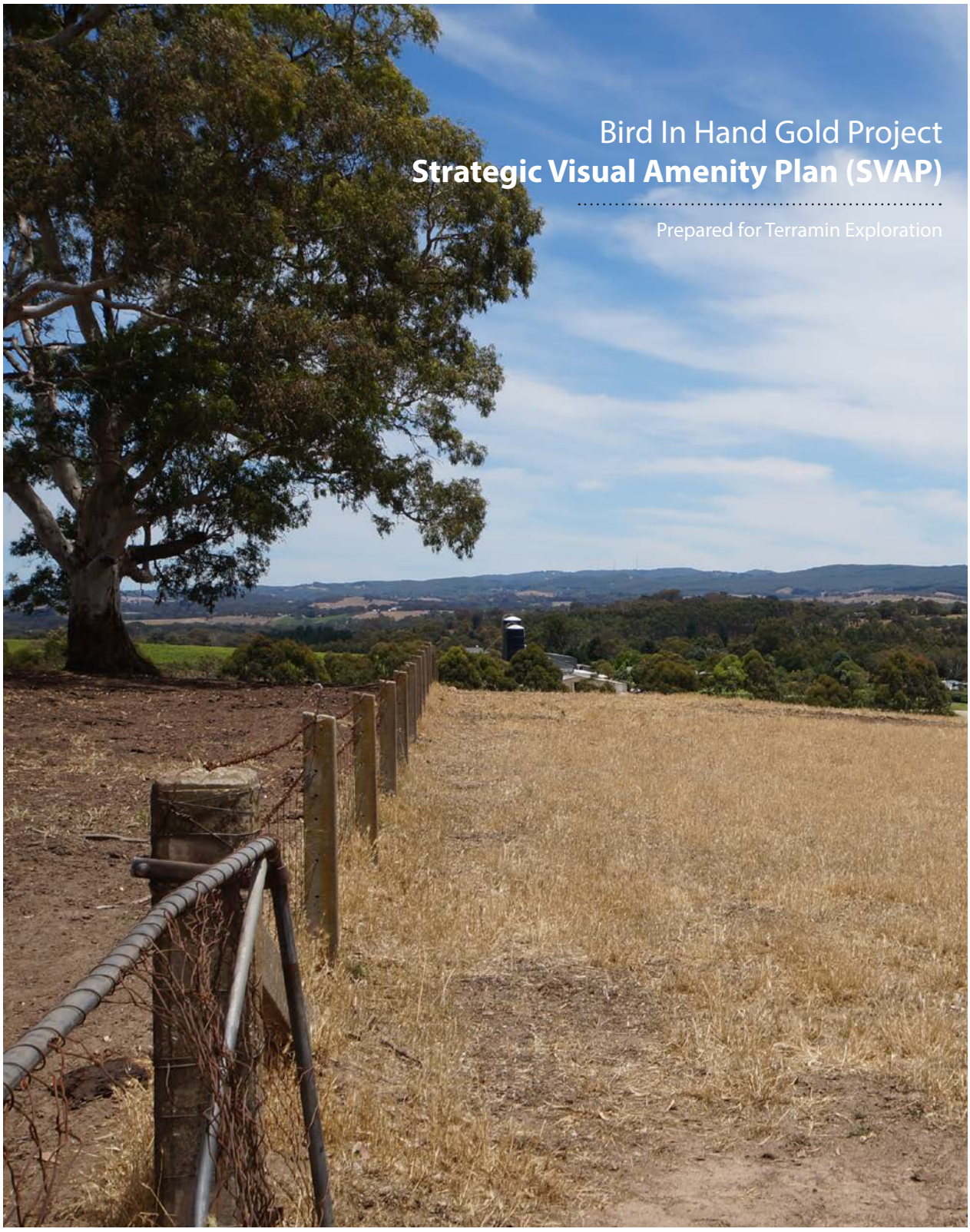

Bird In Hand Gold Project
Strategic Visual Amenity Plan (SVAP)

Prepared for Terramin Exploration

TERRAMIN oxigen

15.019 Bird In Hand Gold Project
Strategic Visual Amenity Plan (SVAP)

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CONTENTS

1 INTRODUCTION

Project
Terramin Exploration Pty. Ltd. are in the planning and design phase for development of gold mining operations at the Bird in Hand Gold Project site near Woodside in the Adelaide Hills. Prior to conducting any mining operations, Terramin are required to undertake a two-stage State Government statutory approvals process involving a Mining Lease application and a subsequent Program for Environment Protection and Rehabilitation (PEPR).

