CHAPTER 6

End Land Use and Landform

1. Post Relinquishment Land Uses

Since the time of privatisation of the Hazelwood Mine and Power Station it has been envisaged that the post mining land use for the site would be multi-faceted due to the complexity of the site, existing constraints, previous use, and emerging opportunities. As a broad concept this may include agriculture, industry, passive recreation, with a mix of some conservation zones and recreation areas, surrounding a lake in the mine void.

Whilst the process in defining end land uses will continue to evolve and needs to be supported with further technical studies, this chapter will identify and describe the various repurposed land uses for each landform, including who is envisaged to use the landform, how it will be used, when it will be available for reuse and who will manage the repurposed landform.

Following the cessation of coal winning, ENGIE Hazelwood embarked on planning for the post relinquishment land use of the site with a desired outcome of presenting a safe, stable and sustainable landform that can be used by the community in the future. ENGIE Hazelwood commissioned Arup to prepare a Concept Master Plan (ENGIE ARUP 2019) for the site to help inform a comprehensive land use and economic strategy, and to instil greater confidence for all stakeholders in proposed plans for the site's future. As a part of that masterplan post mining land use alternatives were identified for specific areas of the site. Additionally, a preliminary review of land capability and post relinquishment land suitability assessment were undertaken to further refine post mining land use alternatives. These studies have provided the basis for the work that is presented in the DMRP.

2. Evolution of Technical Knowledge and Rehabiliation Planning

ENGIE Hazelwood, supported by various specialist technical studies, subject matter experts, extensive site knowledge, and operational experience, has focused on developing a closure concept of a full pit lake to RL +45 m AHD with mixed land use in the vicinity of the pit lake, including agricultural land, industrial land and parkland/conservation areas.

The proposed full pit lake final landform is identified as the preferred rehabilitation alternative from the perspective of stability, passive post closure management, environmental values and community amenity. This conclusion has been drawn from:

- Technical studies completed by ENGIE Hazelwood.
- Studies conducted in connection with the 2015/2016 Hazelwood Mine Fire Inquiry.
- The Integrated Mines Research Group (IMRG) projects.
- Technical studies informing the development of the Latrobe Valley Regional Rehabilitation Strategy (LVRRS).
- International experience in the rehabilitation of lignite (brown coal) mines.

Notwithstanding the above, the Options and Strategies Report, completed in May 2017 (ENGIE GHD 2017), undertook a further review of three possible closure landforms for the MIN5004 area. The three scenarios presented within that report built on closure options discussed in previous approval documentation and drew on existing knowledge presented during the 2015/2016 Hazelwood Mine Fire Inquiry. These scenarios were:

a. an empty void;
b. partial pit lake; and
c. a full pit lake.

This comparative analysis illustrated the favourability of further investigation of the full lake option over the alternatives.

3. Policy and Regulatory Framework Considerations for End Land Use

3.1 LATROBE PLANNING SCHEME

Planning schemes seek to ensure the protection and conservation of land in Victoria in the present and long-term interests of all Victorians. The Latrobe Planning Scheme outlines strategies and objectives to be achieved and planning permit requirements for development within the municipality.

The Planning Policy Framework (PPF) seeks to ensure that land use and development in Victoria meet the objectives of planning as set out in the P&E Act. The PPF is set out in Clauses 10-19 of all planning schemes, is general in nature, and informs Local Planning Policies (LPPs) that are specific to each municipality.

LPPs include the Municipal Planning Strategy and individual LPPs which are further summarised in the *Chapter 5 - Rehabilitation Obligations and Commitments* and specified in detail in *the EES Technical Report N: Land Use Impact Assessment*. The Municipal Planning Strategy is a statement of key strategic planning, land use and development objectives for the municipality and the strategies and actions for achieving those objectives. The LPPs are policy statements of intent explaining the expectation of what the responsible authority would do in specific circumstances.

3.2 PLANNING ZONES AND OVERLAYS

The Latrobe Planning Scheme contains planning policies, zones, overlays, and other provisions that affect how land can be used and developed, these have been considered in the development of the final landforms and considered as part of the 2025 EES. It is acknowledged that further work may be required to amend the planning zones to facilitate the post mining land use and development as proposed in the DMRP.

3.3 LAND TENURE

To support the former operational site, ENGIE Hazelwood has a land ownership of approximately 4,000 Hectares. The majority of this land (2,873 Ha) is located within the Mining Licence area (MIN5004) with the exception of the Hazelwood Cooling Pond area (711.3 Ha), several parcels of agricultural land and wetlands (346.2Ha) and some minor land parcels of industrial use (including the former Power Station site and offsite commercial warehouses and the Firmins Lane Pumping Station 71.7Ha).

In addition to ENGIE's freehold land there are additional land stakeholders within the Mining Licence area. There is, approximately 218 hectares of Crown land (former river frontage and road reserves) and 82 Ha of freehold held by other landowners. Where these areas of Crown land fall into the boundary of MIN5004, they have been "fenced into" the mine landholding. Crown land across the Hazelwood site includes the following:

- Crown Allotment 2039 Vol 11740 Folio 212 and Crown Allotment 2049 Vol 11961 Folio 215 - road reserve of former/relocated Strzelecki Highway
- Crown Allotment 2052 Vol 11977 Folio 643 - former alignment of diverted Morwell River
- Crown Allotment 2042 Vol 11960 Folio 947 (likely a former road)
- Crown Allotment 2040 Vol 11980 Folio 560 (likely a former road)
- Crown Allotment 2055 Vol 11968-545 and Crown Allotment F16A Vol 11740 Folio 193 (waterways or banks / beds thereof).

Much of the crown land is subject to an agreement between the Minister for Environment and Climate Change, HPP and the Roads Corporation (VicRoads), previously determined to facilitate the West Field extension of the Hazelwood Mine. Under this agreement the existing crown land parcels (mostly related to the former Morwell River path and Driffield Road) are to be the subject of a freehold grant to ENGIE Hazelwood. In return, ENGIE Hazelwood will transfer the new Morwell River alignment and Strzelecki Hwy to VicRoads and the Minister for Environment and Climate Change.

