

Coal & Allied

NORTHERN ESTATES

MINMI - LINK ROAD

APPENDIX A ■ CONCEPT PLAN DESIGN GUIDELINES

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Introduction

This Concept Plan forms the basis of a major development application by Coal & Allied for the future development of land at Minmi in the Lower Hunter. It forms Appendix A to the Environmental Assessment (EA) prepared by Urbis, which provides a review of the Concept Plan in relation to relevant planning provisions and other general requirements.

Appendix A is structured as follows:

A.1 Urban Design Concept Plan

Summarises the key design elements and principles. The concept plan describes the development footprint, defined by the site boundaries and existing site attributes.

The concept plan is divided into five urban precincts. Each precinct is distinguished by a different urban character in response to housing density, mix of land uses and the precincts context within the site and its surrounds.

A.2 Landscape Concept Plan

The landscape strategy plan identifies the site's key features. These features are recognised in the design of the development in the broad scale pattern of land use and down to the detailing of streetscapes and public spaces.

A.3 Development Staging Plan

Describes the intended development sequence and timing.



A.1 Urban Design Concept Plan

A.1.1 Background

The Minmi/Link Road site (the subject land) is located in the Lower Hunter Region of New South Wales within both Lake Macquarie City Council and Newcastle City Council. The subject land extends both north and south of the Newcastle Link Road, and sits east of the F3 Freeway and immediately west of Blue Gum Hills Regional Park.

The subject land surrounds but is buffered from the existing township of Minmi and adjoins the existing residential areas of Cameron Park, The Outlook, The Sanctuary, Hidden Waters and Kingston Fletcher.

The subject land has been identified as future urban area, within the Lower Hunter Regional Strategy.

The development footprint has been modified from that originally prescribed, after detailed analysis of the opportunities and constraints associated with the subject site. The visual impact of the development on the adjoining Minmi settlement was one of the key factors influencing the final development footprint, together with ecological, flooding, slope and geotechnical constraints.

The Concept Plan has been developed on the basis of five distinct precincts. These link the existing Minmi Township to the neighbouring residential estates of Cameron Park, The Outlook, The Sanctuary, Hidden Waters and Kingston Fletcher. The key features and form of these precincts are discussed in detail in this document.

