

Coal & Allied
NORTHERN ESTATES
Black Hill

APPENDIX B ■ CONCEPT PLAN DESIGN GUIDELINES

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PREPARED BY ■ RPS and JMD

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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 Black Hill in the Lower Hunter. It forms Appendix B 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 B is structured as follows:

B.1. Urban Design Concept Plan

This chapter summarises the key design elements and principles used in developing the Concept Plan. The Concept Plan illustrates the proposed development footprint and the site opportunities and constraints which have helped determine the final concept layout.

This chapter also provides an overview of proposed landscape and streetscape treatment.

B.2. Development Controls

This chapter provides indicative development controls for future development of the Estate. The controls have been based on a review of the relevant Newcastle City Council planning provisions and a consideration of the surrounding physical and natural environment.

B.3. Staging Plan

This chapter illustrates the intended staging for the overall development.



B.1. Urban Design Concept Plan

B.1.1. Background & Site Overview

The Black Hill site is owned by Black Hill Land Pty Ltd, a wholly owned subsidiary of Coal & Allied Industries Pty Ltd (Coal & Allied) and the land is legally described as Lot 30 on DP 870411. The proposed Black Hill development area consists of 183ha and is located to the south west of the intersection of the F3 Freeway and John Renshaw Drive. Largely rural lands bound the site to the south. The land to the west of the site is owned by the Catholic Church and was formerly used as a poultry farm. It is understood that a number of development options have been considered for the adjoining Catholic Church land including residential, industrial and a new school. No development application has yet been lodged for the site. It should be noted that this land is also within the LHRS Freight Hub study area, therefore potential exists for similar employment generating uses to occur on adjacent lands in the future. Land north of the site is part of a staged light industrial/commercial land release partly developed.

Black Hill is located in the north-west extremity of the City of Newcastle LGA. Agricultural industries located in the area have included poultry farms and Boral Asphalt operates on part of the Coal & Allied site under a short term lease. Ironbark Colliery was partly established in the 1970s in the central northern and central western portion of the site. While mining was not undertaken at the site, construction of surface infrastructure did occur. This mining infrastructure was later decommissioned.

Black Hill benefits from a highly accessible location adjacent to the F3 Freeway which is the major transportation corridor to Newcastle, Sydney and the North Coast. Maitland, Raymond Terrace and Newcastle are the nearest higher order centres to the site, providing shopping and business services.

The F3 Freeway provides access to the subject site at Black Hill. Neither John Renshaw Drive along the northern boundary or the F3 Freeway provide formal footpaths, kerbs or gutters. A private road provides access to Boral Asphalt site off the F3 Freeway. Potential access to and from the site can be made via the F3 Freeway on the eastern boundary and John Renshaw

Drive on the northern boundary.

The Coal and Allied Black Hill site covers approximately 183ha. It forms part of the area included as 'employment lands' within the Lower Hunter Regional Strategy (LHRS).

Tank Paddock, which forms part of the Black Hill site Concept Plan application, is identified in the LHRS as proposed conservation lands covering an area of approximately 147ha.

Coal and Allied propose to develop the 183 hectares owned by Coal and Allied at Black Hill as employment lands to include support facilities. The 183 hectare development site will include up to 26 hectares of open space, including riparian corridors and parks. Further, it is proposed to dedicate 100% of the 147ha Tank Paddock site to the New South Wales Government (NSWG) for conservation purposes. It is proposed to dedicate land for conservation purposes as part of the Major Development Application via a Voluntary Planning Agreement (VPA) between Coal & Allied and the NSWG in accordance with s.93F of the Environmental Planning & Assessment Act, 1979 (EP&A Act).

The existing industrial use of part of the site by Boral Asphalt is prohibited by the current 7(c) Environmental Investigation zoning in the Newcastle LEP 2003. It is understood to have been established lawfully and benefits from existing use rights. The vast majority of the remainder of the site is highly vegetated, however there are some cleared areas associated with the sites former uses.