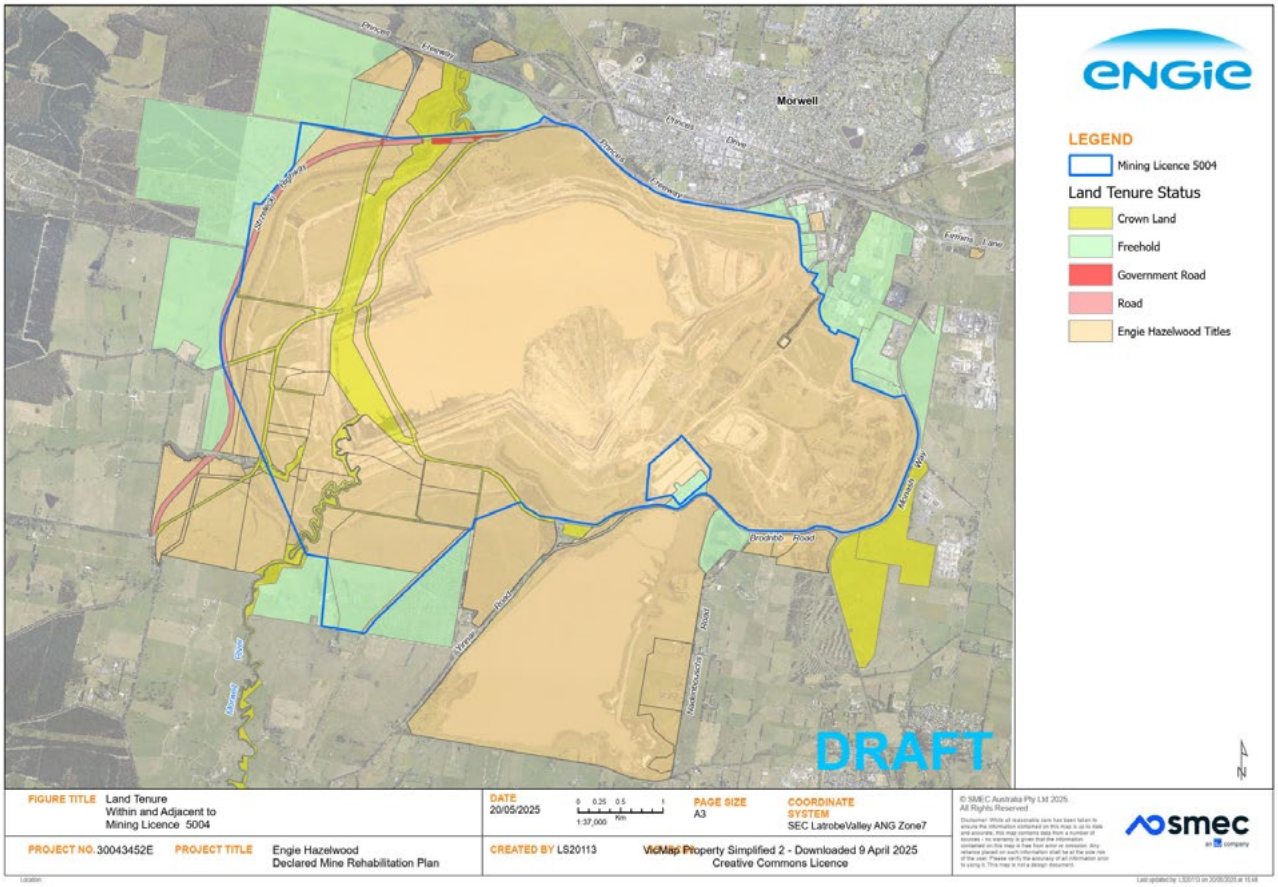

Figure 6.1: Land Tenure Status

4. Site Constraints and Opportunities

The following list of site constraints and opportunities were identified in the Hazelwood Concept Master Plan (CMP) produced by Arup in 2019 (ENGIE ARUP,2019). The 2019 CMP was developed through strategic background and technical research, an analysis of the identified site elements and context, and the challenges and opportunities they might present for Hazelwood. This analysis is consolidated in an assessment of site opportunities and constraints which is listed below. These constraints and opportunities need to be considered when identify possible end land uses and final landforms.

4.1 SITE CONSTRAINTS

- The Princes Freeway currently acts as a barrier between the site and Morwell. This makes it difficult for pedestrians and cyclists to access.
- The Morwell River, currently diverted around the western boundary of the site, may result in flooding of low-lying land.
- The mine void presents limited opportunity for development due to land stability. The desired intent for use of the mine void is a water body / lake.
- The area immediately adjacent to the mine void, within the mine void buffer, is not suitable for structures or buildings.
- Overhead transmission lines restrict future land uses. Structures and buildings should be located a minimum of 60 metres away to maintain public safety and access for maintenance.
- Existing underground gas and fuel pipelines need to be considered. Gas and fuel pipelines, whilst outside of the mining licence boundary, should be reviewed for any requirements for stability, public safety and access for maintenance in respect of the pipelines.
- The transmission grid switchyard will likely remain in operation for 20+ years, limiting any short-medium term opportunities for redevelopment. This switchyard is a piece of state critical infrastructure, owned and operated by AusNet and the ongoing life could be beyond 40 years, based on previous discussions with AusNet.
- Landfills and land subject to environmental audit may be restricted with regards to future land uses for a specified period of time. In line with EPA guidelines, aftercare and management plans some capping infrastructure (BPEM) will have limited allowable used for such a time.
- Proximity of Hazelwood to the existing Morwell town presents a constraint. Land stability concerns will be modelled to understand possible impact on the town of Morwell and other known receptors, and to inform management or mitigation.

4.2 SITE OPPORTUNITIES

- Opportunity exists to provide new links between Morwell and the site, across the Princes Freeway, either by extending Maryvale Crescent and / or Hazelwood Road across the Princes Freeway or the former ICR easement to the site, which would significantly enhance connectivity between Morwell and the site. Key links would further support the Traralgon-Morwell-Moe- Churchill networked city, providing increased connectivity across the Princes Freeway for all modes of transport / travel.
- Low-lying land abutting the Morwell River presents an opportunity to provide large-scale recreational uses in a tranquil setting, overlooking the lake at the site. The provision of recreational uses will further enhance the Gippsland Region's extensive tourism offering and help to put Hazelwood on the map as a key destination in the region.
- The mine void presents a major opportunity to create a significant water body at the centre of the site. A water body of this scale could provide for a range of activities relating to recreation and industry, noting that the landform of the western portion of the mine void provides more accessible options. Opportunities are for both on-water and water's-edge uses that make the most of this major element of this site.
- There are some large portions of land that have limited constraints. These present significant redevelopment opportunities for the site, particularly when considered in the context of the presence of some quantities of contaminated land on site. Where treated and capped appropriately, landfilled and contaminated land areas maybe suitable for repurposing to support other uses (subject to EPA and BPEM guidelines in regard to aftercare management and public access).
- Existing wetlands to the north and south of Hazelwood provide an opportunity to establish a wetland and water-based natural environment to both enhance landscape and environment and provide recreational opportunity.
- The switchyard presents a significant opportunity for the site to support energy-related uses. This is both in terms of opportunities to feed into the grid and generate electricity for Victoria, and also to extract energy to support new uses on the site.
- Proximity of the site to both the Princes Freeway and Gippsland Regional Rail (with a station at Morwell) provide significant opportunity to unlock growth for Hazelwood.

5. Considerations for Determining End Land Uses

When determining the end land uses for a mining project, it is essential to consider the site's expansive nature and diverse landforms, which can support multiple future uses. A straightforward and adaptable approach ensures flexibility, allowing future stakeholders to shape higher value uses according to evolving needs. Rather than imposing predefined land uses, ENGIE Hazelwood aims to facilitate informed decision-making by transparently disclosing residual risks and constraints, enabling responsible and sustainable development tailored to future requirements.

5.1 LAND USE STABILITY ASSESSMENT

A Post-Relinquishment Land Use Suitability Assessment (Landloch 2019b) has been undertaken based on the Guidelines for Land Capability Assessment in Victoria (Rowe et al 1981) and other supporting documents. While this study does not dictate or prescribe particular land uses, it does provide the technical details on land characteristics that will be critical to ensure that each closure domain is safe, stable, and sustainable and has been used to inform the land uses identified in the DMRP. At this stage, broad types of post relinquishment land use suitability assessed include (but are not limited to):

- grazing / horticulture;
- nature conservation;
- hay and silage production;
- land based recreation;
- shoreline interactions with water-based recreation; and
- simple construction constraints (concrete slab foundations, roads, effluent disposal).

In determining the above, this study (Landloch 2019b) considered:

- constraints classified under the Guidelines for Land Capability Assessment in Victoria (Rowe et
- al. 1981);
- a simple rating system for Engineering Uses including effluent disposal, shallow excavations,
- roads, carparks and paths;
- existing access and power supply;
- septic waste disposal;
- land based recreation;
- grazing in <750 mm rainfall zone (Latrobe Valley mean annual rainfall is 744 mm);
- horticulture;
- nature conservation (e.g. potential wildlife corridor options);
- utilisation of the beaching area;
- Latrobe City's Wood Encouragement Policy 2014, which seeks to retain and expand the local
- timber industry;
- Latrobe City's Planning Scheme Objective 4: To ensure that a sufficient supply and adequate
- choice of industrial land exists;
- opportunities and possible constraints of the current Special Use – Brown Coal Zoning / Public
- Use Zoning; and
- viable areas for the main land use types.

5.2 PLANNING / ZONING CONTROLS

The MIN5004 area is within the Latrobe City Council local government area. The mine and its surrounds are subject to Schedule 1 of the Latrobe Planning Scheme. The Latrobe Planning Scheme has been critical in managing land use conflicts and facilitation of brown coal-based electricity generation, it will be equally important in facilitating the transition to future land use by considering residual risk and conflicts.