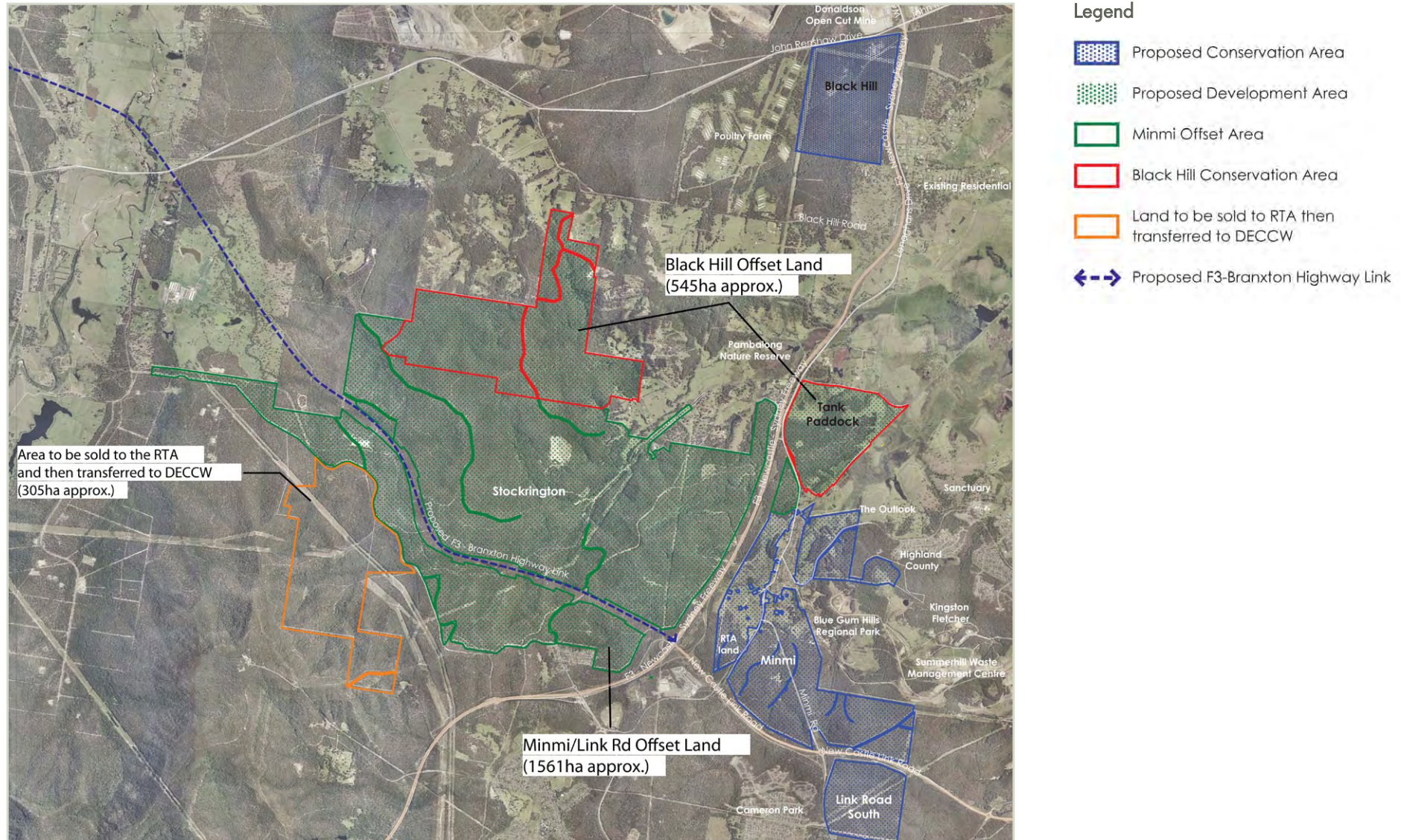


Figure A.1.1. Minmi and Link Road Conservation and Development Area

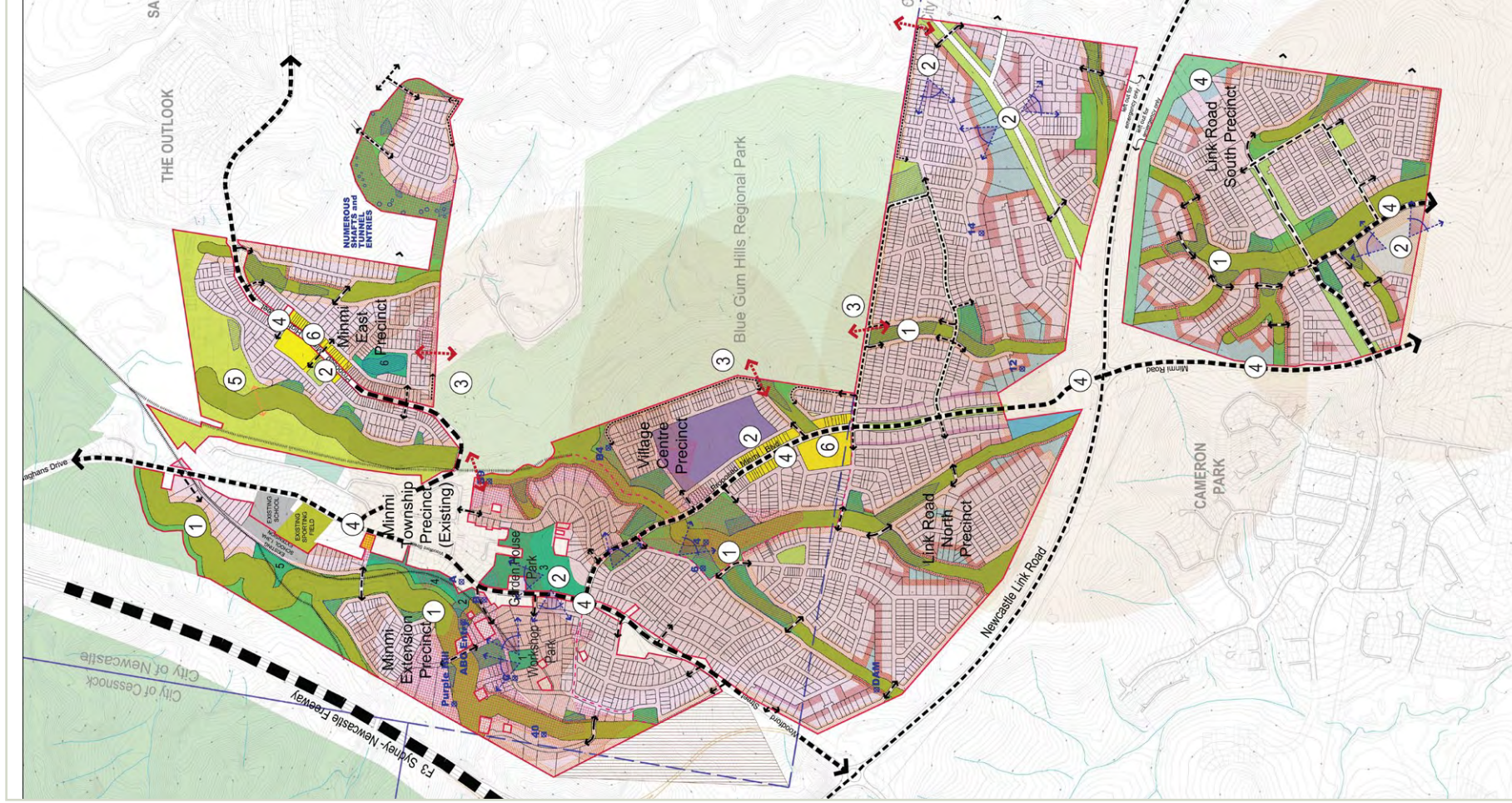
A.1.2 Site Constraints and Opportunities

A.1.2.1 Site Opportunities

There are a number of key development constraints and opportunities associated with the site that have been identified through the concept planning process:

Development Opportunities

- Create open space areas on land mildly constrained by past mining activity;
 - Include local vegetation, interpretation of Minmi's mining heritage, and landscape elements in the design of proposed neighbourhoods;
 - Establish wildlife corridors through the site, via riparian corridors and linking Blue Gum Hills Regional Park to Hexham Swamp;
 - Improve existing public transport services by providing opportunities for more accessible and more frequent bus services;
 - Improve existing road access to Minmi and surrounding residential areas and open space by upgrading and increasing access points, and by providing a network of cycle and pedestrian pathways;
- Increase the range and quality of social infrastructure, including sporting facilities and other outdoor recreation opportunities, available to the local community; and to meet demands associated with additional population;
 - Reinforce the economic vitality of the existing township and the range of services available there.



Legend

- Existing Creek Line