An above ground water supply pipeline adjoins the northern boundary and currently constrains vehicular access from John Renshaw Drive. Hunter Water Corporation (HWC) is currently planning to replace this section of pipe with a new underground pipe, programmed to commence in the second half of 2010. An existing underground mining consent over the Black Hill site will defer development until mid 2013.

The current population of Black Hill is 704 persons. The majority of the 220 occupied dwellings in Black Hill are classified as separate houses, located on the eastern side of the F3 Freeway.

Existing infrastructure at Black Hill includes:

- Water – There is an existing 900mm diameter trunk main adjacent to the northern boundary of the site. Hunter Water is currently planning to replace this pipeline with a 1200mm diameter pipeline which will be placed underground. Hunter Water has advised work is programmed to commence second half of 2010. Hunter Water has indicated three permissible connection points from which a 200mm / 250mm diameter water main could be connected to create a ring main to service the site. Two connection points will be required to create the ring main for the development area.
- Sewer – There is a network of sewer pump stations (SPS) in Beresfield and Thornton which drain to Morpeth. The existing sewer infrastructure network of pump stations, gravity mains and rising mains has not been designed to cater for the development. A detailed Sewer Servicing Strategy for the site will be prepared in consultation with Hunter Water to determine the optimal servicing arrangement for the site. The Strategy will be prepared prior to Project Application approval.
- An existing zone substation at Beresfield (north of Black Hill) services the Black Hill area. This zone substation is relatively new and may have some capacity to service some of the development. Energy Australia has indicated that (based on current capacity) low voltage electricity reticulation and street lighting can be serviced; however it is unlikely that the zone substation will have sufficient capacity to accommodate an employment precinct. Design loads will be determined by the user's requirements. It may be necessary to construct a separate zone substation or extend high voltage mains to service the site.
- A major gas main is located parallel to the Sydney to Newcastle freeway. The closest connection point is located at the corner of John Renshaw Drive and Kinta Drive east of the Freeway. The nature (ie medium or high pressure) and size of the main to the development site will depend on the potential demand that is anticipated by Jemena (formerly Alinta) based on expected demand levels generated by industrial / commercial customers

- Telstra telecommunications infrastructure is available in the proximity of the site and will be extended to service the development. The National Broadband Network (NBN) has been announced by the Federal Government committing to the rollout of fibre optic telecommunications.
- Transport – Access to the Boral Asphalt site is from the F3 in the north-east corner of the site.
- Social infrastructure – There is only a limited range of facilities at Black Hill, restricted to:
 - Black Hill Public School; and
 - Black Hill Church.

