

Coal & Allied

NORTHERN ESTATES

MINMI - LINK ROAD

APPENDIX B ■ CONCEPT PLAN DESIGN GUIDELINES

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Introduction

Appendix B:

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

The structure of this document is as follows:

Chapter B.1

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.

Chapter B.2

Provides detailed design guidelines for the Minmi East Precinct, which is to form Stage 1 of the proposed development. These design guidelines have been developed having consideration of the unique characteristics of the precinct. The guidelines provide indicative controls for general lot typologies, building height, site cover, setbacks, private open space and landscaping.

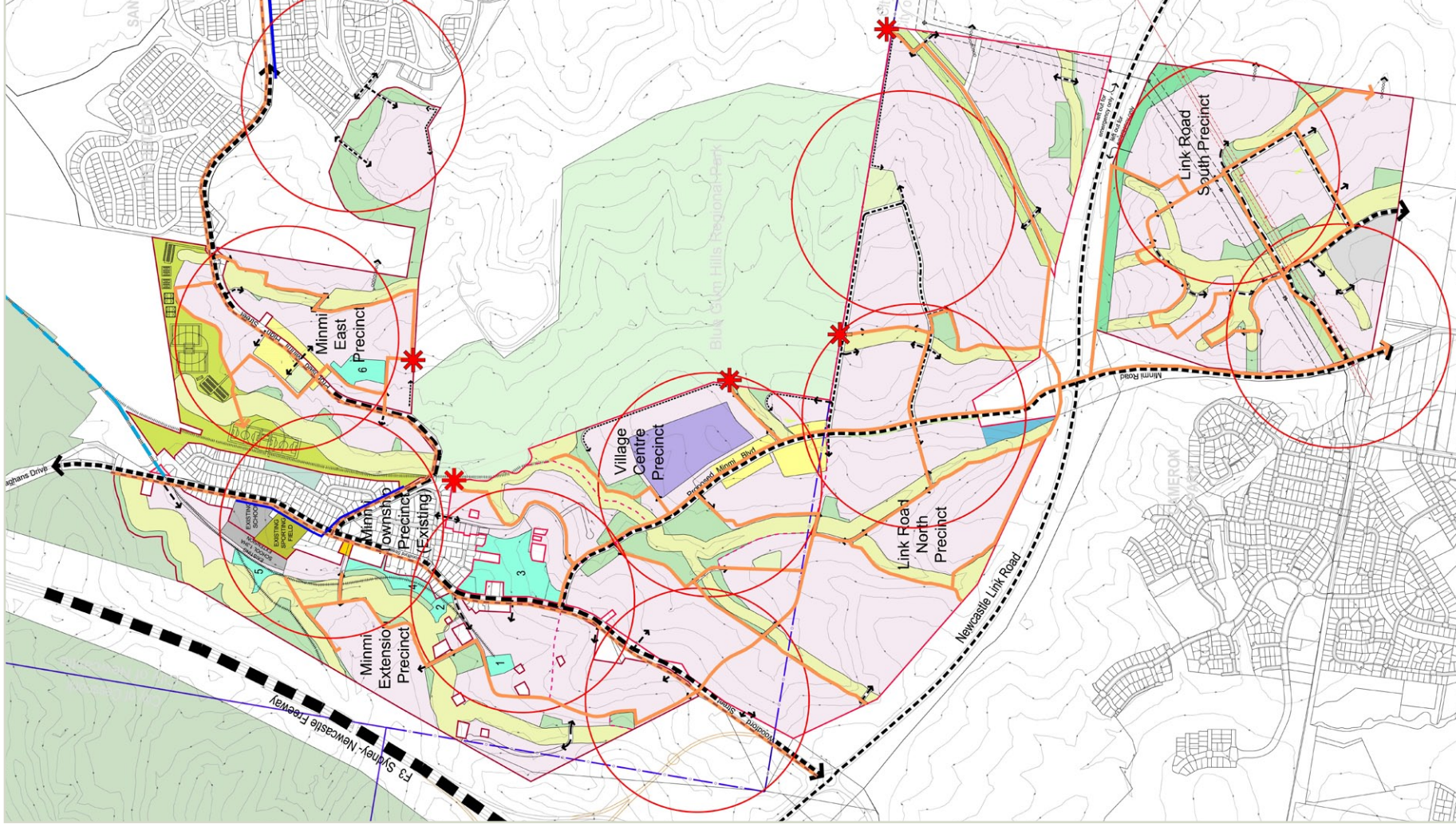


B.1 Public Domain Guidelines

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)
- Development Precinct Boundary
- Existing Heritage Railway Tracks
- Proposed F3 motorway RTA Extension
- Existing Transgrid Easement
- Existing Energy Australia Easement
- Existing Dual Power Pole Position (Monteath, 2008)
- Existing Electricity Transmission Lines (Monteath, 2008)
- Blue Gum Hills Regional Park
- Coal and Allied Conservation Area
- 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
- Open Space
 - Proposed Sport and Recreation
 - Neighbourhood Parks
 - Drainage Corridors
 - Passive Open Space
 - Link Road Edge
 - Feature Parks
- 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
- Access
 - 400m Transit Catchment
 - Off Road Shared Pedestrian Pathway / Cycleway
 - Potential Pathway Connection to Regional Park
- NCC Regional Cycleways
 - On Road Cycle - Proposed
 - Off Road Cycle - Existing
 - Off Road Cycle - Proposed (R6)

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 playing fields, 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 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. Table B.1.2. 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.1.3. shows the proposed pattern of ownership of these open space assets, that has been negotiated with stakeholders.