The Latrobe Planning Scheme includes a Special Use Zone (Brown Coal) (SUZ1) over the mine area. The purpose of SUZ1 is to provide for coal mining, electricity generation, and associated uses. The mine area is partly affected by Land Subject to Inundation Overlay, Bushfire Management Overlay, Floodway Overlay, Road Closure Overlay, Schedule 1 to the Design and Development Overlay and Schedule 1 of the Environmental Significance Overlay pursuant to the Planning Scheme.

The Latrobe Planning Scheme provides for coal buffers where open cut coal mines are located near urban settlement (Latrobe Planning Scheme Section 21.07-4). The scheme requires a total separation between an urban settlement boundary and the crest of any future open cut to be at least 1,000 m wide. This buffer, as it applies to the MIN5004 area at the termination of the coal mining operations, is also shown in Figure 6.2. The buffer comprises a 750 m (+/- 75 m) wide "urban (coal) buffer" measured from the boundary of a 250m wide "coal operational area" measured from the open cut extraction limit. The full extent of the coal buffer is not achieved in respect of the northern batters of the MIN5004 area (i.e. in the vicinity of the Princes Freeway/Morwell Township), as these developments pre-date privatisation and the introduction of buffer zones into the Planning Scheme.

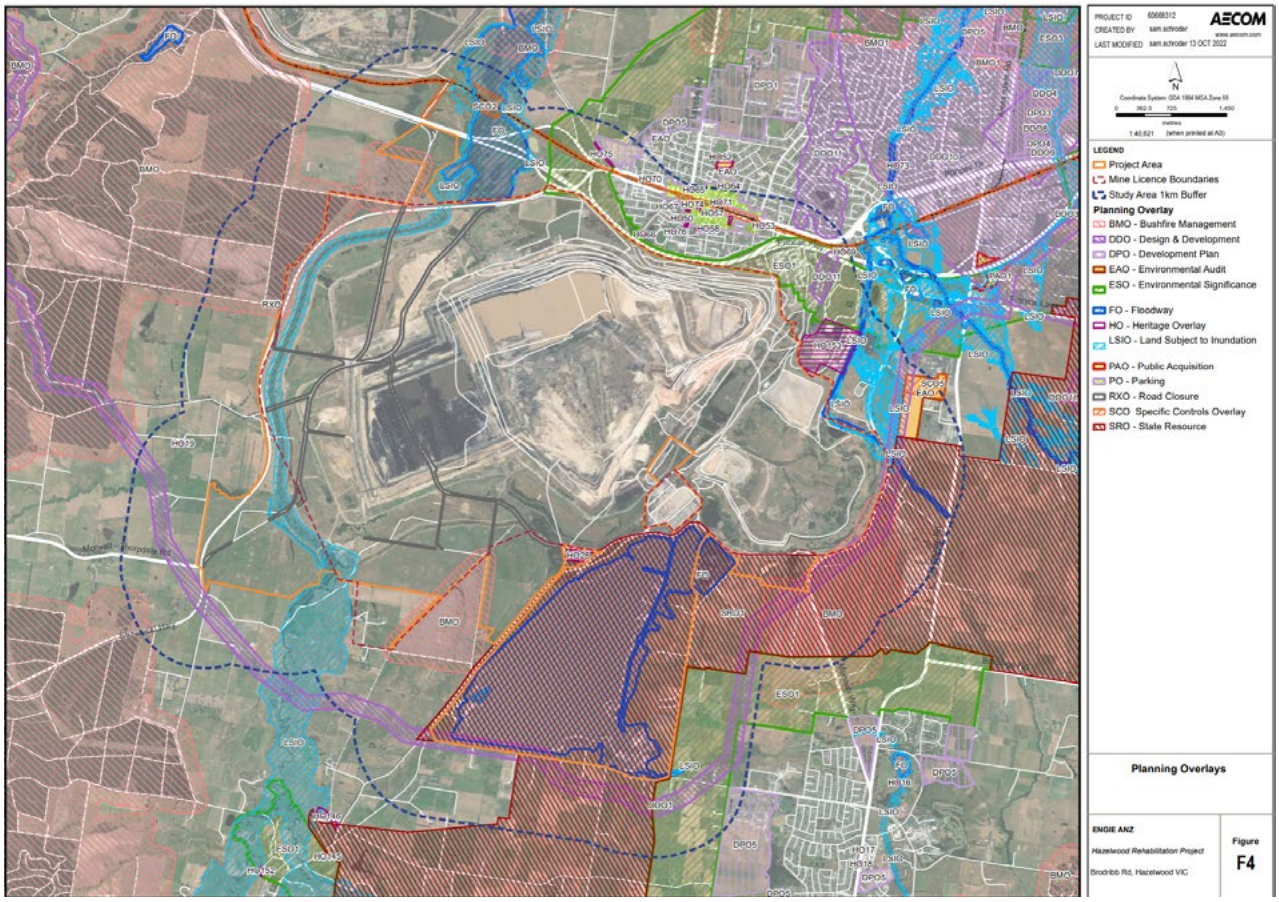

Figure 6.2: Planning Overlays

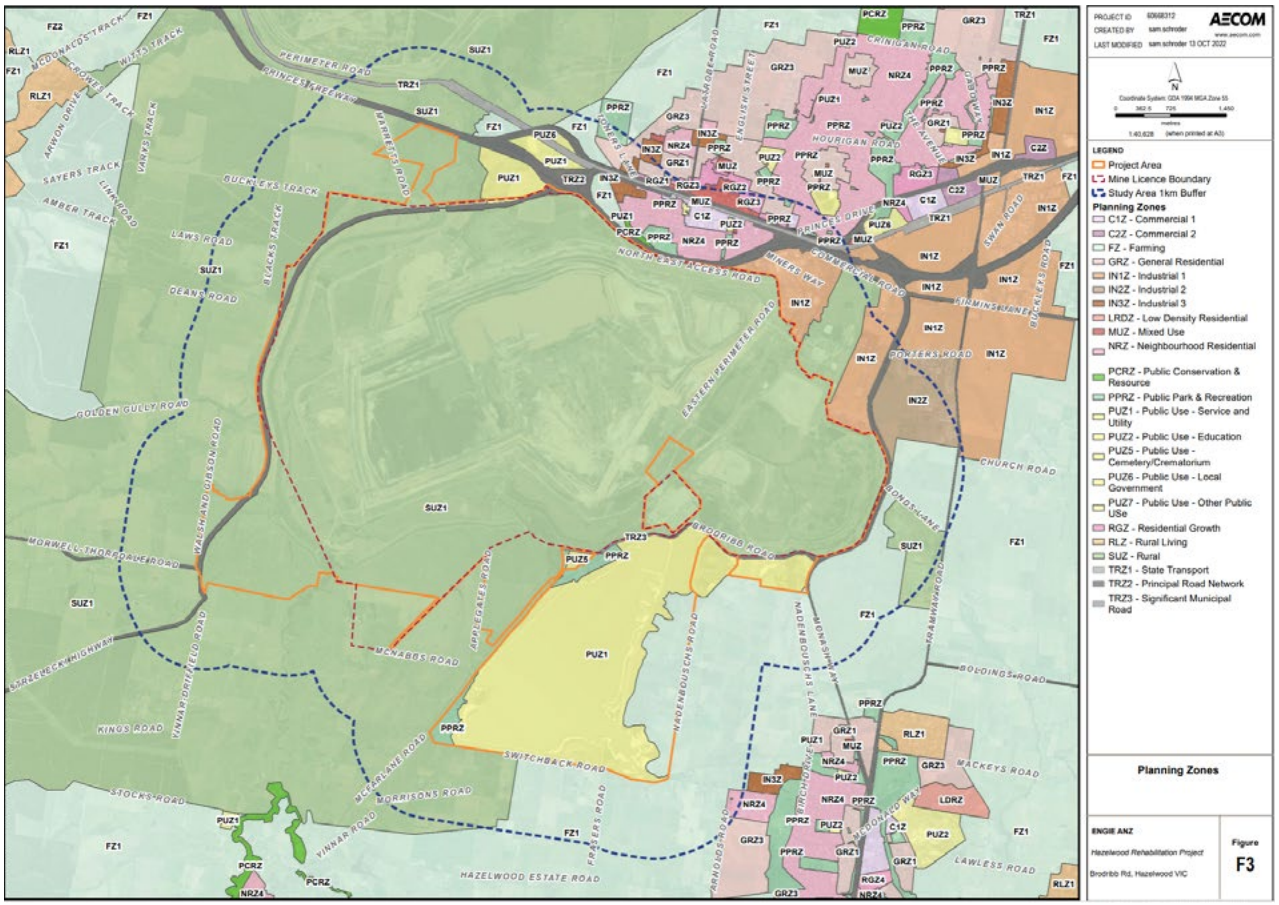

Figure 6.3: Planning Zones

In the transition to future use, the coal buffers will continue to reduce the potential for land use conflict, by defining an area between urban development and the coal mine resource development area where there is potential for impact from the residual risk of noise, dust, earth subsidence, fire hazard and visual intrusion.

