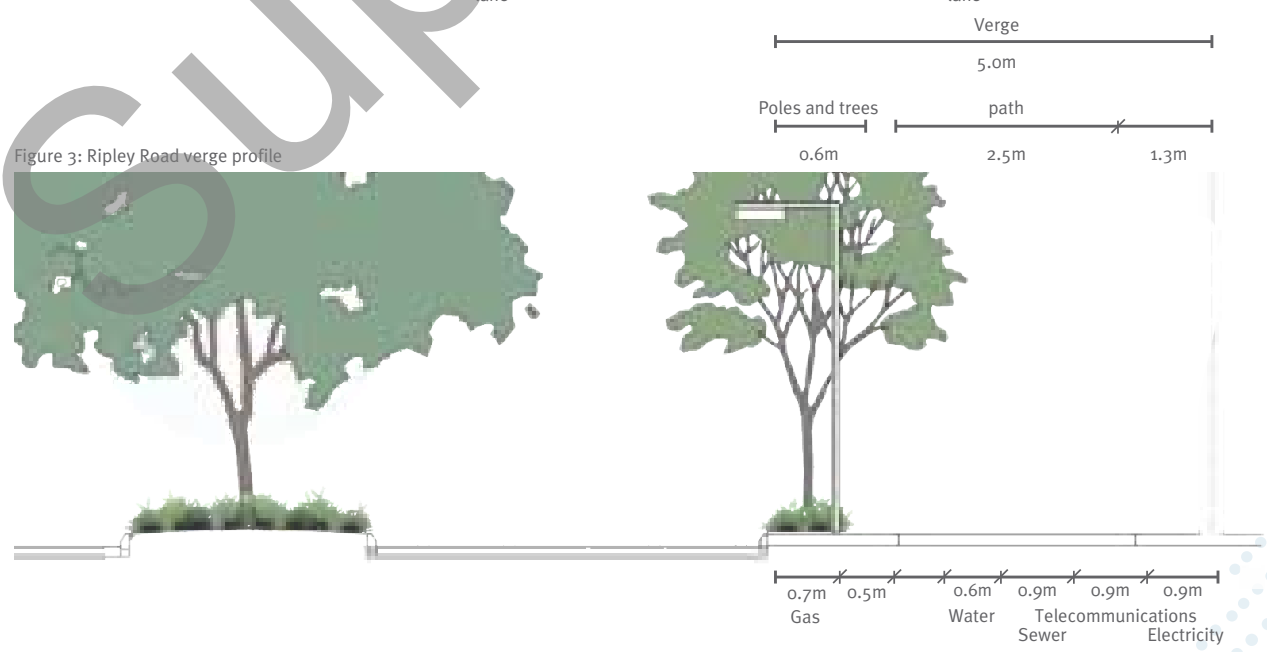


RESIDENTIAL (Cunningham Highway to Scotts Rd)

Figure 1: Typical cross section dual carriageway G-lane configuration

Figure 2: Proposed interim 2-lane configuration

Figure 3: Ripley Road verge profile



Services profile

The typical services profile along Ripley Road outside the urban core is outlined in Figure 3.

Intersection locations and configuration

Figure 4 provides a guide to the preferred location of signalised intersections and Figure 5 provides a guide to the preferred configuration of the intersections along Ripley Road between the Cunningham and Centenary Highways. Additional left-in/left-out intersections will be permitted based on meeting engineering standards.

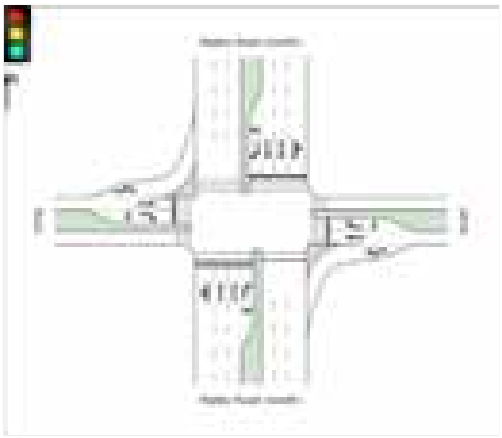
Key

1 - Intersection number

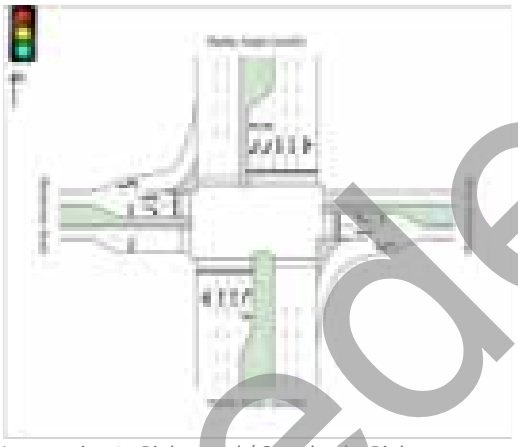
Figure 4: Preferred signalled intersection locations