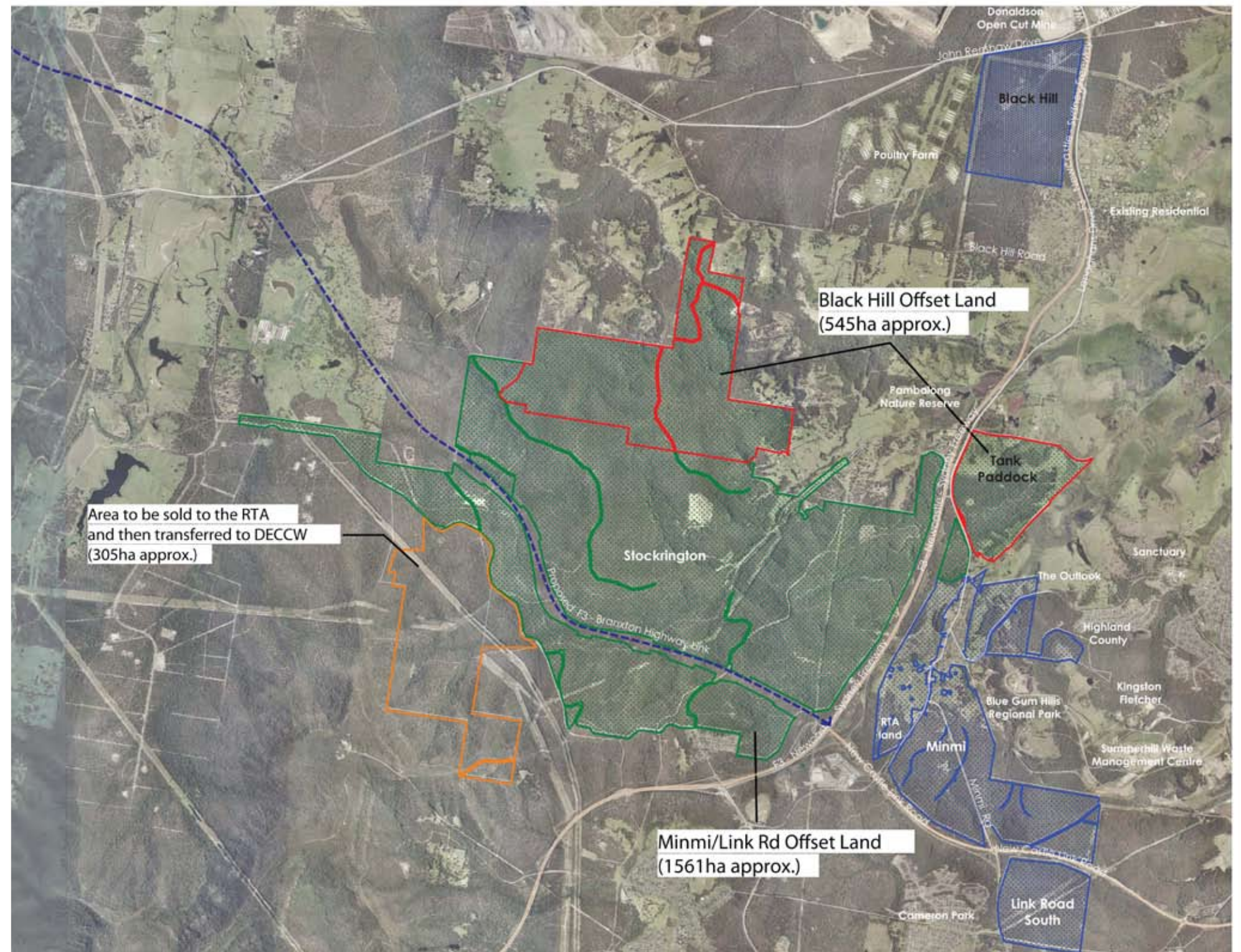


Figure B.1.1. Black Hill Conservation and Development Area

B.1.2.Site Constraints & Opportunities

Opportunities

- Employment opportunities located in close proximity to residential development and other employment lands;
- Land falls within the NSW Government Lower Hunter Regional Strategy's area for future employment lands and freight hub;
- Incorporating riparian corridor into public open space;
- Utilising riparian corridor for stormwater management and recreation facilities;
- Access points from F3 Freeway and John Renshaw Drive;
- Proximity to bus routes and potential to augment these services to cater for future employees of the Estate;
- Dedication of Tank Paddock as conservation land assumes the offset for development of the Black Hill site.

LEGEND

- Site Boundary
- Existing Creek Line
- Existing Residential
- Existing Industrial
- Indicative Existing Bus Routes
- ◀● Access points from existing F3 Freeway and existing road reserve on western edge of site from John Renshaw Drive
- Existing Hunter Water Supply
- ① Existing Viney Creek and proposed riparian corridor provides opportunity for public open space spine and water sensitive urban design initiatives across the site. Opportunity to use Viney Creek as open space riparian corridor for passive open space and cycle/pedestrian links
- ② Opportunities for support facilities such as cafes, child care to be located on open space amenity and central to future industry users.
- ③ Opportunity to provide two access points to the site to create good traffic circulation
- ④ Utilise existing bus routes and augment these to enhance public transport for future employees
- ⑤ Future industrial road links to adjoining properties to the south

