



# Deep Creek Quarry Project

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THE BUCKETTS WAY,  
LIMEBURNERS CREEK

PUBLIC MEETING

DECEMBER 2023

# Introduction

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- ❑ Thank you to the Commissioners for the opportunity to speak today.
- ❑ My name is Jonathan Berry from Wedgetail Project Consulting, Ironstone Developments have asked me to speak on their behalf today.
- ❑ I have personally been working on this project at various times since about 2014.
- ❑ This is a short overview of some of the key aspects of the Deep Creek Quarry (DCQ) Project.
- ❑ A comprehensive overview is provided in the DPE assessment report along with all the detailed documentation submitted on the Major Projects Website.

# DCQ Overview

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- ❑ 12Mt hard rock quarry.
- ❑ Up to 500,000 tonnes per year over a period of up to 30 years.
- ❑ Range of quarry materials focusing on high grip and light-coloured aggregates, supported by road base, crusher dust and a range of construction and decorative aggregates.
- ❑ Includes a new intersection and access road, workshop, stockpiles, weigh bridge and office.
- ❑ Total footprint of approximately 32 ha (18 ha for quarry, up to 14 ha for supporting infrastructure).



# DCQ Overview

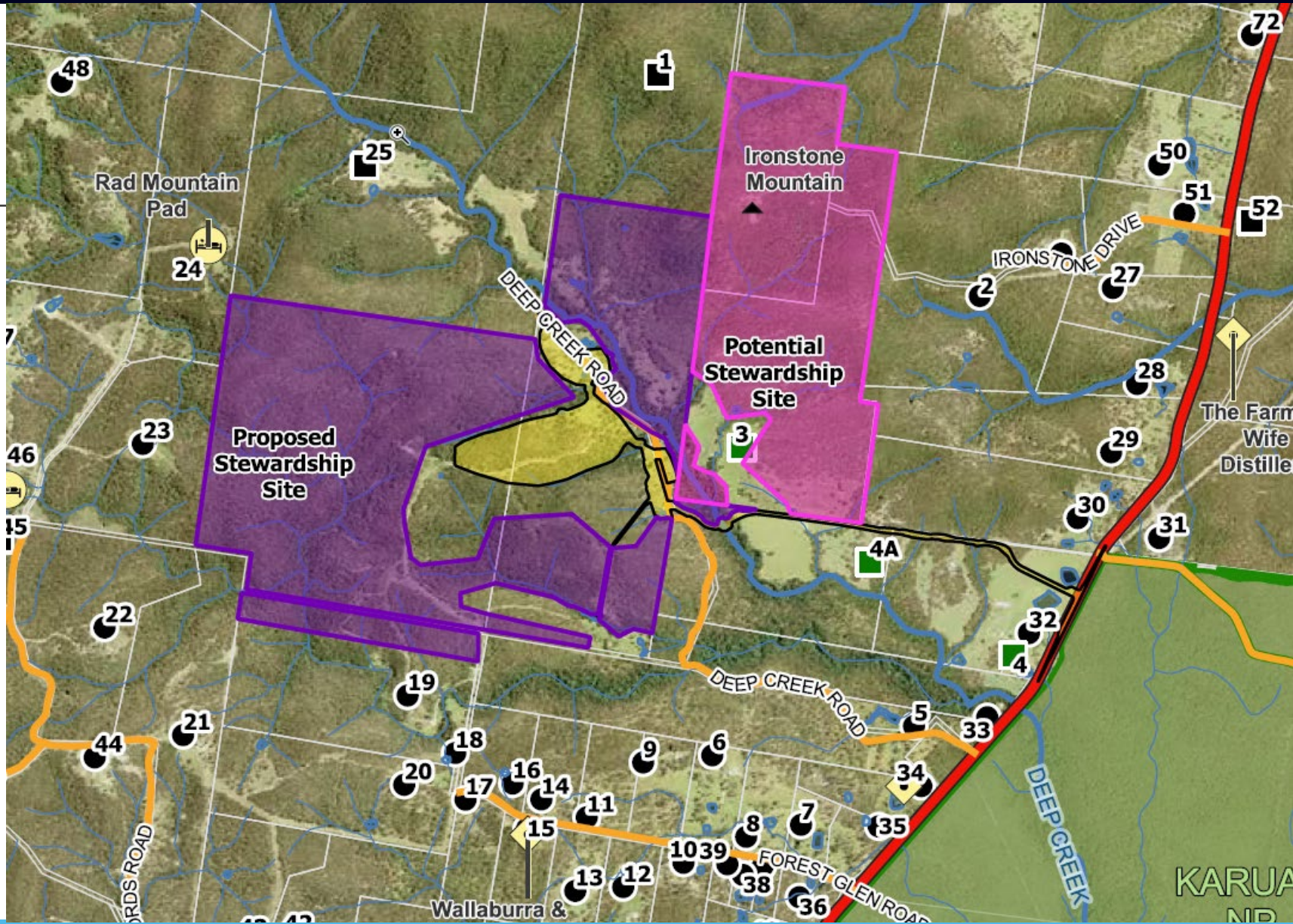
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- ❑ 10 employees, plus other haulage operators.
- ❑ Rock extracted by blasting, excavator and truck.
- ❑ Crushing and processing on quarry floor.
- ❑ Quarry is aimed to operate essentially daylight hours Monday to Friday and a half day on Saturday.
- ❑ Will include establishing a Stewardship Site for conservation in the order of 235 to 360 hectares, these conservation areas operate in perpetuity, beyond the life of the quarry.