Oxigen Landscape Architects have been engaged to provide a Strategic Visual Analysis Plan (SVAP) for the proposed development to assist in the Mining Lease application.

Proposed Development
Terramin are proposing to establish an underground mine with supporting operations infrastructure on the property. The mine targets a known ore body, formerly mined in the 1800's, with ore containing gold transported to Terramin's existing Angas Processing Facility at Strathalbyn.

The existing Terramin property is predominantly agricultural land formerly used for cropping, potato farming and livestock, characterised by open paddocks and vegetated belts of non-endemic native species along the property boundary.

An existing farm house, former dairy work sheds and unused dams are proposed for retention within the property.

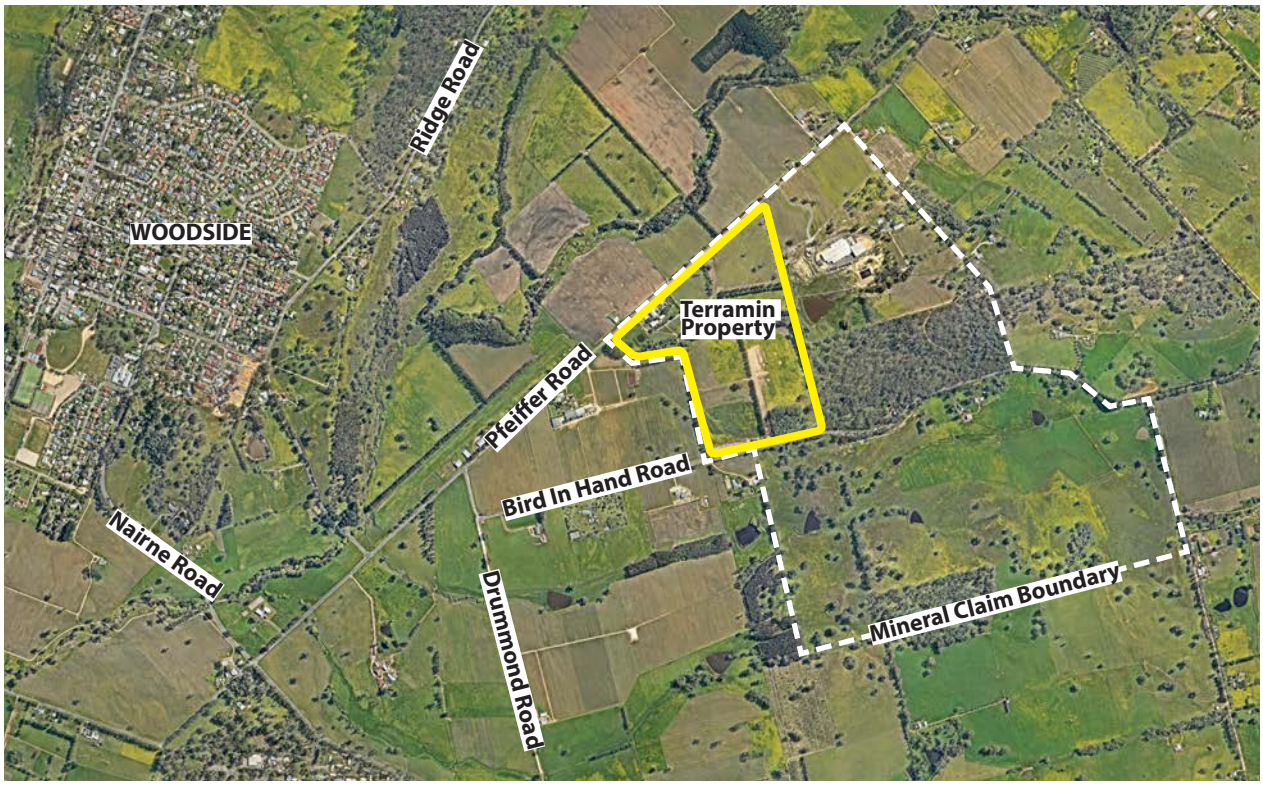


Figure 1: Location

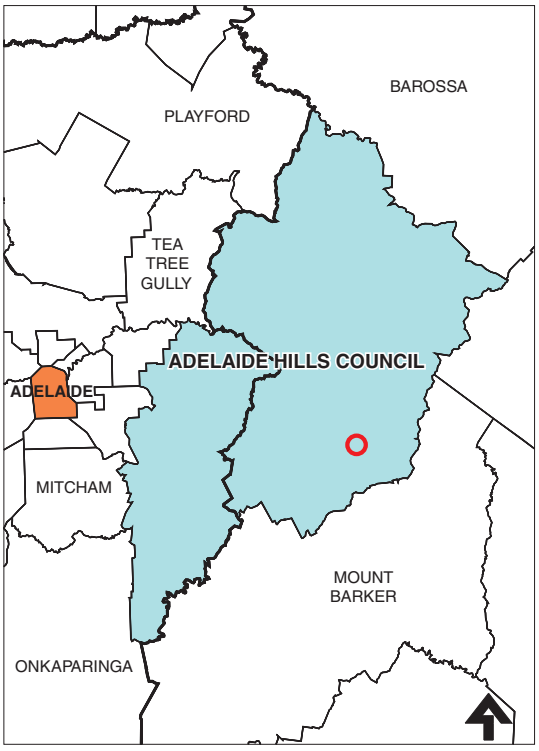
Planning Framework
Terramin's property is located within the Adelaide Hills Council (AHC) local government area and is within the Adelaide Hills Council Development Plan's 'Onkaparinga Valley 'Policy Area. The land is zoned Watershed (Primary Production).

The zone's objectives and principles of development control aim to prevent development that may lead to deterioration in the quality of surface or underground water within the Mount Lofty Ranges Watershed and also maintain land in primary production.

Onkaparinga Valley Policy Area
Objectives:

- *Objective 1: The retention of the existing rural character by ensuring the continuation of farming and horticultural activities and excluding rural living or other uses which would require division of land into smaller holdings."*

