

HUNTER VALLEY OPERATIONS

Community Consultative Committee Meeting – 24 November 2016 Agenda Items

1. Welcome: Housekeeping, Emergency Procedures
2. Apologies
3. Declaration of pecuniary interests/conflicts of interest
4. Correspondence
5. Confirmation of the previous meeting's minutes
6. Matters arising from previous meeting
7. Company reports – Update on Hunter Valley Operations
8. Community Representative Feedback
9. Presentations
 1. HVO South EIS Overview
 2. Cultural Heritage Management
10. General business
11. Next meeting

Housekeeping, Muster Area & Safety Share



Business Arising from July and October CCC Minutes

Action	Action Proposed By	Action Proposed	Accountability	Response
1	H.Jenkins	Travis to provide further breakdown of contractor workforce.	Travis Bates	
2	H.Jenkins	Coal and Allied to allow an additional week in sending out business papers to ensure they arrive with sufficient time to review.	Daniel Solomon	Ongoing
3	T. Lukeman	Coal and Allied to provide dates for additional CCC meeting to be held in September.	Andrew Speechly	Extraordinary meeting held
4	D. Solomon	HVO to provide overview of Cultural Heritage Management as a focus topic for the next CCC.	Daniel Solomon	See following slides
5	B. Atfield	Explore pig trapping options on Charlie Shearer's property.	Andrew Speechly	Work undertaken
6	D. Brown	DS to ensure that Brian Atfield is emailed an updated contact list of C&A representatives.	Daniel Solomon	CCC Minutes
7	C. Gelatly	C&A to explore options for a new flyover video which shows the mining progression of HVO South Mod 5.	Anthony Russo	This meeting

Long Term/On-going Actions

	Action Proposed By	Action Proposed	Accountability
1	H. Jenkins	Ensure CCC members without email access are provided with copies of all emails sent to CCC members	D. Solomon

Business Arising from July CCC Minutes

Feral Pest Management Update

Since the July CCC meeting HVO has undertaken the following vertebrate pest management activities

- a 4 week 1080 baiting program targeting wild dogs and foxes based on historical and recent sighting locations (incl. ejector baiting trial) (60 bait sites, 88 baits taken)
- Pig trapping (60)
- Opportunistic pig shooting (31)
- Rabbit Baiting (90% consumption rate)
- Kangaroo Culling
- Opportunistic Shooting (Other)

Vertebrate Pest	Post July 16	YTD
Deer	-	1
Feral Cat	4	4
Feral Pig	91	162
Fox	3	5
Hare	8	8
Kangaroo	161	291

Trapping at Maison Dieu undertaken on 6/11/2016 resulted in 4 feral pigs trapped. Work occurring simultaneously on HVO side of river – Comleroi, Lemington South, Archerfield and Cheshunt, resulted in the trapping of 43 feral pigs

Inter-Agency Audit program: Dam Safety

- Joint audit occurred between 3rd - 4th November
- Audit comprised NSW EPA, Resources Regulator and DPE
- Audit of HVO under the Dams at NSW Mines Audit Program
- Audit report from the NSW EPA will be available to the public via the NSW EPA Website

HVO Independent Audit

Undertaken between the 24th – 27th October 2016.

A compliance requirement of Conditions of Consent 6 (Schedule 6) Hunter Valley Operations North Development (DA 450_10_2003) and Conditions of Consent 5 (Schedule 5) Hunter Valley Operations South Development (PA 06_0261), which each requires completion of an independent audit every three years from the date of the approval.

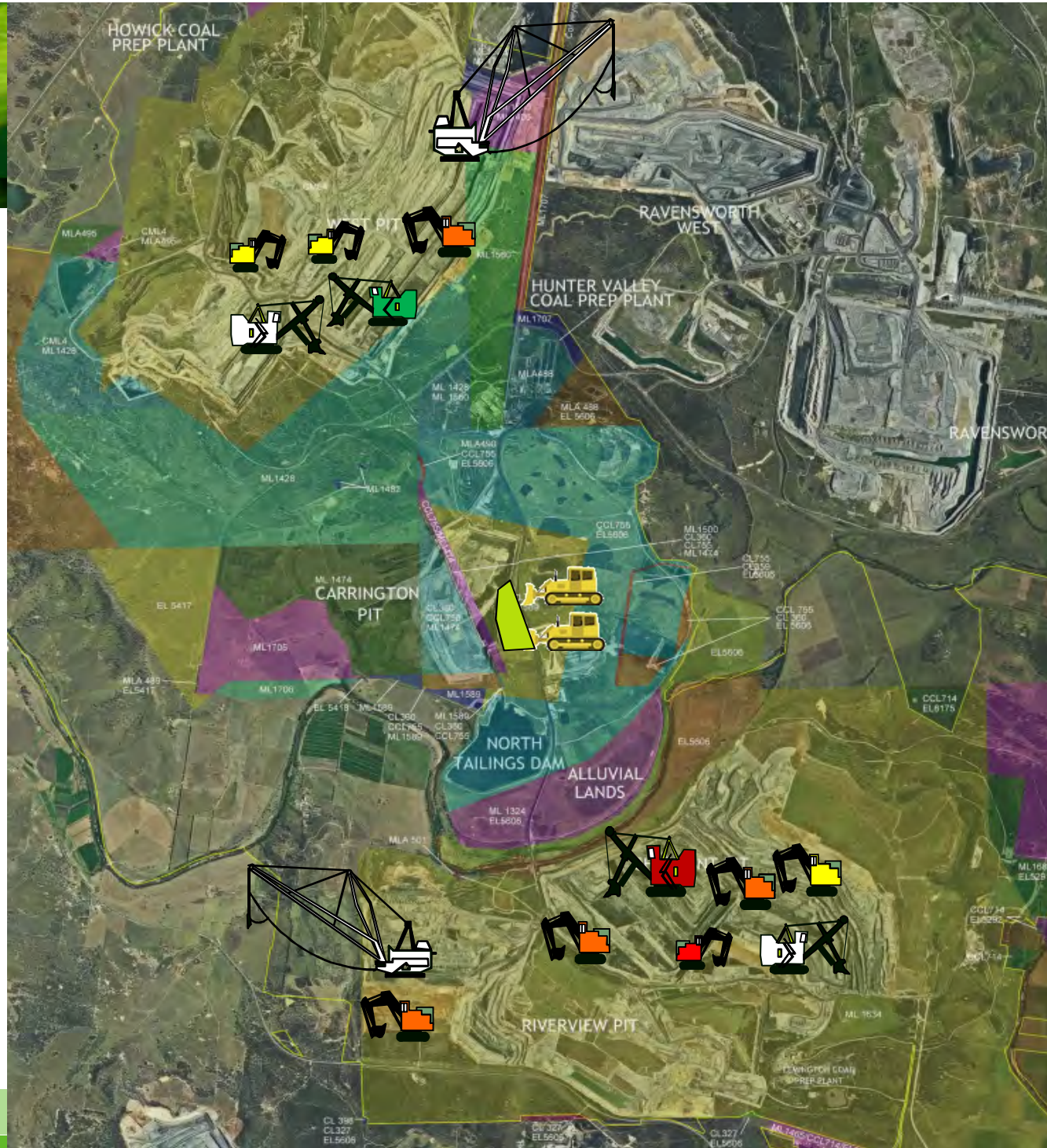
- Report will be submitted to DoPE for review
- Report to be uploaded website when finalised

Update on Hunter Valley Operations

Update on Hunter Valley Operations

Mark Townson
Mining Manager

2016 Mine Operations



**2016 Rehabilitation
Progress**

**Planned Rehab 69.1 ha
Seeded/Claimed YTD 51.7ha**



HVO South EIS Overview

HVO South EIS Overview

HVO South Modification 5

Environmental Assessment Report

November 2016

Overview

- A modification is proposed to the Hunter Valley Operations South development consent PA 06_0261.
- An Environmental Assessment Report (EAR) that considers the social, environmental and economic impacts and benefits of the proposal is expected to be available for public exhibition early in 2017.
- Hunter Valley Operations will be undertaking consultation with local stakeholders on the preliminary findings of the EAR prior to exhibition.
- The CCC is the first group to be presented the preliminary findings.
 - Description of proposed modification
 - Visual amenity
 - Noise
 - Air quality
 - Groundwater
 - Surface water
 - Ecology
 - Final landform, rehabilitation and land use

Timeline

Stage 1



Consultation and prepare Environmental Assessment (EA)

A draft EA is prepared in accordance with the relevant policies.



We are here.

Stage 2



Lodgement of application & EA

Coal & Allied will lodge the application with the EA to the Department of Planning and Environment.

Stage 3



Public Exhibition of EA

The EA will be placed on public exhibition where individuals and organisations will be invited to make a written submission during the exhibition period.

Stage 4



Response to submissions

Coal & Allied will consider all written submissions made during the public exhibition period and prepare a response to submission document addressing the submissions.

Stage 5



Recommendation and Secretary's Assessment Report

The Department of Planning and Environment will prepare an assessment report for the Secretary with a recommendation on whether the applications should be approved or refused.