- █ Creek Buffer Zone
- █ Existing School
- █ Existing Blue Gum Hills Regional Park
- █ Existing and Proposed Open Space
- █ Existing Heritage Open Space
- █ C & A Conservation Area
- █ Proposed Passive Open Space
- █ Existing Active Open Space / Proposed Sports & Recreational Area
- █ Proposed Landscaped Road Corridor
- Existing Transgrid Easement (Monteath, 2008)
- Existing Energy Australia Easement (Monteath, 2008)
- █ Proposed New Centres (Mixed Use and High Street Medium Density)
- Indicative proposed bus stops with 800m walking radius
- Indicative viewing points

NOTES

- ① Creek Lines as potential key component of open space network, wildlife corridors and Water Sensitive Urban Design initiatives across the site.
- ② Opportunities to capitalise view corridor within hilly site and existing heritage conservation area.
- ③ Opportunities to link into adjoining Blue Gum Hills Regional Park as per BGHRP Plan of Management.
- ④ Opportunities to introduce an integrated road system, improving accessibility for pedestrian and cyclist, and also introducing public transport route within the main road system.
- ⑤ Opportunities to utilise existing open space as active recreational open space, integrated with interpretation of existing Mimmi mining heritage whilst improving social infrastructure requirements.
- ⑥ Opportunities to introduce new centres within the sites to enhance economic vitality.
