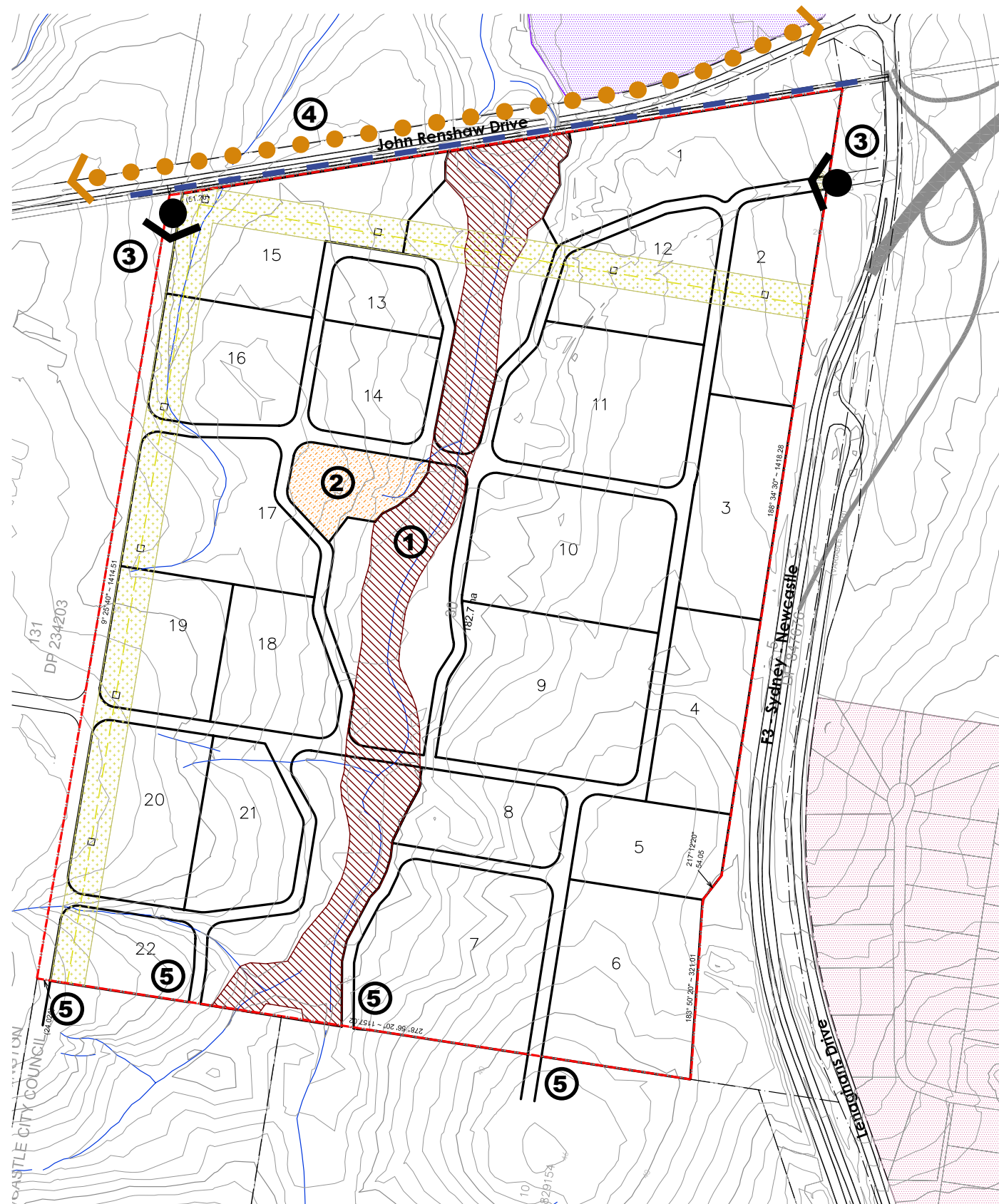


Figure B.1.2.1. Indicative Site Opportunities

B.1.2 Site Constraints & Opportunities

Constraints

- Management and planning for riparian zones and flood prone land including requirements for offline detention basins for Category 2
 - Viney Creek;
- Offline detention basin requirements for Category 2 Creek, (generally to be incorporated into open space areas);
- Uncontrolled filling and potential contamination associated with the Iron Bark Colliery site;
- Proposed future mining activities that will impact on the timing and development of the land;
- Visual impacts on adjacent properties & surrounding road network;
- Asset Protection Zones will restrict building envelopes;
- Hunter Water pipeline running along the northern boundary (planned for replacement underground 2010/2011);
- Transmission lines along the western boundary and east/west in the northern section of the site;
- Noise impacts from the F3 freeway will impact on future construction and building design;
- Heritage, archaeological and aboriginal sites require careful management and integration.