Stage 6



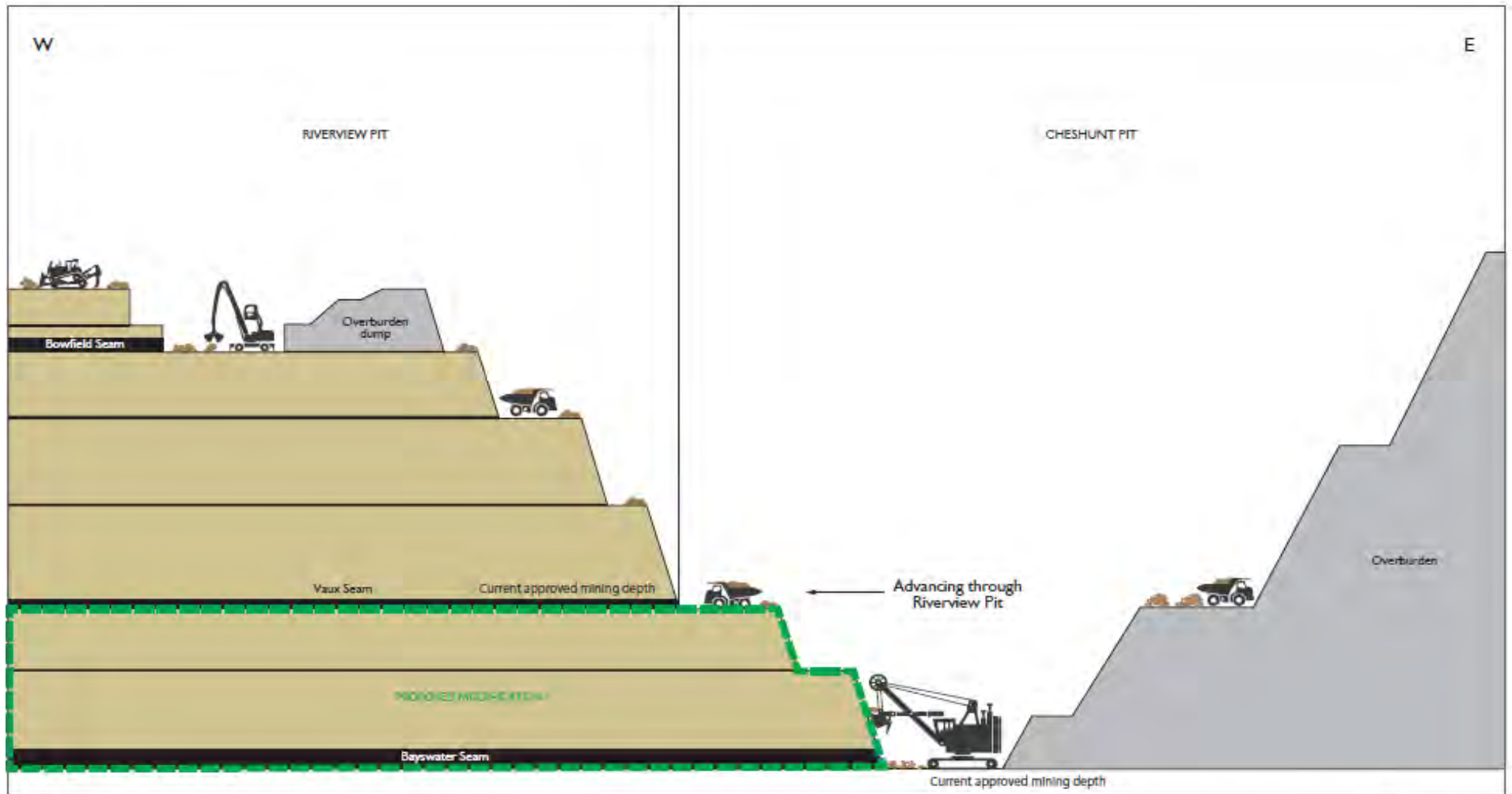
Determination

Depending on the amount and type of submissions received, the Minister or the Planning Assessment Commission will make a determination.

Proposed Modification

- Mining depth extension in Riverview Pit from Vaux to Bayswater seam.
- Mining depth extension in South Lemington Pit 2 from Bowfield to Vaux seam.
- Increase in maximum height of Cheshunt overburden emplacement from RL155 to 240 m AHD in the northern section only.
- Ability to increase the rate of mining from 16 to 20 mtpa ROM if required to provide greater flexibility for sourcing coal across the integrated HVO operation.

Proposed Modification

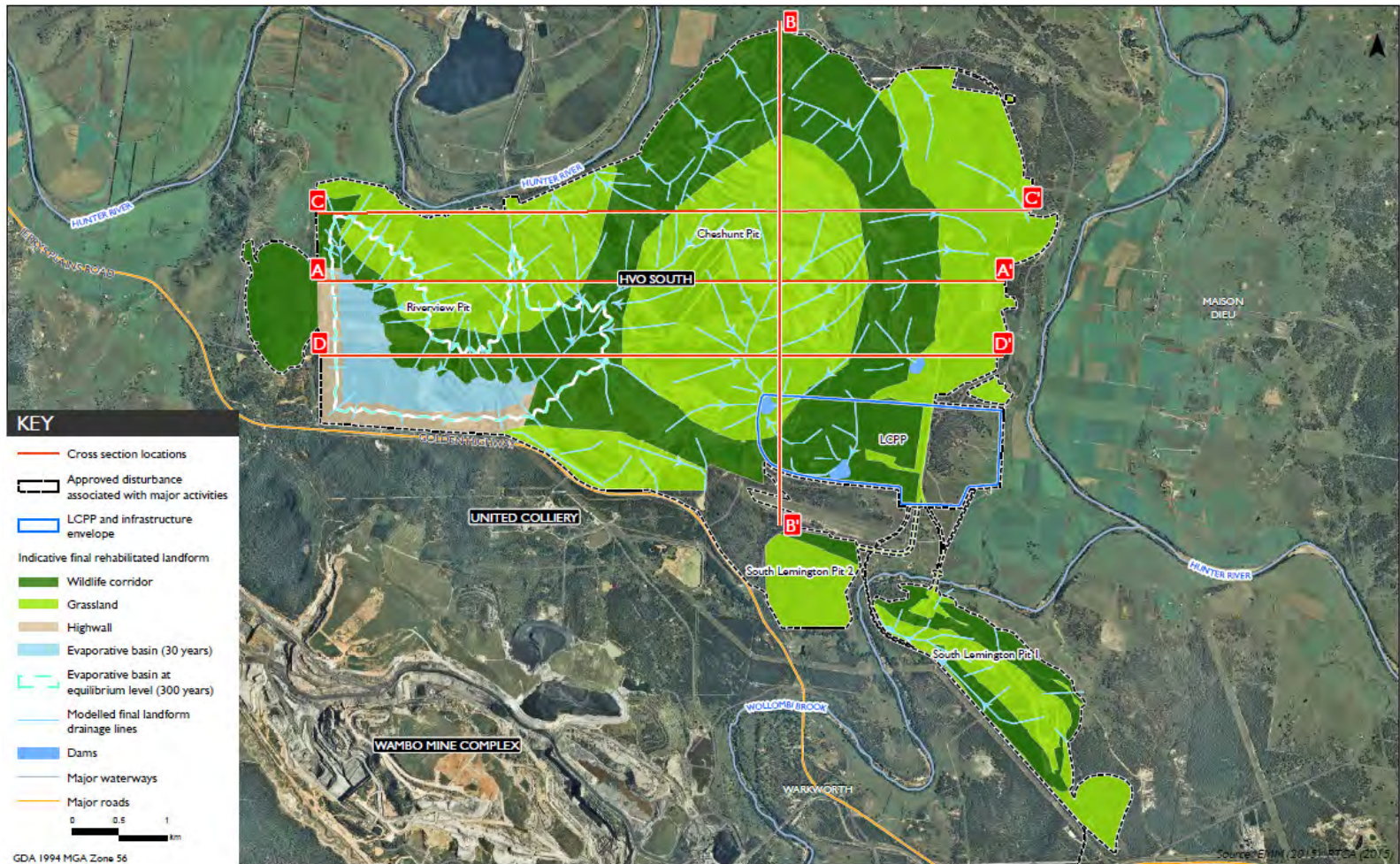


Proposed Modification

- Mine plan review process that considered avoidance and minimisation of environmental impacts.
- No extension of State-approved disturbance footprint.
- Micro-relief incorporated into overburden emplacement area.
- Overburden height increased to RL240M in Northern Cheshunt.
- Final void lake further from Hunter River.
- The proposal is not seeking to extend the current approval period, which is due to expire in 2030.

