

Coal & Allied

NORTHERN ESTATES

MINMI - LINK ROAD

APPENDIX B ■ URBAN DESIGN GUIDELINES

DATE ■ NOVEMBER 2014
PREPARED BY ■ RPS and JMD

Contents

Introduction	1
B.1 Public Domain Guidelines	2
B.1.1 Access and Movement	2
B.1.2 Parks and Open Spaces	4
B.1.2.1 Garden House Park - Indicative Design	8
B.1.2.2 Neighbourhood Park 1- Indicative Design	9
B.1.2.3 Neighbourhood Park 2 - Indicative Design	10
B.1.2.4 Neighbourhood Park 3 - Indicative Design	11
B.1.3 Road Hierarchy, Road Grades & Housing on Slope and Riparian Corridor	12
B.1.3.1 Road Hierarchy	12
B.1.3.2 Typical Road Sections	14
B.1.3.3 Road Grades & Housing on Slope	25
B.1.3.4 Riparian Corridors	27
B.1.4 Landscape Character Palette	31
B.1.5 Indicative Landscape Plant List	35

Figures

Figure B.1.1 Conceptual Access & Movement	3	Figure B.1.21 Newcastle Link Road - Link Road North to Link Road South (Section C-C)	24
Figure B.1.2 Conceptual Park and Open Spaces	5	Figure B.1.22 Dwelling Design Principles to Consider on Steep Slopes	25
Figure B.1.3 Open Space Provision	6	Figure B.1.22 Preferred options for roads and lots on steeper land	26
Figure B.1.4 Open Space Ownership	7	Figure B.1.23 Riparian corridor between two lots (Section 10-10)	28
Figure B.1.5 Indicative Design - Garden House Park	8	Figure B.1.24 Riparian corridor between roads (Section 11-11)	29
Figure B.1.6 Indicative Design- Neighbourhood Park 1	9	Figure B.1.25 Riparian corridor with road to one side (Section 12-12)	30
Figure B.1.7 Indicative Design - Neighbourhood Park 2	10	Figure B.1.26 Landscape Character - Minmi Extension Precinct	31
Figure B.1.8 Indicative Design - Neighbourhood Park 3	11	Figure B.1.27 Landscape Character - Minmi East Precinct	32
Figure B.1.9 Conceptual Road Hierarchy	13	Figure B.1.28 Landscape Character - Link Road North Precinct	33
Figure B.1.10 Proposed Minmi Boulevard -27m (1-1)	14	Figure B.1.29 Landscape Character - Link Road South Precinct	34
Figure B.1.11 Minmi Boulevard within Minmi Village -26m (2-2)	15	Figure B.1.30 Landscape Character - Indicative Plant List	35
Figure B.1.12 Collector Road A - 24m (3-3)	16		
Figure B.1.13 Collector Road B - 20m (4-4)	17		
Figure B.1.14 Local Road with Bus Route - 18.6m (5-5)	18		
Figure B.1.15 Local Road A - 17m (6-6)	19		
Figure B.1.16 Local Road B - 15m (7-7)	20		
Figure B.1.17 Local Road C - 13m (8-8)	21		
Figure B.1.18 Access Way - 10m (9-9)	22		
Figure B.1.19 Newcastle Link Road - Cameron Park to Link Road North (Section A-A)	23		
Figure B.1.20 Newcastle Link Road - Link Road North to Link Road South (Section B-B)	24		

Introduction

Appendix B:

Provides information on the public space design strategy and the desired character for these spaces.

It describes the access and movement strategy, park and open space characters, road hierarchy and road typology, and public domain guidelines. The public domain guidelines seek to consolidate the landscape character identified in the concept plan. They aim to reinforce the dominant qualities of each landscape by the use of appropriate scale, thematic treatment, and planting and materials palettes.

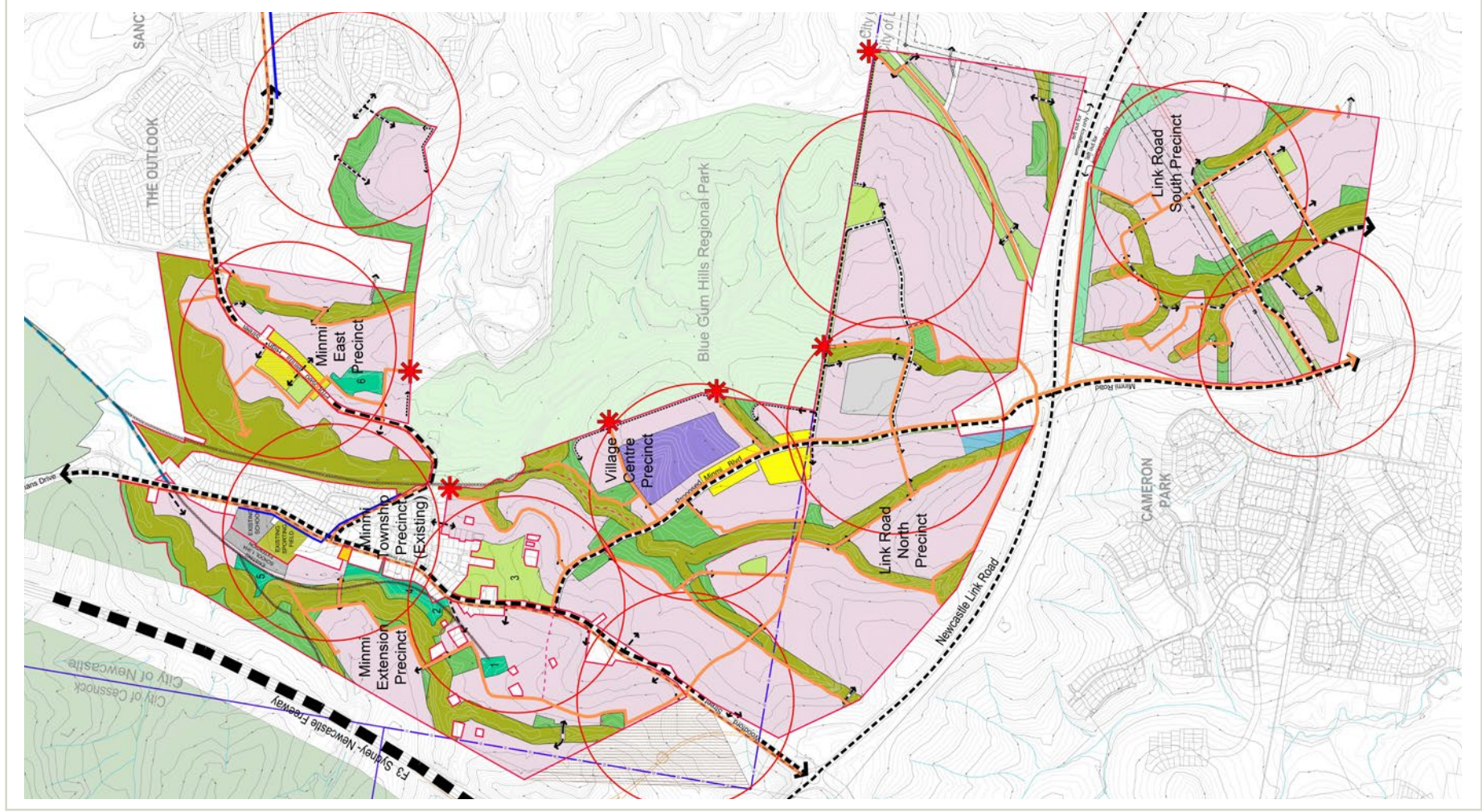


B.1 Public Domain Guidelines

B.1.1 Access and Movement

The Conceptual Access and Movement Plan on the opposite page illustrates the key components of the pedestrian, cycle and vehicle networks associated with the proposed development. These are summarised as follows:

- Minmi Boulevard is to encourage traffic through the village centre. Woodford Street (between the Link Road and Minmi Boulevard) will become a collector road;
- Minmi Road in Minmi East area will transition from a local access road to a dynamic Minmi High Street; which will support the activity on the main road and will act as the link between the existing suburbs to the east and the new township;
- The road hierarchy utilises the existing road network to provide access to the development - Newcastle Link Road (east-west), Minmi Road (north-south and top east corner) and Woodford Street linking the existing Minmi township and new development with the surrounding area;
- The hierarchy promotes Minmi Boulevard as the main entrance to the development from the Newcastle Link Road, and as the main connection with the existing suburbs to the east and the south;
- Secondary roads form a grid network, which has been developed in response to the existing topography and proposed built form densities;
- Perimeter roads will often act as asset protection zones (APZs);
- The street layout has been designed to provide safe walking and cycling routes that link the site with the Blue Gum Hills Regional Park, neighbourhood parks and creek corridors;
- There will be a permeable street pattern of through roads;
- Footpaths are to be provided on one or both verges on all streets;
- Cycle ways are to be provided on-street or as shared paths;
- A heritage walk along the former rail line will provide pedestrian access from the Tank Paddock area to the new township through to Workshop Park in the west and Blue Gum Hills Regional Park in the east;
- Parallel street side parking will occur on all local streets, and within the village areas;
- The Minmi Boulevard, High Street and the Collector Road in the Link Road South Precinct will be lit for good visibility at night;
- Bio-retention swales will be provided on some streets (where gradients permit) to clean and filter stormwater;
- A network of fire access/walking trails will extend the pedestrian and cycle network within and alongside the creek corridors.



- Legend**
- Site Boundary
 - Existing Major Contour (10m Interval)
 - Existing Minor Contour (2m Interval)
 - Development Precinct Boundary
 - Existing Heritage Railway Tracks
 - Proposed alignment of shared pedestrian/bicycle pathways
 - Proposed F3 motorway RTA Extension
 - Proposed RTA Land
 - Existing Transgrid Easement
 - Existing Energy Australia Easement
 - Existing Dual Power Pole Position (Monteath, 2008)
 - Existing Electricity Transmission Lines (Monteath, 2008)
 - Existing Creek Line
 - Blue Gum Hills Regional Park
 - Coal & Allied Conservation Area
 - Existing Open Space
- Proposed Land Uses**
- Proposed Village Centre Mixed Use / Retail (incl Community Facilities)
 - Proposed Minimi High Street Mixed Use / Retail
 - Proposed Minimi Township Mixed Use / Retail
 - Proposed Independent Living Units
 - Proposed Residential (includes Local Roads)
 - Proposed Water Reservoir Lot
 - Existing School Extension
 - Proposed School
 - Proposed Landscape Road Corridor
- Major Roads**
- F3 - Sydney-Newcastle Freeway
 - Newcastle Link Road
 - Collector / Spine
 - Road Bus Route on Local Road
 - Esplanade Road to Regional Park
 - Indicative Local Access Road Connections
 - Potential Local Road Connection to east if required
- Open Space**
- Neighbourhood Parks
 - Drainage Corridors
 - Passive Open Space
 - Link Road Edge
 - Feature Parks
- Access**
- 400m Transit Catchment
 - Off Road Shared Pedestrian Pathway / Cycleway
 - Shared Pedestrian Pathway / Cycleway along Alignment of Heritage Railway Tracks
 - Potential Pathway Connection to Regional Park
 - NCC Regional Cycleways
 - On Road Cycle - Proposed (R10 & R11)
 - Off Road Cycle - Existing
 - Off Road Cycle - Proposed (R9)

Note:
 Access to regional park to be restricted as per BGHRP Plan of Management.

Figure B.1.1 Conceptual Access & Movement

B.1.2 Parks and Open Spaces

Sustainability

- Employ Water Sensitive Urban Design techniques to maximise natural site hydrology and ensure high water quality of stormwater with no excessive export of sediments and nutrients;
- Ensure Water Sensitive Urban Design principles are integrated into the landscape, are sympathetic to the existing landscape character; and are incorporated into development wherever possible;
- Utilise permeable pavements wherever possible.

Heritage

- Uphold and preserve the cultural integrity of important historical items. such as Garden House Park (refer page 8: Garden House Park Indicative Design);
- Important historical elements to be incorporated into the landscape and effectively interpreted in an interesting and engaging way;
- Incorporate and interpret heritage items and places of significance into passive open space.

Parks and Open Spaces Guidelines

- Provide open space facilities for residents within a 400m radius of most homes, eg. childrens playground, shelters, and seating;
- Park design is to reflect built character and landscape character;
- Provide a range of different sized open space areas to cater for varying recreation needs and ages including informal exercise spaces, children’s play equipment and informal play areas;
- Encourage community interaction and ownership by creating desirable gathering spaces, and providing a full range of activities including passive and informal active recreation;
- Increase environmental value by the use of planting and landscape treatments that promote biodiversity and native fauna habitat;
- Provide biodiversity connectivity;
- Integrate and conserve an interconnected network of waterways that allows for ecological, aesthetic and recreational values while meeting the requirements of stormwater drainage design;
- Ensure low impact on sensitive ecological communities;
- Retain and enhance existing rural landscape character;
- Provide landscape plantings which frame views, create shade and give interesting and varied experiences to pedestrian walkways;
- Provide a range of plant groupings of different ages to ensure longevity of the plant community, sustaining landscape amenity of the open spaces.

Figure B.1.2 shows the distribution of public open space across the development. Figure B.1.3 accompanies this plan defining the areas of open space provided by type and quantifying the area of open space uncumbered by high/low risk of pot holing and areas needed for stormwater detention and bio-retention.

Figure B.1.4 shows the proposed pattern of ownership of these open space assets, that is to be further negotiated with stakeholders.