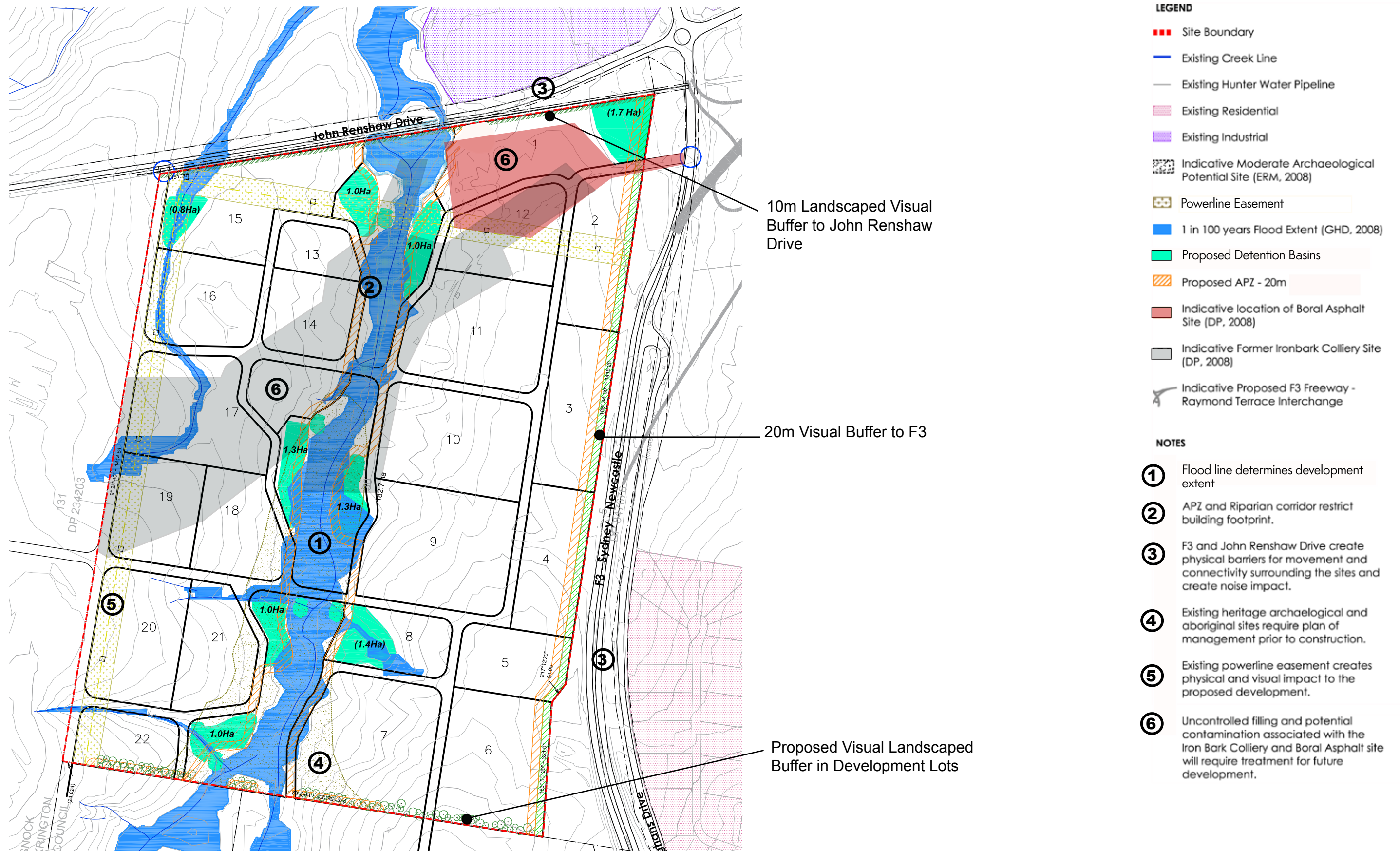


Figure B.1.2.2. Indicative Site Constraints

B.1.3. Concept Plan Overview

The application seeks approval for a Concept Plan to guide the development of employment lands at Black Hill. Aspects for which concept approval is sought include:

- The use of the Black Hill site as 'employment lands' for a range of employment generating activities, including:
 - light industrial;
 - warehouse and distribution centre;
 - depots;
 - freight transport facilities;
 - truck depot;
 - neighbourhood shops;
 - office premises ((that are ancillary to development for another permitted purpose);
 - advertising structure;
 - car park;
 - food and drink premises;
 - timber and building supplies;
 - transport depot/passenger transport facility;
 - industrial retail outlets;
 - service station;
 - vehicle repair station;
- Supporting social infrastructure for the emerging workforce, including:
 - food and drink premises;
 - business premises;
 - child care centre;

- community facility;
- health consulting rooms;
- hotel accommodation;
- medical centre;
- recreation area;
- recreation facility (indoor);
- restaurant;
- retail premises;
- petrol station.

- Indicative super-lot layout;
- Road and access layout;
- Riparian green buffer;
- Central location for support facilities; and
- Associated infrastructure arrangements;

Approval is not sought under the Concept Plan for a specific lot or road layout. An indicative lot and road layout has been prepared, which indicates how subdivision could be achieved that will enable a range of industrial and ancillary activities to be undertaken.

Roads are proposed both sides of the Viney Creek riparian corridor which will provide easy public access to the open space and riparian corridor spine and allow future subdivision of the development land without the need for cul-de-sacs.

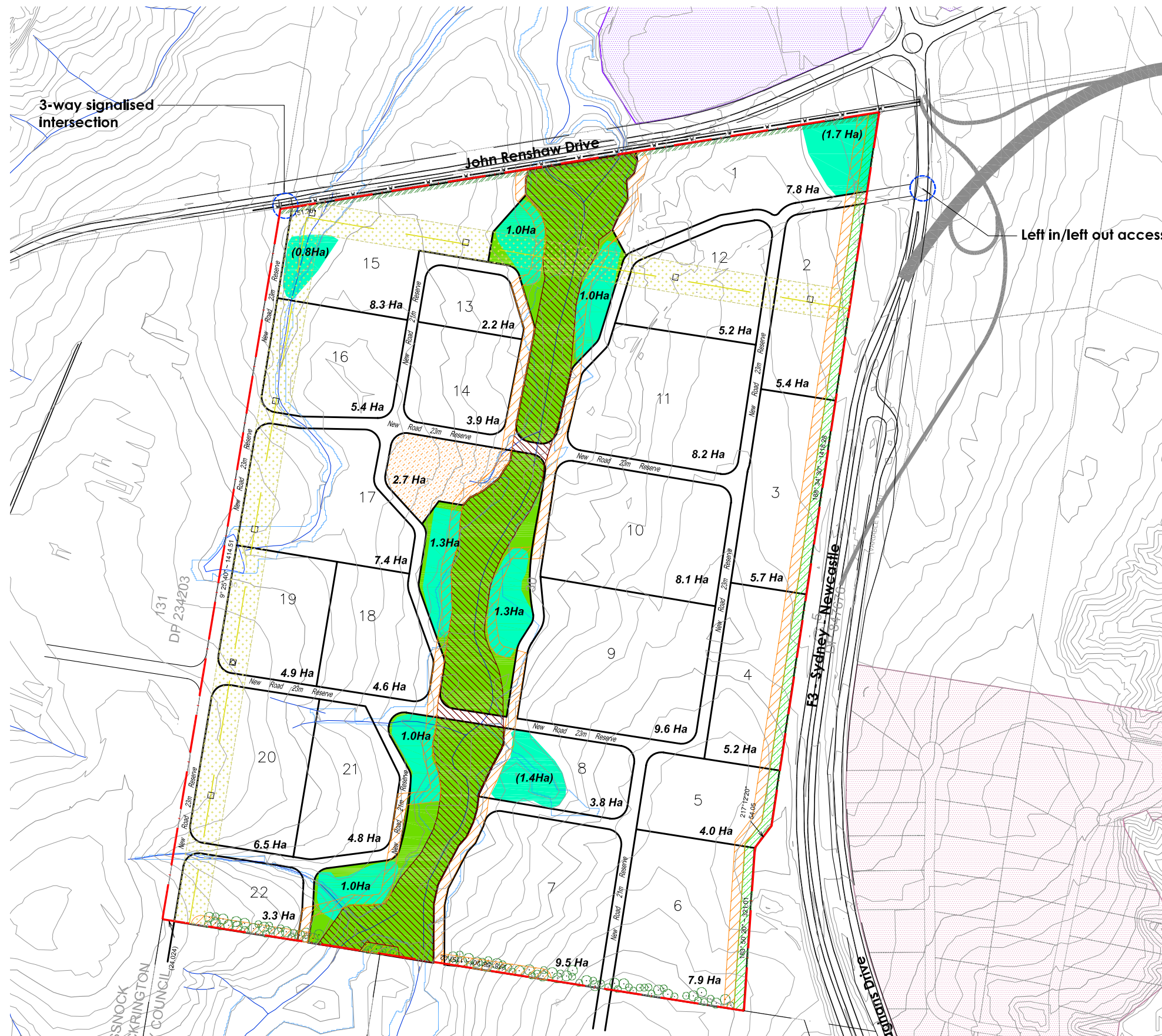
Proposed future mining by Abel Mine means that the site will be suitable for development once the mining and associated subsidence is complete, which is required to be completed by 30 June 2013. Accordingly, a detailed built form layout has not been prepared at this stage. Approval is not sought under the Concept Plan for subdivision or for individual buildings on the site.