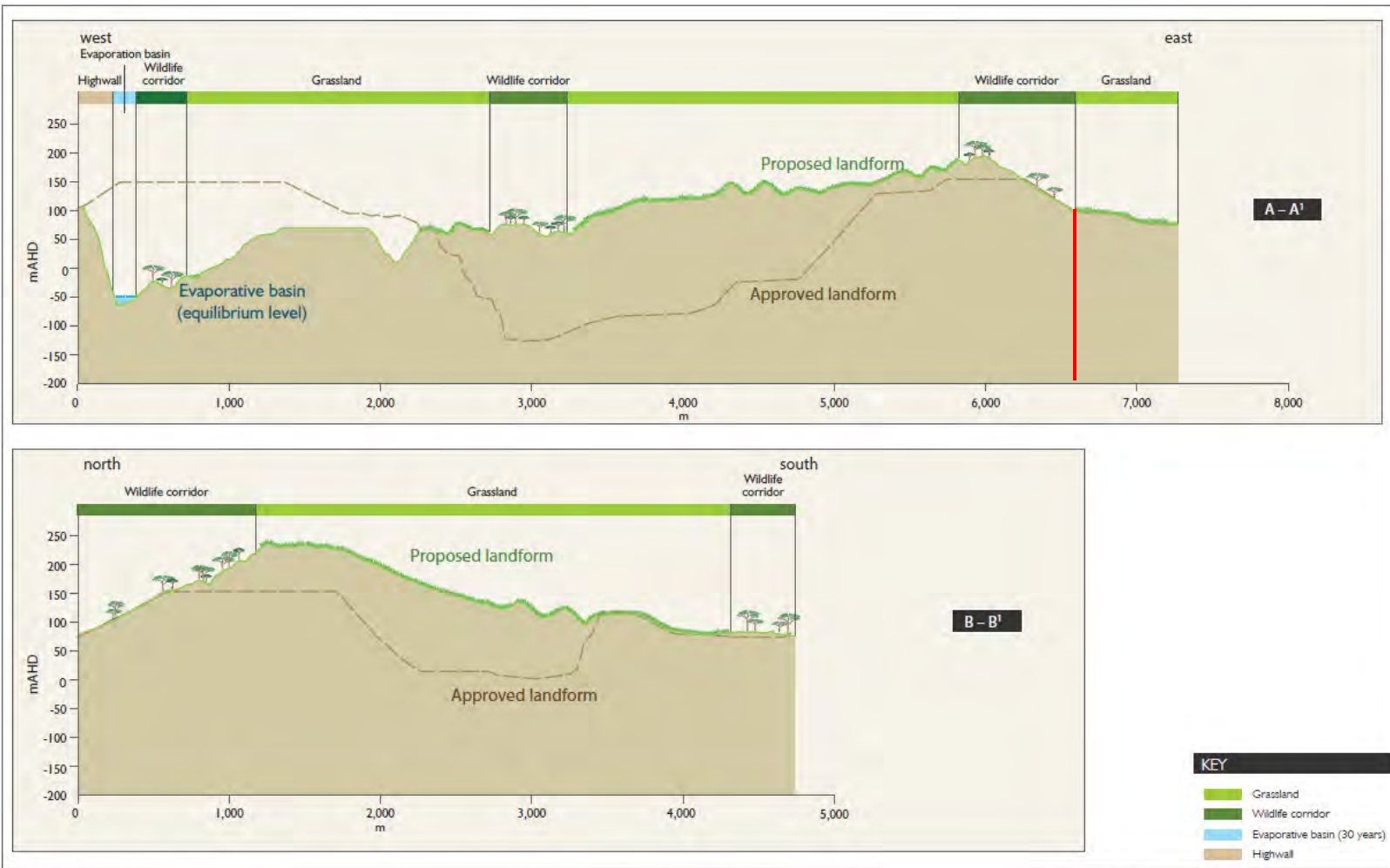
Proposed Modification

Indicative Final Landform



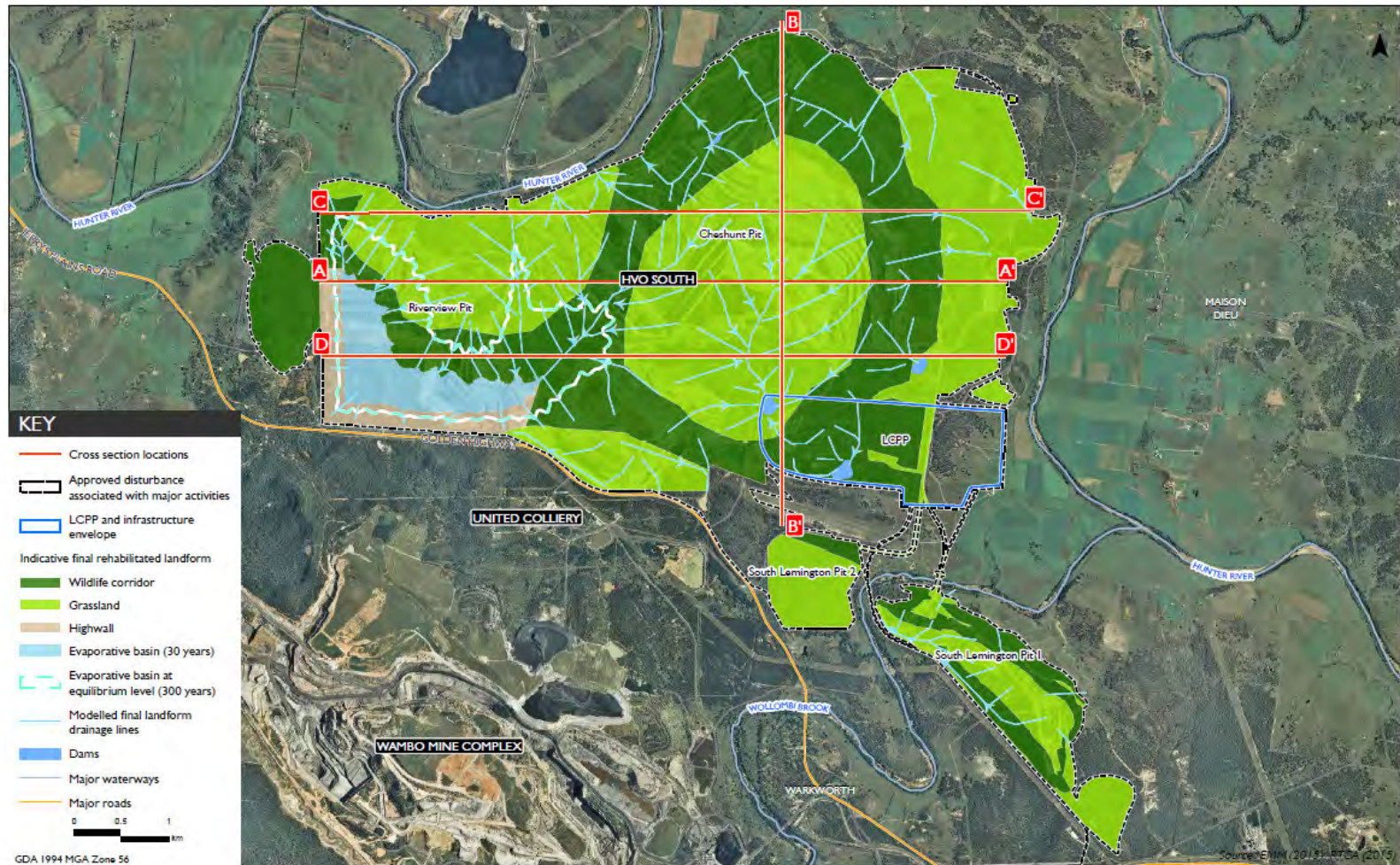
Proposed Modification

Indicative Final Landform



Proposed Modification

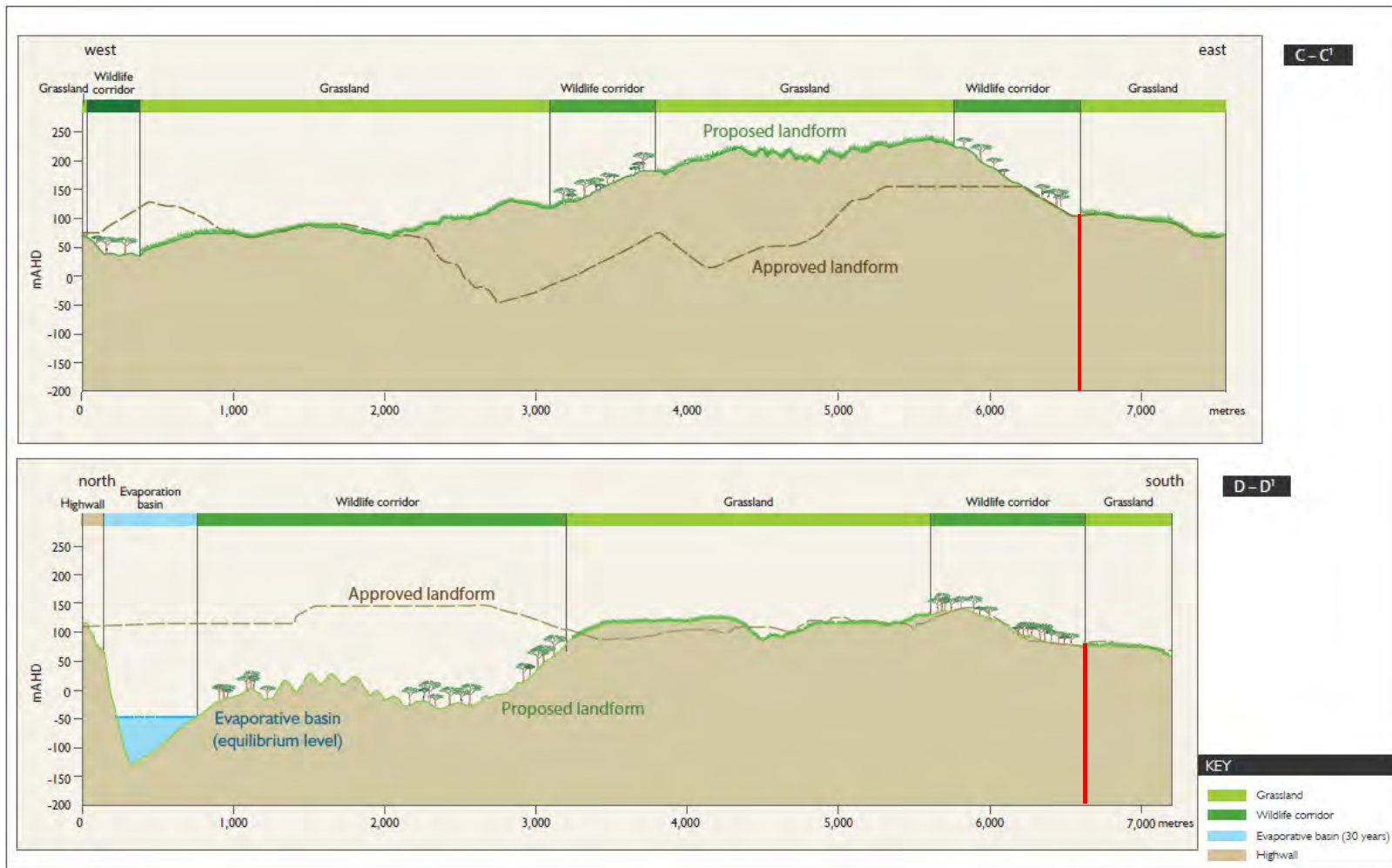
Indicative Final Landform



Indicative final rehabilitated landform
HVO South Modification 5
Environmental Assessment

Proposed Modification

Indicative Final Landform



Visual Amenity

- Moderate impacts in the short to medium term to the east until rehabilitation can be completed in nominally Year 2022 (Stage 2).
- Approx 700m of the existing rehabilitated face of the emplacement area seen from Shearers Lane at Maison Dieu will be retained.
- Increase in maximum overburden height to RL240M in Northern Cheshunt similar to current approved height at HVO North and Ravensworth Operations.