A land tenure plan **Figure 6.1** shows the Mine Licence area, Crown land, freehold land, township boundary, roads and in relation to the mining area.

The MIN5004 area includes four additional mining licences (MIN5449, MIN5450, MIN5451 and MIN5452) associated with the West Field extension, consolidated into MIN5004 in 2006.

The total area within the MIN5004 outlying boundary is now approximately 3,290 ha. The vast majority of the land within MIN5004 is owned by ENGIE Hazelwood under freehold title. The Power station and works exclusion areas are excluded from MIN5004, resulting in an area of 3,258 ha.

5.3 LAND USE AND TENURE OF SURROUNDING AREA

Land tenure surrounding the project area is predominantly freehold land with some parcels of Crown land associated with rivers and waterways, sections of road and the Hazelwood Cemetery. The land uses immediately surrounding the MIN5004 area consists of:

- Morwell River Diversion (Crown Land), agricultural land and timber plantations to the west of the mine;
- farming land to the south-west;
- industrial land on the north-eastern side; and
- the Morwell township, Princes Freeway reservation, commercial and public land to the north.

The mine is bounded by the Princes Highway to the north, the Strzelecki Highway on the west, Brodribb Road and Yinnar Road on the south-eastern side and Monash Way on the east.

5.4 FARMING AND AGRICULTURE LAND USE

The primary land use surrounding the project area boundary is farming (cattle and sheep grazing on large rural holdings) with land on the east and south of the site located within the Farming Zone 1 and land to the west located in the Special Use Zone 1. Overlays applicable to the farming and agricultural areas include the Flood Overlay (FO) and Land Subject to Inundation Overlay (LSIO) as well as the Bushfire Management Overlay (BMO), Heritage Overlay (HO,) Design and Development Overlay (DDO), Development Plan Overlay (DPO) and Environment Significance Overlay (ESO).

Cattle farming for meat production is the predominant farming type in the Latrobe region with other farming types including sheep grazing, dairy farming and cropping. Agricultural uses include tree plantation and harvesting with a number of industries in the area associated with this use, including paper manufacturing, milling and mulching.

The adjacent location of these broadacre land uses has a significant influence on the proposed future use.

5.5 INDUSTRIAL LAND USE

Industrial land uses surrounding the project area are located to the north and east in the IN1Z, IN2Z and IN3Z. Applicable overlays are the LSIO, FO flood areas as well as the EAO, HO, DDO, SCO and ESO. Industrial land uses in these zones include steel fabrication, construction and transportation equipment, recycling, plantation timber production, and technology services. These areas are characterised by large warehouses, storage yards, high fences and other power production infrastructure including the Jeeralang power station. Another smaller industrial area is located to the south-east of the project area on the northern boundary of the township of Churchill.

Sites within this area with transport links and services infrastructure are priorities for potential industrial use.

Other industrial areas outside the project area include the former Hazelwood Power Station site and the Hazelwood BESS, all of which are located within the broader mine site but excluded from the project area for the purpose of the EES and DMRP. These sites include large industrial machinery, power generation infrastructure and power storage assets.

5.6 SENSITIVE RECEPTORS

The site is surrounded by a host of receptors which may be sensitive to impacts from the site and rehabilitation activities as defined in *Chapter 11 - Site Setting*. The location of natural features and built infrastructure and the proximity to human and environmental receptors is a key factor in determining the preferred post mining land use.

5.7 NATURAL FEATURES

Natural features surrounding the project area are characterised by open space, farmland, low rolling hills, and waterways (including floodplains, wetland and riparian zones). These include the Eric Lubcke Yarra Gum Conservation Reserve, Morwell River, Eel Hole Creek, Wilderness Creek, Water Hole Creek, Bennetts Creek, Morwell River Wetlands, other natural features identified in *Chapter 11 - Site Setting*. The DMRP seeks to support existing natural features through connection and enhancement of adjacent land parcels.

5.8 HERITAGE SITES

Historic heritage sites adjacent to the project area include the Victorian Heritage Register listed Morwell Power Station and Briquette Factory and the No 21 Dredger and the Latrobe Planning Scheme listed Heritage Overlay site the Hazelwood Public Cemetery.

Features of Aboriginal Cultural Heritage are well documented and occur predominantly within waterway corridors and remnant vegetation. A complete assessment of Aboriginal Cultural Heritage was completed as part of the 2025 EES and known areas of Cultural heritage sensitivity are recorded in *Chapter 11 - Site Setting*.

6. Post Mining Land Uses

The full pit lake will be central to the site post relinquishment. ENGIE Hazelwood owns more than 4,000 ha of land, and approximately 1200 ha of the land would be taken up by the pit lake and the remaining land would be used for other purposes. Other post relinquishment land uses generally identified for the site include land suitable for agriculture, public open space surrounding the pit lake and water courses, and industrial land.

Table 6.1 provides an overview of the potential post relinquishment land uses for each closure domain and subdomain. The table identifies the domains, sub domain, current land use and end use. The table also provides definition, descriptions, land tenure, end landform consideration and stakeholder input. ENGIE Hazelwood will provide the base case landform that will support the following post relinquishment end land uses.

Figure 6.4 shows the conceptual end land use of the Hazelwood site. Figure 6.5, Figure 6.6 and Figure 6.7 show the cross sections end landforms across the different areas of the mine site.