Legend

- Site Boundary
- Existing Major Contour (10m Interval)
- Existing Minor Contour (2m Interval)
- Development Precinct Boundary
- Existing Heritage Railway Tracks (proposed alignment of shared pedestrian/cycle pathways)
- Proposed F3 motorway RTA Extension
- Existing Transgrnd Easement
- Existing Energy Australia Easement
- Existing Dual Power Pole Position (Monteath, 2008)
- Existing Electricity Transmission Lines (Monteath, 2008)
- Existing Creek Line
- Blue Gum Hills Regional Park
- Coal & Allied Conservation Area
- Existing Open Space
- Open Space
- Neighbourhood Parks
- Drainage Corridors
- Passive Open Space
- Link Road Edge
- Feature Parks
- Proposed Landscape Road Corridor
- Detention Basins, Existing and Proposed Lakes
- High Risk Pothole
- Low Risk Pothole
- Major Roads
- F3 - Sydney-Newcastle Freeway
- Newcastle Link Road
- Collector / Spine
- Road Bus Route on Local Road
- Esplanade Road to Regional Park
- Indicative Local Access Road Connections
- Potential Local Road Connection to east if required

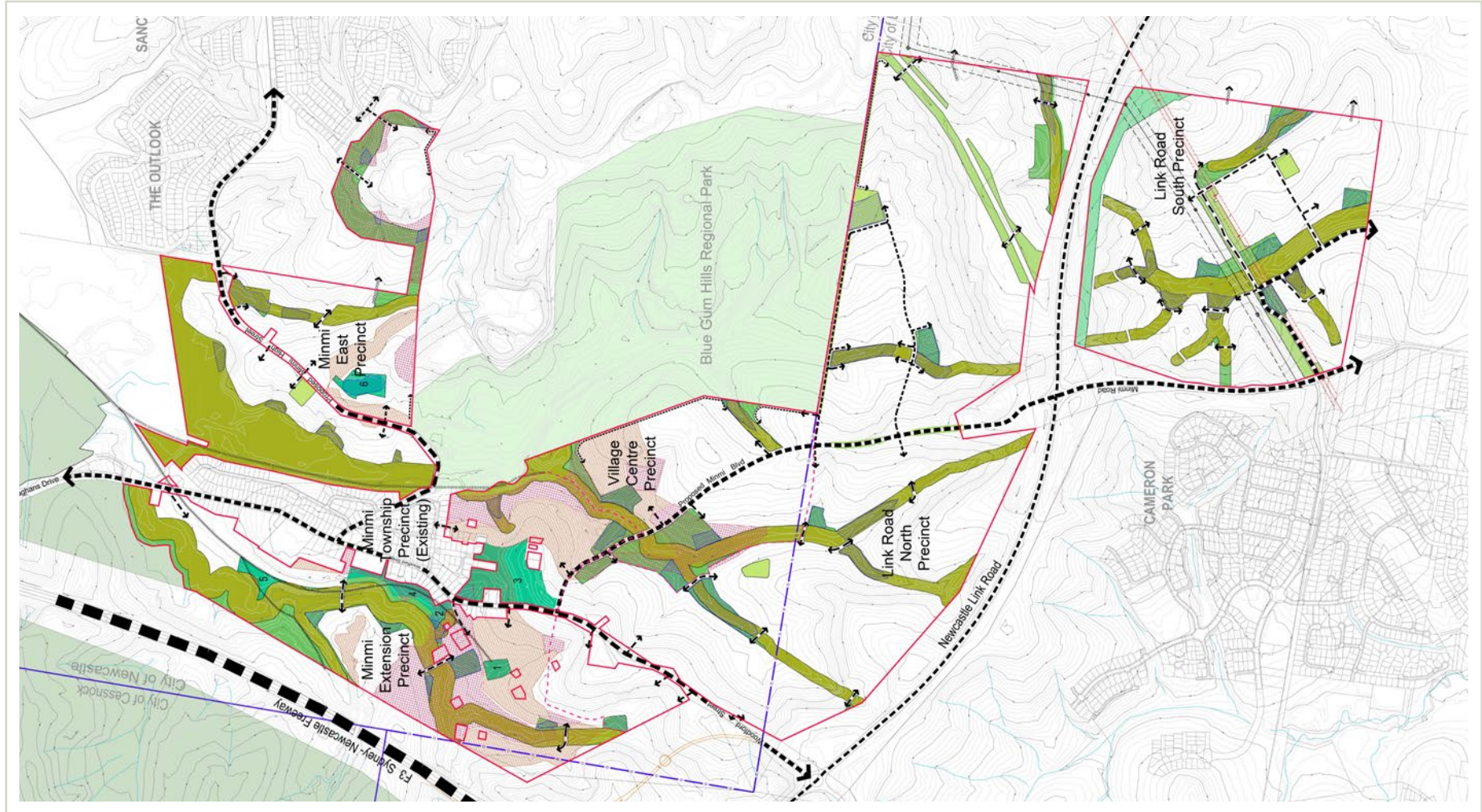


Figure B.1.2 Conceptual Park and Open Spaces

	Total	High Risk Pothole	Low Risk Pothole	Balance
Open Space Type	Areas (Ha)	Within Open Space (Ha)	Within Open Space (Ha)	Area (Ha)
Neighbourhood Parks	3.10	0.00	0.00	3.10
Playgrounds, Seating & Shade Facilities, Informal Kick & Play, Tree Planting	1.98	0.00	0.00	1.98
Detention and Bioretention Areas	1.12	0.00	0.00	1.12
Riparian Corridors	89.88	9.90	2.76	77.22
Passive Open Space, Movement trails, Drainage, Drainage Corridor Edges, Services & Vegetation	79.02	9.45	2.76	66.81
Detention and Bioretention Areas	10.86	0.45	0.00	10.41
Passive Open Space	29.75	11.17	2.34	16.24
Heritage Open Space, APZ's, Steep Slopes, Pothole Risk Area	21.30	9.19	0.99	11.12
Detention and Bioretention Areas	8.45	1.98	1.35	5.12
Link Road Edge	5.34	0.00	0.00	5.34
Feature Parks	9.35	1.48	3.01	4.85
1 Workshop Park	0.58	0.00	0.58	0.00
2 Coke Oven Park	0.44	0.41	0.00	0.03
Detention and Bioretention within Coke Oven Park	0.05	0.00	0.00	0.05
3 Addition To Garden House Park	4.93	0.27	2.12	2.54
4 Minmi Edge & Entry Parks	1.33	0.80	0.00	0.53
5 Minmi Edge Parks	0.74	0.00	0.00	0.74
6 Lake Park (Lake Area within Lake Park 0.78Ha)	1.33	0.00	0.31	1.01
Total	137.42	22.54	8.12	106.76

Figure B.1.3 Open Space Provision

Legend

- Site Boundary
 - Existing Major Contour (10m Interval)
 - Existing Minor Contour (2m Interval)
 - - - Development Precinct Boundary
 - + + + Existing Heritage Railway Tracks (proposed alignment of aligned pedestrian/cycle pathways)
 - Proposed F3 motorway RTA Extension
 - - - Existing Transgrid Easement
 - - - Existing Energy Australia Easement
 - + + + Existing Dual Power Pole Position (Monteath, 2006)
 - + + + Existing Electricity Transmission Lines (Monteath, 2006)
 - Existing Creek Line
 - Blue Gum Hills Regional Park
 - Coal & Allied Conservation Area
 - Existing Open Space
- Open Space**
- Neighbourhood Parks
 - Drainage Corridors
 - Passive Open Space
 - Link Road Edge
 - Feature Parks
 - Proposed Landscape Road Corridor
 - Detention Basins, Existing and Proposed Lakes
- Major Roads**
- F3 - Sydney-Newcastle Freeway
 - - - Newcastle Link Road
 - - - Collector / Spine
 - - - Road Bus Route on Local Road
 - - - Esplanade Road to Regional Road
 - - - Indicative Local Access Road Connections
 - - - Potential Local Road Connection to east if required
- Proposed Open Space Ownership**
- Coal & Allied
 - Newcastle City Council (NCC)
 - Lake Macquarie City Council

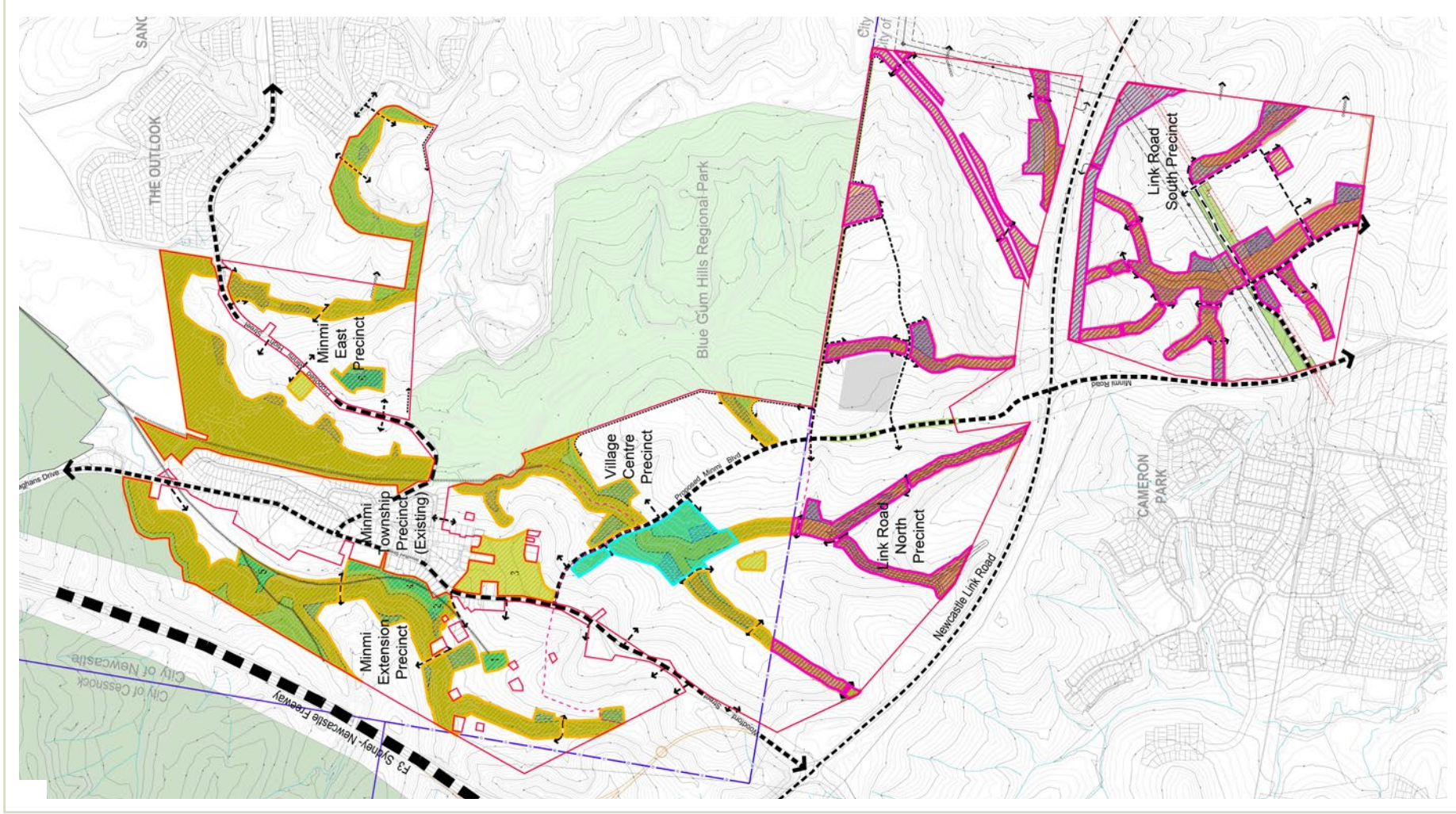


Figure B.1.4 Proposed Open Space Ownership

B.1.2.1 Garden House Park – Indicative Design (Minmi Village Extension Precinct – Heritage Character)

Urban Design Character

Conservation Character

Landscape Character

The Heritage Character of Minmi Landscape Curtilage responds to wide, open lawn areas to retain views and minimal, but high quality landscape design that respects historic features. Open areas contrast with natural planting to the perimeter.

User Group

Old and new Minmi catchment area. Every day activities: dog walking, coffee shop, picnic, look-out, heritage, on weekends: performances in amphi-theatre, outdoor activities like kite flying on extensive lawn area.

Amenities

Walking paths, shelters, outdoor dining, outlook/views.

Sustainability

Native planting of endemic species, permeable materials on hardstanding areas (allow natural drainage).



Figure B.1.5 Indicative Design - Garden House Park

B.1.2.2 Neighbourhood Park 1 – Indicative Design

(Minmi East – High Street Mixed Use Precinct)

Urban Design Character

Park side & High Street.

Landscape Character

Urban aesthetic along High Street, abstract bushland aesthetic along the perimeter.

User Group

Neighbourhood community. Urban edge: people of all ages, coffee shop culture. Natural edge: families and children.

Amenities

BBQ, shelters/ shading, seating, childrens playground, multi-functional area, coffee shop.

Sustainability

Bioswale, permeable paving, recycled materials, rainwater collection.



Figure B.1.6 Indicative Design - Neighbourhood Park 1

B.1.2.3 Neighbourhood Park 2 – Indicative Design

(Minmi East – High Street Mixed Use Precinct)

Urban Design Character

Lake Side

Landscape Character

Material selection responds to Hexham Swamp Edge Character. Water related activities and planting.

User Group

Neighbourhood community, families with children.

Amenities

Water play, boardwalks, terraces and out-looks with shelter and BBQ facilities.

Sustainability

The design is sensitive to wildlife, creating habitat and retaining existing trees where possible. New tree plants are to be endemic and endangered species to the region and recycled materials are to be used in creating passive recreation opportunities.



Figure B.1.7 Indicative Design - Neighbourhood Park 2

B.1.2.4 Neighbourhood Park 3 – Indicative Design

(Link Road South Precinct – Traditional Character)

Urban Design Character

Parkside and Traditional Character

Landscape Character

The character of Link Road South is one of smaller neighbourhood pockets set amongst tree lined gullies and defined by undulating terrain. These pockets range in character from traditional sub-urban to more informal, secluded bushland settings. The proposed park has a more suburban character but is informal in its design with a strong presence of native planting to perimeter areas to integrate with this setting.

User Group

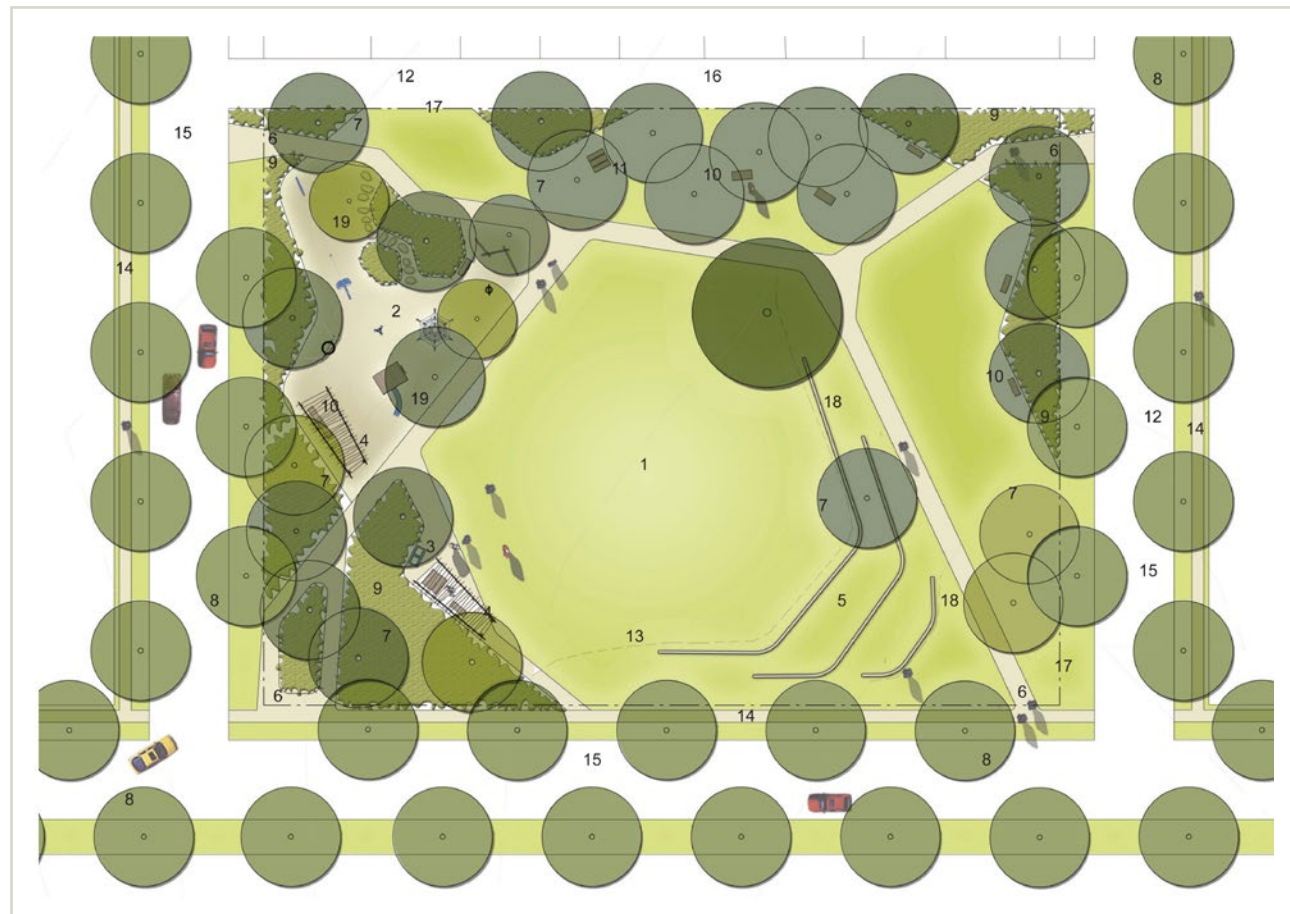
Local community of the Link Road South Precinct, young and older families, extended families, single and couple households. Informal play, community events, social gathering.