Figure 4: Preferred signalled intersection configurations

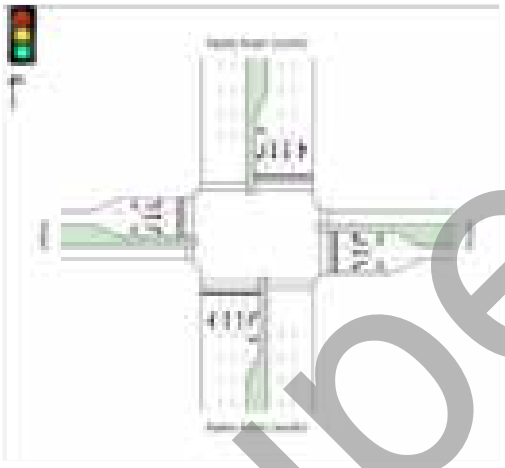
Intersections 1,3,4



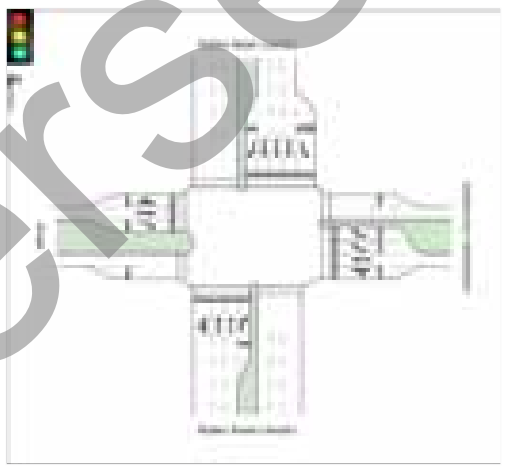
Intersection 2 - Ripley road / Monterea road



Intersection 6, 7, 9, 10



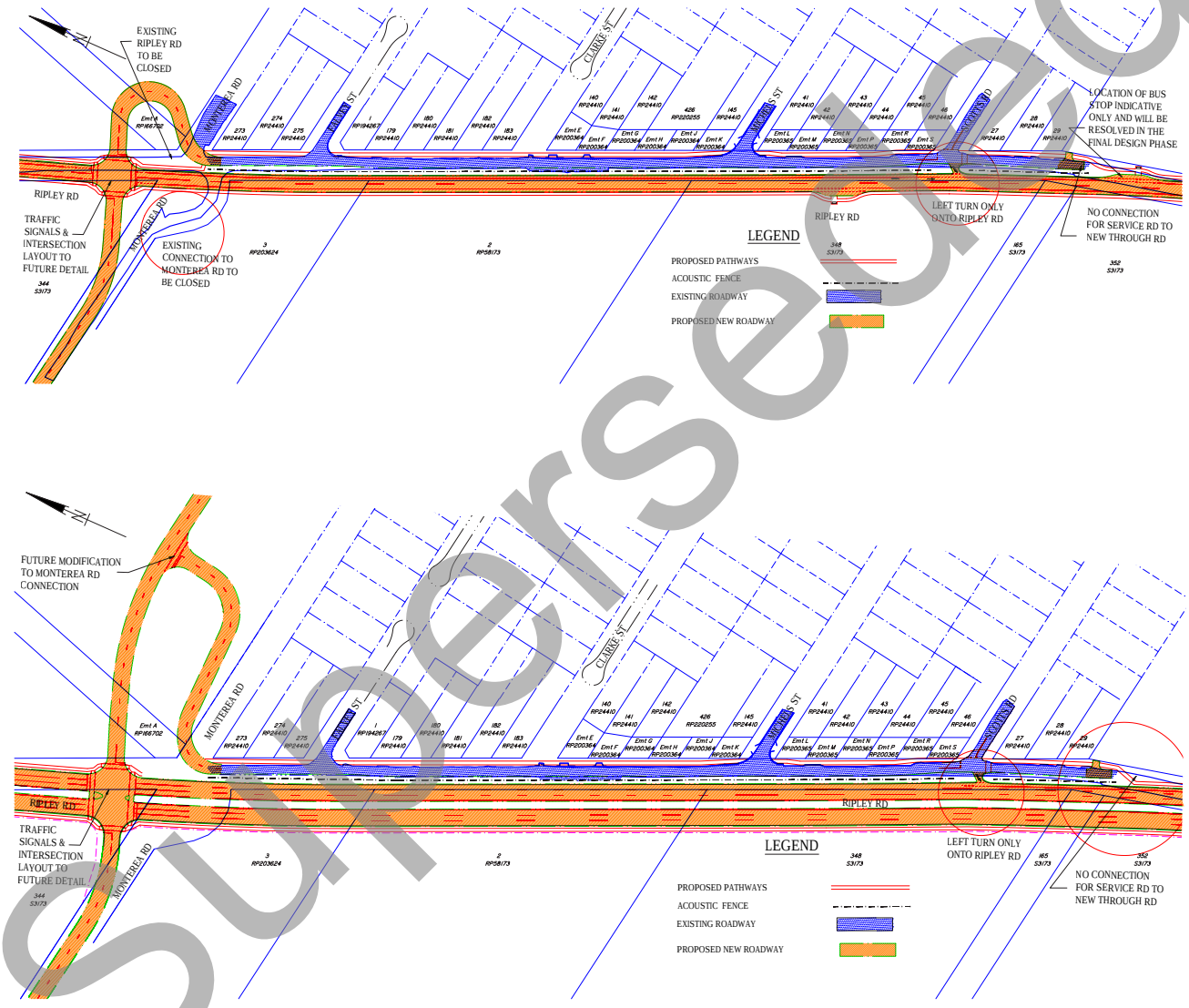
Intersection 8 - Ripley road / Swanbank - Ripley connection road