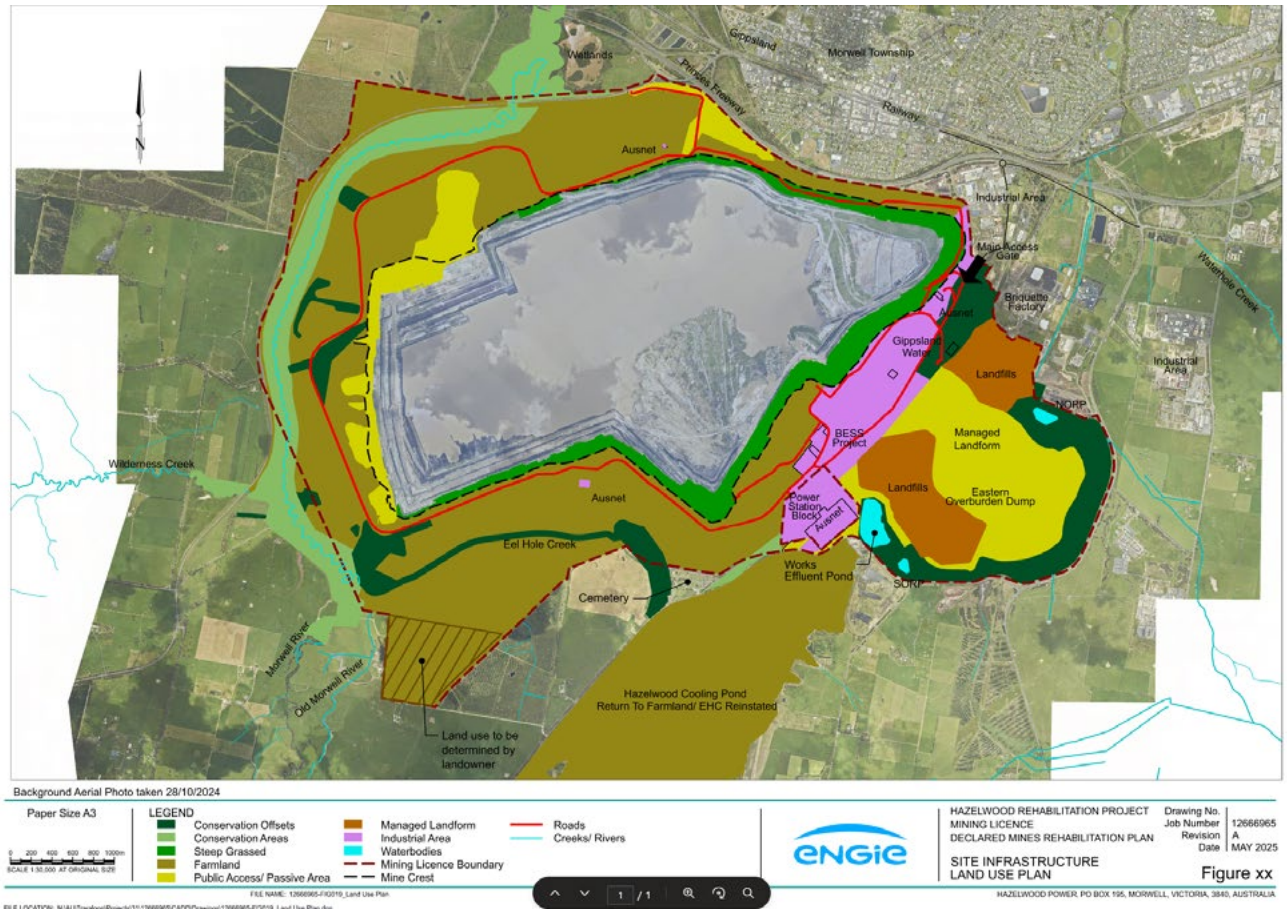

Figure 6.4: Conceptual End Land Use of the Hazelwood site

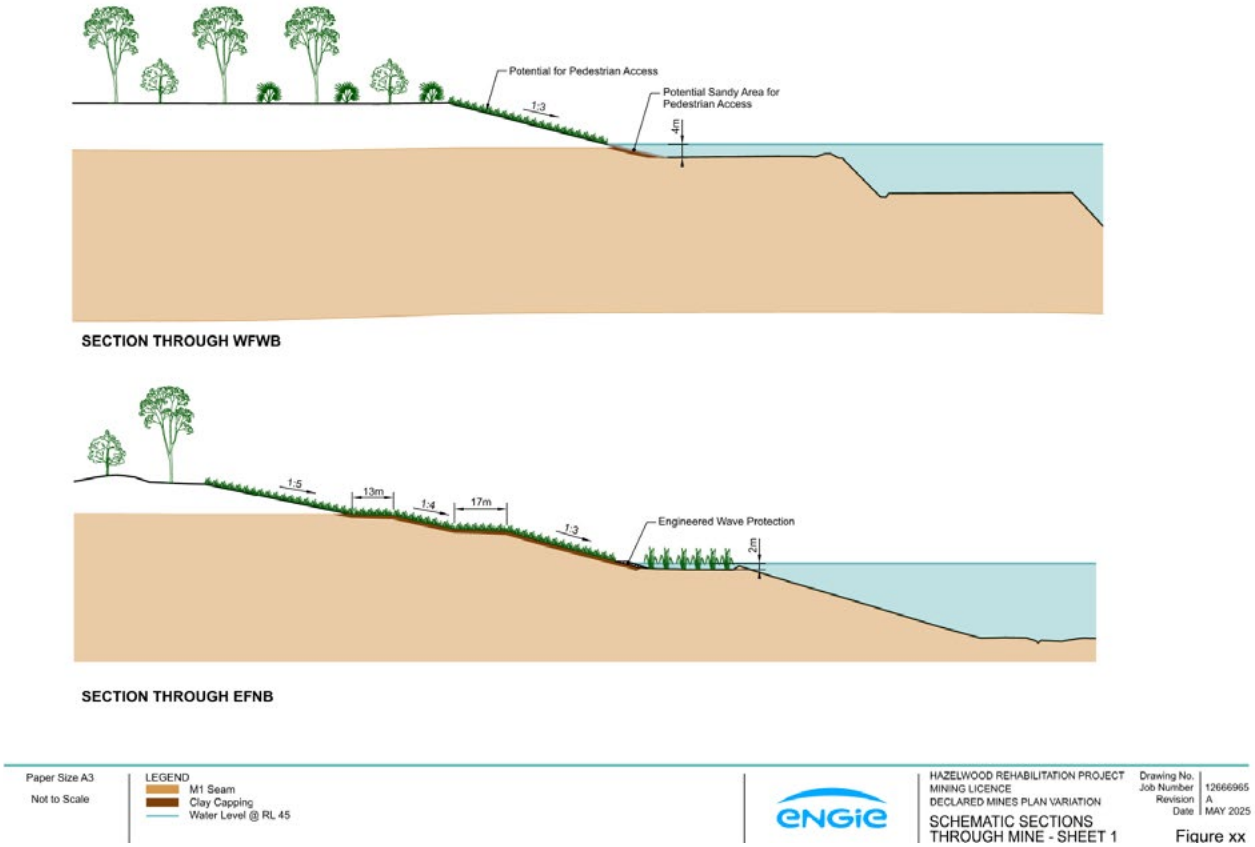

Figure 6.5: Cross section 1 of end landform

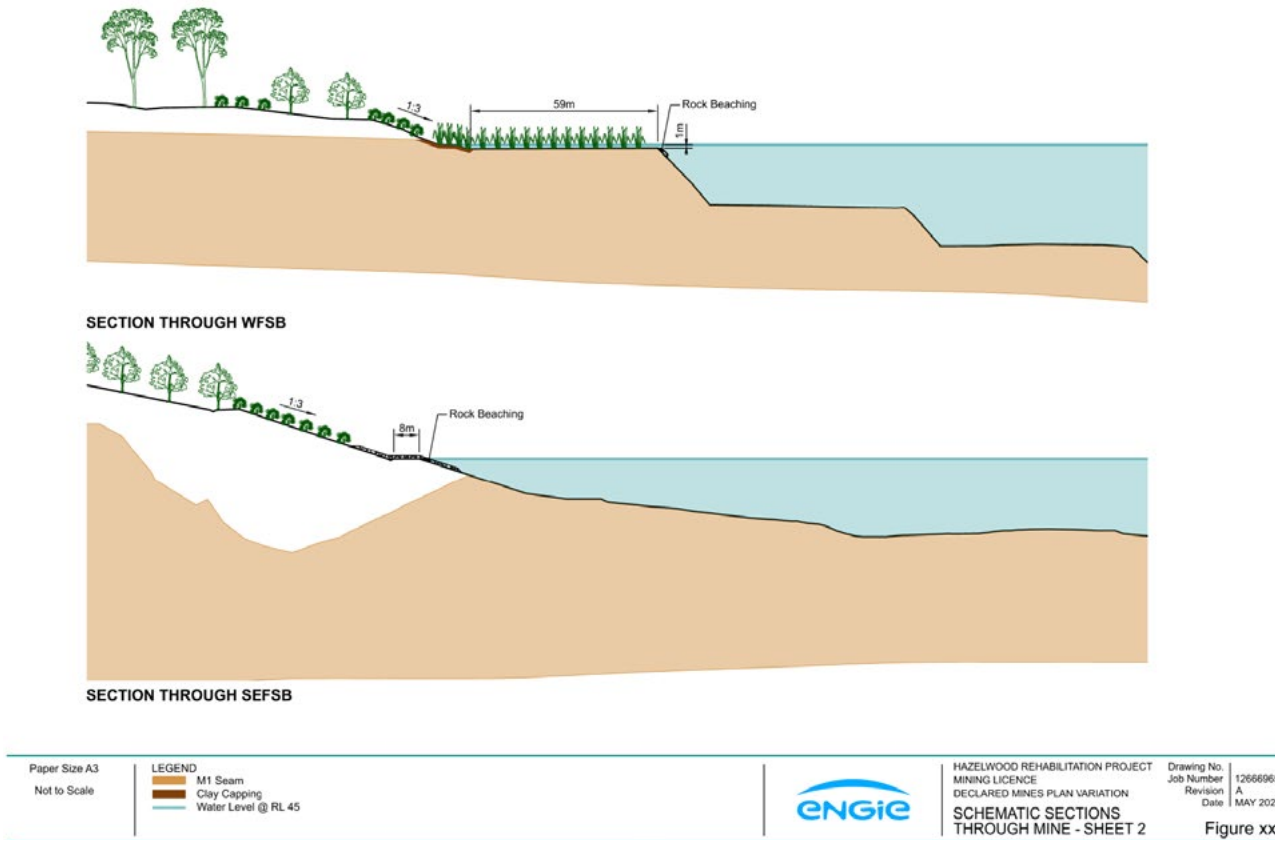

Figure 6.6: Cross section 2 of end land form

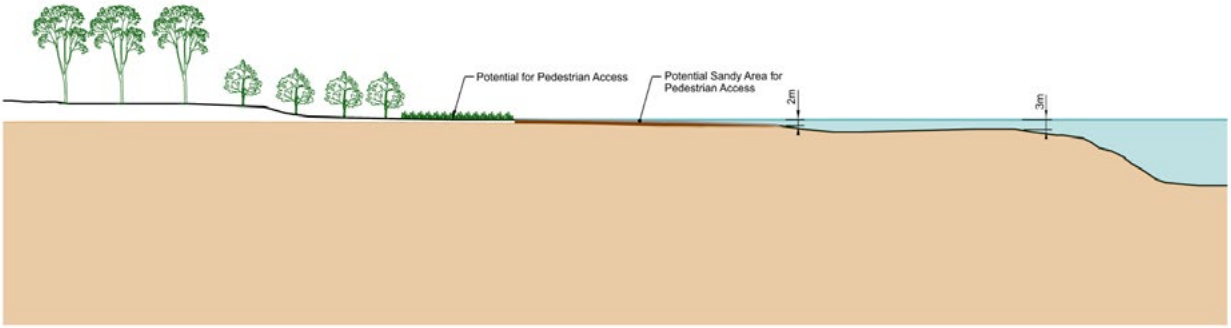

Figure 6.7: Cross section 3 of end land form

Table 6.1: Final Land use and Landforms

SUB-DOMAIN	CURRENT LAND USE	FINAL LANDFORM AREA (ACCORDING TO FIGURE)	BACKGROUND CONSIDERATIONS	DEFINITION	CONSIDERATIONS AND OPTIONS FOR POST MINING LAND USE (PMLU)	LAND TENURE/OWNERSHIP	STAKEHOLDER INPUTS/ CONTRIBUTIONS
Sub-domain	Pre-rehabilitated operational landform		What are the background considerations that need to be considered for these areas – this could include current zoning, geotech etc	Rehabilitation design overview. This should also include the identification of any landforms that could be repurposed prior to relinquishment	What will shape future land use, who will use the landform, how it will be used, when it will be available for reuse and who will manage the repurposed landform	Consideration of the various statutory mechanisms that may-be required to manage changes to sequential land use beyond relinquishment (e.G. Light indus-trial to heavy industrial	Explanation/summary of stakeholders to the repurposed and key inputs
DOMAIN: MINE VOID							
Mine void lake	Open void/ partially filled lake	Water Bodies	Water availability (and top up), fill rate, fill height, water quality, local stream interconnections, geotechnical risks (ground movement)	Mine void area filled with water to final level (RL +45 m AHD). Pit lake access points designed with shallow beaching and all-weather surfaces. Pit lake access serviced by public road network.	The aim of the pit lake is to be available for recreational use, this will include being used by the Community, fauna and adjoining pastoralists. It is currently anticipated the MLRA will be an interim responsible for managing the pit lake after relinquishment.	Land rezoning Freehold land transfer Crown Land transfer Declared Mine Registration	MLRA Latrobe City Council Water body managers Community
Mine batters and floor	Mine Batters	Grassed / vegetated Batters	Seeding, vegetation selection, slope, maintenance, public access restrictions, agricultural (livestock) access, erosion. Safe access and maintenance	Coal Batters 1V:3H will be capped and grassed with a perennial pasture mix. Other vegetation option possible above coal	Batter vegetation could be managed though means such as light grazing. It is anticipated the batters will be incorporated in sale or lease of adjoining land Batters will likely be available for grazing during passive management phase.	Land rezoning Freehold land transfer Crown Land transfer Declared Mine Registration	MLRA Latrobe City Council Adjoining landholders GLaWAC Community