Amenities

Walking paths, shelters, outdoor dining, playground, kick 'n' throw area.

Sustainability

Native planting of endemic species, permeable paving, recycled materials.



- 1_Open lawn kick around area
- 2_Playground
- 3_BBQ facilities
- 4_Shelter
- 5_Regrading to form even grass bank
- 6_Park entry
- 7_Proposed native trees
- 8_Proposed street trees
- 9_Native grasses and shrub planting
- 10_Seat/ table seat
- 11_Picnic setting
- 12_Existing contours
- 13_Proposed contours
- 14_Footpath in street verge
- 15_Local road type B
- 16_Access way
- 17_Lot boundary
- 18_Seating wall
- 19_Shade trees outside fallzones

KEY MAP

Figure B.1.8 Indicative Design - Neighbourhood Park 3

B.1.3 Road Hierarchy, Road Grades & Housing on Slope and Riparian Corridors

B.1.3.1 Road Hierarchy

The proposed street network will be linked to the existing road network. The current road hierarchy consists of Newcastle Link Road (arterial), F3, local roads – Woodford Street and Minmi Road, and local minor roads within the Minmi township. The proposed street network consists of nine road types:

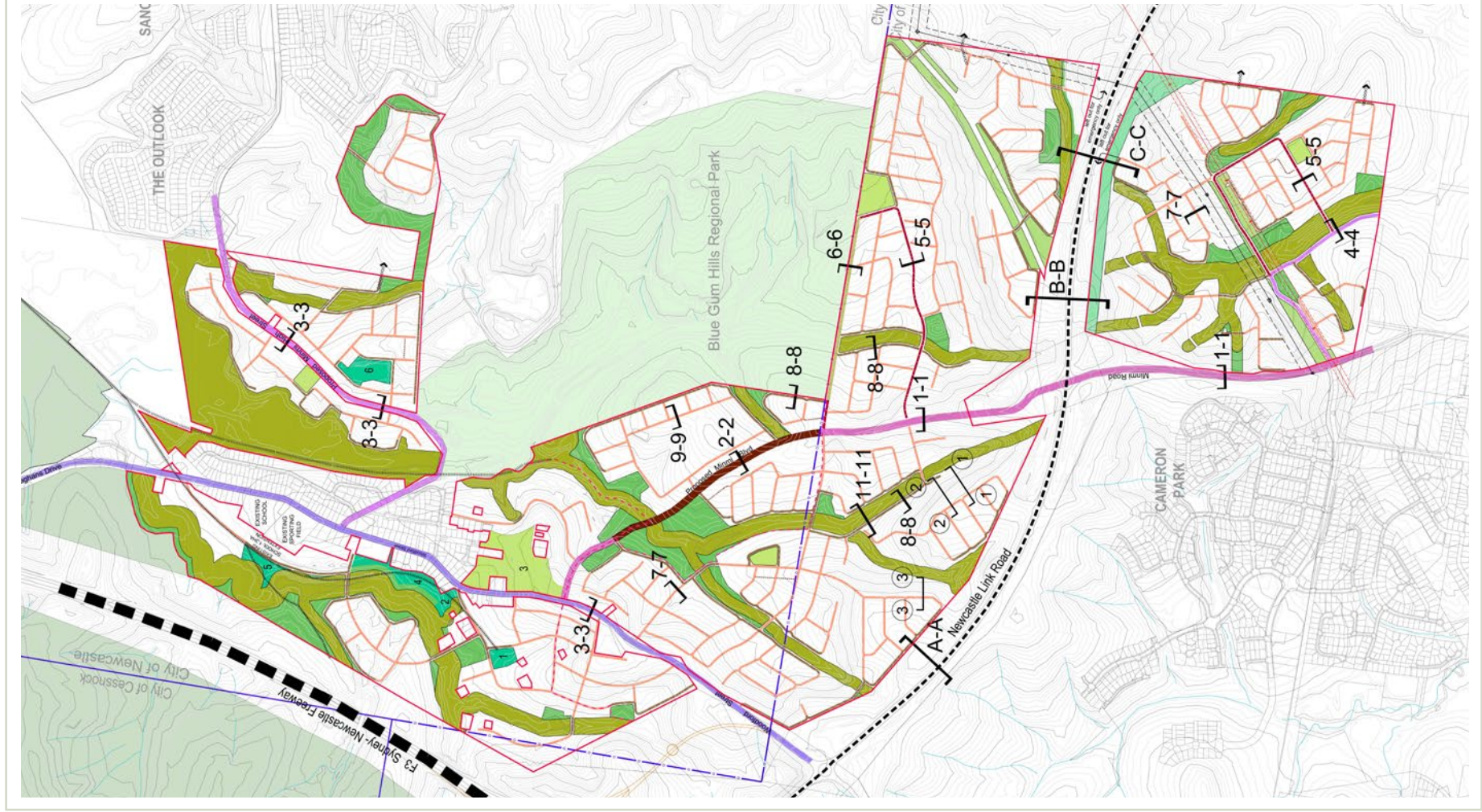
- Minmi Boulevard (including buses) – 27m wide road reserve;
- Minmi Boulevard in village area (including buses) – 26m wide road reserve
- Collector Road A (including buses) – 24m wide road reserve;
- Collector Road B (including buses) – 20m wide;
- Local road with bus route – 18.6m wide road reserve;
- Local Road A – 17m wide road reserve;
- Local Road B – 15m wide road reserve;
- Local Road C – 13m wide road reserve; and
- Access Way – 10m wide road reserve.

The proposed street hierarchy will create a diversity and richness that responds to the differing conditions around the site, without being constrained by unnecessary complexity.

The road types refer to:

- The entry road, proposed Minmi Boulevard, running through the heart of the proposed township and linking with the new village centre, existing village and surrounding suburbs and supporting a bus route;
- Collector Road that runs through the Link Road South Precinct – (as a bus route to support the school precinct and local neighbourhoods), Woodford Street and the proposed High Street in Minmi East Precinct;
- Local street with a bus route to allow more extensive access to local bus services;
- Local streets that form the neighbourhood grid; and
- Laneways that service areas of higher density.

Three cross-sections through the Newcastle Link Road show the interface of the development with the Link Road corridor.



Legend

- Site Boundary
- Development Precinct Boundary
- Existing Heritage Railway Tracks (proposed alignment of shared pedestrian/cycle pathways)
- Proposed F3 motorway RTA Extension
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- Existing Energy Australia Easement
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- Link Road Edge
- Feature Parks
- Proposed Landscape Road Corridor
- Major Roads
- F3 - Sydney-Newcastle Freeway
- Newcastle Link Road
- Potential Local Road Connection to east if required
- Proposed Road Types
- Proposed Mimmi Boulevard and Mimmi Road South (27m): Section 1-1
- Mimmi Boulevard within Mimmi Village (26m): Section 2-2
- Collector Road A (24m): Section 3-3
- Collector Road B (20m): Section 4-4
- Local Road D (18.6m) Bus Route: Section 5-5
- Local Road A (17m): Section 6-6
- Local Road B (15m): Section 7-7
- Local Road C (13m): Section 8-8
- Access Way (10m) Section 9-9
- Proposed Link Road Sections
- Section A-A Cameron Park to Link Road North
- Section B-B Link Road South to Link Road North
- Section C-C Link Road South to Link Road North

Figure B.1.9 Conceptual Road Hierarchy

B.1.3.2 Typical Road Sections

The road types and their respective character areas are described below:

Minmi Boulevard - 27m - reducing to 26m in the village centre

- Proposed Minmi Boulevard is to act as a spine road for the development, given its central location, through the Village Centre precinct. It will accommodate a bus route;
- This is to be a wide street with a shared path 2.5m wide on both sides and a median strip of 3m in all areas, except the village centre;
- Paving within the village centre will differ from other areas. The lack of median strip in this area will encourage pedestrian access to both sides of the street;
- Street trees and heath planting will supplement the existing bushland character;
- This street will provide for moderate volumes of through traffic, with parallel parking on both sides (within the village centre and where townhouses front the collector road only), street lighting and landscaping;
- Bioswales will be located according to detailed design parameters.

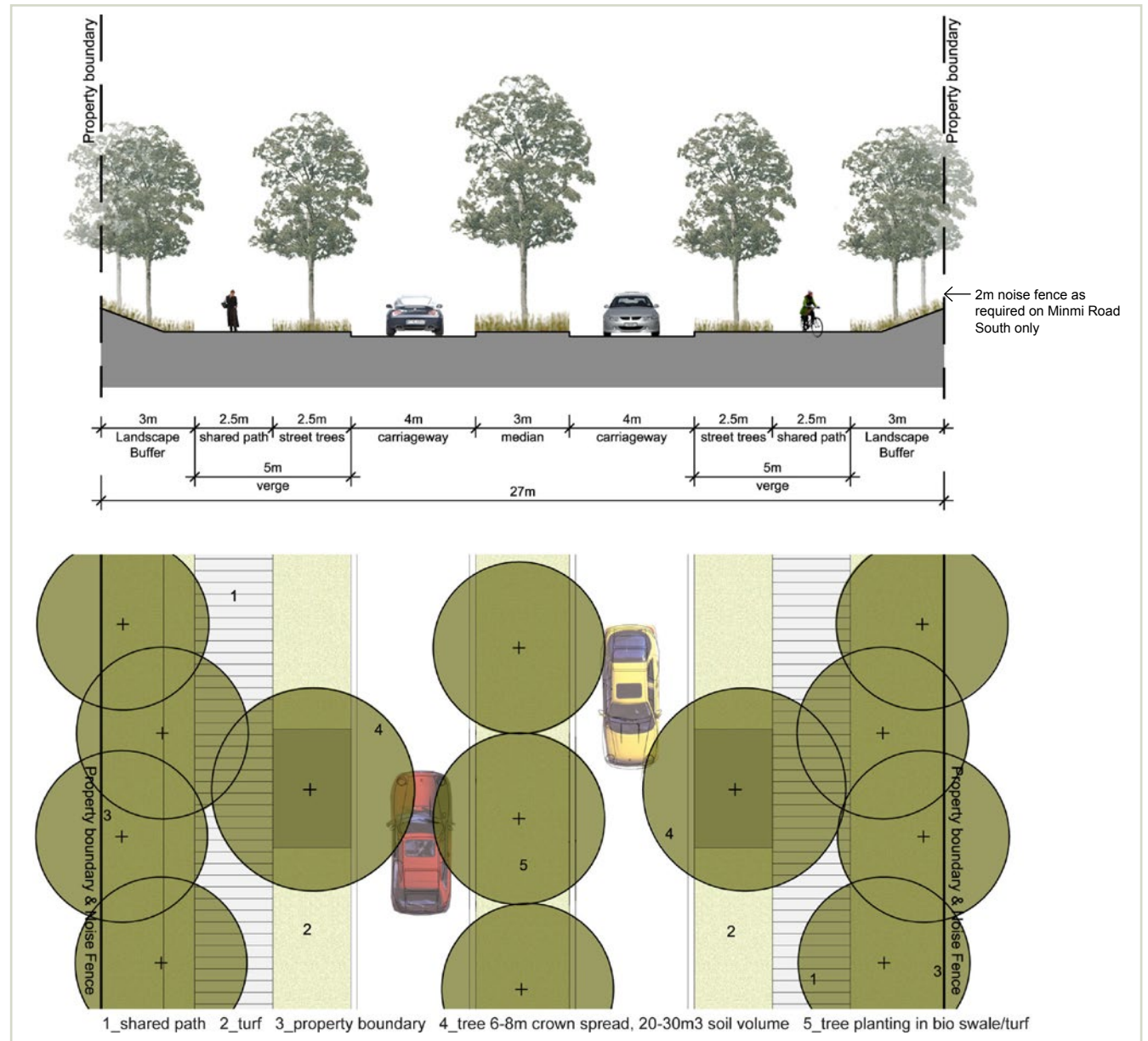


Figure B.1.10 Proposed Minmi Boulevard - 27m (Section 1-1)

Minmi Boulevard Within Proposed Village
- 26m (Section 2-2)