The project does not propose to divide the Terramin property into smaller holdings. Recommendations for retention of the rural landscape character are discussed within this plan.



AHC Local Government Area

AHC Development Plan Land Zone

The Adelaide Hills Council Development Plan includes specific objectives relating to Council-wide mining activity including:

- ***Objective 58: The continued availability of metallic, industrial and construction minerals by preventing development likely to inhibit their exploitation.***

  "The minerals of greatest significance are those used for building and construction. South Australia has a scarcity of natural timbers for building construction, and is therefore particularly dependent on resources of clay and shale for brick manufacture, and sand and stone for concrete and mortar aggregate. Equally important are materials such as filling sand and quarry products used in road building and general construction. Transport costs of these bulky low-value products rise rapidly as the distance increases between the workings and the point of consumption, with a consequent increase in price to the consumer."

Gold and silver, being metallic, are acknowledged as being available for exploitation in the Mount Lofty Ranges.

- ***Objective 59: The protection of the landscape from undue damage from quarrying and similar extractive and associated manufacturing industries.***

  "New mining operations in the south Mount Lofty Ranges should be confined to areas not readily visible from the Adelaide Plain.

  It is not in the best interests of the community that land should be left derelict following the extraction of minerals, and wherever possible steps should be taken to reclaim the land and put it to a suitable use."