	Mine lake shoreline	Passive Recreation / Shallow waters	Slope, public access, water quality,	Public access areas will be limited to areas of suitable access and landform such as being constructed and surfaced with grass and gravel/sand to allow recreational use.	Pit shoreline will be used by the general public for passive recreation. Anticipated Latrobe Council will manage the pit shoreline	Land rezoning Freehold land transfer Crown Land transfer Declared Mine Registration	MLRA Latrobe City Council Community
	Mine lake shoreline	Emergency Lake access	Access, emergency vehicle access,	The landform allows for two potential points of access which could facilitate boat ramps constructed to meet emergency vehicular access for watercraft and emergency helicopter.	Emergency lake access will be used by the Vic Emergency services (FRV, CFA, VicPol, SES, Ambulance). Anticipated Latrobe Council will manage the pit shoreline	Land rezoning Freehold land transfer	MLRA Latrobe City Council Community
	Mine lake shoreline	Protected shoreline area	Engineered / constructed shoreline to protect from wave erosion	Large areas of steep slopes are likely to be exposed to wave action. This will require engineering design considering wave height and water level variation.	Maintenance program and responsibility		Latrobe City Council Community
Ash landfills		Water Bodies	A risk based capping design is being progressed in consultation with EPA Victoria. The HARA would be inundated for the creation of a full mine lake, with the HARA submerged at a volume of 372GL and at RL +19m AHD.	Post closure monitoring and maintenance as per EPA licence requirements.	Ash waste retention area in the eastern section of mine void. Closed and currently uncapped, with dust suppression (water sprays) and active leachate collection. Located in the mine void. MLRA will manage the pit lake after relinquishment, with oversight by EPA for the landfill elements.	EPA Landfill Register Declared Mine Registration Freehold land transfer Land rezoning	MLRA EPA
DOMAIN: HCP (OUTSIDE DMRP, BUT WITHIN EES)							
Watercourse diversion structure	Watercourse diversion structure		Removal of HCP embankments may impact flow and env values within the existing Eel Hole Ck down stream	Engineered channel and structures to replace HCP embankment and outlet Rehabilitation of storage area and reinstatement of history stream coarse	Watercourse to manage HCP outflow. Native vegetation habitat corridor.	Freehold land transfer Land rezoning Waterway easement	SRW West Gippsland Catchment Management Authority (WGCMA) Latrobe Council DEECA GLaWAC
Infrastructure		Restricted Areas	These are prescribed use sites that have been remediated. Required to be fenced and restricted public assess.		Restricted public access through fencing/signage and/ or security.		