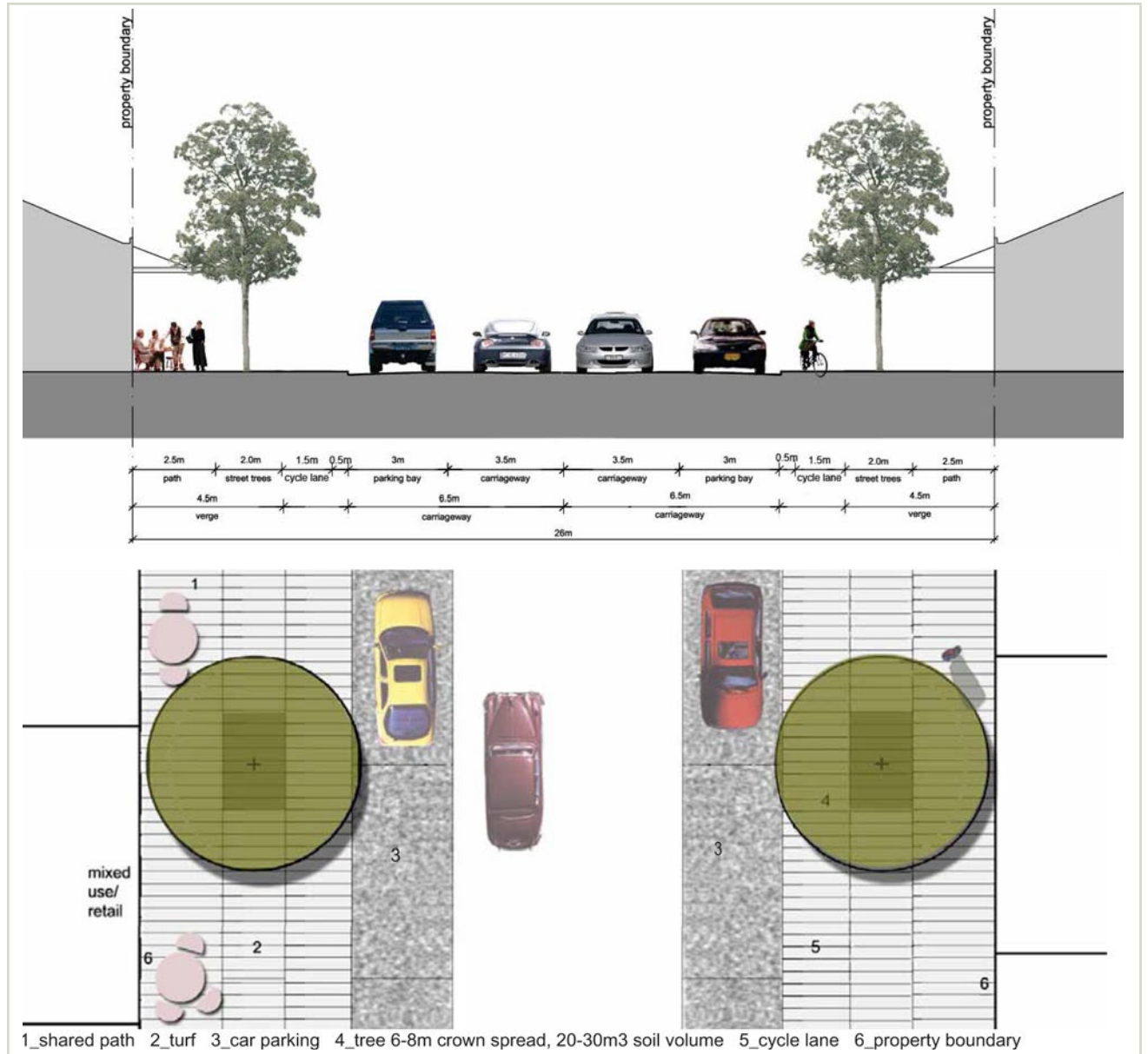


Figure B.1.11 Minmi Boulevard Within Proposed Village - 26m (Section 2-2)

Collector Road A - 24m

- Collector Road A (Woodford Street and Minmi Road) will provide the major thoroughfare for traffic through the new development and will accommodate a bus route;
- This road is to be a broad street with a shared path 2.5m wide on both sides and an 8m wide carriageway. A 3m wide vegetated buffer and street tree planting (2.5m) will also be accommodated on both sides of this street;
- Street trees and heath planting will complement the existing bushland character;
- This street will provide for moderate volumes of through traffic with parallel parking on both sides (Minmi East Village only), street lighting and shared pedestrian cycle paths;
- Bioswales will be located according to detailed design parameters.

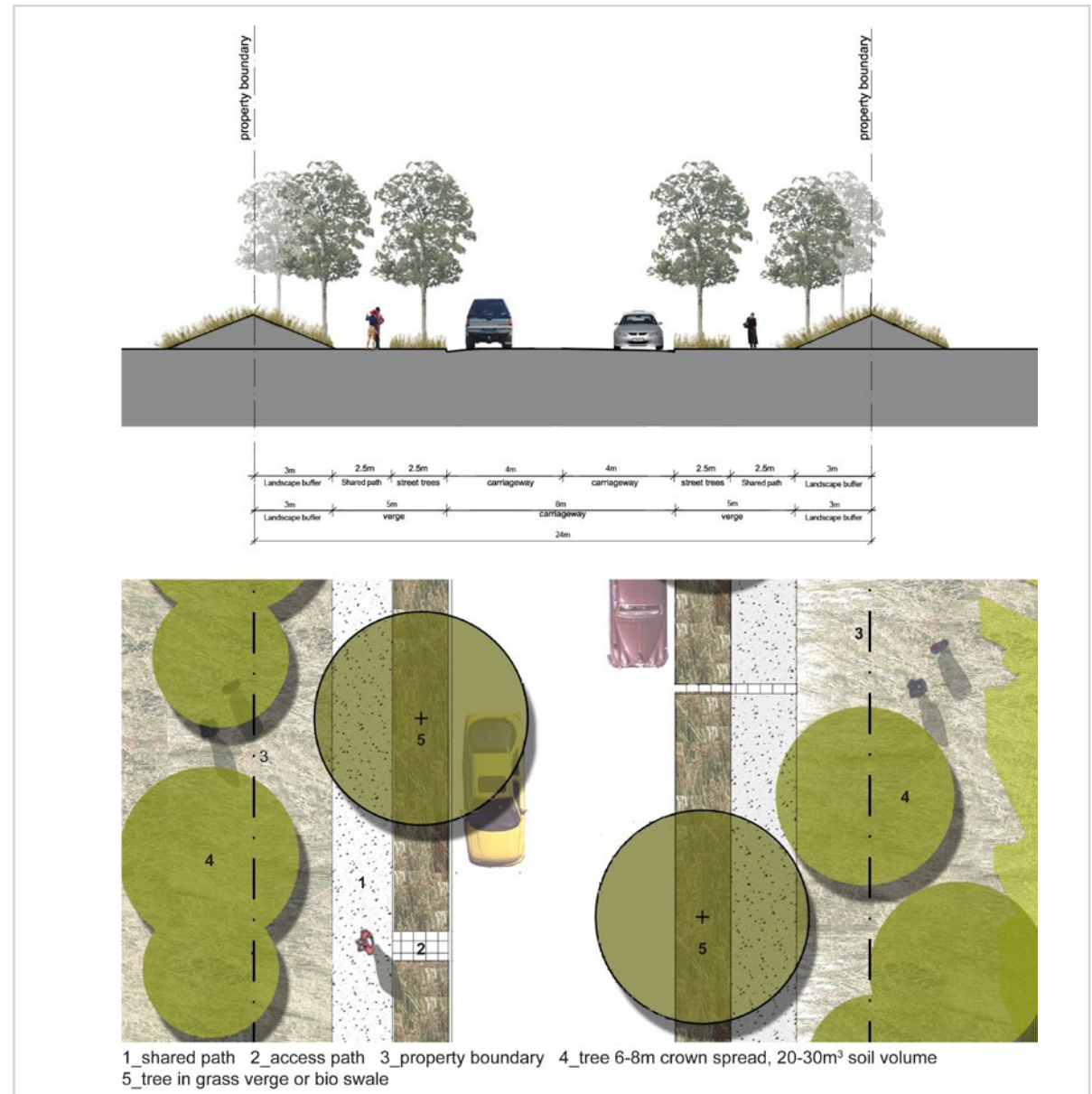


Figure B.1.12 Collector Road A - 24m (Section 3-3)

Collector Road B - 20m

- Collector Road B will provide the major thoroughfare for traffic through the Link Road South Precinct and will accommodate a bus route;
- This road is to be a broad street with a shared path 2.5m wide on both sides and an 11m wide carriageway comprised of two 3.0m moving lanes and parking lanes on either side. A wide 4.5m verge allows space for larger street trees to create a boulevard effect. Street trees and heath planting will complement the existing bushland character;
- This street will provide for moderate volumes of through traffic and a road connection south into the future residential areas of Cameron Park;
- Bio-swales will be located according to detailed design.



Figure B.1.13 Collector Road B - 20m (Section 4-4)

Local Road with Bus Route - 18.6m

- Provides a wider pavement and wider footpaths to both sides of the street to cater for bus access and higher volumes of pedestrian traffic.
- Parallel on-street parking is also to be provided on both sides of the street, with dedicated zones between for bus stops;
- Heath planting will complement the existing native vegetation; and
- Bioswales will be located according to detailed design parameters.

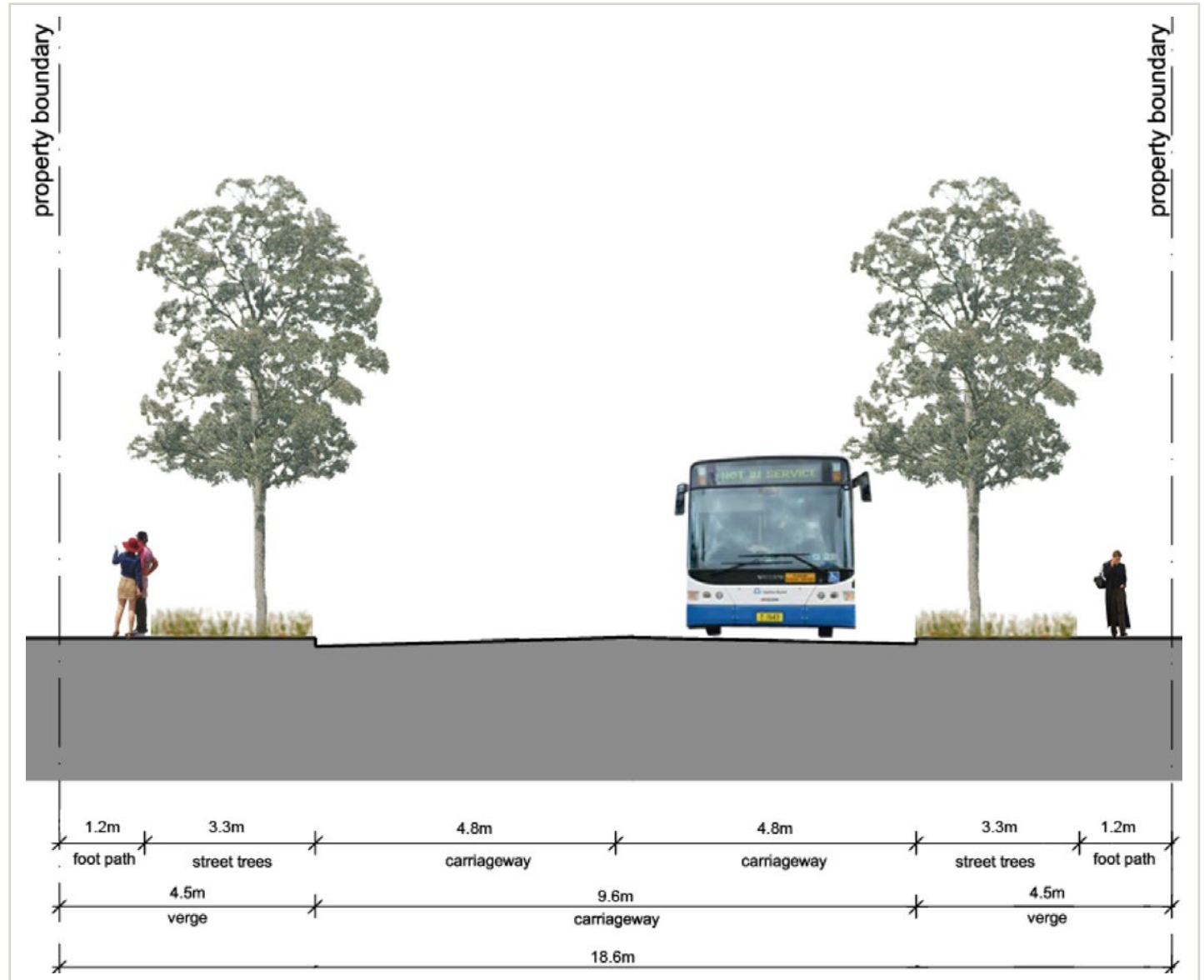


Figure B.1.14 Local Road with Bus Route 18.6m (Section 5-5)

Local Road A - 17m

- Local Road A is to be located along the southern boundary of Blue Gum Hills Regional Park;
- It will include on-street parallel parking on the housing side and one verge will be dedicated to a swale and buffer planting to filter stormwater and protect Blue Gum Hills Regional Park;
- Some sections with have a wider pavement and footpaths to cater for a bus route;
- Surface stormwater will be directed to swales on the bushland verges. Swales will be planted with native grasses and swale tree species that are smaller and denser, providing a layer of vegetation in front of the adjoining bushland;
- New heath planting will complement the existing native vegetation; and
- Bioswales will be located according to detailed design parameters.



Figure B.1.15 Local Road A - 17m (Section 6-6)

Local Road B - 15m

- These local streets form the majority of the streets within the development and will consist of 8m carriageways and smaller verges;
- A footpath (1.2m) is to be located on one side only, with street tree planting on both sides;
- Parallel on-street parking is also to be provided on one side of the street;
- Heath planting will complement the existing native vegetation; and
- Bioswales will be located according to detailed design parameters.

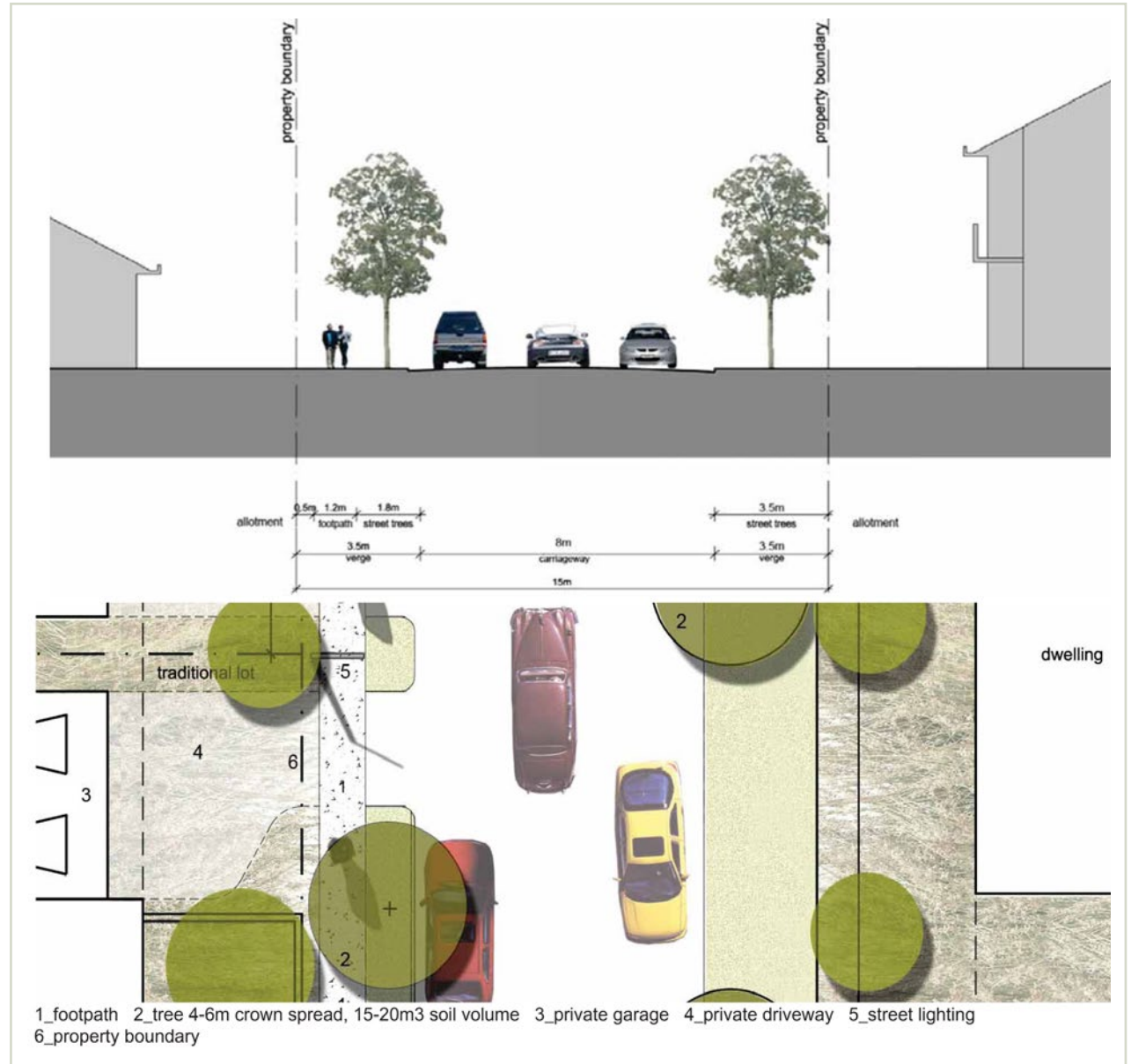


Figure B.1.16 Local Road B - 15m (Section 7-7)

Local Road C - 13m

- These roads form the edge streets; distinctive because they will have parkland or creek on one side and residential housing development on the other;
- Carriageways of these streets will be 8m wide including on-street parking;
- A 1.2m wide footpath is to be located on the housing verge; and
- Bioswales will be located according to detailed design parameters.