- ***Objective 60: The siting and management of quarrying and similar extractive and associated manufacturing industries so that minimum damage is caused to the landscape.***

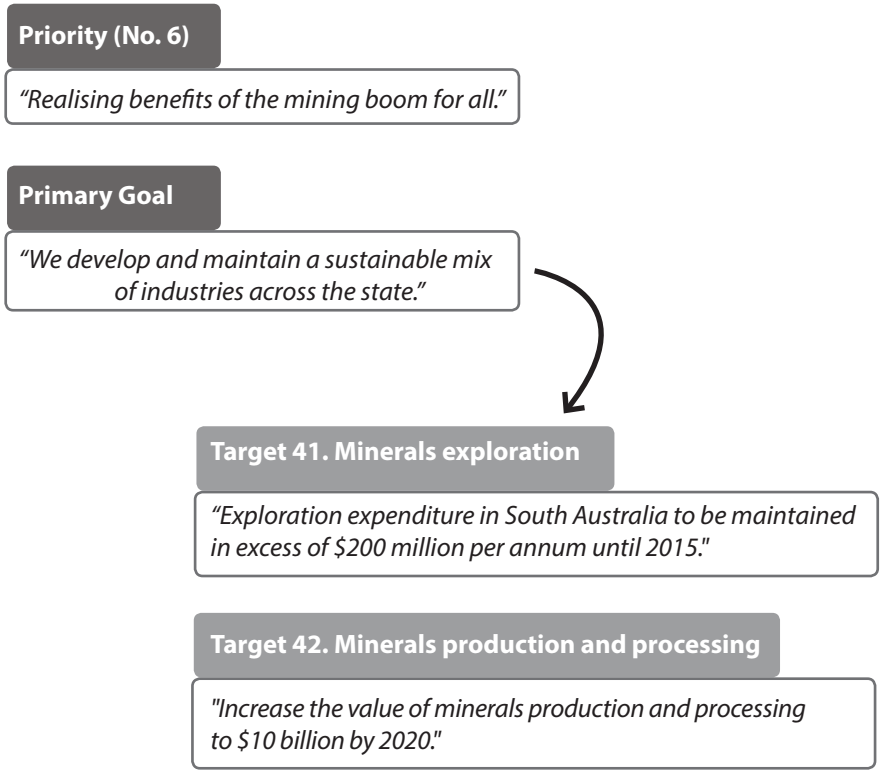
  "The permanent effect of mining operations on the appearance of the landscape and water front areas should be considered before operations begin, and the suitability of alternative sites investigated.

  After workings are finished undesirable structures should be removed, quarry faces beautified by landscaping, or the natural cover of the land restored. In some cases the redevelopment of some areas to other uses should be considered."

The objectives above are considered to apply Council-wide and therefore not limited to land zoned specifically Extractive Industry (EIn).

South Australia's Strategic Plan
Our Community, Our Prosperity and Our Environment are organising priorities for South Australia's Strategic Plan. These priorities are organised with supporting visions and goals, together with 100 targets for monitoring and measuring progress.

The proposed Bird In Hand Gold Project contributes to the following SA Strategic Plan priorities, goals and targets:



Mining lease approvals, monitoring and reporting of mining activity is carried out through the Department of Premier and Cabinet. (DPC)

Purpose

The purpose of the Strategic Visual Amenity Plan is to identify the visual effects of the proposed mining operations through a strategic approach addressing the proposed site operations, minimisation of the overall visual impact of the mine and integration within the existing broader Onkaparinga Valley landscape.

This report:

1. Examines the existing landscape character through photographic survey of key locations and analysis of the properties context within the Onkaparinga Valley.
2. Identifies objectives for enhancing the visual amenity of the property.
3. Identifies techniques to strategically address the visual impact of future mining establishment and operations.
4. Specifies actions in the implementation of the strategy.
5. Illustrates the visual effects of earthworks and associated landscape remediation techniques from key viewpoints within the surrounding locality.

Methodology

The Strategic Visual Amenity Plan reviews the visual impact of the proposed project from identified locations within the surrounding region and provides recommendations for future mitigation techniques based on the proposed project infrastructure.