Figure A.1.2.1. Indicative Site Opportunities

A.1.2.2 Site Constraints

Development Constraints

- Past mining activities have impacted upon the development potential of the land, thereby constraining development footprints, building heights and structure type;
- Management and planning for riparian zones and flood prone land;
- Noise buffering and mitigation along the F3 Freeway and the Newcastle Link Road;
- Electricity transmission easements traversing the Link Road North and Link Road South Precincts;
- Development on areas with slope greater than 20% gradient;
- Heritage conservation requirements and maintaining view corridors;
- Bushfire impacts of surrounding vegetation and vegetation retained within the site.

Legend

-  Site Boundary
-  Existing Major Contour (10m Interval)
-  Existing Minor Contour (2m Interval)
-  Existing Heritage Railway Tracks
-  Proposed F3 motorway RTA Extension
-  Existing Transgrid Easement
-  Existing Energy Australia Easement
-  Existing Dual Power Pole Position (Monteath, 2006)
-  Proposed Electricity Transmission Lines (Monteath, 2008)
-  Existing Creek Line outside subject site
-  Category 1 Creek Line within subject site
-  Category 2 Creek Line within subject site
-  Category 3 Creek Line within subject site
-  Existing Lakes
-  Core Riparian Zone inc. 10m Landscape Buffer (RPS, 2010)
-  100 years Flood Line (GHD, 2008)
-  APZ (RPS, NOV 2010)
-  Existing Heritage Park / Open Space to be reserved (ERM, 2008)

Notes

- ① Flooding and detention issues to be addressed on site
- ② APZ and Creek Buffer restricting building footprint
- ③ F3 and Newcastle Link Road are barriers to physical movement and connectivity surrounding the sites and create noise impact
- ④ Existing heritage determines conservation area and view corridor requirements
- ⑤ Existing Transgrid and Energy Australia Easement Zone creates physical and visual impacts to be addressed on site