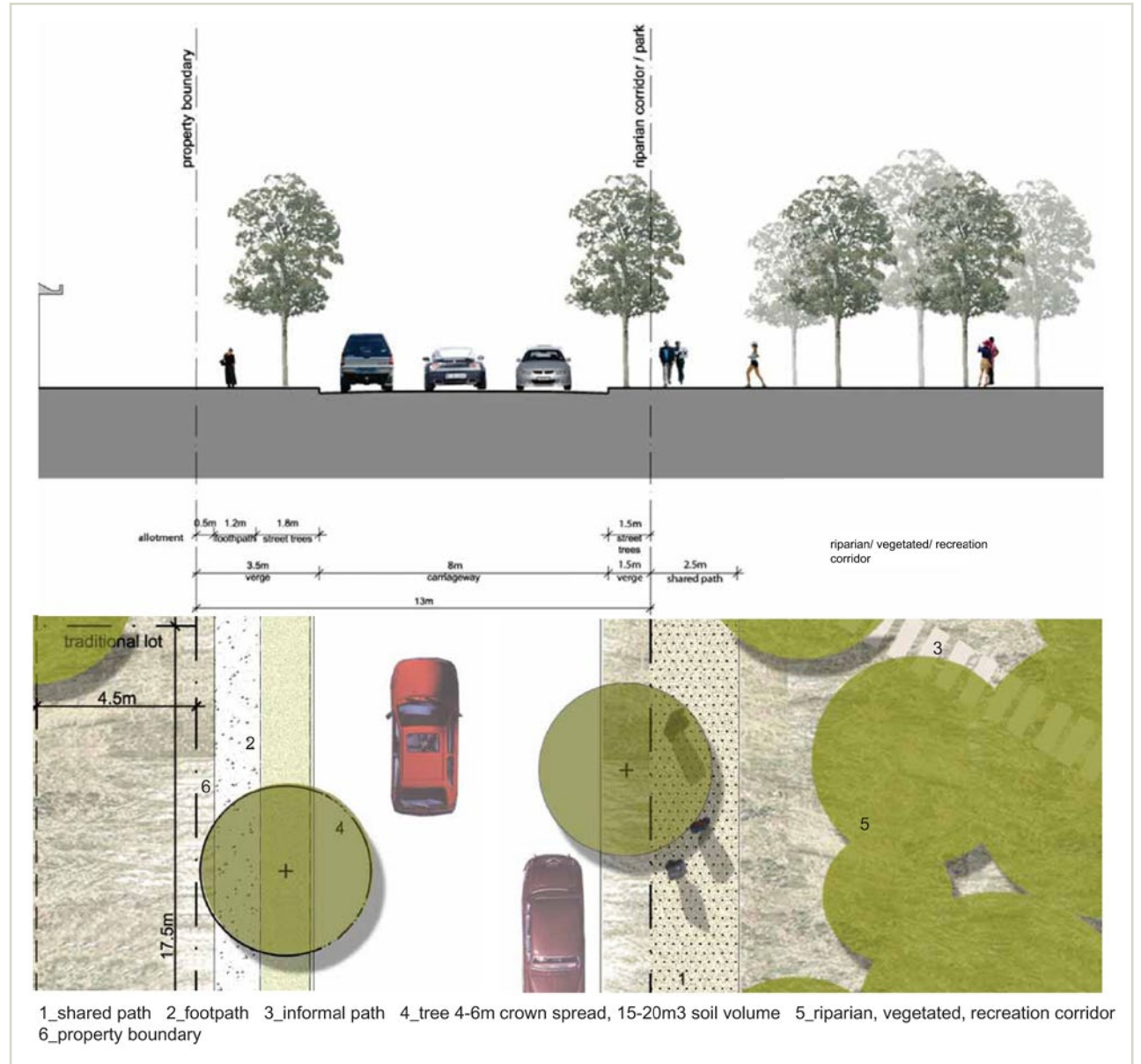


Figure B.1.17 Local Road C - 13m (Section 8-8)

Access Way - 10m

- Access ways or laneways service the higher density areas. They allow the garage to address a laneway at the rear of the lot, thus freeing the front facade (now without garage) to address the primary street or adjoining parkland;
- They are intended to be low speed shared access ways with small pedestrian footpaths; and
- A footpath and smaller street trees is to be provided on one side of the access way.

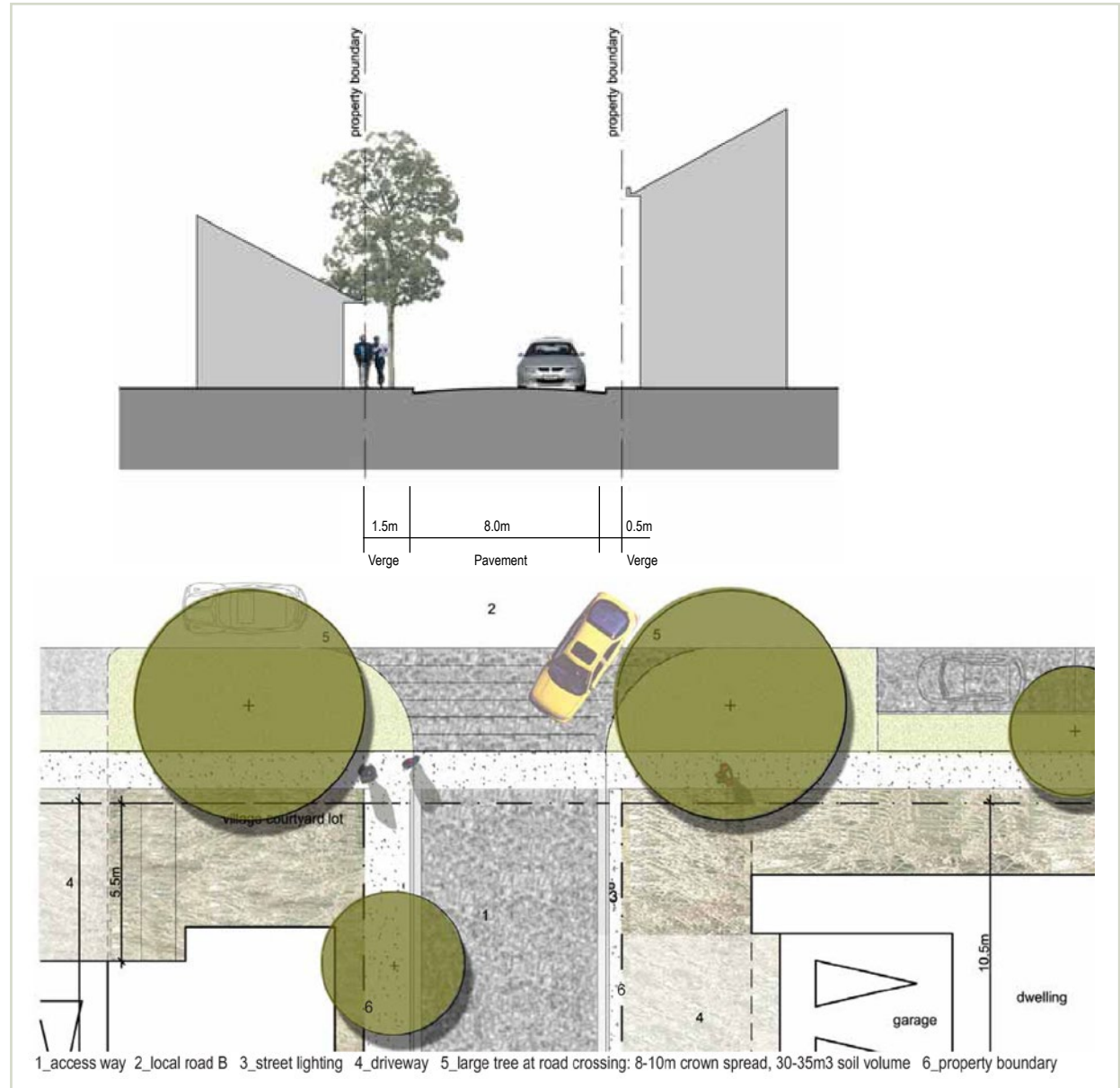


Figure B.1.18 Accessway - 10m (Section 9-9)

Newcastle Link Road - Cameron Park to Link Road North

Figures B.1.19 to 21 show the Link Road corridor, after upgrading, and its relationship to the proposed development, including the buffer of retained vegetation and the location of sound attenuation walls, Asset Protection Zones (APZs), and house platforms.

The cross-sections demonstrate the effect of the existing landform, combined with retained vegetation, in mitigating views from the Link Road into the proposed development. The impact of the development upon views downward along creek lines, where the road is placed higher than the subject site, are addressed in Appendix A.



Figure B.1.19 Newcastle Link Road - Cameron Park to Link Road North (Section A-A)

Newcastle Link Road - Link Road North Precinct to Link Road South

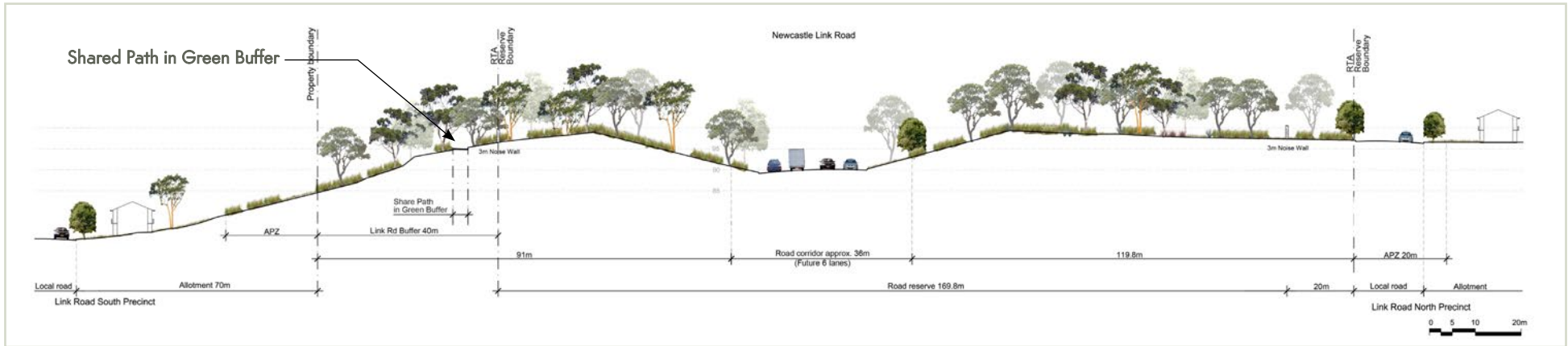


Figure B.1.20 Newcastle Link Road - Link Road North Precinct to Link Road South (Section B-B)

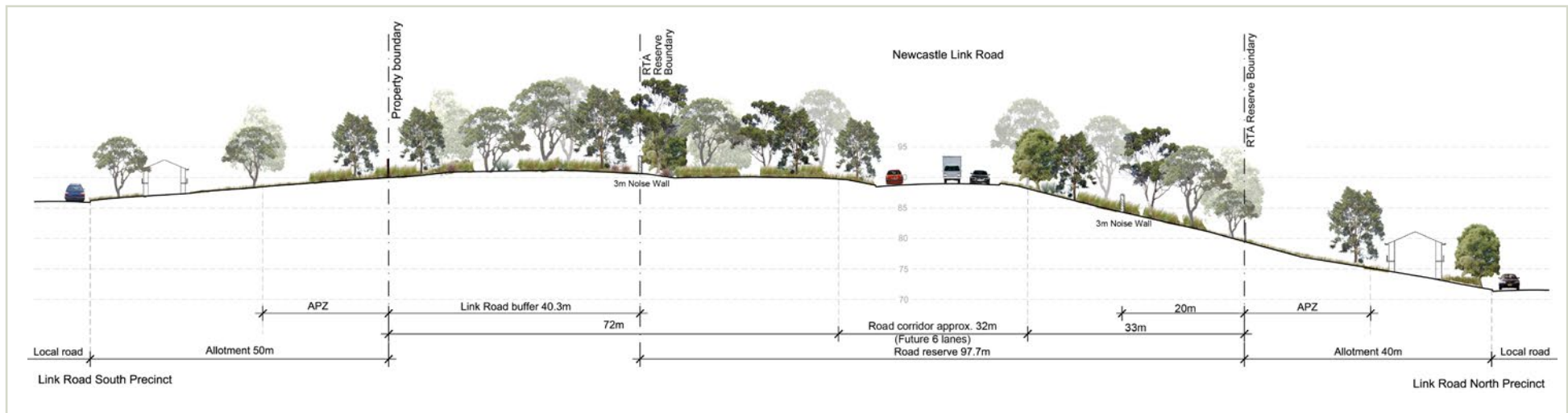


Figure B.1.21 Newcastle Link Road - Link Road North Precinct to Link Road South (Section C-C)

B.1.3.3 Road Grades & Housing on Slope

In addressing topography, roads and local streets will need to comply with the policies of Newcastle City Council and associated design documentation. In general, roads should run along the contour in areas steeper than 15%.

Housing design principles to consider for slope design are shown in Figure B.1.22.

The preferred approach to dealing with roads and lots in steeper areas with slope 15% or greater, is shown on the following page in figure B.1.23.