Visual amenity is considered for proposed works within the Terramin property rather than the whole of the Mineral Claim Boundary area. It is assumed works outside the property boundary are either temporary or underground and therefore have a negligible effect on visual amenity.

Viewpoints were identified from the surrounding public roadways and places of business where views to the project site are visible.

Oxigen reviewed views of the project site from private residences in conjunction with Terramin environmental staff and the owners or tenants of individual properties. Views were identified with owners or tenants based on the relative level of visual exposure to the operations site and the locations frequency of use.

Context

Terramin's property is bounded by wineries and cellar doors on the eastern, southern and western boundaries with recently constructed polo fields to the north. A polo clubhouse is proposed on the northern side of the Inverbrackie Creek but at the time of writing is yet to be constructed.

A large stand of native vegetation within the neighboring private property to the east is protected under a perpetual Heritage Agreement. The Heritage Agreement protects bush land on private property and is legally binding. Few native vegetation areas of this size exist within the surrounding area.

Figure 2: Property Boundary

Site History

The Bird In Hand property has a gold mining history dating back to the late 1800's where a number of mines operated to the east of the current Woodside township, including Bird In Hand, Bird In Hand Extended, Brind, Mint, Eureka, Two-In-The-Bush, Lone Hand. Nest Egg, Ridge, Hay Valley and New Era.

The Bird in Hand mine operated until uneconomic water ingress, increasingly harder rock types and project economics caused it to cease operation.

Historic photographs indicate mining infrastructure and the typical landscape character of the region in the late 1800's. The former township of Reefton Heights was located to the north-east of the operations site.

Existing vegetation was removed to enable access and construction of mining infrastructure. Planting of agroforestry windbreaks occurred on the property in the 1990's.

Bird In Hand Mine ~1880 (SLSA#6258)

Ridge Gold Mine ~1880 (SLSA#6260)

Nest Egg Mine ~1880 (SLSA#6259)

Two-In-The-Bush Mine ~1880 (SLSA#6262)

SLSA - State Library of South Australia - Woodside Images Collection

State Heritage
An existing historic chimney is a relic from the former Lone Hand Gold Mine and is a listed State Heritage item number #12863. The chimney provides a visual link to historic mining within the surrounding area and is in a visually sound condition. The heritage listing recognises the importance of the mining and mineral processing heritage of the property and was confirmed in 1987.

The chimney is a visually prominent brick and stone structure; however, views from Pfeiffer Road and Bird In Hand Road to the chimney are obscured by vegetation and landform. Terramin have advised that the chimney is to be retained and a construction buffer of 25 metres established.

State Heritage Listed Chimney + Flue (Lone Hand Site)

The Bird-in-Hand Mine is on section 5278, hundred of Onkaparinga. There are three lodes bearing 10° east of north, with an underlay of 40° east. Their width varies from 1ft. to 8ft. The country rock consists of decomposed schist, with bands of sandstone, and the veinstone associated with the metallic minerals is quartz. Seven shafts have been sunk, one to a depth of 341ft; the drives and levels extend for about 4,000ft. in length. The water level was reached at 90ft. The quantity of stone raised equals 17,014 tons, and the smelted gold obtained is 6,079ozs., of the value of £18,642 15s. Stone taken from the stopes between the 210ft. and 275ft. level gave 1,544ozs. of smelted gold from 3,183 tons of quartz. The gold occurs in shoots apparently perpendicular to the vein.

This mine is still beng worked, and machinery consisting of a 50-inch cylinder beam-engine, and 18-inch pumps, has recently been erected. (1887.)

Extract from "A Record of the Mines of South Australia"
by Henry Brown - Government Geologist. 1887.

2 PHOTOGRAPHIC SURVEY

A photographic survey was undertaken to record viewpoints and assist in determining the visual impact of the proposed project in construction and operation on the adjacent landscape.

A desktop study reviewed the extent of potential views from residences, businesses and roadways within an approximate 2 kilometre radius of the proposed mining operations site. The proposed operations area is on a north facing hill side, naturally screened from views by existing landform from the southern and south-eastern sides of the property.