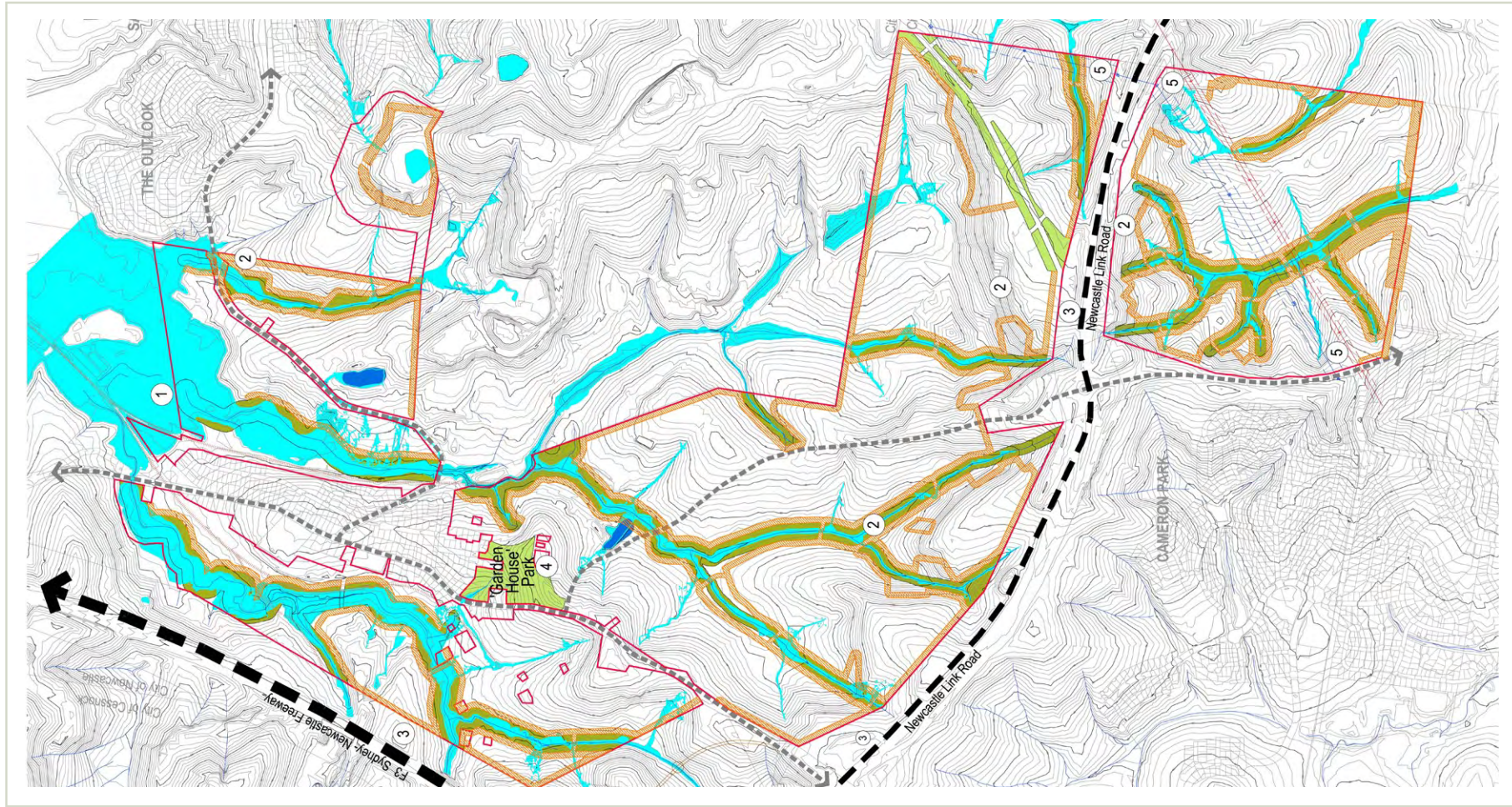