Existing landform as at November 2015



Shearers Lane
HVO South Modification 5
Environmental Assessment
Figure 6.7

Visual Amenity

Mitigation

- The emplacement of overburden has been designed to the northern end of Cheshunt Pit to preserve the viewshed through to the Wollemi National Park.
- The current setback distance from Maison Dieu is maintained (approx. 2.6km).
- Overburden emplacement is designed to be more consistent with the natural terrain.
- Progressive rehabilitation will continue with the slopes planted to ironbark woodland.
- During construction, emplacement areas will be seeded with a temporary vegetation cover.



Existing landforms as November 2015

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VP4 - Jerrys Plains Road - photomontage
HVO South Modification 5
Environmental Assessment

Figure 9.9

Visual Amenity

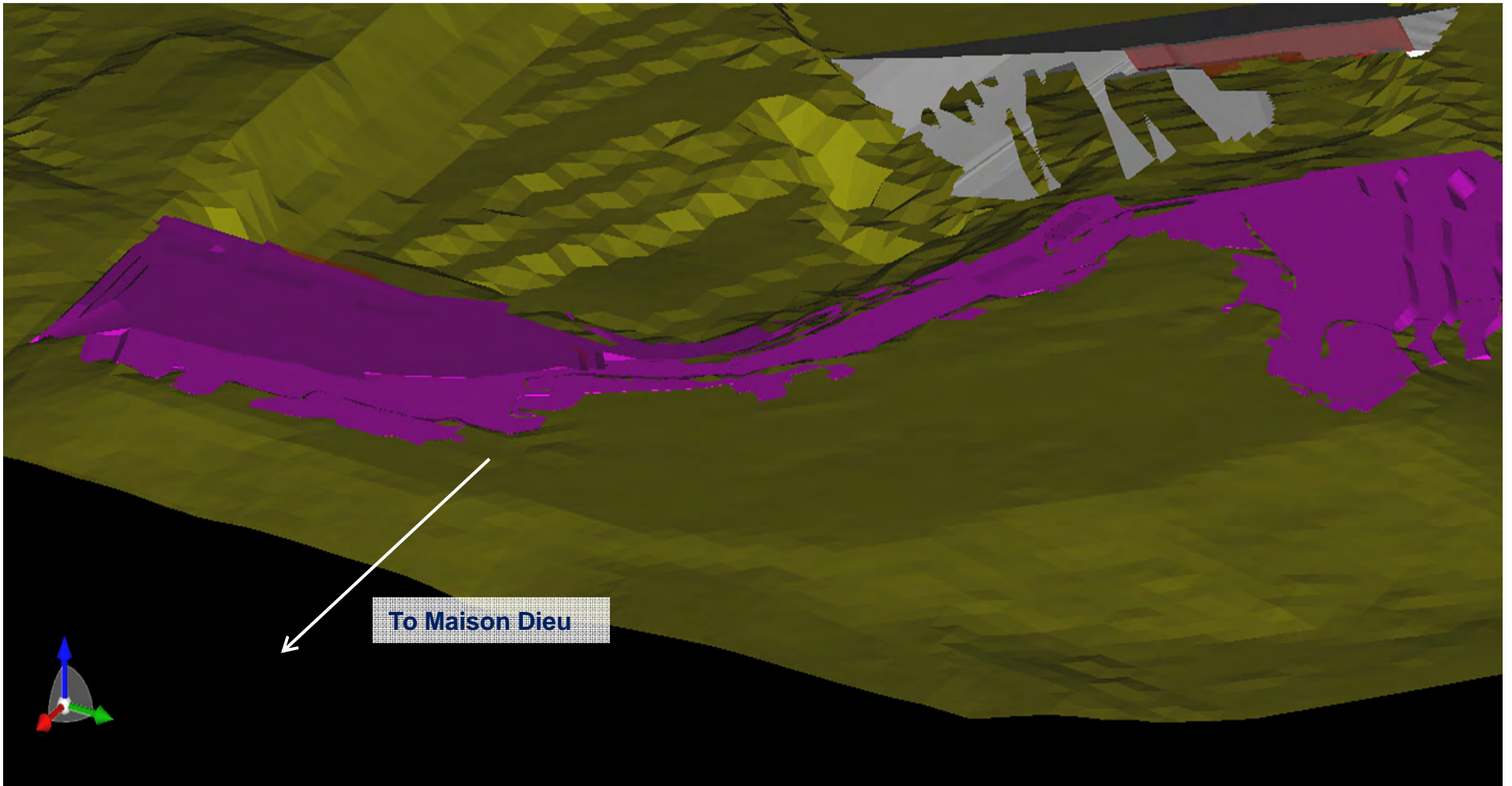
Additional Viewshed of Emplacement



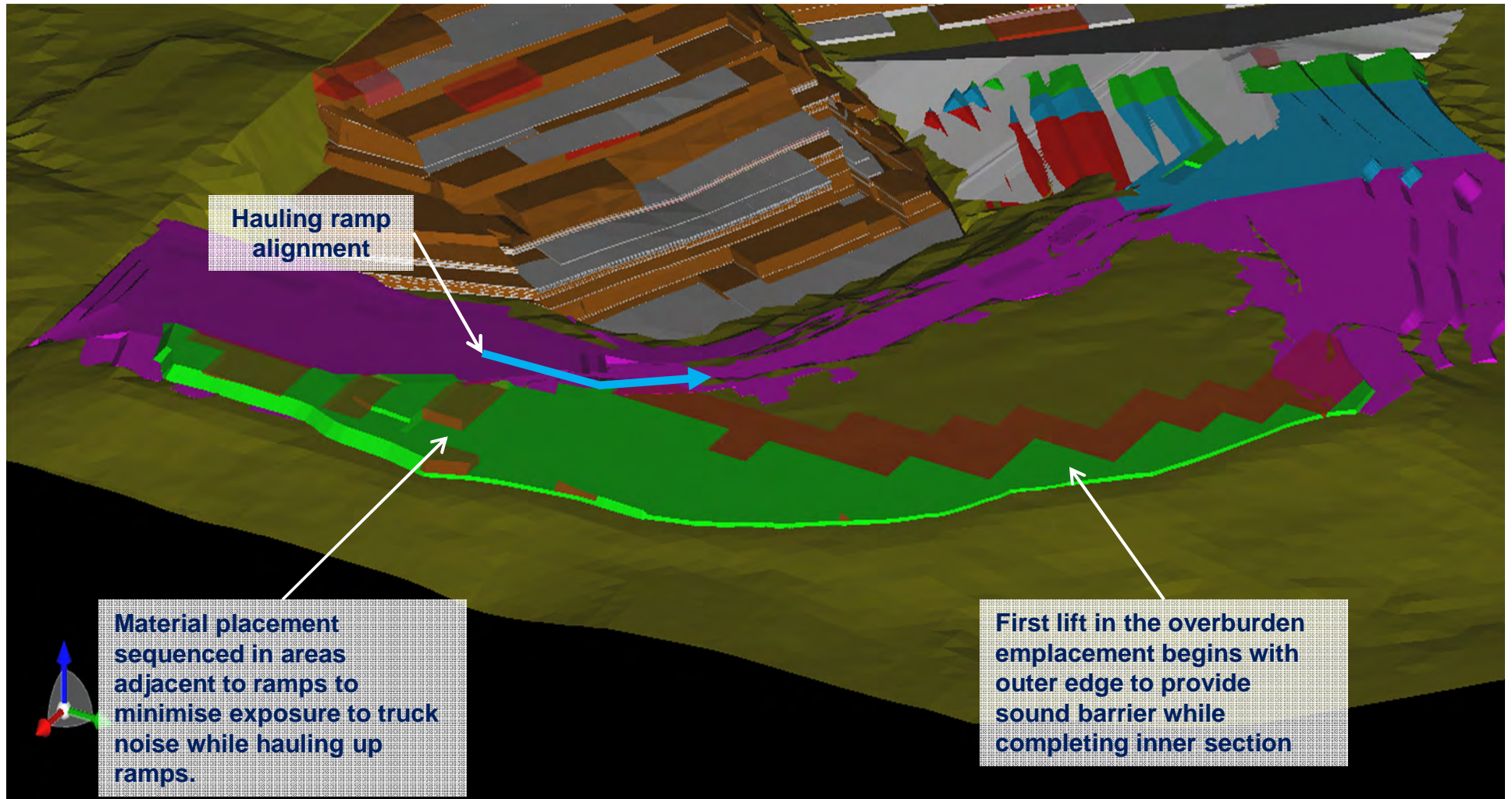
VPI - Shearers Lane - viewshed analysis of approved and proposed final landform
 HVO South Modification 5
 Environmental Assessment