- wide, shallow dwelling
- carport (poles) & single garage
- reduced front setbacks
- utilise front verandahs to front lot boundary

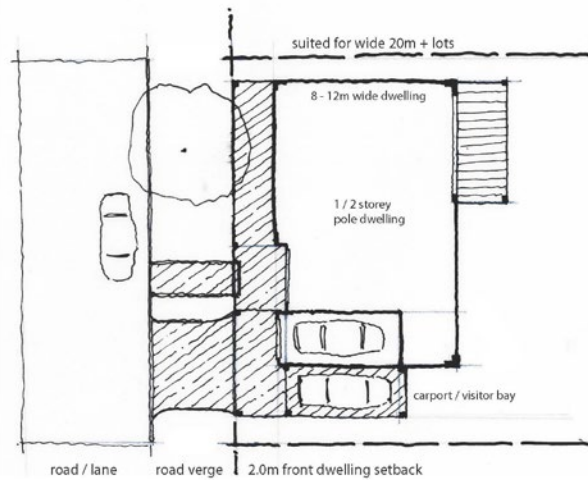
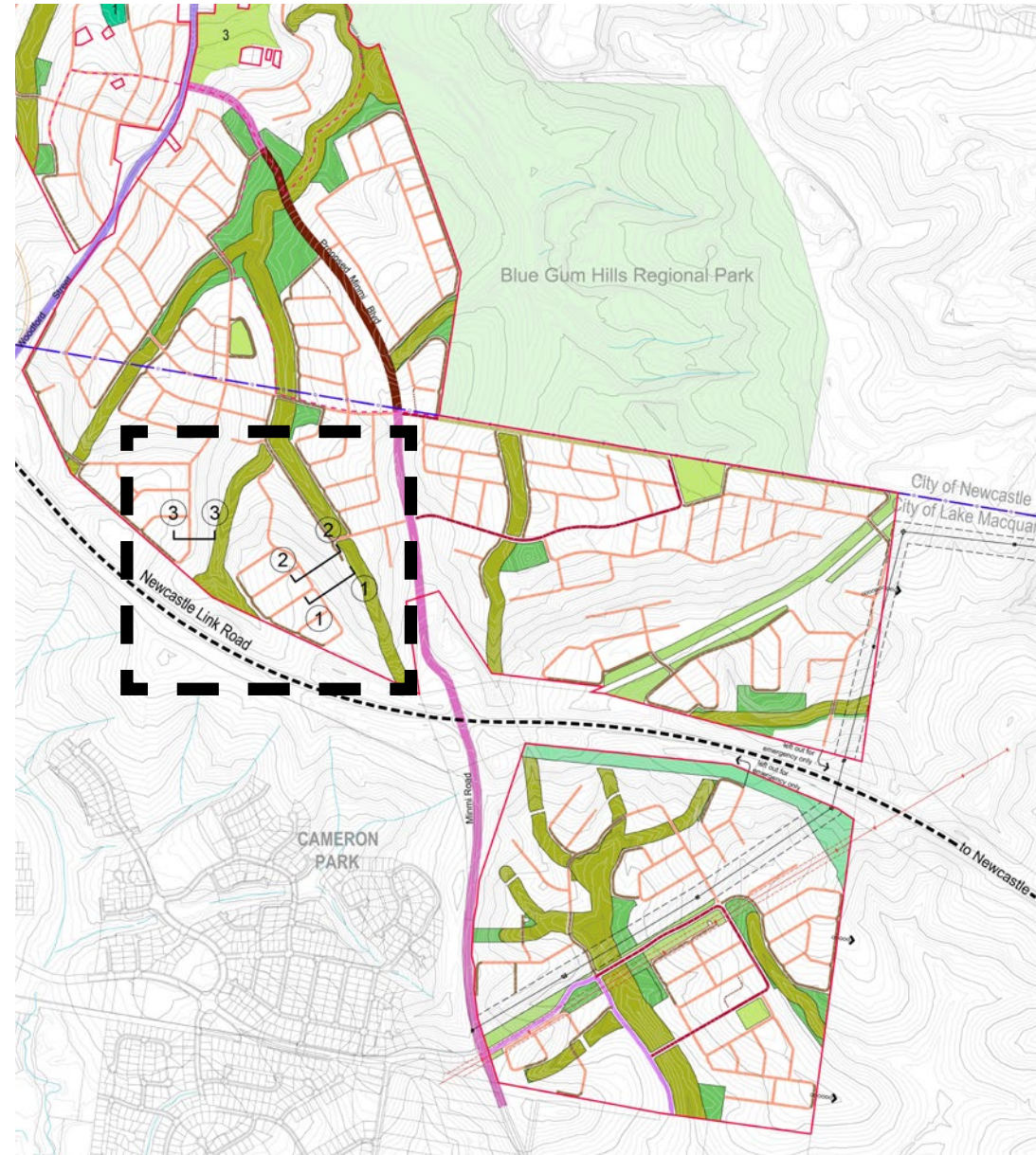


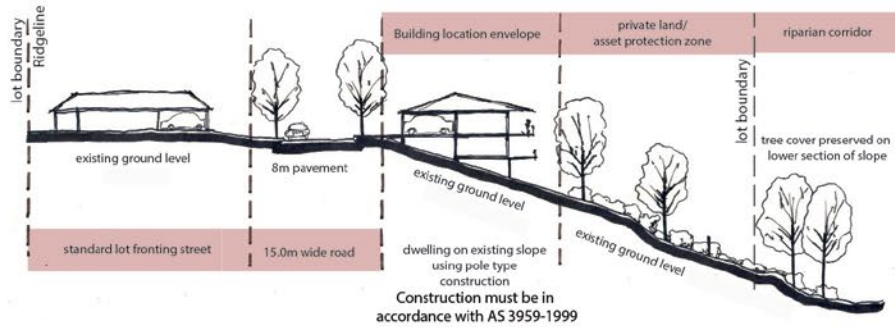
Figure B.1.22 Dwelling Design Principles to Consider on Steep Slopes



Key Plan showing location of cross-sections in Figure B.1.23

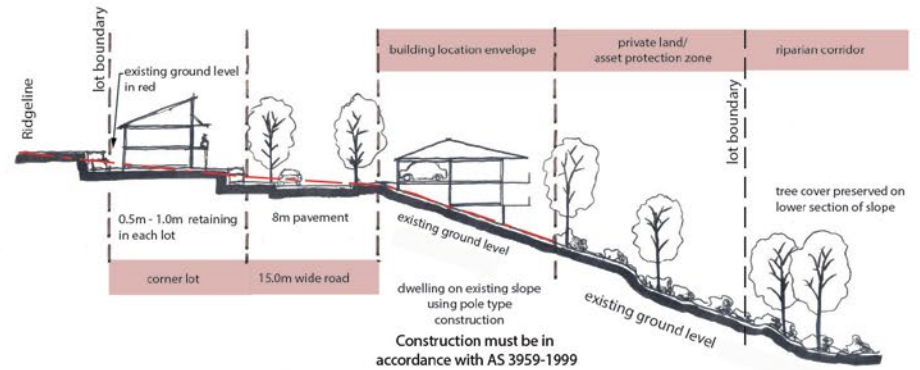
SECTION 1-1

- road constructed above steeper slope.
- bulk earthworks to create streets.
- slope responsive housing constructed level with street.
- homes built with minimal cut/fill within lots.



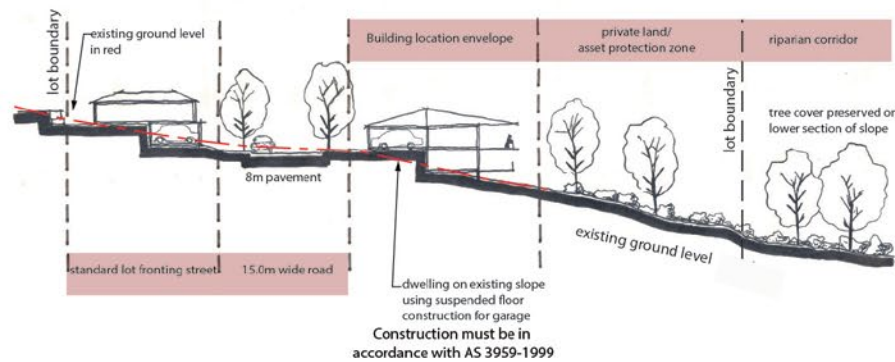
SECTION 2-2

- road constructed above steeper slope.
- bulk earthworks to create streets.
- slope responsive housing constructed level with street.
- standard corner lot fronts side street with minor earthworks within each lot by builders, creating retaining between lot boundaries and street frontage.



SECTION 3-3

- road cut into side of existing slope.
- bulk earthworks to create streets.
- slope responsive housing on both sides of street. Houses constructed to absorb level change by builder.
- minimal retaining walls as level change contained in house design and construction.
- moderate cut/fill.



SECTION 2-2

- road constructed above steeper slope.
- bulk earthworks to create streets and lots.
- lot downslope of street filled and retained within Building Location Envelope

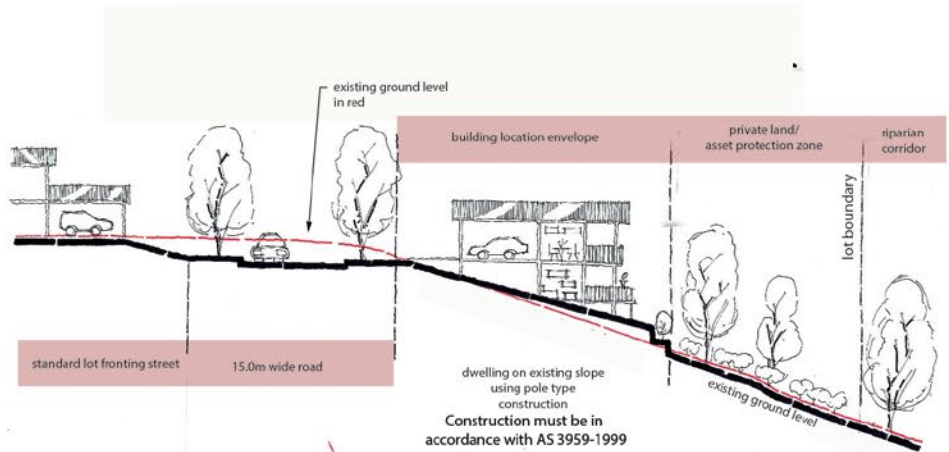


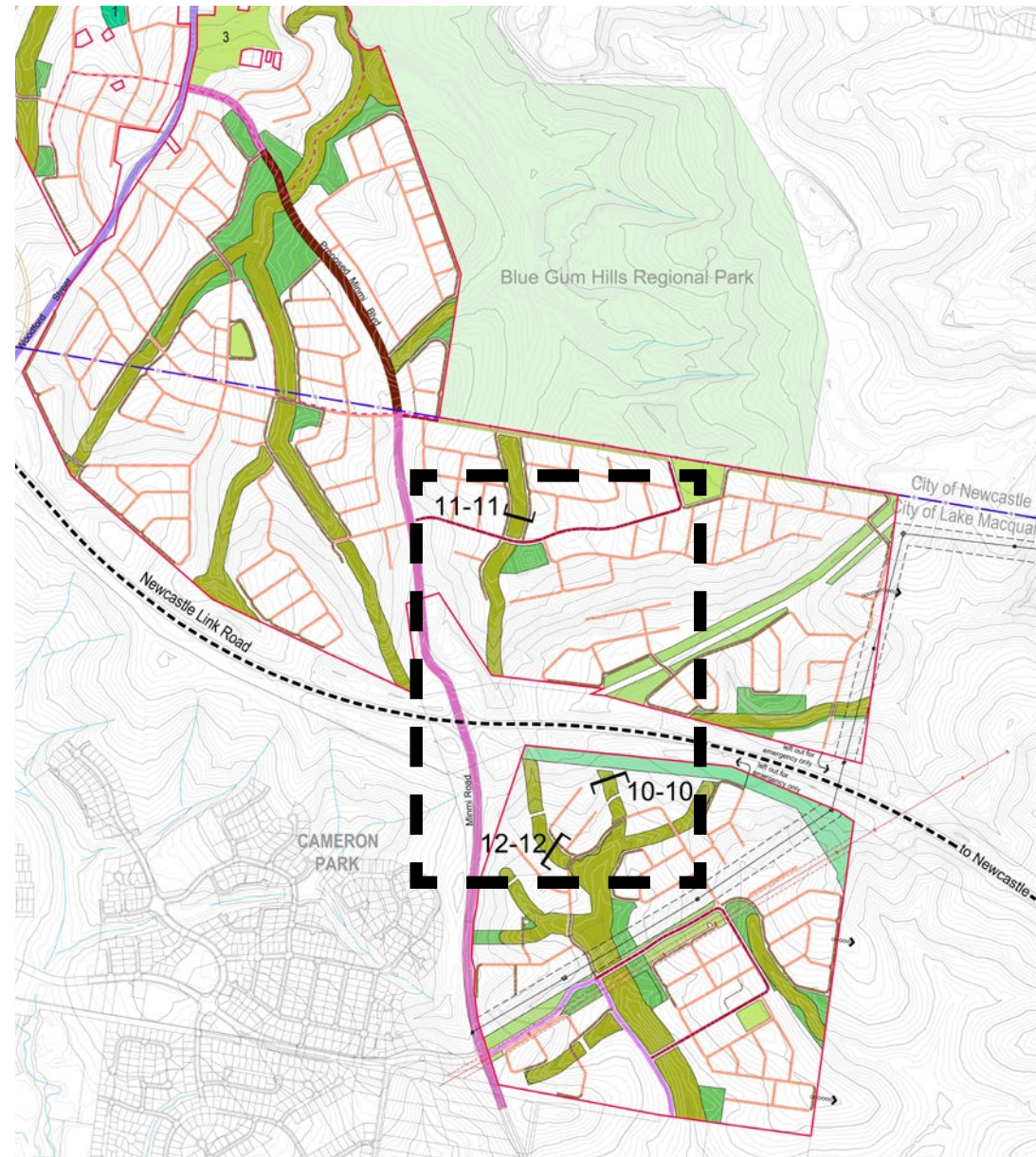
Figure B.1.23 Preferred options for roads and lots on land with 15% slope or greater

B.1.3.4 Riparian Corridors

Interface of Development with Riparian Corridors

Figures B.1.24 to 26 show in cross-section and plan the three interface types proposed between the urban development areas and the riparian corridors that run through the site.

The interface types maintain public access along the length of the corridors.