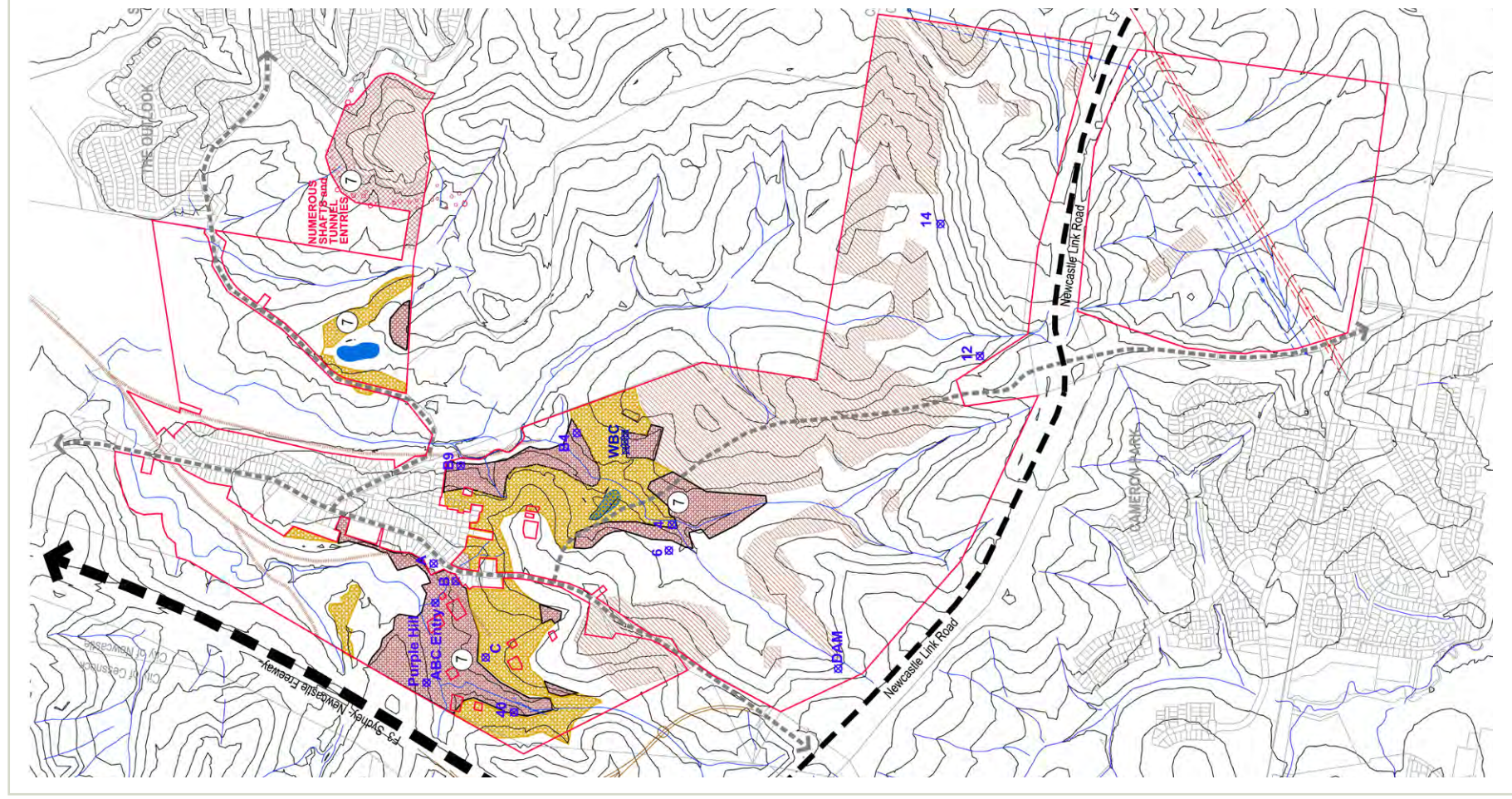