SUB-DOMAIN	CURRENT LAND USE	FINAL LANDFORM AREA (ACCORDING TO FIGURE)	BACKGROUND CONSIDERATIONS	DEFINITION	CONSIDERATIONS AND OPTIONS FOR POST MINING LAND USE (PMLU)	LAND TENURE/OWNERSHIP	STAKEHOLDER INPUTS/ CONTRIBUTIONS
Sub-domain	Pre-rehabilitated operational landform		What are the background considerations that need to be considered for these areas – this could include current zoning, geotech etc	Rehabilitation design overview. This should also include the identification of any landforms that could be repurposed prior to relinquishment	What will shape future land use, who will use the landform, how it will be used, when it will be available for reuse and who will manage the repurposed landform	Consideration of the various statutory mechanisms that may be required to manage changes to sequential land use beyond relinquishment (e.G. Light industrial to heavy industrial	Explanation/summary of stakeholders to the repurposed and key inputs
DOMAIN: MINE SURROUNDS (ELEMENTS ARE OUTSIDE THE DMRP AND INCLUDED FOR TRANSPARENCY)							
External overburden dumps	Eastern Overburden Dump - HAP2a, HAP 4	EOD - Areas to be maintained	Drainage, plantings, access restrictions	The EOD is made up of subsoils, clays and inferior coal removed as part of the mining process and placed to create the EOD. Within the EOD there are EPA licenced landfills for hard rubbish, ash and asbestos. Grassed hilly landform The EOD containing ash, asbestos and hard rubbish landfills will not be available for post mining reuse. The hilly landform will be vegetated and maintained by mowing. EPA licence obligations ongoing.	The EOD is approximately 50 meters high and is approx. 285 hectares. Much of the surface has been shaped for stability and vegetated. Rehabilitation works have been completed on HAP2a and HAP 4. Works are being undertaken on HAP1. The end land use for this area is to be a “managed landform” and licensed landfills within the EOD will be managed in accordance with their EPA licences.	EPA Landfill Register Declared Mine Registration Freehold land transfer Land rezoning	MLRA EPA Latrobe Council
External overburden dumps	Western Overburden Dump (WOBD)		Drainage, plantings, access. Located to the north of the North Field, has been rehabilitated with grass and mature trees. The WOBD is approximately 22-28 metres high and has an area of approximately 28 hectares	Grassed hilly landform The hilly landform will be vegetated and maintained by grazing.	Managed landform, as above	Declared Mine Registration Freehold land transfer Land rezoning	MLRA Latrobe Council
External overburden dumps	South East Field Screening Dump (SEFSD)		Drainage, plantings, access. Located on the south-western side of the SEFWB, has been rehabilitated. The SEFSD is approximately 20 metres high and has an area of approximately 59 hectares	Grassed hilly landform The screening dump will have vegetation enhancement where required.	Managed landform, as above	Freehold land transfer Land rezoning	MLRA Latrobe Council
Ash and asbestos landfills	Ash and asbestos landfills	Restricted Areas	Access restrictions, grassed landform, no PMLU	Located within the EOD. Grassed hilly landform The ash, hard rubbish and asbestos landfills will not be available for post mining reuse. The hilly landform will be vegetated and maintained by mowing. EPA licence obligations ongoing.	Ability to use land for alternative uses cannot be fully assessed until post-rehabilitation. Transfer of obligations and land is likely to occur after the passive management phase, when such uses can be better assessed.	EPA Landfill Register Freehold land transfer Land rezoning	MLRA EPA Latrobe Council
Watercourse diversion structures	Watercourse diversion structures	MRD	Engineered structure to divert Morwell River. Interconnection via engineered inlet and outlet structures. Inlet and outlet control will require active management and maintenance into perpetuity	Vegetated watercourse with civil interconnection points.	Watercourse to manage Morwell River flows. Native vegetation habitat corridor. Expect the Morwell River to be managed by the CMA.	Freehold land transfer Land rezoning	SRW WGCMA Latrobe Council DEECA GLaWAC
Watercourse diversion structures	Morwell river diversion levee (MRDL)	Morwell river diversion levee (MRDL)	Engineered surface water structure		Levee to divert Morwell River flood flows into the pit lake.	Freehold land transfer	SRW WGCMA Latrobe Council DEECA GLaWAC

SUB-DOMAIN	CURRENT LAND USE	FINAL LANDFORM AREA (ACCORDING TO FIGURE)	BACKGROUND CONSIDERATIONS	DEFINITION	CONSIDERATIONS AND OPTIONS FOR POST MINING LAND USE (PMLU)	LAND TENURE/OWNERSHIP	STAKEHOLDER INPUTS/ CONTRIBUTIONS
Sub-domain	Pre-rehabilitated operational landform		What are the background considerations that need to be considered for these areas – this could include current zoning, geotech etc	Rehabilitation design overview. This should also include the identification of any landforms that could be repurposed prior to relinquishment	What will shape future land use, who will use the landform, how it will be used, when it will be available for reuse and who will manage the repurposed landform	Consideration of the various statutory mechanisms that may be required to manage changes to sequential land use beyond relinquishment (e.G. Light industrial to heavy industrial	Explanation/summary of stakeholders to the repurposed and key inputs
Watercourse diversion structures	Eel Hole Creek Flood Levee (EHCFL)	Eel Hole Creek Flood Levee (EHCFL)	Engineered surface water structure			Freehold land transfer	SRW WGCMA Latrobe Council DEECA GLaWAC
Watercourse diversion structures	Morwell Main Drain (MMD)	Morwell Main Drain (MMD)	Engineered surface water diversion structure	Vegetated drainage line.	Engineered stormwater control feature.	Subject to final arrangements with LCC	SRW WGCMA Latrobe Council DEECA GLaWAC
Watercourse diversion structures	Works effluent pond (WEP)	Works effluent pond (WEP)	Pond that collects surface water from the EOD and former Power Block. The WEP will be connect to the reinstated EHC via new drain.	Vegetated waterbody	Waterbody to manage stormwater from surrounding land features.		
Infrastructure	NORP Run-off collection pond	NORP Run-off collection pond	Collects surface water runoff form HAP4 and the Northern section of the EOD, prior to being discharged into Bennetts Creek.	Vegetated waterbody	Waterbody to manage stormwater from surrounding land features.		
	Southern Overburden run-off pond (SORP)	Southern Overburden run-off pond (SORP)	Collects stormwater from a southern section of the EOD.	Vegetated waterbody	Waterbody to manage stormwater from surrounding land features.		
	Surface water storages	Surface water storages					
Remaining land incl. conservation areas	Power station Block	Industrial - Power station Block	Generally flat landform with some small steep sections partially revegetated to pasture. EPA clean-up plan assured no residual contamination.	This area will be retained as a generally flat and stable landform suitable for industrial reuse or power generation.	Although the Hazelwood Power Station has been removed, the site still functions as a major connection point for the electricity network. This includes extensive overhead transmission lines and towers located within the project area as well as the transmission Switchyard, and the Hazelwood BESS. Most of the project area, is covered by the SUZ1 with various planning overlays located around the perimeter of the site. As a result of being a major transmission hub with established connection into the electrical network, the site provides an opportunity for other future uses associated with power generation.	Freehold land transfer Declared Mine Registration	MLRA Latrobe City Council
Remaining land incl. conservation areas	Mine surrounds	Agricultural	Generally flat or undulating landform. Revegetated to pasture for grazing but cropping or intensive agriculture unlikely.	Flat stable landform suitable of being maintained by domestic agricultural machinery.	Mine surrounds will be repurposed for grazing. It is anticipated the land will be sold or leased to adjoining freehold owners. Mine surrounds will likely be available for grazing during passive management phase.	Land rezoning Freehold land transfer	Latrobe City Council Adjoining landholders GLaWAC
Remaining land incl. conservation areas	Mine Surrounds	Industrial	Generally flat landform partially revegetated to pasture. Some areas currently zoned industrial while others are SUZ1	This area will be retained as a generally flat and stable landform suitable for industrial reuse.	Industrial zoning IN1Z, IN2Z, IN3Z yet to be confirmed	Partial land rezoning Freehold land transfer	Latrobe City Council