Intersection 5 - Ripley road / Wensley road / Fischer road

Ripley township service road arrangement

The arrangement for the service road across the frontage of the Ripley township for interim two lane and ultimate six lane arrangement are provided below.



Flood immunity

Type	Average recurance interval
Cross drainage	1 in 50 years #
Longitudinal drainage	1 in 10 years

NOTE: At isolated locations a lower ARI (minimum 1 in 20 years) will be accepted if it can be demonstrated that an 1 in 50 year ARI will cause large / impractical amounts of infrastructure.

Earthworks batters

Batter type	Depth	Maximum slope
Cut batters	≥ 2.0m	1:1
	≤ 2.0m	1:4
Fill batters	≥ 2.0m	1:2
	≤ 2.0m	1:4
Clearance from earthworks interface to road reserve boundaries	minimum 5.0m#	

NOTE: this width does not include provision of catch drains and embankments at the earthworks interface for appropriate drainage measures and stormwater treatment devices).

Stability of maximum batters to be confirmed Geotechnical Report.

Earthworks batters can be contained within easements subject to confirmation of the relevant authority.

Pavement

Design Equivalent Standard Axles (ESA) = 1.2 x 10^7.

Kerb profile

- Barrier (B1) for outside
- Semi-mountable for median

Street lighting

The objective of street-lighting for Ripley Road is to provide a lit environment that is conducive to the safe and comfortable movement of pedestrians, cyclists and vehicles. The design and location of streetlights is to work with other parameters such as the choice of large median street trees and a need to cater for pedestrianised verges.
Therefore, the street-lighting will need to allow for the following as a minimum standard:

- All street lights along Ripley Road are to be Energex Rate 2 and must meet Category V3;
- All street lights along Ripley Road should be aeroscreen luminars to minimise lighting spill into adjacent properties;
- Street light poles on Ripley Road within the urban core should be non-frangible, street light poles outside of the urban core should be frangible

All street lighting arrangements will need to be modeled to confirm the required pole spacing and mounting height and to ensure that the level of light over the verge area will meet the required lux levels (V3), taking into account the proposed tree planting within the verge. Isolux diagrams are required to demonstrate the resulting lux levels, and to demonstrate the level of lighting spill into the adjacent properties.

NOTE: The spacing of street lights in the short term will need to be adequate to light the ultimate dual carriageway road to V3 standard when the lights are duplicated on the other side of the road. Consideration is required as to what arrangement is going to be used in the ultimate dual carriageway design.

Driveway access

None permitted (Emergency Services site excepted).

Existing driveways where safe are to be retained until adjacent properties are developed or alternative local road network is developed.

Cyclists

Ripley Road has been nominated in the "Principal Cycle Route" in both the SEQ Principal Cycle Network Plan and Ripley Valley Structure Plan, necessitating an absolute minimum path with of 2.5 metres on both sides of Ripley Road plus bicycle lanes.

Bus stops

- Ripley Road forms part of the Bus Rapid Transit network between the Ipswich City Centre and the Ripley Town Centre.
- Provision need to be made for bus priority treatments along Ripley Road including transit lanes.
- Bus stops and associated infrastructure (indented, waiting areas, shelters etc) shall need to be provided in accordance with Translink standards/requirements.
- The verge area adjacent to bus stops shall accord with ICC standard drawing SR40.
- Where required bus stops are to be provided for both north and south bound services for the interim 2 lane configuration of Ripley Road.

Contact Us

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