Key Plan showing location of cross-section in Figures B.1.24-26

Riparian corridor in public land between two lots

1. Riparian corridor between two lots where the corridor is public open space.

APZs are provided within private land between the corridor and location of the house on site. Public access is provided by a shared path running alongside the corridor. In places where a public road cannot adjoin the corridor, a fire trail is to be provided to allow fire and maintenance access to the corridor and to contain the shared path. (Figure B.1.24);



Figure B.1.24 Riparian corridor in public land between two lots (Section 10-10)

Riparian corridor in public land between roads

2. Riparian corridor with public road running parallel with the corridor on both sides. This is used in the lower and more denser urban areas of the site and seeks to maximise access to and visibility into the corridor. A shared path also forms part of the trail network (Figure B.1.25);

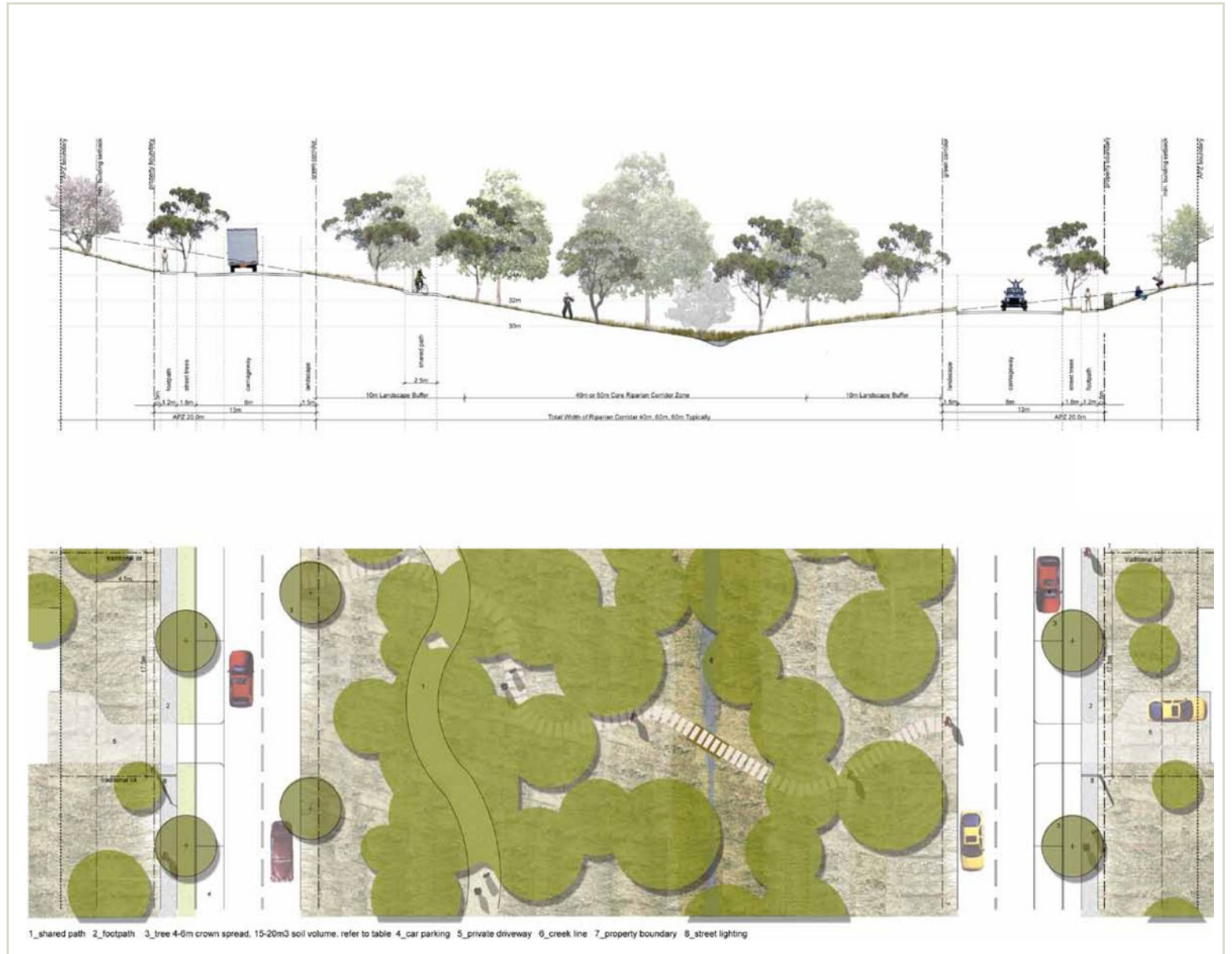


Figure B.1.25 Riparian corridor in public land between roads (Section 11-11)

Riparian Corridor in Public Land with Road to one side (Section 12-12)

3. Riparian corridor with public road along one side of the corridor seeks to maintain public access to the corridor in areas where roads cannot be provided on both sides of the corridor due to site constraints, or where it would affect the efficiency of the adjoining urban neighbourhoods (Figure B.1.26).

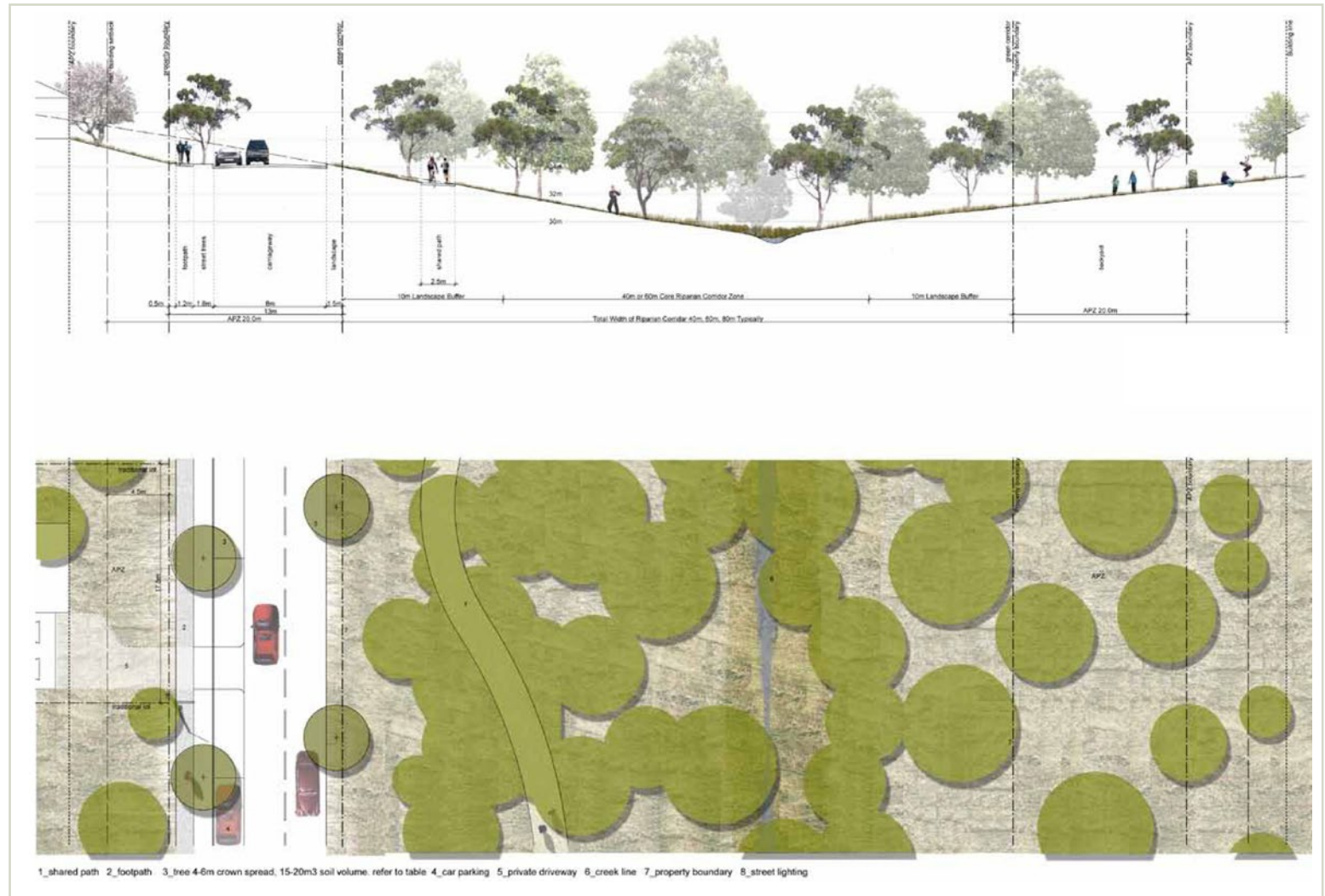


Figure B.1.26 Riparian Corridor in Public Land with Road to one side (Section 12-12)

B.1.4 Landscape Character Palette

The landscape design guidelines suggest by way of example combinations of materials that contribute to creating the desired character for each precinct. The material choice is seen as being of a family across all precincts. However each precinct has a particularity that accentuates an inherent characteristic found within that landscape unit. The material choice and the method of its use needs to further reflect the specific development typology of its location, for example traditional lots will be more relaxed in its character than the landscape associated with the denser town house lots.

Minmi Extension Precinct - Heritage Character

- Preserve and reinforce the distinctive character created by the presence of buildings of historic significance in a landscape setting with strong rural character formed by farming and coal mining;
- Materials and plant species to continue the landscape character of Minmi Village;
- Sensitive use of high quality materials to complement existing fabric;
- Interpretative details to be integrated into overall landscape treatment, to foster interest and encourage awareness of historic and heritage significance;
- Plant palette should reflect its cultural and heritage setting. The boundaries to this precinct should be defined by endemic species; and
- Provide aboriginal and archaeological interpretation.

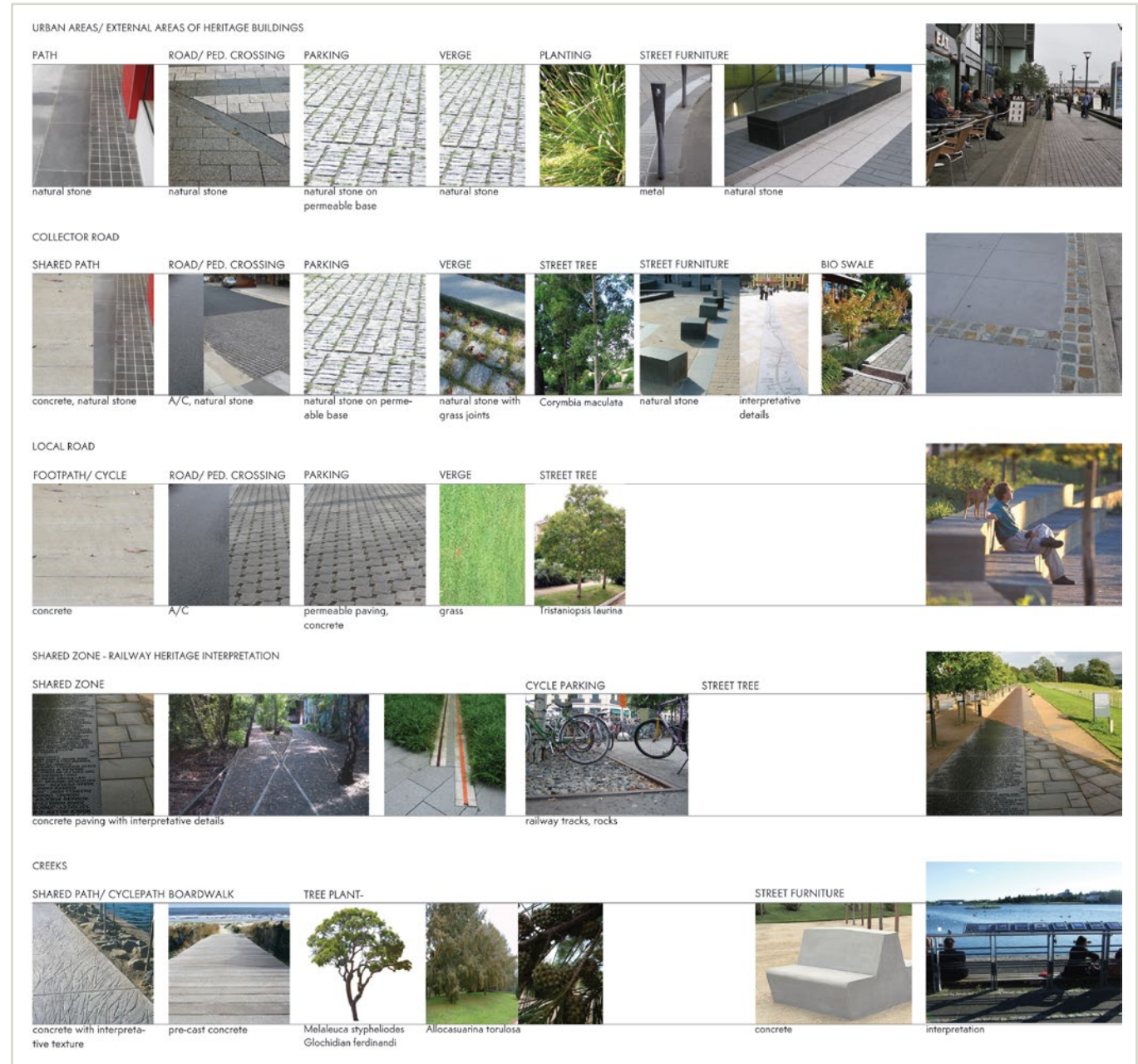


Figure B.1.27 Landscape Character - Minmi Extension Precinct - Heritage Character

Minmi East - High Street Mixed Use Precinct

- Open woodland species to be favoured to maintain airy character and more distant views;
- Acknowledges water as an important element within a sustainable landscape strategy. These should refer to the sites location at the upper reaches of the Hexham Swamp landscape;
- General material choice and manipulation to subtly suggest the ephemeral presence of water in the landscape; and
- Provide aboriginal and archaeological interpretation.