Figure 9.2

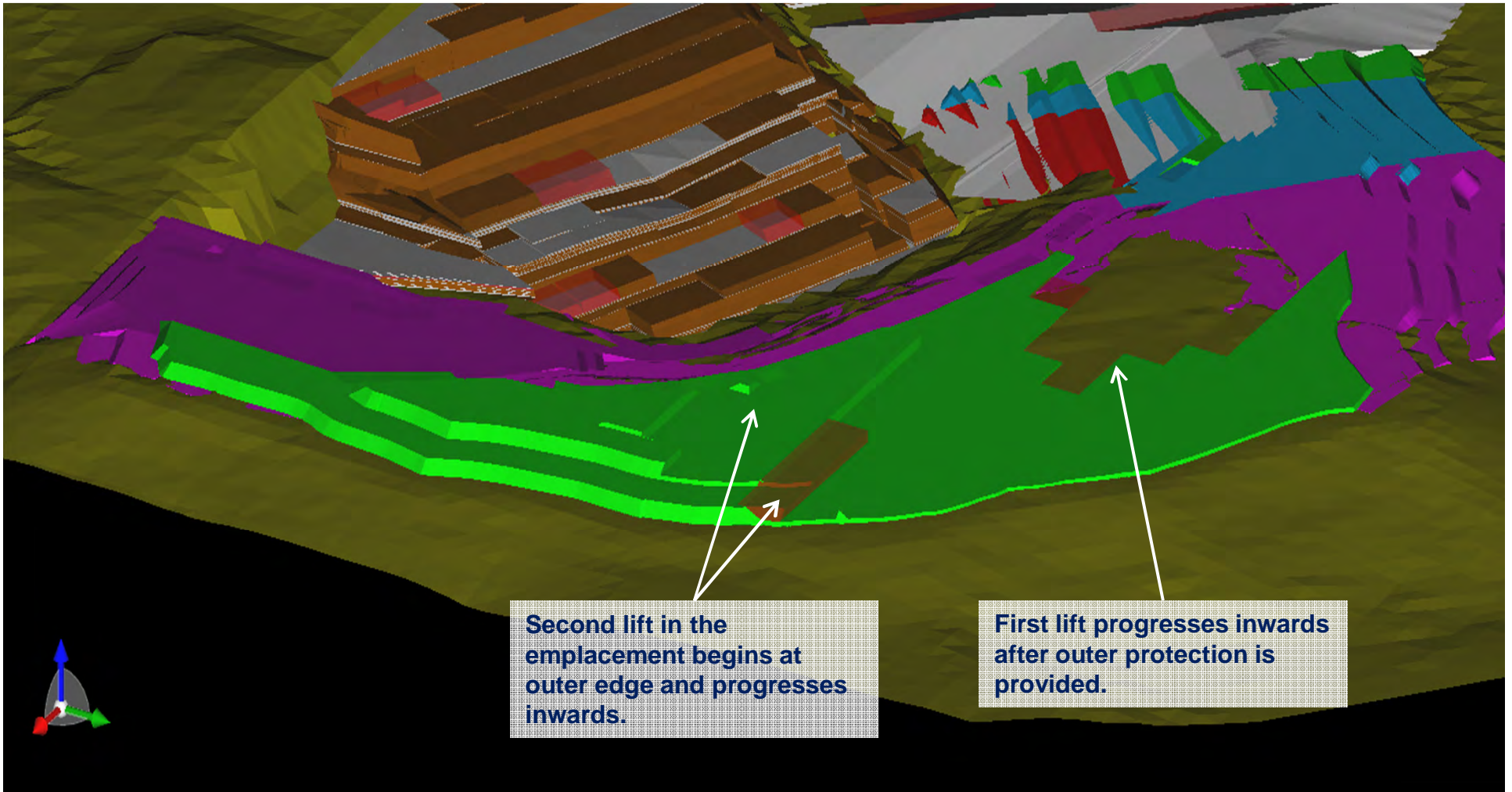
Cheshunt Overburden Emplacement – Build Concept and Management Principles



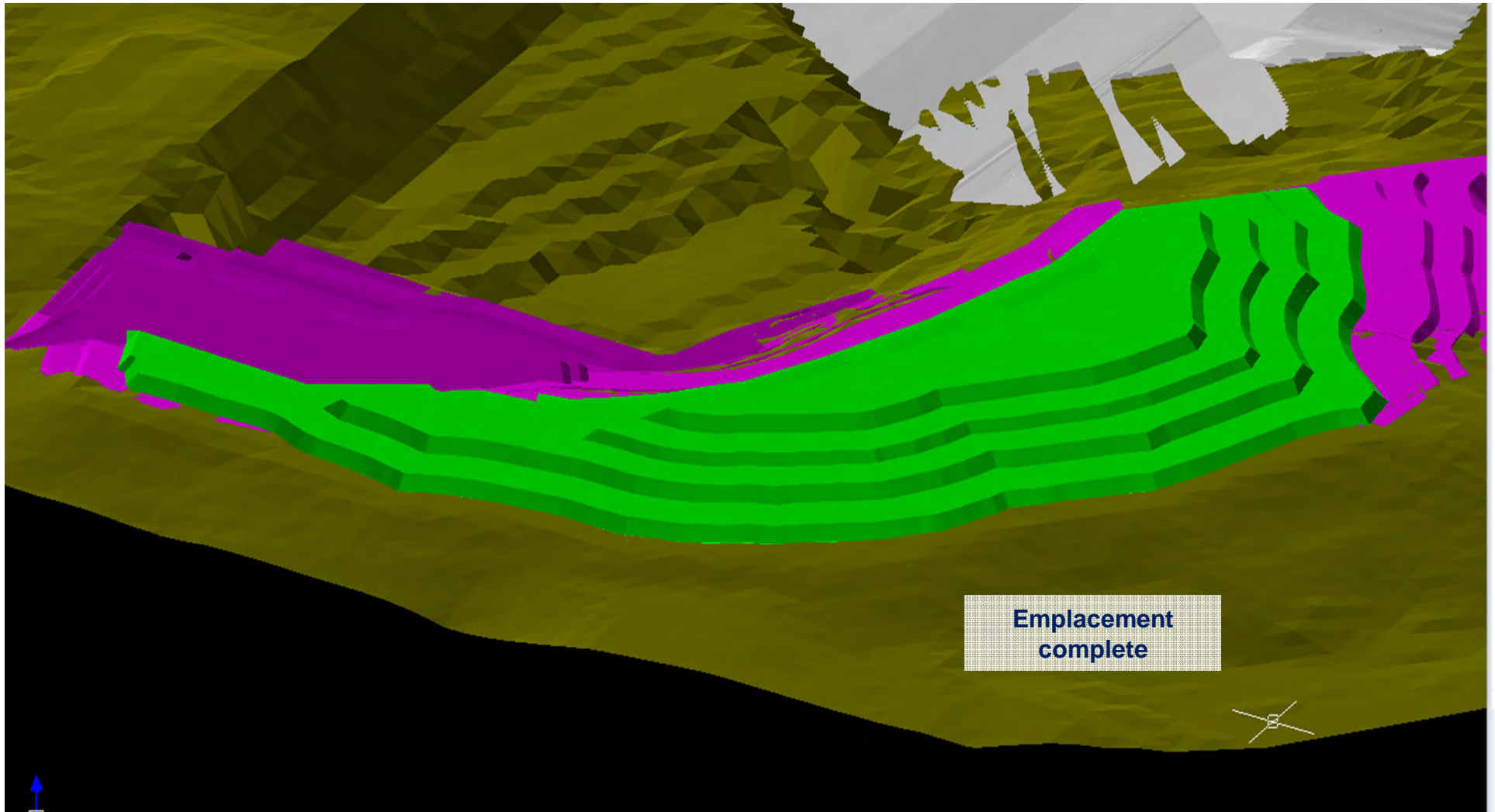
Cheshunt Overburden Emplacement – Build Concept and Management Principles



Cheshunt Overburden Emplacement – Build Concept and Management Principles



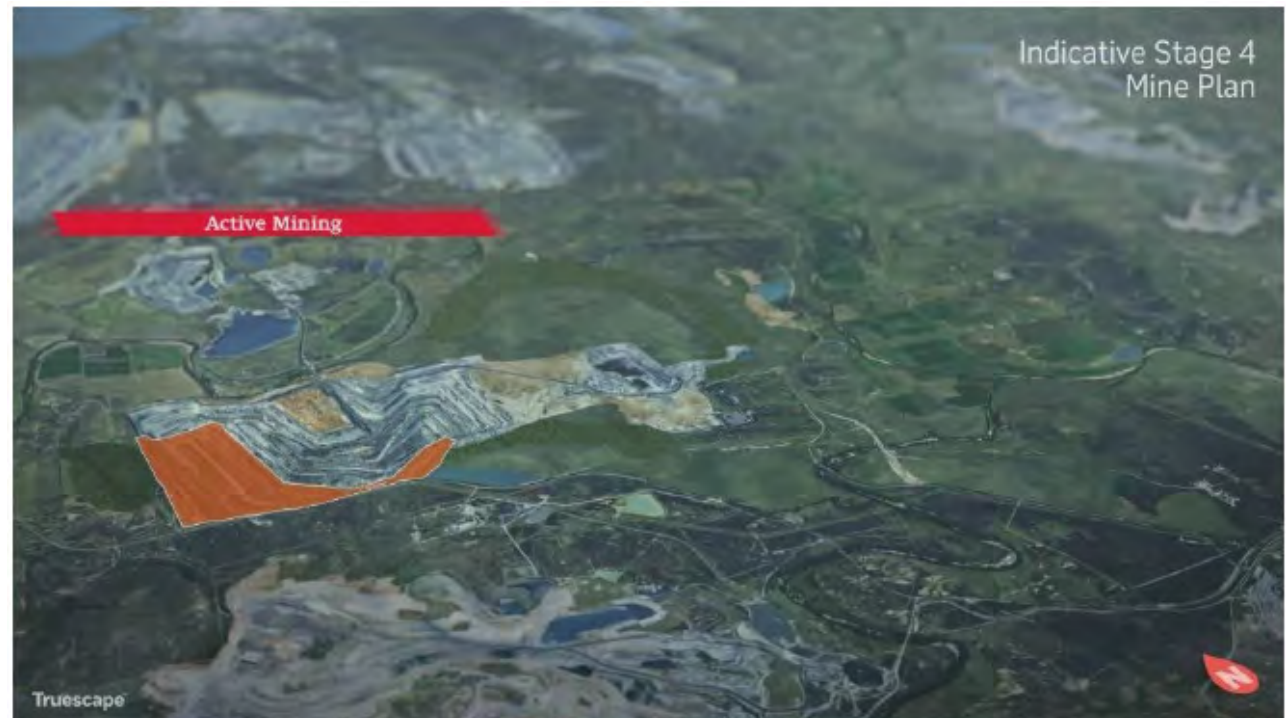
Cheshunt Overburden Emplacement – Build Concept and Management Principles



Visual Amenity

Interactive Application

Following the last HVO CCC, it was agreed to modify the HVO South flyover to show earlier stages plans rather than Stage 4 only.



Noise

Noise and vibration study in accordance with NSW Industrial Noise Policy and Voluntary Land Acquisition and Mitigation Policy (VLAMP)

- No additional properties are significantly impacted due to the proposed modification.
- Fourteen properties not currently entitled to noise mitigation in accordance with the existing PA 06_0261, are entitled to mitigation in accordance with VLAMP (3 to 5dB above PSNL); ten located on Jerrys Plains Road, and four in Maison Dieu;
- Five properties are marginally above operational noise criteria (1 to 2 dB above PSNL). Four on Jerrys Plains Road and one in Maison Dieu.
- Some of these properties are within the acquisition zone for the Wambo United project.