SUB-DOMAIN	CURRENT LAND USE	FINAL LANDFORM AREA (ACCORDING TO FIGURE)	BACKGROUND CONSIDERATIONS	DEFINITION	CONSIDERATIONS AND OPTIONS FOR POST MINING LAND USE (PMLU)	LAND TENURE/OWNERSHIP	STAKEHOLDER INPUTS/ CONTRIBUTIONS
Sub-domain	Pre-rehabilitated operational landform		What are the background considerations that need to be considered for these areas – this could include current zoning, geotech etc	Rehabilitation design overview. This should also include the identification of any landforms that could be repurposed prior to relinquishment	What will shape future land use, who will use the landform, how it will be used, when it will be available for reuse and who will manage the repurposed landform	Consideration of the various statutory mechanisms that may be required to manage changes to sequential land use beyond relinquishment (e.G. Light industrial to heavy industrial	Explanation/summary of stakeholders to the repurposed and key inputs
Remaining land incl. conservation areas	Mine Surrounds	Public Viewing Area	Located adjacent to Morwell township to give vehicle and bicycle access. Carpark and Visitor Hub Visitor Journey Track Viewing Platform Native Vegetation Area Potential Walking Track (connecting the Morwell Township) Drilling Depot Road	Batters 1V3H will be capped and grassed with a blend of pasture and native vegetation. Civil infrastructure installed above batter.	Public viewing area with infrastructure (buildings, footpaths, observation platform, amenities). The area will be managed and maintained by the Latrobe City Council. Are likely to be available for repurposing during the passive management phase.	Land rezoning Freehold land transfer Declared Mine Registration	Latrobe City Council MLRA
Remaining land incl. conservation areas	Mine Surrounds	Passive Recreation /Public Access	Slope, public access, water quality	Areas available within the mine surrounds for passive recreation such as walking. Traverse pasture, native revegetation and waterways. Connected to the Public Viewing Area for transportation and amenities	It's anticipated that Latrobe Council will manage the areas available to the public for passive recreation. Area likely to be available for repurposing during the passive management phase.	Land rezoning Freehold land transfer Crown Land transfer Declared Mine Registration	MLRA Latrobe City Council
Remaining land incl. conservation areas	AusNet Blocks	Industrial – AusNet	MWE substation supplies the nearby industrial estate and will most likely remain. MWN and MWW only supply the site and will likely remain during the passive rehabilitation period. It will be a matter for AusNet if they wish to repurpose these to supplement their distribution network after relinquishment	Note: is outside MIN5004.	AusNet usage	AusNet oversight	AusNet
Remaining land incl. conservation areas	BESS	Industrial – BESS	Commercial agreement with BESS owner/operator.	This area will be retained as a flat and stable landform suitable for the BESS	Battery Energy Storage System	Freehold land transfer	
Remaining land incl. conservation areas	Mine Surrounds	Conservation Remnant Vegetation	Existing vegetation, fencing, coal capping protection, water resources, adjacent land use Habitat linkages Traditional owner cultural values	Patches of remnant vegetation throughout the site will be retained and enhanced with supplementary planting. Remnant vegetation may be enhanced with habitat linkages.	This domain comprises all leased land within the MIN5004 area including all offsets and conservation areas. Isolated areas of the site have been leased to third parties for infrastructure purposes (e.g., with Gippsland Water, AusNet Services) and for grazing and agricultural activities (including as a bushfire fuel reduction measure).	Freehold land transfer	Latrobe City Council GLaWAC
Remaining land incl. conservation areas	Mine Surrounds	Access roads, building facilities	Existing buildings and service infrastructure could be retained for repurposing. Access roads will need to be rationalised whilst still providing access for ongoing monitoring and maintenance.	Buildings and civil infrastructure likely to be available for repurposing during the passive management phase.	The road network within the project area includes sealed and unsealed roads. Some access roads may be retained post-relinquishment to enable access and for use in fire and other land management and emergency activities. However, redundant roads above the crest of the mine that have no specific post-relinquishment use would be ripped, topsoiled and revegetated. Redundant car parks would also be decommissioned. The ownership of buildings, civil infrastructure and associated freehold land could be transferred by commercial arrangement to a private third party. Latrobe City Council and/or MLRA would be the likely entity to assume management of the retained road network.	Freehold land transfer Land rezoning	Latrobe City Council MLRA

SUB-DOMAIN	CURRENT LAND USE	FINAL LANDFORM AREA (ACCORDING TO FIGURE)	BACKGROUND CONSIDERATIONS	DEFINITION	CONSIDERATIONS AND OPTIONS FOR POST MINING LAND USE (PMLU)	LAND TENURE/OWNERSHIP	STAKEHOLDER INPUTS/ CONTRIBUTIONS
Sub-domain	Pre-rehabilitated operational landform		What are the background considerations that need to be considered for these areas – this could include current zoning, geotech etc	Rehabilitation design overview. This should also include the identification of any landforms that could be repurposed prior to relinquishment	What will shape future land use, who will use the landform, how it will be used, when it will be available for reuse and who will manage the repurposed landform	Consideration of the various statutory mechanisms that may be required to manage changes to sequential land use beyond relinquishment (e.G. Light industrial to heavy industrial	Explanation/summary of stakeholders to the repurposed and key inputs
DOMAIN: WATERWAYS							
Watercourse diversion structures		Farmland	Generally flat or undulating landforms. Revegetated to pasture for grazing but cropping or intensive agriculture unlikely. Fencing of agriculture from waterways is essential.	Undulating landform suitable of being maintained by domestic agricultural machinery.	Mine surrounds will be repurposed for grazing. It is anticipated the land will be sold or leased to adjoining freehold owners. Mine surrounds will likely be available for grazing during passive management phase.	Land rezoning Freehold land transfer	Latrobe City Council Adjoining landholders GLaWAC
Remaining land incl. conservation areas		Conservation Areas	Existing vegetation, fencing, coal capping protection, water resources, adjacent land use Habitat linkages Traditional owner cultural values Including waterways	Patches of remnant vegetation throughout the site will be retained and enhanced with supplementary planting. Remnant vegetation may be enhanced with habitat linkages.	Conditions of caveats and offset agreements will determine intensity of future use	Freehold land transfer	Latrobe City Council GLaWAC
Waterways		Access Roads	Access roads will need to be rationalised whilst still providing access for ongoing monitoring and maintenance of waterway infrastructure.	Access roads likely to be available for repurposing during the passive management phase.	The road network within the project area includes sealed and unsealed roads. Some access roads may be retained post-relinquishment to enable access and for use in fire and other land management and emergency activities. Latrobe City Council, MLRA or the CMA could assume management of the retained road network.	Freehold land transfer Land rezoning	Latrobe City Council MLRA SRW WGCMA
		Grassed Batters	Generally flat or undulating landform. Revegetated to pasture for light grazing or public open space.	Undulating stable landform suitable of being maintained by domestic machinery.	It is anticipated the land will be sold or leased to adjoining freehold owners. Mine surrounds will likely be available for repurposing during passive management phase.	Land rezoning Freehold land transfer	Latrobe City Council Adjoining landholders
		Morwell River diversion and Morwell River Flood diversion	To facilitate the ongoing expansion of the Hazelwood site in 2000, the Morwell River Diversion (MRD) was created to redirect water around the western boundary of the project area for a length of approximately seven kilometres. The river diversion traverses land within the SUZ1 and is covered by a LSIO. In addition to the MRD, a temporary flood diversion structure known as the Morwell River Flood Diversion (MRFD) was constructed during a significant flooding event in 2021. The purpose of the MRFD was to capture flood flows above a base flow river level and divert this water into the Hazelwood mine void via a water channel (Figure 6.14 and Figure 6.15).	Vegetated watercourse with civil interconnection points.	Watercourse to manage Morwell River flows. Native vegetation habitat corridor. The Morwell River will be managed by the CMA.	Freehold land transfer Land rezoning	SRW WGCMA Latrobe Council DEECA GLaWAC

7. References

ENGIE ARUP (2019) *Hazelwood Concept Master Plan.* June 2019

ENGIE GHD (2017) Overview of options and strategies for rehabilitation and remediation of the Hazelwood Mine and Power Station, Staff working paper. 2017

Landloch (2019b) *Post Relinquishment Land Use Suitability Assessment, Hazelwood Mine.* September 2019.