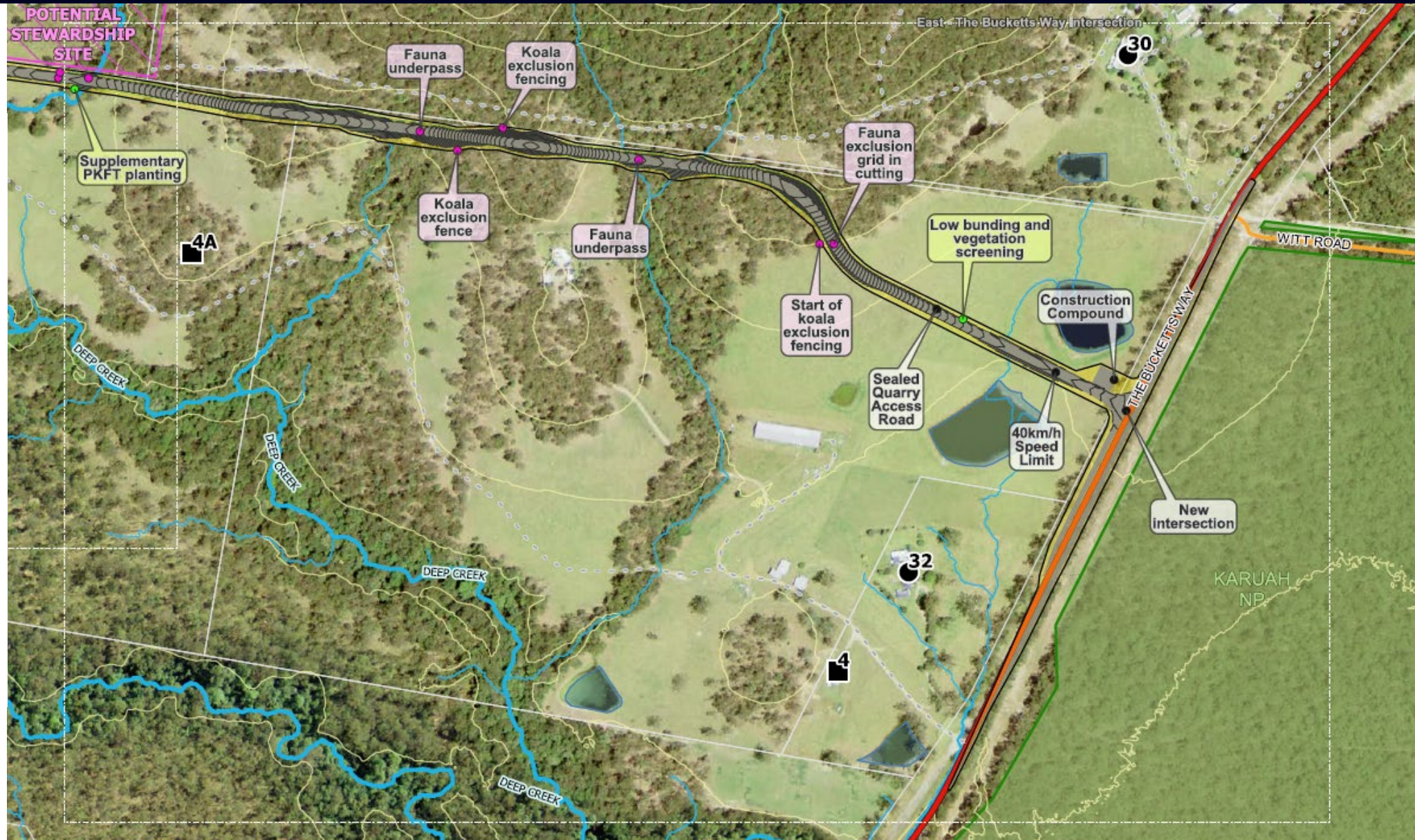


# The Project



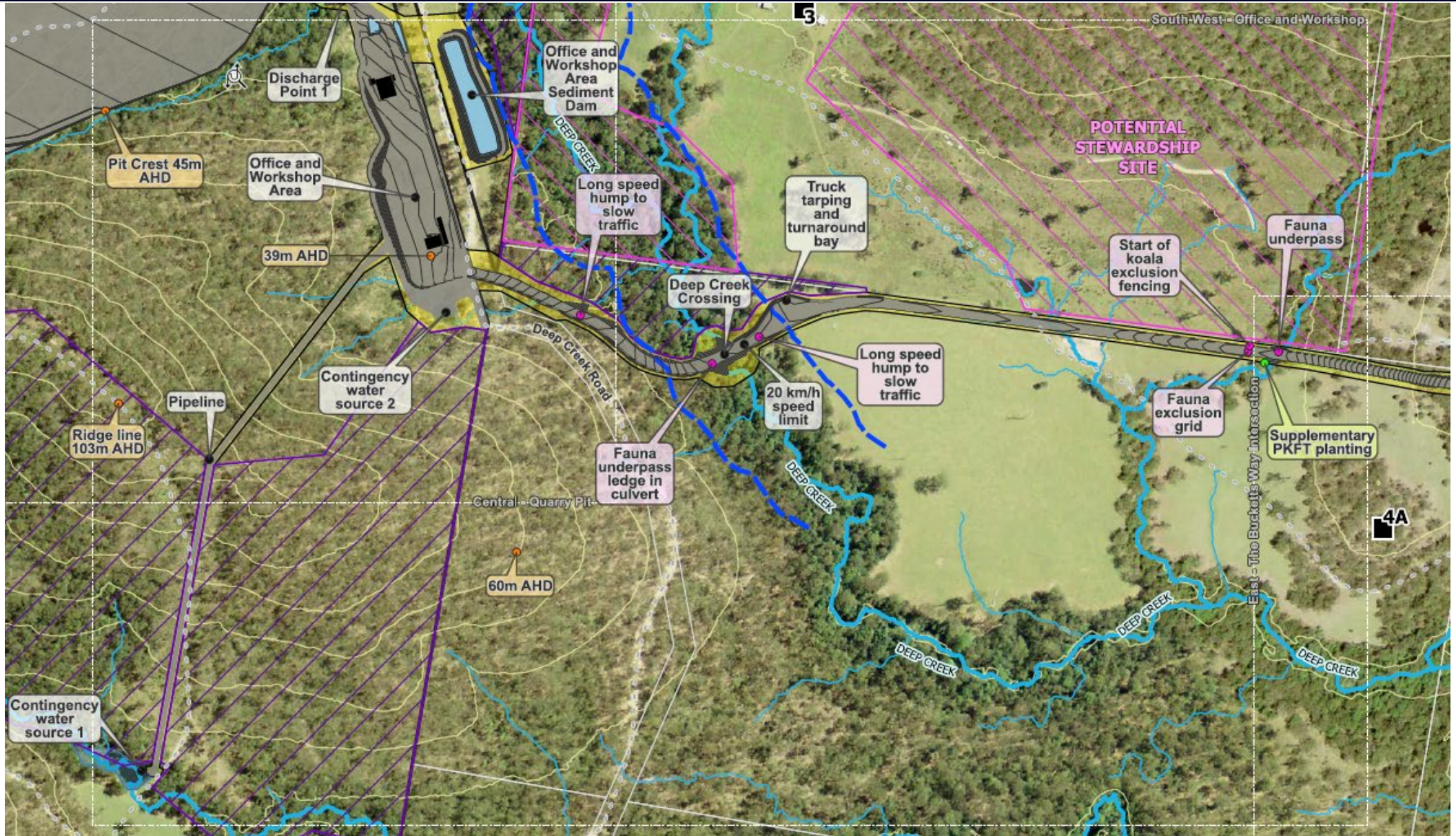