The surrounding hills and valley topography limit external views of the project. There are no land based locations identified where a view of the entire property is possible. Views are predominantly scattered and partially obscured by existing vegetation and/or topography.

Methodology
The photographic survey was undertaken on the 2nd and 3rd of March 2017. Viewpoints were taken from all immediate properties which have view of the subject site and have the potential to have a visual impact. These were then analysed during the Visual Impact Assessment. Photographs were taken in full daylight in horizontal (landscape) format. Key viewpoints were identified from public roadways, businesses and residential dwellings. The photographic viewpoints were taken to provide an image capture equivalent to perception of the range of focal lengths of the human eye.

Images were geographically tagged by Global Positioning Satellite (GPS) to provide a precise location for each viewpoint and to allow for future locating and comparison. Elevation was recorded and is expressed in metres as a height above sea level AHD (Australian Height Datum).

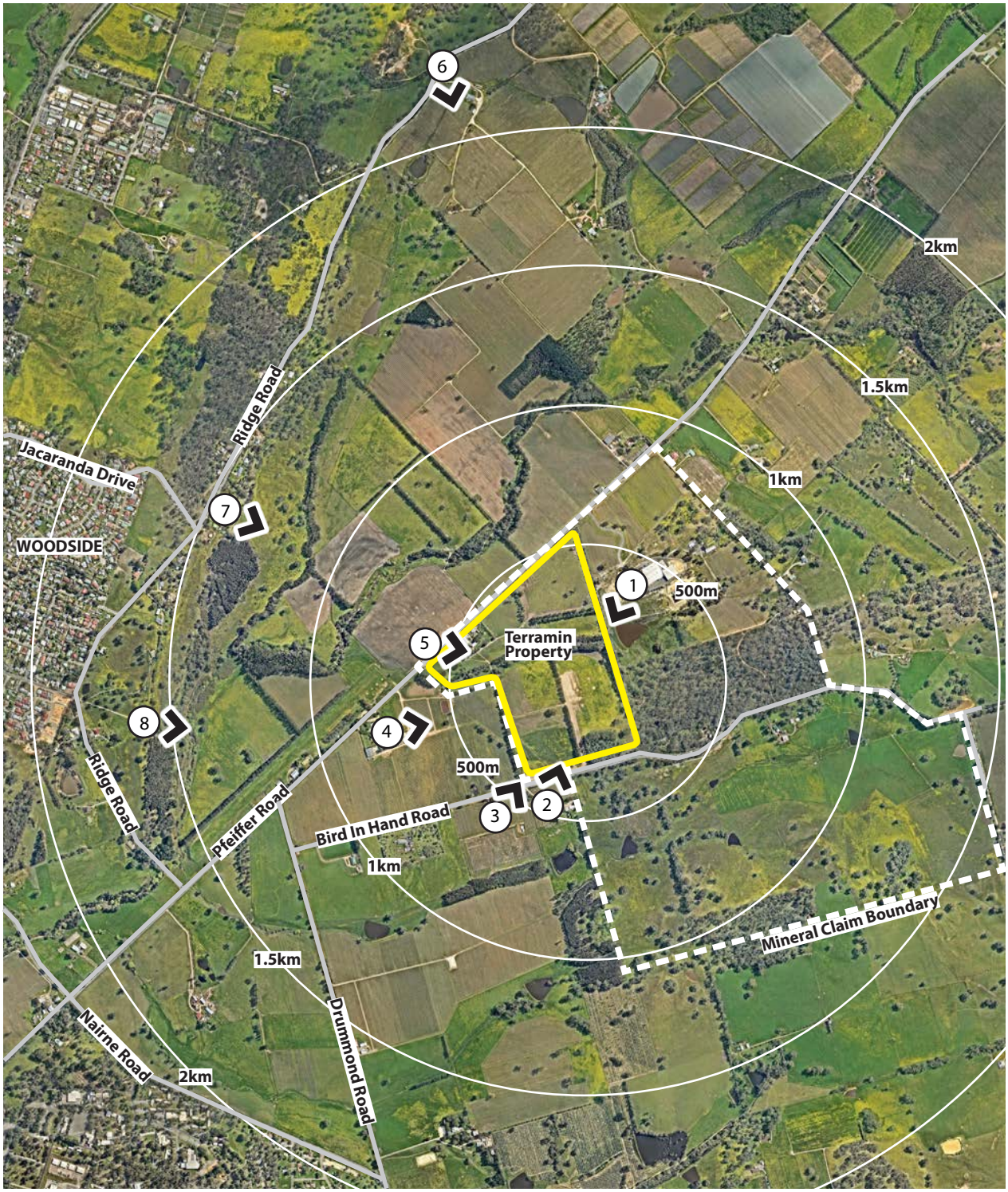


Figure 3: Photo Points

1. Petaluma Winery
2. Bird In Hand Road Residence
3. Artwine Winery
4. Bird In Hand Winery
5. Pfeiffer Road Residence
6. Ridge Road Verge
7. Ridge Road Residence
8. Ridge Road Residence

Viewpoint 1

Altitude	460m Above Sea Level
Latitude	34 degrees 57' 10.32" S
Longitude	138 degrees 54' 21.13" E

Address
Petaluma Winery
77/233 Pfeiffer Road, Woodside

Notes

- This viewpoint is from an internal Petaluma Winery access road within the winery's storage and operations area.
- The foreground is of seasonal grass cover adjacent to a storm water dam.
- An established boundary planting buffer provides a visual screen for the project operations site.
- Select views of the north eastern section of the operations site are exposed between gaps in the existing tree canopy.
- This viewpoint is not in a publicly accessible area.