The Concept Plan has been developed in response to the opportunities and constraints of the site, as discussed in Section B.1.2. Key design principles used to guide the preparation of the Concept Plan were developed for the early phases of the project and include:

- Providing employment lands close to transportation corridors.
- Providing a flexible layout and suitable road network to cater for a range of future uses, including large scale industrial development.
- Providing connections to the surrounding business parks and residential areas.
- Providing a small local centre for the future local employment community.
- Recognising Aboriginal and cultural heritage and archaeology.
- Recognising the importance of the view shed of the existing southern houses of Black Hill.
- Creating employment opportunities to realise the Lower Hunter Regional Strategy.
- Design aspects to address the safety of future users of the development site.
- Incorporating Viney Creek and offline detention basins in an open space corridor designed to be community friendly.
- Current best practice of integrated water cycle design and management is employed.

Through the inclusion of super lots and the proposed road network, the final Concept Plan provides a flexible layout that will enable a range of industrial and ancillary activities to be undertaken on the site.

The street network consists of a series of collector roads that will provide the foundation for future subdivision of the Estate. The roads have been designed to cater for large articulated vehicles, as necessary for large scale industrial development. Future entry statements are to be provided on the site.



LEGEND

- Site Boundary
- Existing Creek Line
- Existing Hunter Water Pipeline
- Existing Residential
- Existing Industrial
- Indicative Stanchion Locations
- Powerline Easement
- Proposed Detention Basin
- Indicative Proposed Riparian Zone
- Indicative Proposed APZ - 20m
- Proposed 20m wide Green Buffer Zone (as required under Newcastle-Lake Macquarie Western Corridor Planning Strategy)
- ✂ Indicative Proposed F3 Freeway - Raymond Terrace Interchange
- Proposed Indicative Site Entries
- Proposed Visual Buffer
- Proposed 10m wide Visual Buffer to John Renshaw Drive.
- Support Facilities
- 100 year ARI
- Proposed Public Open Space

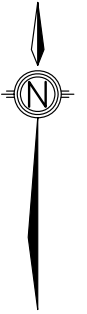


Figure B.1.3.1. Illustrative Concept Plan

Land Budget

26ha Proposed Public Open Space
 157ha Developable Land incl. lots, road, easements, buffers, APZ's, detention basins