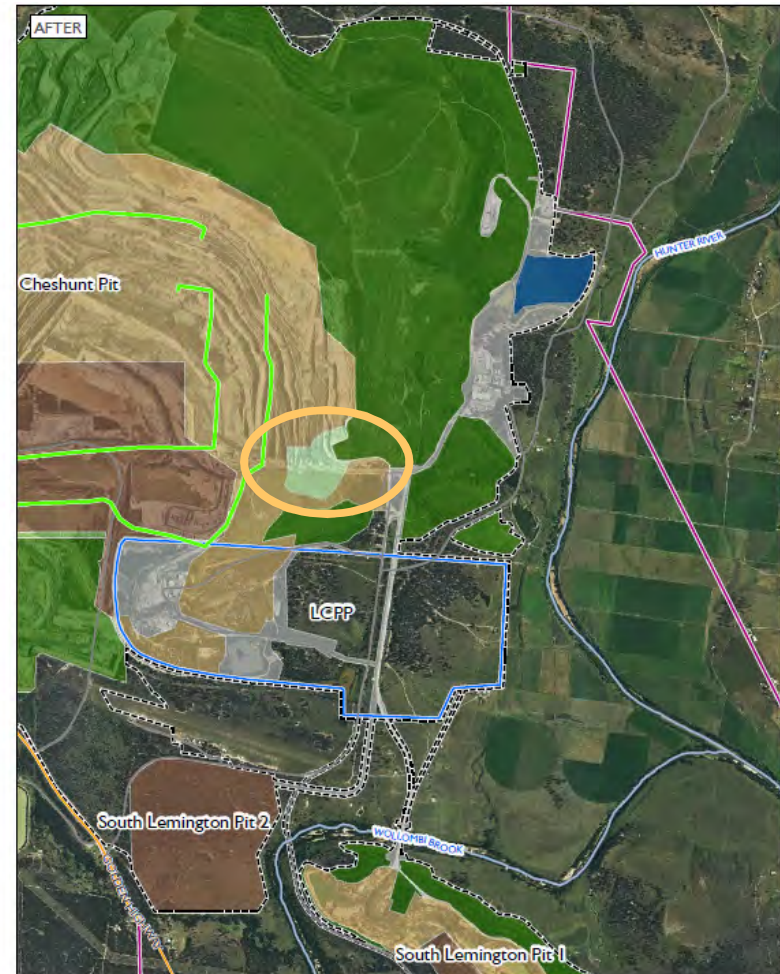
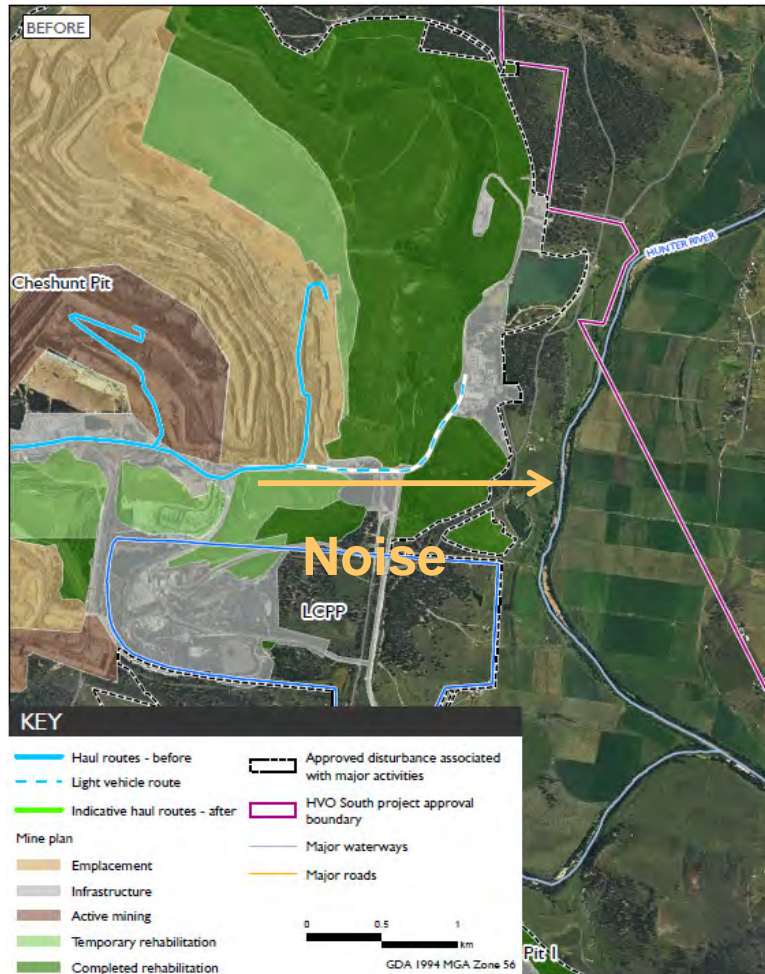
Noise

Mitigation

- HVO will progressively attenuate all the haul truck fleet to minimise noise impacts.
- Continued operational management measures such as the relocation or shutting down of equipment during adverse weather conditions.
- Haul roads to the proposed higher emplacement area to be confined behind a noise bund.
- Closure of light vehicle road that directs noise towards Maison Dieu.
- Monitoring to support operational management including through the recent installation of a directional noise monitor within Jerrys Plains village.
- Landholders entitled to mitigation may request mitigation of their property.

Noise

Services Road Closure



Haul routes - before and after
HVO South Modification 5
Environmental Assessment

Air Quality

Air quality and greenhouse gas assessment in accordance with NSW Approved Method and Voluntary Land Acquisition and Mitigation Policy.

- Similar air quality conditions modelled for Maison Dieu and Jerrys Plains as what is already approved for the existing operation. The proposal will not result in any significant change.
- PM₁₀ annual average criterion of 30µg/m³ is satisfied at all residences with the exception of three privately-owned properties. These privately-owned properties are in the existing acquisition zone for other mine operations.
- Two of these properties are non-residences (Warkworth Hall and the Anglican Church) and the third property is entitled to acquisition upon request to Wambo Coal Mine as noted in the existing PA 06_0261.

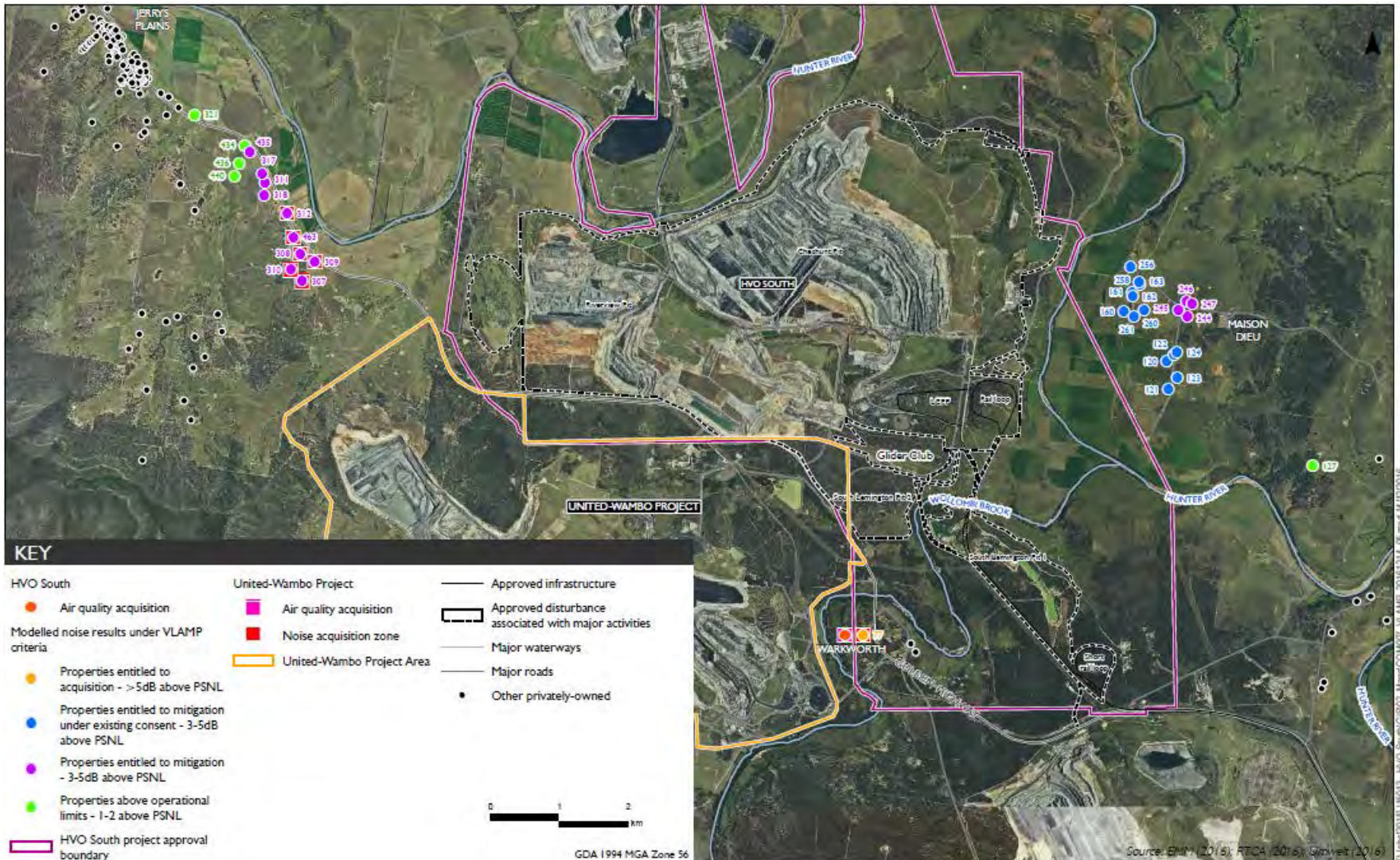
Air Quality

Mitigation

Continued implementation of air quality management plan, including:

- Use of water carts to manage wheel generated dust.
- Altered or reduced operations in periods of high winds / elevated PM10.
- Use of lower / more protected dumping locations during adverse conditions.
- Use of meteorological forecast information to guide mining operations.
- Ongoing monitoring.