# Intersection Area



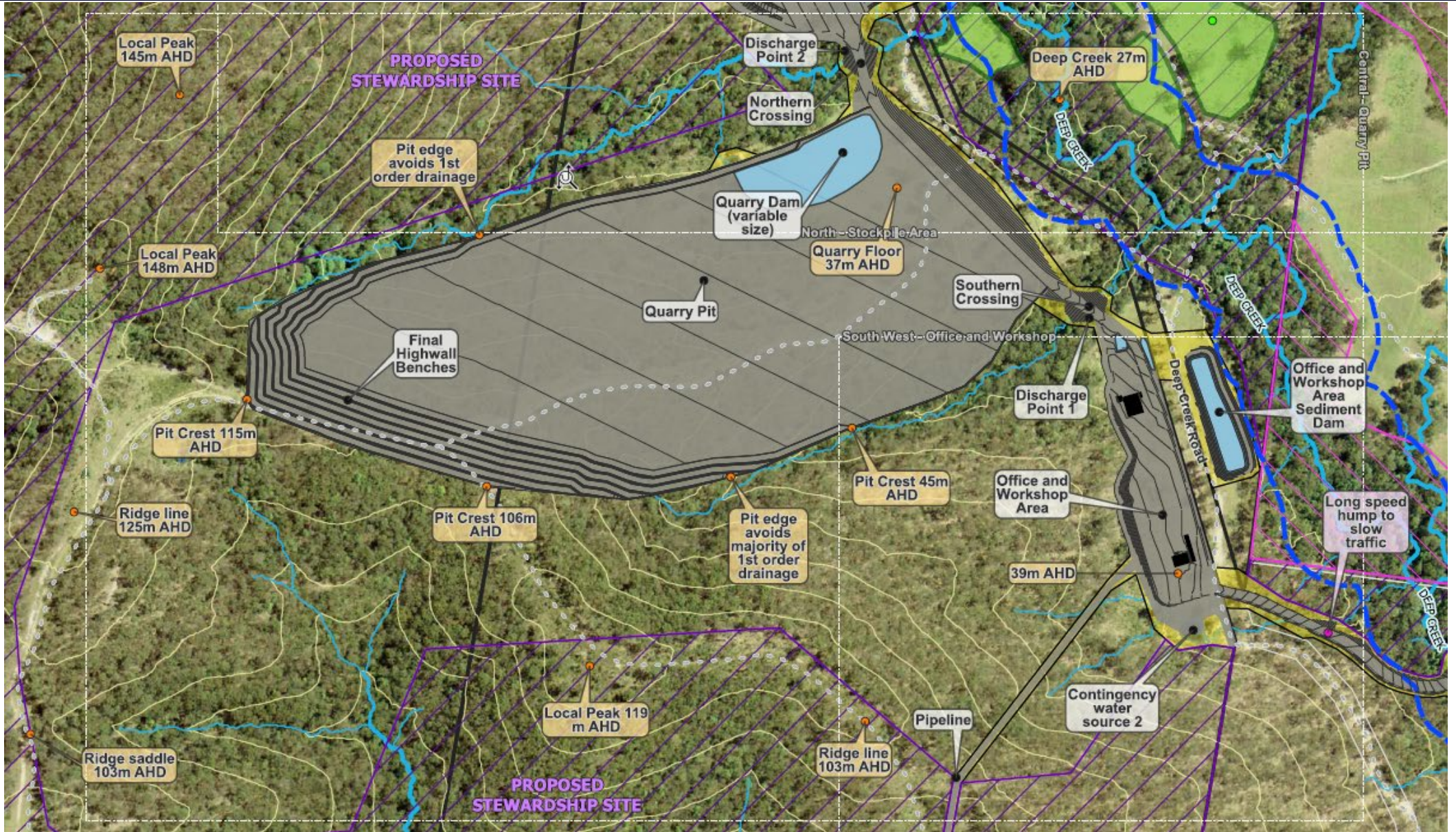


# Office and Workshop



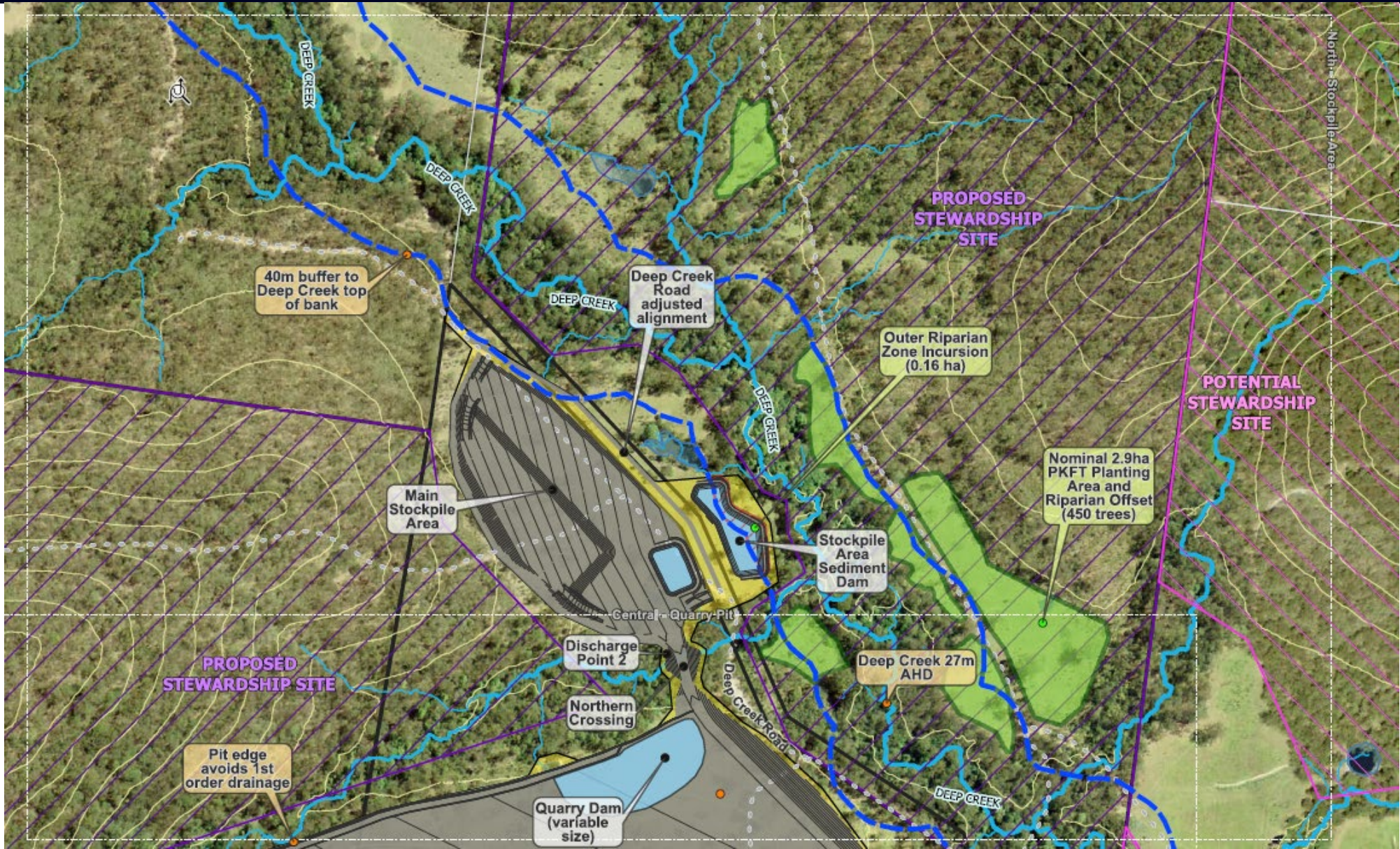