- The Petaluma cellar door is at the opposite end of the Petaluma property and is screened by the existing building.

Viewpoint 2

Altitude	412m Above Sea Level
Latitude	34 degrees 57' 34.0" S
Longitude	138 degrees 54' 07.1" E

Address

Private Residence and Vineyard
86 Bird In Hand Road, Woodside

Notes

- The property at 86 Bird In Hand Road is in an elevated position and is exposed to views on the southern side of the operations site.
- An outdoor entertaining area and verandah provide viewpoints of the site with a foreground of vines and perimeter olive hedge.
- Recent earth mounding and revegetation on the project site are currently below the viewshed; however, the shrub layer and trees are expected to grow into the foreground view over time.

Viewpoint 3

Altitude	400m Above Sea Level
Latitude	34 degrees 57′ 35.63″ S
Longitude	138 degrees 53′ 59.59″ E

Address

Artwine Cellar Door
72 Bird In Hand Road, Woodside

Notes

- Artwine operate an art gallery and cellar door with north facing views towards the adjacent Bird In Hand Winery.
- Existing trees within the Artwine carpark perimeter and Bird In Hand Road verge provide partial north eastern screening towards the operations site.
- The elevated cellar door verandah raises the potential public viewing height above the grapevines within the foreground.

Viewpoint 4

Altitude	395m Above Sea Level
Latitude	34 degrees 57′ 24.98″ S
Longitude	138 degrees 53′ 46.57″ E

Address

Bird In Hand Winery
Corner Bird In Hand Road and Pfeiffer Road, Woodside

Notes

- Bird in Hand Winery operate a cellar door and temporary outdoor event space with an eastern view towards the operations site.
- The cellar door exit pathway faces the operations site with existing vines in the foreground and a row of existing boundary trees providing mid level screening.
- Currently there are exposed views of the Terramin property beneath the existing tree canopy onto the western side of the operations site. Recent under-planting of the existing tree rows with a range of native shrubs is expected to provide an additional vegetated screen upto 3 metres high underneath the existing tree canopy.