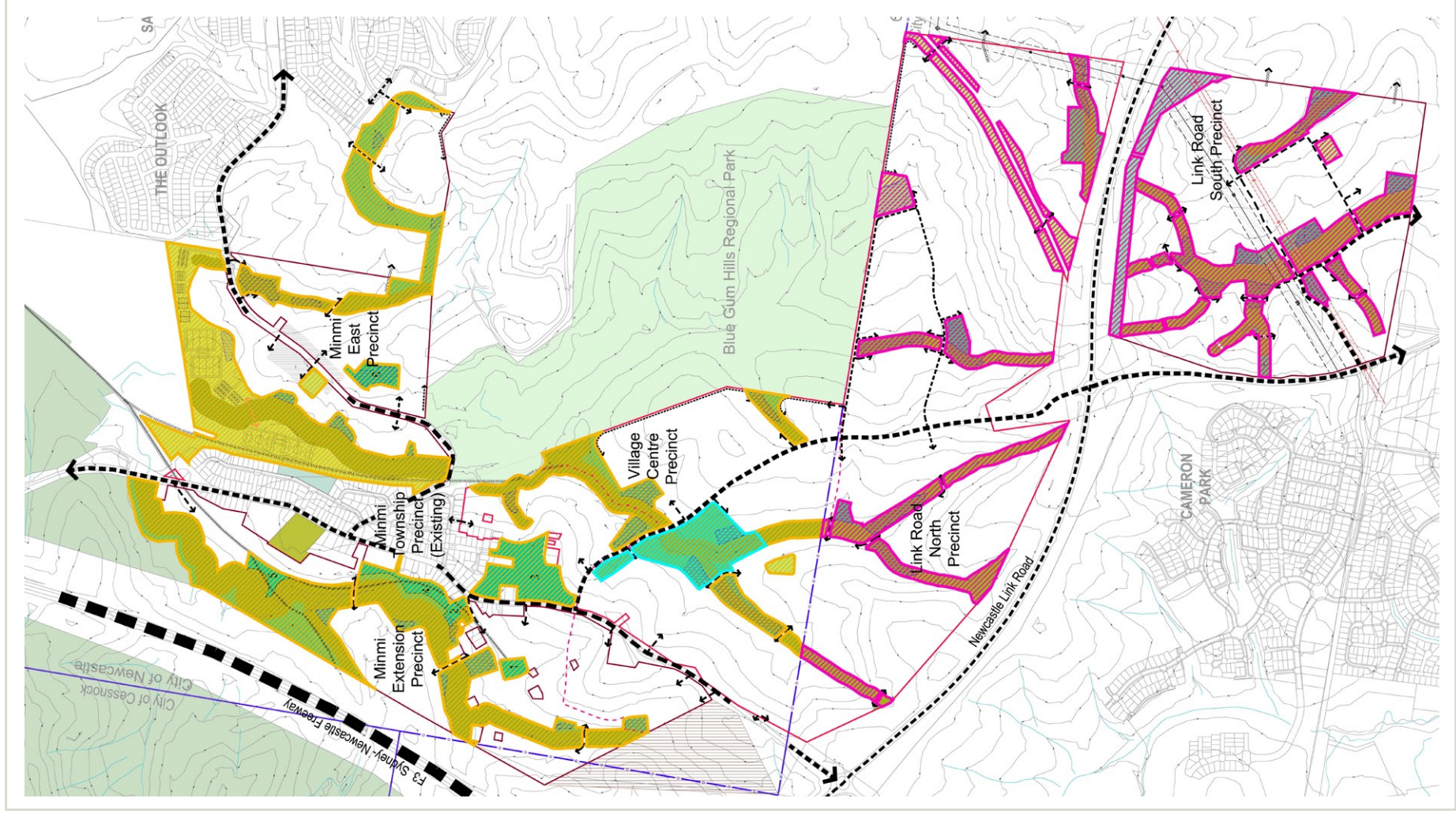
		Total	High Risk Pothole	Low Risk Pothole	Balance
Open Space Type		Areas (Ha)	Within Open Space (Ha)	Within Open Space (Ha)	Area (Ha)
Proposed Sport & Recreation		15.08	0.00	0.00	15.08
Sports fields, Parking, Buildings, Movement Trails		14.77	0.00	0.00	14.77
	Detention and Bioretention Areas	0.31	0.00	0.00	0.31
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		73.97	9.90	2.76	61.31
Passive Open Space, Movement trails, Drainage, Drainage Corridor Edges, Services & Vegetation		64.06	9.45	2.76	51.85
	Detention and Bioretention Areas	9.91	0.45	0.00	9.46
Passive Open Space		34.70	11.16	2.34	21.20
Heritage Open Space, APZ's, Steep Slopes, Pothole Risk Area		25.73	9.35	0.99	15.39
	Detention and Bioretention Areas	8.97	1.81	1.35	5.81
Link Road Edge		5.34	0.00	0.00	5.34
Feature Parks		9.35	1.48	3.01	4.86
1	Workshop Park	0.58	0.00	0.58	0.00
2	Coke Oven Park	0.44	0.41	0.00	0.04
	Detention and Bioretention within Coke Oven Park	0.06	0.00	0.00	0.06
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		141.54	22.53	8.12	110.88

Figure B.1.3. Open Space Provision



Legend

- Site Boundary
 - Existing Major Contour (10m Interval)
 - Development Precinct Boundary
 - Existing Heritage Railway Tracks
 - Proposed F3 motorway RTA Extension
 - 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 and Allied Conservation Area
- 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
 - Pedestrian Link between sporting fields

Open Space

- Proposed Sport and Recreation
- Neighbourhood Parks
- Drainage Corridors
- Passive Open Space
- Link Road Edge
- Feature Parks
- Detention Basins, Existing & Proposed Lakes

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