Noise and Air Quality modelling



Voluntary Land Acquisition and Mitigation Policy - private properties
HVO South Modification 5
Environmental Assessment

Groundwater

A groundwater assessment was undertaken against the Aquifer Interference Policy including a groundwater model peer reviewed by Dr Frans Kalf.

- Groundwater take from Permian, alluvium and surface aquifers within previous predicted peak takes.
- No private bores will be affected by >2m drawdown.
- Final void will remain as a groundwater sink resulting in no release of water to surrounding environment.

Surface Water

A surface water assessment determined:

- No extension of State-approved disturbance footprint.
- HVO South will not increase the cumulative impacts of salinity within the Hunter River due to continued participation in the HRSTS.
- Any water taken from the Hunter River Regulated Water Source is in accordance with the Water Access Licence (WAL) which will not adversely affect other licence holders from accessing their licenced water entitlements.
- Final landform designed to minimise surface water draining to the final void.

Ecology and Cultural Heritage

- Proposal limited to within existing State-approved disturbance footprint.
- No additional impacts to the ecology or heritage features.



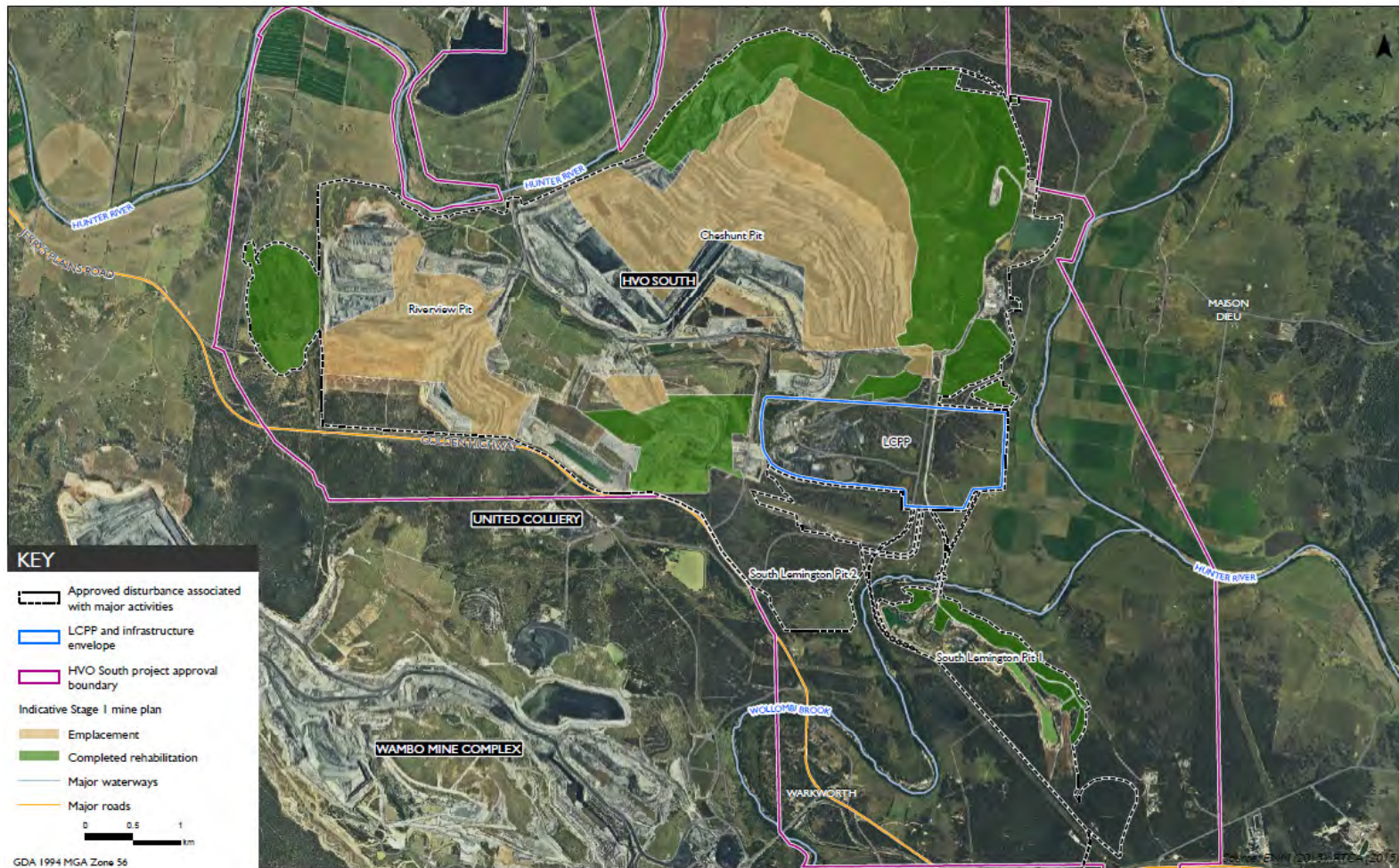
Socio-economic

- Sustains mine employment at current levels and generates additional economic activity including \$243 million in royalties and \$160 million in taxes.
- It does not result in social impacts arising from workforce influx, population change and associated impacts on infrastructure.

Feedback

Visual Amenity

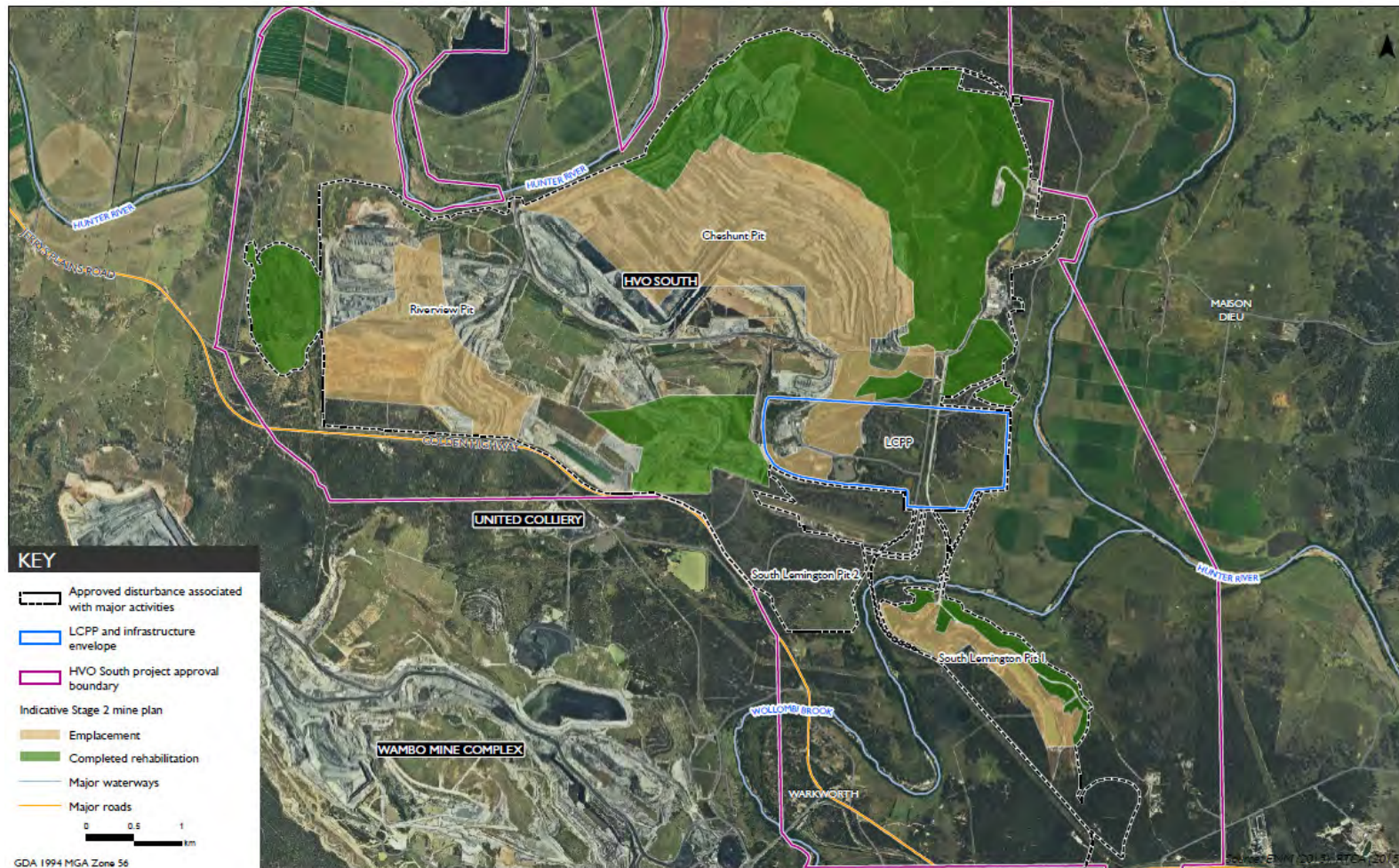
Rehabilitation progression – nominally 2019



Indicative Stage 1 emplacement areas
 HVO South Modification 5
 Environmental Assessment

Visual Amenity

Rehabilitation progression – nominally 2022



Cultural Heritage Management

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Cultural Heritage Management

Hunter Valley Operations

Cultural Heritage Management

Joel Deacon

Specialist, Cultural Heritage NSW

Cultural Heritage Management

Legislation

- Manage both Aboriginal & non-Aboriginal heritage
- Aboriginal heritage regulated under *National Parks & Wildlife Act 1974* (under review)
- Non-Aboriginal heritage regulated under *Heritage Act 1977*
- Specific operational compliance for both conditioned through development consents issued under *Environmental Planning & Assessment Act 1977*
- Additionally, RTCA has a Cultural Heritage Management System which provides comprehensive heritage assessment & management procedures for CNA development & land management activities