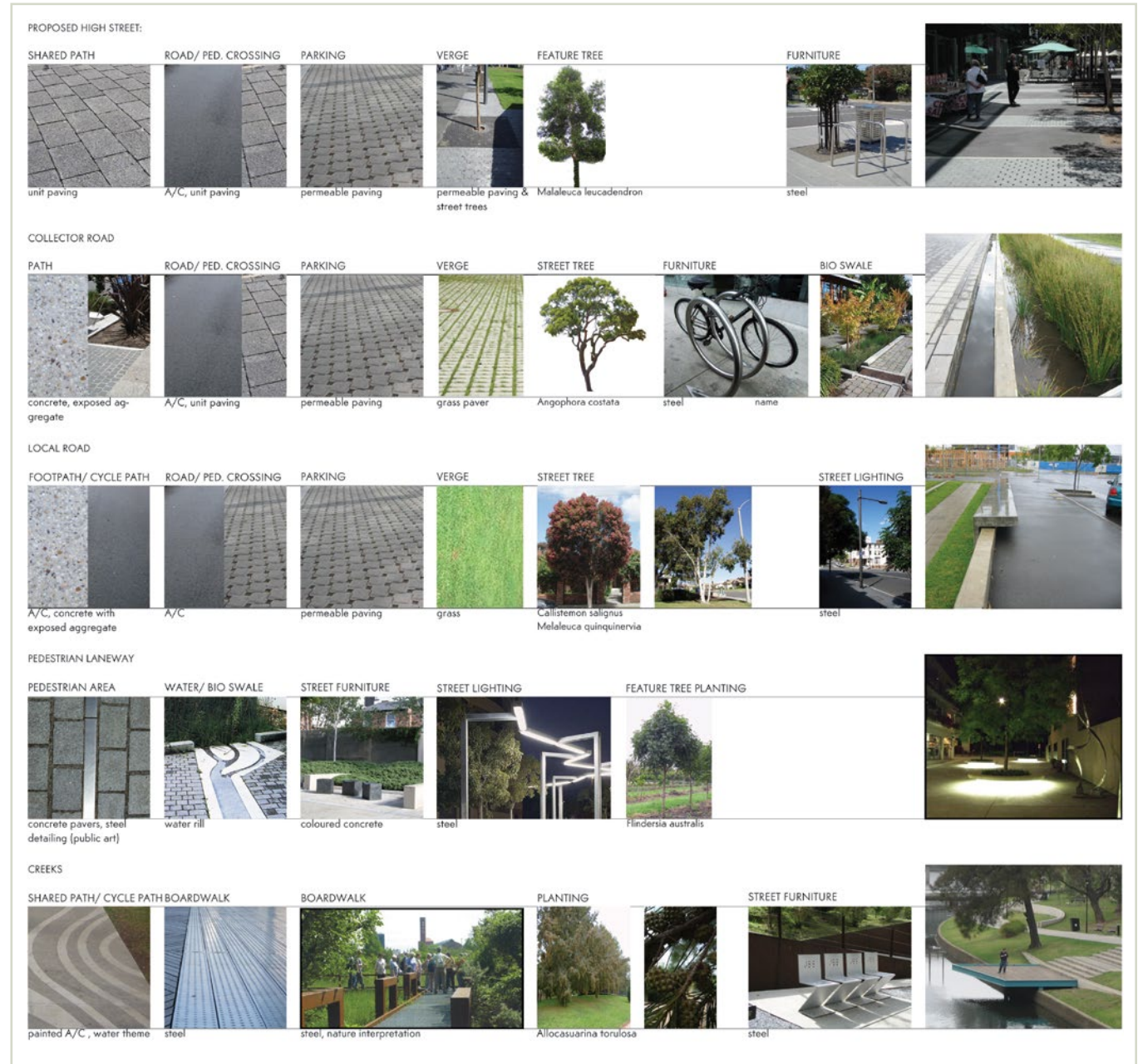


Figure B.1.28 Landscape Character - Minmi East - High Street Mixed Use Precinct

Link Road North Precinct and Village Centre Precinct – Activity Hub

- Reinforce this precinct that is characterised by its topography with dominant ridgelines and steep slopes that lead into valley creek lines with lush forest vegetation;
- Forest landscape is reflected by use;
- Use nature interpretation to create interest and awareness for the diverse vegetation; and
- Provide aboriginal and archaeological interpretation.

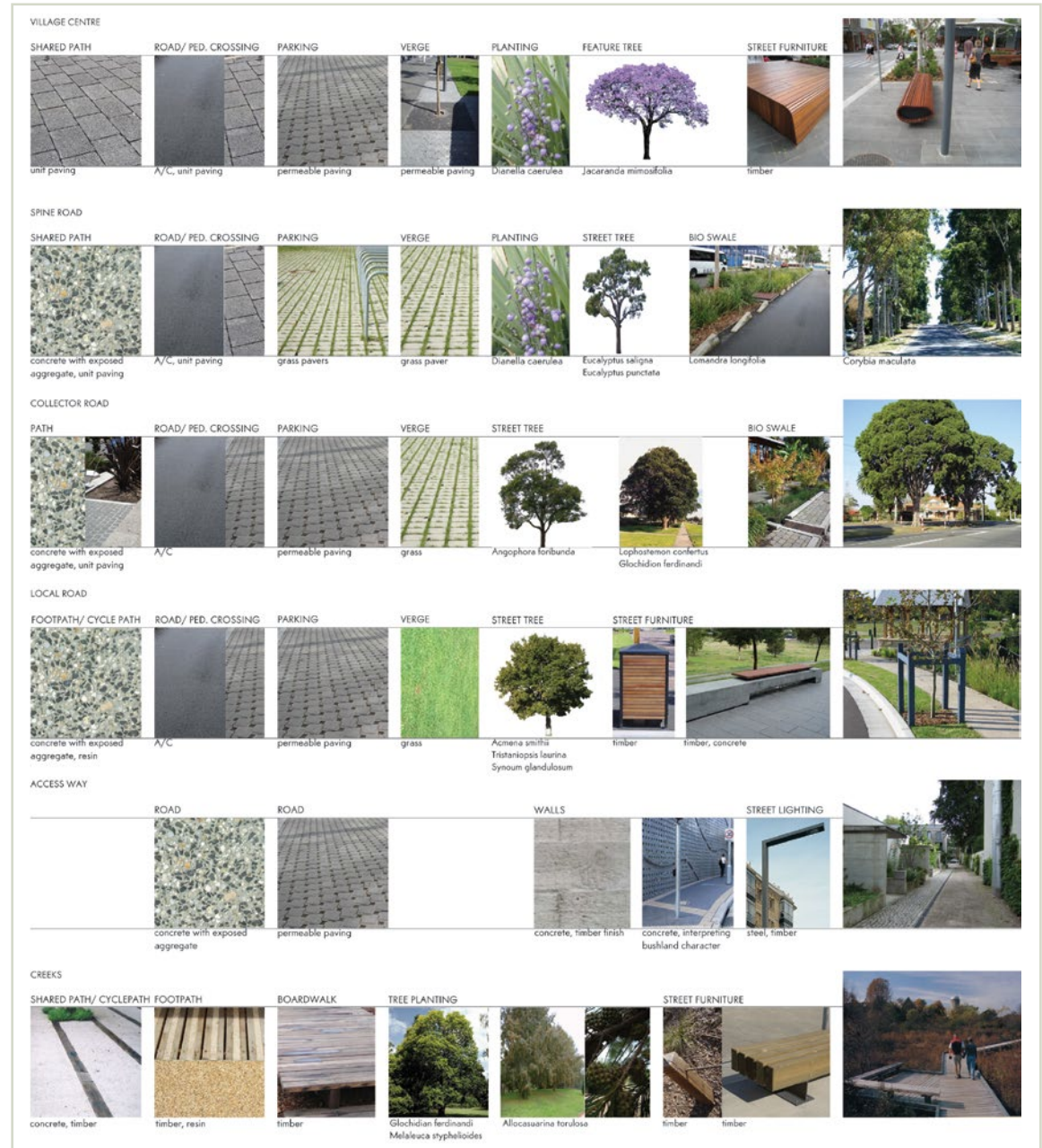


Figure B.1.29 Landscape Character - Link Road North Precinct and Village Centre Precinct - Activity Hub

Link Road South Precinct

- South facing valleys in this area tend to be wetter with denser vegetation. Species selection should reflect this micro climate;
- Maximise the potential for the easement area by the use of sun loving flowering native shrub planting; and
- Provide aboriginal and archaeological interpretation.

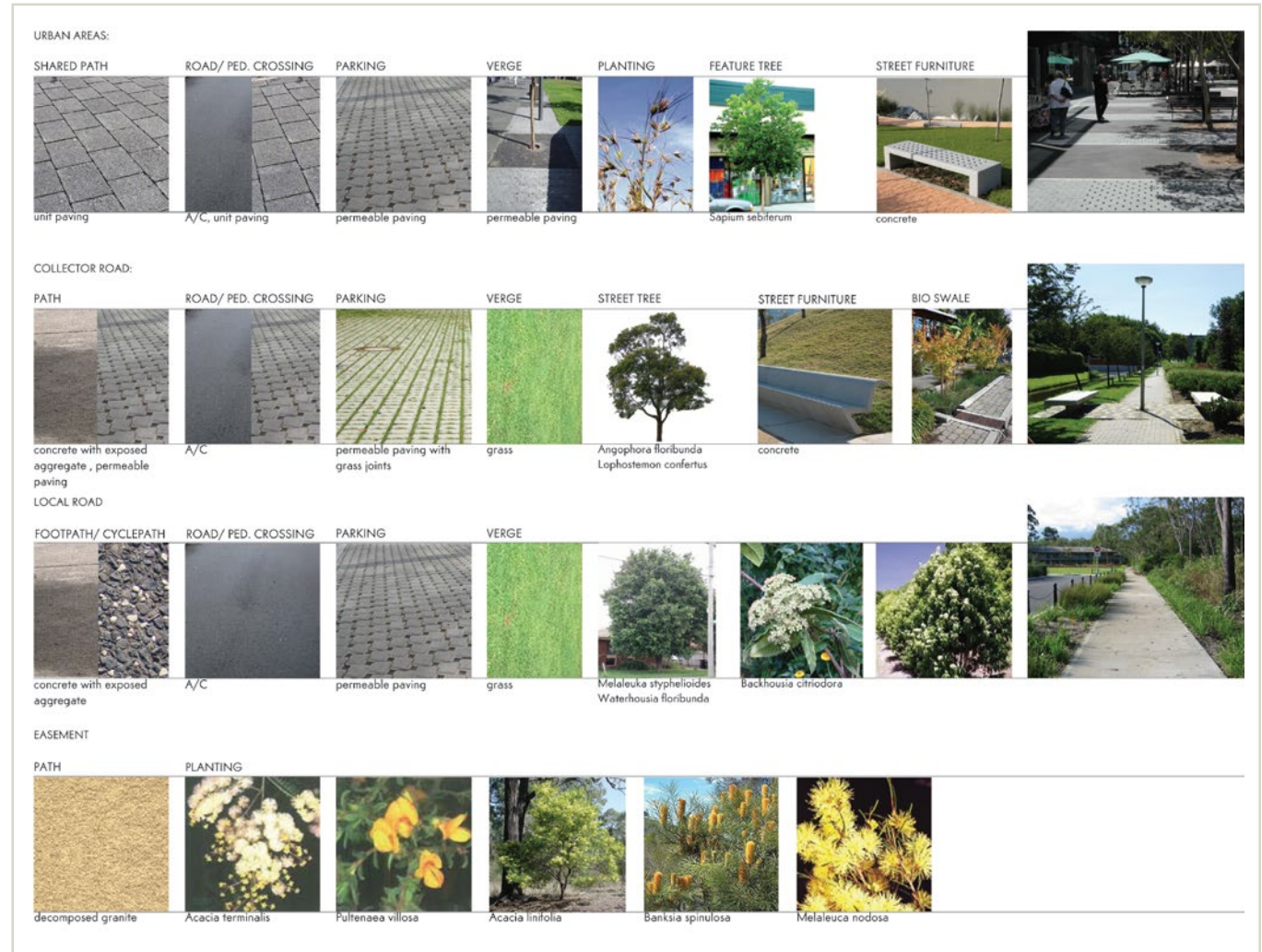


Figure B.1.30 Landscape Character - Link Road South Precinct

B.1.5 Indicative Plant List

<p>LARGE TREES Angophora costata Corymbia maculata Eucalyptus microcorys Eucalyptus piperita Eucalyptus punctata Eucalyptus saligna Eucalyptus tereticornis Lophostemon confertus Syncarpia glomulifera</p>	<p>Smooth Barked Apple Spotted Gum Tallowood Sydney Peppermint Grey Gum Sydney Blue Gum Forest Red Gum Brush Box Turpentine</p>	<p>PUBLIC OPEN SPACE Angophora floribunda Eucalyptus tereticornis Backhousia myrtifolia Melaleuca styphelioides</p> <p>Green Corridor (Creek) Acmena Smithii Allocasuarina torulosa Ficus coronata Glochidial ferdinandii Livistona australis Melaleuca nodosa Melaleuca styphelioides</p>	<p>Rough Barked Apple Forest Red Gum Grey Myrtle Prickly Leafed paperbark</p>		<p>PLANTING IN CREEKLINES/ BIO SWALES</p>
<p>MEDIUM TREES Acmena Smithii Glochidial ferdinandii Melaleuca linariifolia Synoum glandulosum Waterhousia floribunda Jacaranda mimosifolia</p>	<p>Small Leafed Lilly Pilly Cheese Tree Snow in summer Scentless Rosewood Weeping Lilly Pilly</p>	<p>Cissus Antarctica Gahnia clarkei Viola hederacea</p>	<p>Small Leafed Lilly Pilly Forest She Oak Sandpaper Fig Cheese Tree Cabbage Palm Snow in Summer Prickly Leafed paperbark</p>		<p>TREES FOR PARKS AND OPEN SPACES</p>
<p>SMALL TREES Callistemon salignus Elaeocarpus reticulata Tristaniopsis laurina</p>	<p>Willow Bottlebrush Blueberry ash Water Gum</p>	<p>STREETS Alluvial Tall Moist Forrest</p>	<p>Rough Barked Apple Sydney Blue Gum Sydney Peppermint Forest Red Gum Turpentine</p>		<p>TREES FOR PARKS AND OPEN SPACES</p>
<p>BIO SWALE Callistemon salignus Melaleuca styphelioides</p>	<p>Willow Bottlebrush Prickly Leafed paper bark Water Gum</p>	<p>LARGE TREE Angophora floribunda Eucalyptus saligna Eucalyptus piperita Eucalyptus tereticornis Syncarpia glomulifera</p>	<p>Small Leafed Lilly Pilly Cheese Tree Snow in summer Prickly Leafed paperbark</p>		<p>LARGE STREET TREES</p>
<p>Tristaniopsis laurina Juncus usitasis Lomandra longifolia</p>	<p>Water Gum Common Rush Spiny headed Matt-Rush Broad-leaved paperbark</p>	<p>MEDIUM TREE Acmena Smithii Glochidial ferdinandii Melaleuca linariifolia Melaleuca styphelioides</p>	<p>Willow Bottlebrush</p>		<p>MEDIUM STREET TREES</p>
<p>Melaleuca quinquenervia</p>	<p>SMALL TREE Callistemon salignus</p>	<p>UNDERSTOREY Lomandra longifolia</p>	<p>Spiny headed Matt-Rush Kangaroo Vine</p>		<p>UNDERSTOREY</p>
	<p>Cissus Antarctica</p>	<p>Coastal Foothills Spotted Gum – Ironbark Forrest</p>	<p>Smooth Barked Apple Spotted Gum Tallowood Grey Gum</p>		<p>SMALL STREET TREES</p>
	<p>LARGE TREE Angophora costata Corymbia maculata Eucalyptus microcorys Eucalyptus punctata</p>	<p>MEDIUM TREE Allocasuarina torulosa</p>	<p>Forest She Oak</p>		<p>UNDERSTOREY</p>
	<p>SMALL TREE Melaleuca nodosa</p>	<p>UNDERSTOREY Themeda australis Dianella caerulea</p>	<p>Snow in Summer</p>		<p>UNDERSTOREY</p>
	<p>UNDERSTOREY Coastal Plains Smooth Barked Apple Woodland Swamp Mahogany – Paperbark Swamp Forest Lower Hunter Spotted Gum – Ironbark Forrest</p>	<p>Kangaroo Grass Paroo Lilly</p>			<p>UNDERSTOREY</p>

Figure B.1.31 Landscape Character - Indicative Plant List