# Quarry Pit





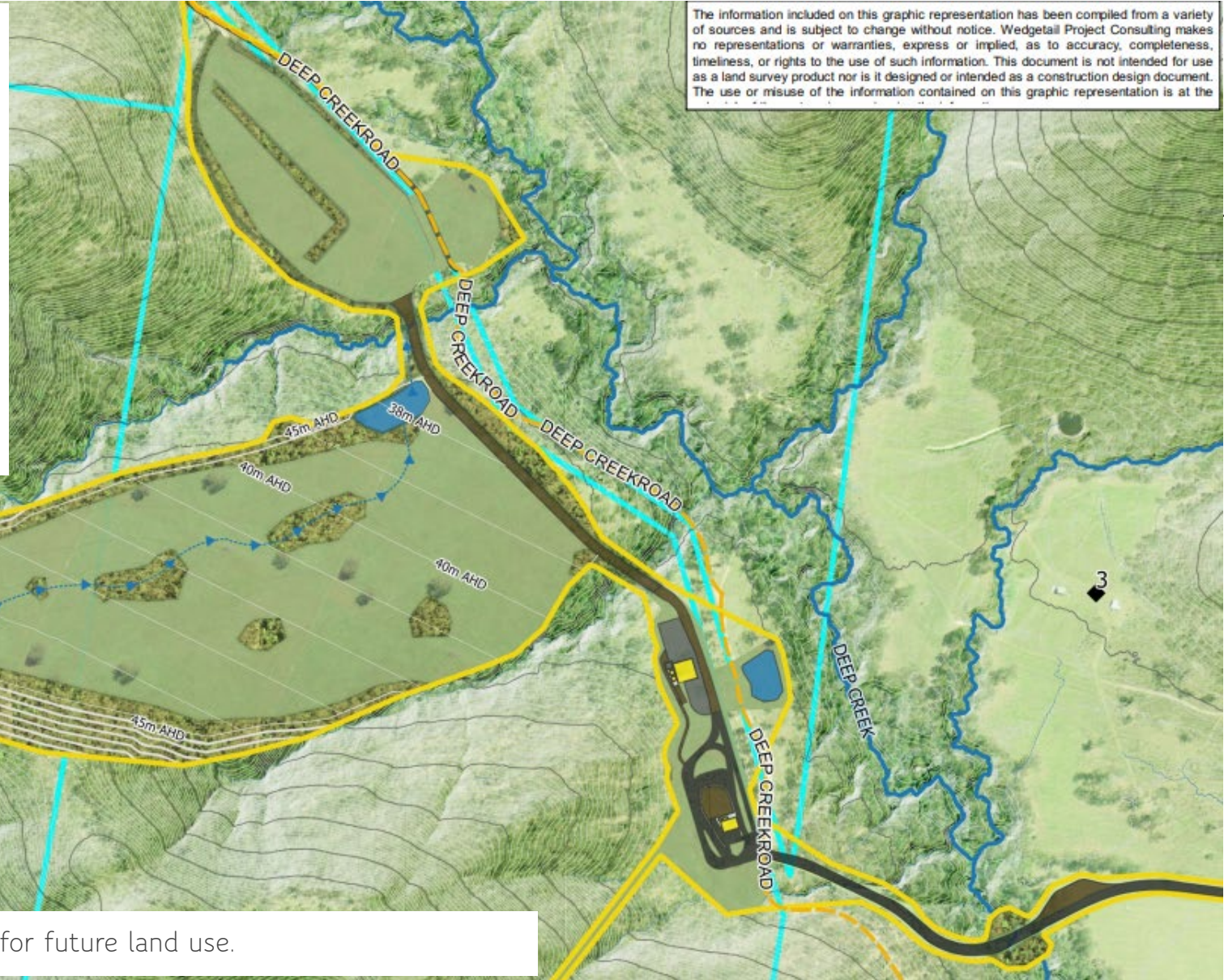
# Stockpile Area





# Final Landform

- ❑ 10m high batters with 6m wide benches, approximately 73m total height
- ❑ Floor 42m to 37m AHD.
- ❑ Free draining.
- ❑ Planted as grassland with patches of woodland.
- ❑ Woodland on benches.



- ❑ Office and workshop retained for future land use.