Figure A.1.2.2. Constraints Drainage and Open Space



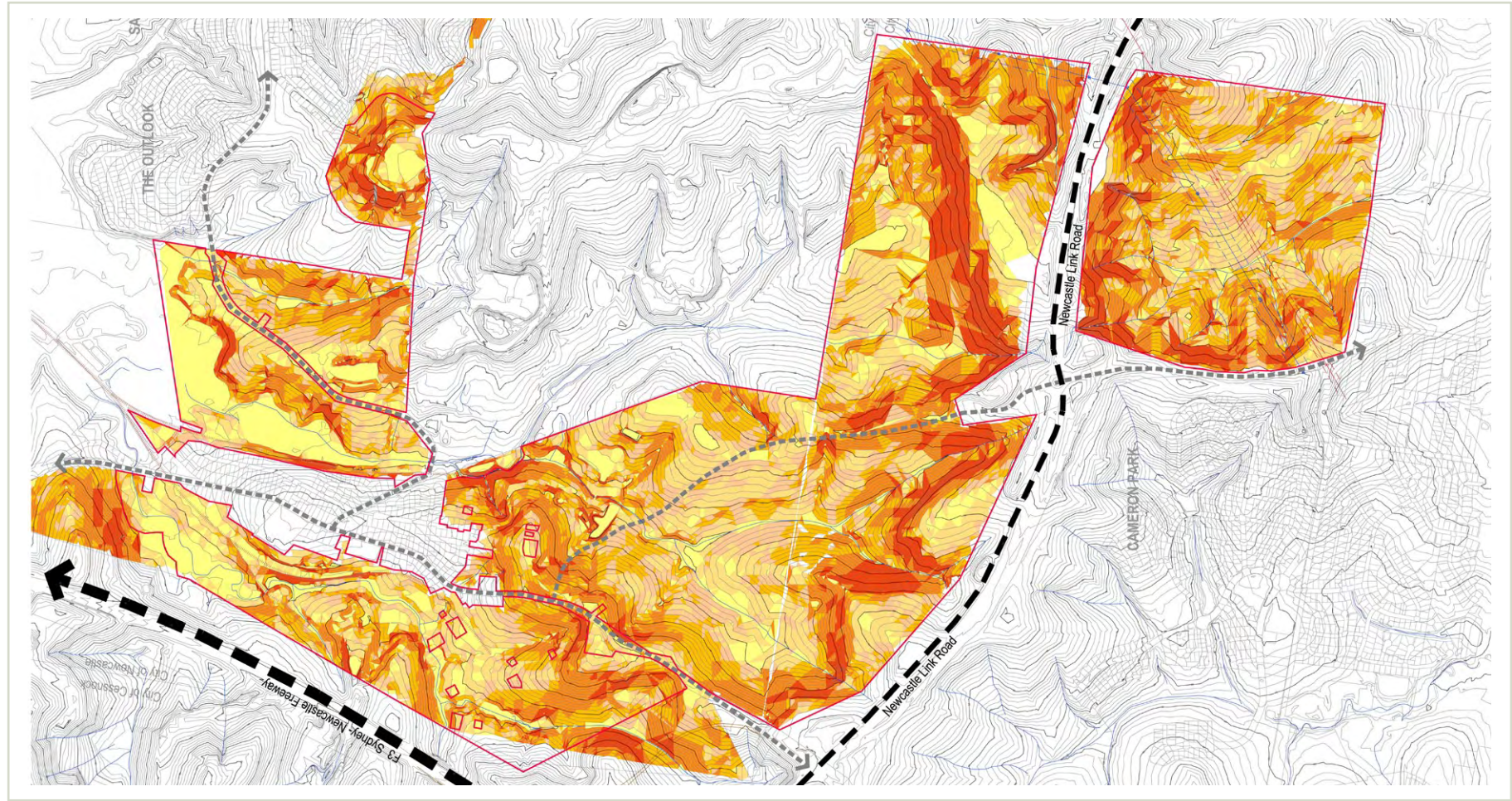
Legend

- Site Boundary
 - Existing Major Contour (10m Interval)
 - Existing Minor Contour (2m Interval)
 - Existing Heritage Railway Tracks
 - Proposed F3 motoway RTA Extension
 - Existing Transgrid Easement
 - Existing Energy Australia Easement
 - Existing Dual Power Pole Position (Monteath, 2008)
 - Proposed Electricity Transmission Lines (Monteath, 2008)
 - Existing Creek Line
 - Existing Lakes
 - Single Storey - Specialised design required (Douglas Partners, 2008)
 - High Risk Pot Hole (Douglas Partners, 2008)
 - Single Storey - Low Risk Pot Hole (Douglas Partners, 2008)
- Existing Mining Shafts**
- Shaft Locations (Located)
 - Wellseid Borehole Colliery (WBC) Entry Location
 - Shaft Locations (Uncertain)

Notes

- ⑦ Special consideration required prior to building in this area due to mining constraints

Figure A.1.2.3. Constraints - Mining



Legend

- Site Boundary
- Existing Major Contour (10m Interval)
- Existing Minor Contour (2m Interval)
- Existing Heritage Railway Tracks
- Proposed F3 motorway RTA Extension
- Existing Transgrid Easement
- Existing Energy Australia Easement
- Existing Dual Power Pole Position (Monteath, 2008)
- Proposed Electricity Transmission Lines (Monteath, 2008)
- Existing Creek Line

Slope Classes

- Slope 0 - 6% (0 - 1:16)
- Slope 6 - 10% (1:16 - 1:10)
- Slope 10 - 12% (1:10 - 1:8)
- Slope 12 - 16.6% (1:8 - 1:6)
- Slope 16.6 - 25% (1:6 - 1:4)
- Slope 25 - 100% (1:4 - 1:1)

Figure A.1.2.4. Constraints - Slope