Cultural Heritage Management

Consultation

- Aboriginal heritage management program developed in consultation with Aboriginal Cultural Heritage Working Group (**CHWG**) comprised of Aboriginal community stakeholders
- CHWG stakeholders participate in all aspects of cultural heritage assessment (surveys), mitigation & management activities
- Non-Aboriginal heritage managed in consultation with community through the Community Heritage Advisory Group (**CHAG**)
- CHAG forum reviews assessment reports & management plans

Cultural Heritage Management

Aboriginal Heritage

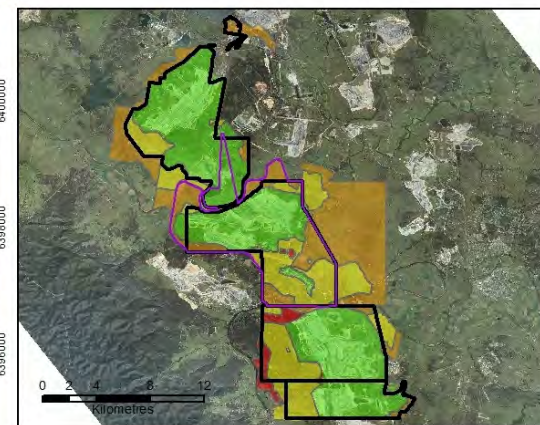
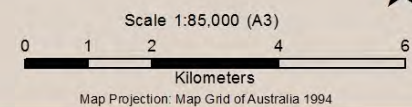
- Managed under two approved Aboriginal Heritage Management Plans – one for HVO South, one for HVO North
- Ensures compliance with development consents, legislation & RTCA standards – Zone Plan guides management
- HVO has been subject of archaeological surveys since 1970s, & more comprehensively since 2006
- Over 1800 Aboriginal heritage sites recorded
- Archaeologists also determine potential for sub-surface archaeology based on land form type & geomorphology
- If required, excavations conducted to further study this sub-surface potential

Hunter Valley Operations Cultural Heritage Zone Plan August 2016

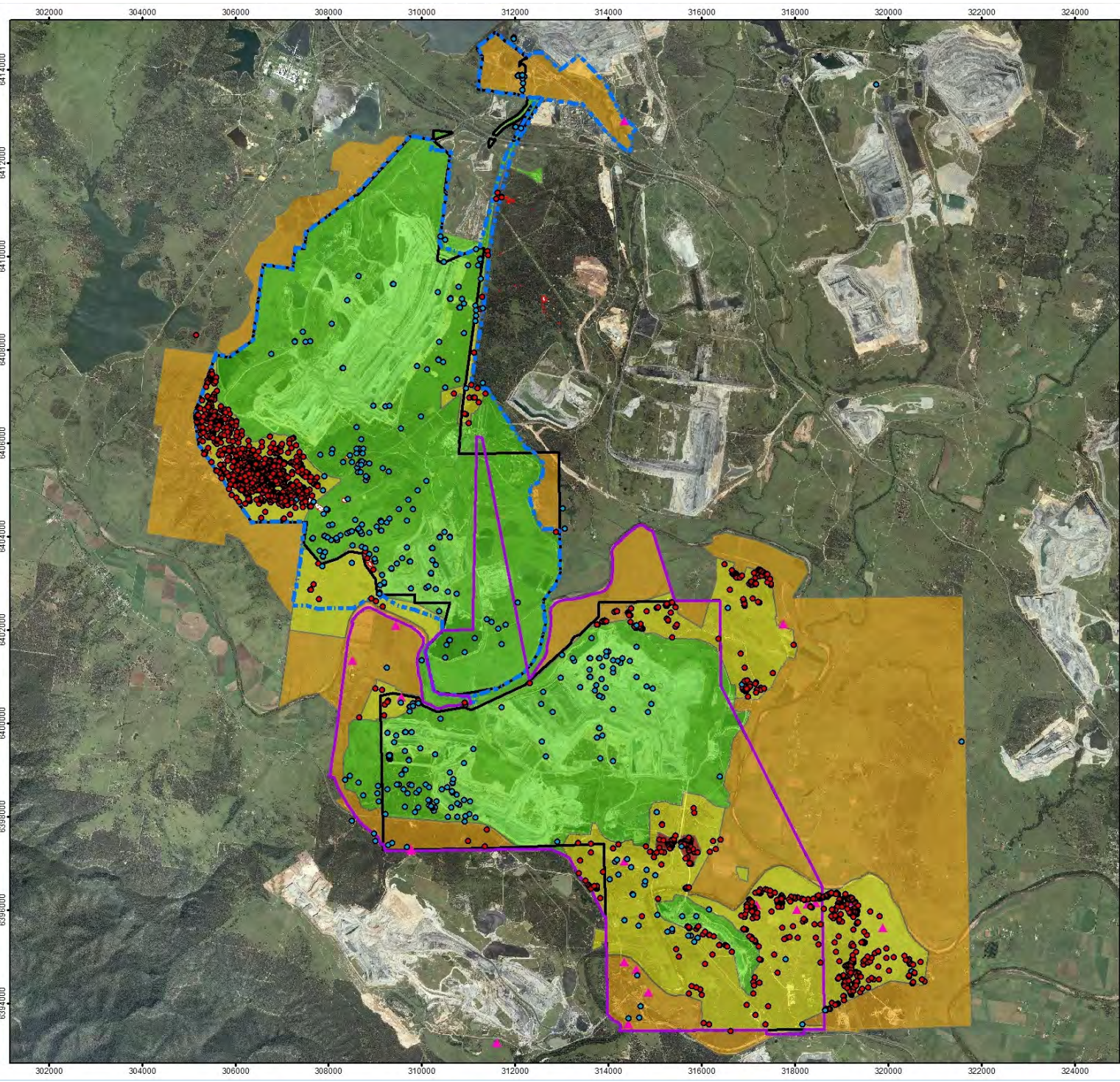
Legend

HVO ACH Sites

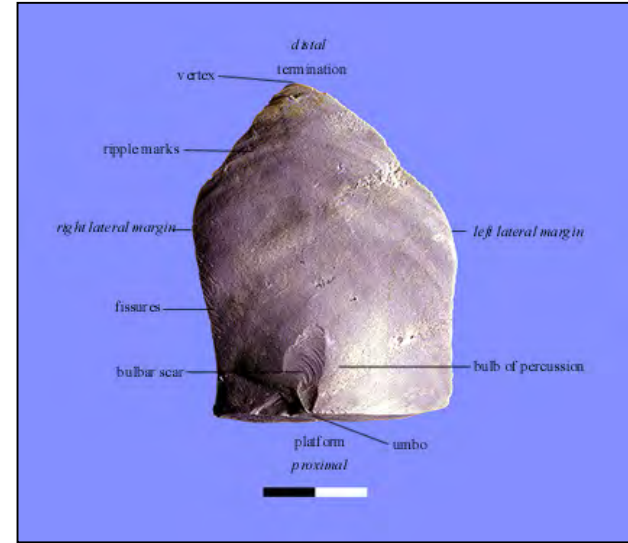
- Existing
- Mitigated
- ▲ Historic sites
- ▭ PA06-0261 HVO South
- ▭ DA_450_10_2003_HVO_North (2013_Mod)
- CHZP Zone 1
- CHZP Zone 2
- CHZP Zone 3
- CHZP Zone 5



Project HVO CHZP Aug 2016
Date: 21 August 2015
Map Version: Version 1
Author: D Cameron
Map Path: G:\BR External Relations\RTCA\Cultural Heritage\RTCA\HVO



Cultural Heritage Management



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Cultural Heritage Management



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Cultural Heritage Management



Cultural Heritage Management

Non-Aboriginal Heritage

- Numerous locally significant non-Aboriginal sites located at HVO
- Some listed on Singleton Council Local Environmental Plan, one – Chain of Ponds Inn – on State Heritage Register
- Non-Aboriginal heritage surveyed & assessed for any new developments
- Welcome community input & knowledge to help us identify & manage sites of local significance

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Cultural Heritage Management



Cultural Heritage Management

Chain of Ponds Inn

- Located on Old New England Highway, halfway between Singleton & Muswellbrook
- Inn dates from 1840s & post-dates the lock up
- Stable block also part of complex
- Listed on State Heritage Register
- External & internal (including asbestos removal) clean up conducted June/July 2012
- Stabilisation works underway in consultation with Liddell Coal – propping & chimney bracing while blasting
- Stringent Blast Management procedures implemented

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Cultural Heritage Management





Park up areas



Community Representative Feedback

Community Representative Feedback

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General Business

General Business

Date & Time of Next Meeting

2017 Calendar

January

Su	Mo	Tu	We	Th	Fr	Sa
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March 23, 2017
July 20, 2017
November 16, 2017

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August

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- 1 Jan New Year's Day
- 2 Jan 'New Year's Day' observed
- 26 Jan Australia Day
- 6 Mar Labour Day (Western Australia)
- 13 Mar Labour Day (Victoria)
- 13 Mar Eight Hours Day (Tasmania)
- 21 Mar Harmony Day
- 14 Apr Good Friday
- 15 Apr Holy Saturday (Most regions)
- 16 Apr Easter Day (All)
- 17 Apr Easter Monday
- 25 Apr ANZAC Day (All)
- 1 May May Day (Northern Territory, Queensland)
- 5 Jun Western Australia Day (Western Australia)
- 12 Jun Queen's Birthday (Most regions)
- 25 Sep Queen's Birthday (Western Australia)
- 2 Oct Queen's Birthday (Queensland)
- 2 Oct Labour Day (ACT, NSW, SA)
- 11 Nov Remembrance Day
- 24 Dec Christmas Eve
- 25 Dec Christmas Day
- 26 Dec Boxing Day
- 31 Dec New Year's Eve

September

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October

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November

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December

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