# DCQ Design – Pit Extent

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- ❑ We have been aware of sensitivity of noise, dust and visibility for dwellings in the area since inception, and sort to retain ridgelines between quarry and Forest Glen Road and the western ridgeline toward Fords Road.
- ❑ Started with considerations of much larger pit areas as the whole hill contains saleable rock.
- ❑ Various pit shell designs investigated, resolved to have smaller pit focussing highest quality resources.
- ❑ Pit avoids drainage lines north and south and setback over 50m from Deep Creek, and the floor is about 10m above Deep Creek.



# DCQ Design – Access Road

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- ❑ Forest Glen Road first discussed as quarry access given intersection with The Bucketts Way was partially resolved, but avoided this option given potential noise impacts to dwellings and steep grades within the property.
- ❑ Deep Creek Road was next option investigated. We avoided this due to a dwelling, land ownership and inconsistencies in the road alignment, intersection is also close to Deep Creek bridge.
- ❑ Investigated though other properties, but dismissed due to vegetation, creeks and topography.
- ❑ Identified option through Property 4 and 4A to follow northern boundary along an existing access and utility handle for lot 4A.
- ❑ Road re-design following consultation with the R30 (Lancasters) to move road and intersection south.



# DCQ Product Material Benefits

- ❑ DCQ aggregate can help mitigate urban overheating.
- ❑ DCQ aggregate has high solar reflectivity index.
- ❑ DCQ aggregate can reduce pavement temperatures.
- ❑ Better environmental outcomes from lower pavement temperatures (e.g. reduces lighting costs and runoff temperatures).
- ❑ The high grip nature of aggregate will also meet a high demand market aimed at making roads safer (for example, its typically used at bus stops, black spots and roundabouts).

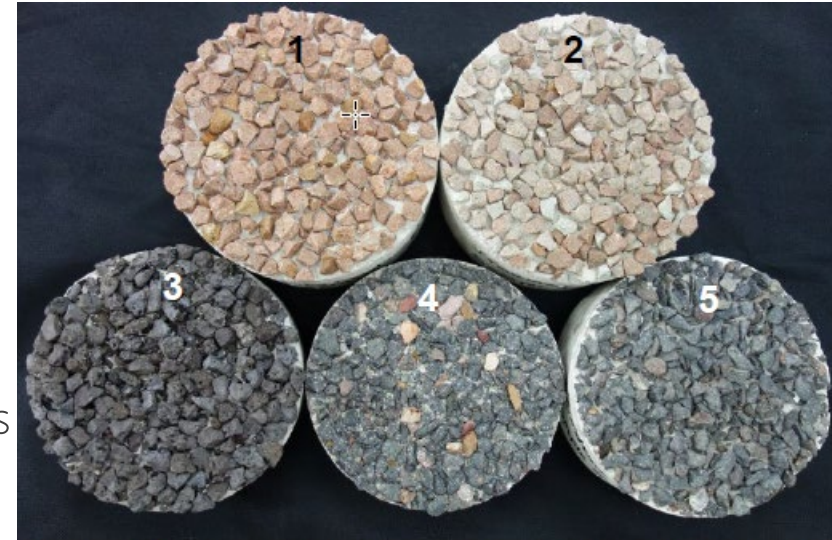


Plate 3-1: Aggregate samples tested for solar reflectance, 1) DCQ high PAFV aggregate, 2) DCQ high PAFV aggregate, 3) Slag with high PAFV, 4) Hunter Region hard rock quarry with normal PAFV aggregate, 5) Another Hunter Region hard rock quarry with normal PAFV aggregate.



# Biodiversity

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- ❑ Extensive surveys completed across the site consistent with Biodiversity Assessment Methods, plus extensive surveys for New Holland Mouse and Koala.
- ❑ Design includes a range of controls such as koala exclusion fencing, underpasses, speed control humps and preferred koala feed tree planting.
- ❑ Comprehensive management plan required including a New Holland Mouse relocation plan.
- ❑ Will establish a 235 ha Stewardship Site onsite for local source of credits, plus potentially an additional 125 hectares subject to an option agreement.
- ❑ Plan to have staged credit retirement that will commence with purchase of credits or payment into fund, and when available credits will be retired from onsite offset area.



# Traffic and Transport

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- ❑ At 500,000 tonne per annum, 5.5 days per week for 52 weeks per year you need to maintain 55 laden trucks per day (110 movements) to achieve maximum extraction.
- ❑ To allow for some redundancy and to meet typical construction peaks, we have proposed a maximum of up to 25 laden trucks per hour, or up to 125 laden trucks per day.
- ❑ Will consult with school bus operators using the road to identify measures to help minimise potential for conflict with School Buses.
- ❑ S7.11 contributions for maintenance of The Bucketts Way.
- ❑ Traffic Management Plan to be developed, will include a and Code of Conduct for all truck drivers to reduce traffic impacts, will include driver suspensions from the site.



# Water

- ❑ Pit design aimed to avoid first order creeks north and south and keep clear of Deep Creek both spatially and topographically. The floor of the pit is approximately 10m higher than Deep Creek.
- ❑ Quarry will use runoff from disturbance areas first, then from two farm dams on the property, then purchase water if needed.
- ❑ No impacts from flooding, groundwater impacts are negligible.
- ❑ Detailed management plans to be developed to manage water quality during construction and operations.



# Noise and Vibration

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- ❑ Predicted noise levels are below adopted criteria (40dB) for all receptors with exception to R25 (currently no permanent residence) that during worst case conditions may have exceedance of 2dB or less.
- ❑ Design of the quarry considered noise propagation and initiated the extraction in a sequence to retain a bench around the southern and western side of the operations to shield noise.
- ❑ No prediction of any exceedance of blast vibration criteria, monitoring will be undertaken.
- ❑ Limited to up to 25 blasts per year, with notification of residents prior to blasting.



# Air Quality and Human Health

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- ❑ Predicted air quality impacts are compliant with accepted criteria.
- ❑ Relocated access road to accommodate concerns by R30 of health effects.
- ❑ Access road to include low bund planted with vegetation on northern side to help minimise impacts on R30.
- ❑ Measures to be implemented during operations to minimise impacts on R30 including speed limits, having turn around area closer to the quarry and inductions to avoid trucks idling at entry gate if closed.

# Visual

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- ❑ Very limited visibility of the DCQ.
- ❑ Intersection and start of access road when viewed from The Bucketts Way only aspect visible from public lands.
- ❑ Limited visibility from adjoining property.
- ❑ Design of the quarry pit aimed to retain western ridgeline and southern ridgelines on the property.



# Heritage

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- Completed a heritage assessment in consultation with the Aboriginal Community.
- No significant constraints identified for heritage.
- Will continue to work with Community to ensure heritage is managed appropriately.

# Social and Community

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- ❑ Noise and dust impacts not predicted above criteria at any dwelling.
- ❑ We understand community are concerned about the additional traffic on the road, management of haulage and the condition of The Bucketts Way will be of high importance to Ironstone.
- ❑ Perceived change in reputation for area - however practically conservation will be largest spatial change in land use as a result of the Project with a 32ha quarry and up to 360ha conservation.
- ❑ A Community Consultative Committee (CCC) will be established to help increase communication between the community and the quarry.
- ❑ A Community Development Fund (CDF) is proposed to support the community.



Part of the Conservation Area / Stewardship Site



# Section 7.11 Contributions and the CDF

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- ❑ Pay Section 7.11 levy per tonne for road maintenance of The Bucketts Way to PSC and Mid-Coast Council, will be proactive in seeking road maintenance is undertaken.
- ❑ Community Development Fund (CDF) will be up to \$50,000 per year (at \$0.1 tonne levy on production).
- ❑ Funding would preferably go to supporting the local community, with a higher weighting on areas closer to the quarry.
- ❑ CDF use determined by CCC members, following nominations for funding by community.

# Next Steps...if approved

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- ❑ We will establish the Community Consultative Committee.
- ❑ A comprehensive range of management plans need to be developed, including:
  - Social Impact Management Plan
  - Water Management Plan
  - Biodiversity Management Plan
  - Noise Management Plan
  - Traffic Management Plan and Driver Code of Conduct
  - Rehabilitation Management Plan



# Thank you

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- ❑ Thank you for the opportunity to speak today.
- ❑ Ironstone Developments look forward to being a safe and responsible quarry operator in the area, that will provide jobs and a unique quarry product that can help make roads safer and help provide options to help combat climate change through the lighter coloured aggregates.