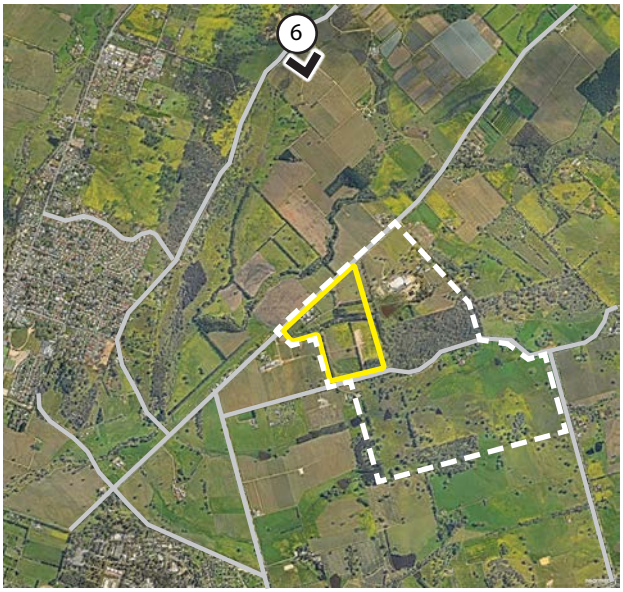
Viewpoint 5

Altitude	394m Above Sea Level
Latitude	34 degrees 57′ 15.58″ S
Longitude	138 degrees 53′ 51.41″ E

Address
Pfeiffer Road Verge

Notes

- Pfeiffer Road provides limited views of the operations site.
- Views are restricted to the foreground dairy dams and canopy trees within the creek corridor.



Viewpoint 6

Altitude	426m Above Sea Level
Latitude	34 degrees 56′ 8.55″ S
Longitude	138 degrees 53′ 53.94″ E

Address
Ridge Road Verge

Notes

- Long range views from the Ridge Road verge are limited due to established roadside vegetation and built form along the south-eastern side of the road.
- The viewing distance is over 2 kilometres and the relatively small gaps in roadside vegetation greatly reduces the effective viewing angle of views of the Terramin property.
- The southern section of Ridge Road is generally within cut and therefore views of the property are obscured by landform.
- The 80km/h speed limit on Ridge Road reduces the time duration in which the property is viewed to moving traffic.

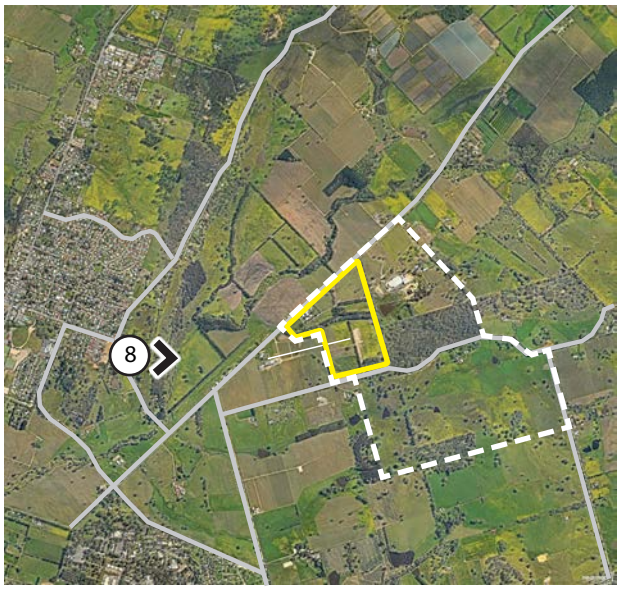
Viewpoint 7

Altitude	417m Above Sea Level
Latitude	34 degrees 56′ 59.66″ S
Longitude	138 degrees 53′ 22.46″ E

Address
Private Residence
82 Ridge Road

Notes

- Views of the operations site are possible from select locations within the backyard of 82 Ridge Road.
- Existing vegetation at the rear of the property screens views of the operations areas from an outdoor entertaining area and swimming pool.



Viewpoint 8

Altitude	402m Above Sea Level
Latitude	34 degrees 57' 22.69" S
Longitude	138 degrees 53' 11.24" E

Address
Private Residence
5A Ridge Road

Notes

- Views of the proposed Silo are possible from select locations within the backyard of 5A Ridge Road.
- Existing vegetation in the foreground and distance obscures the majority of the site.

VIEWSHED

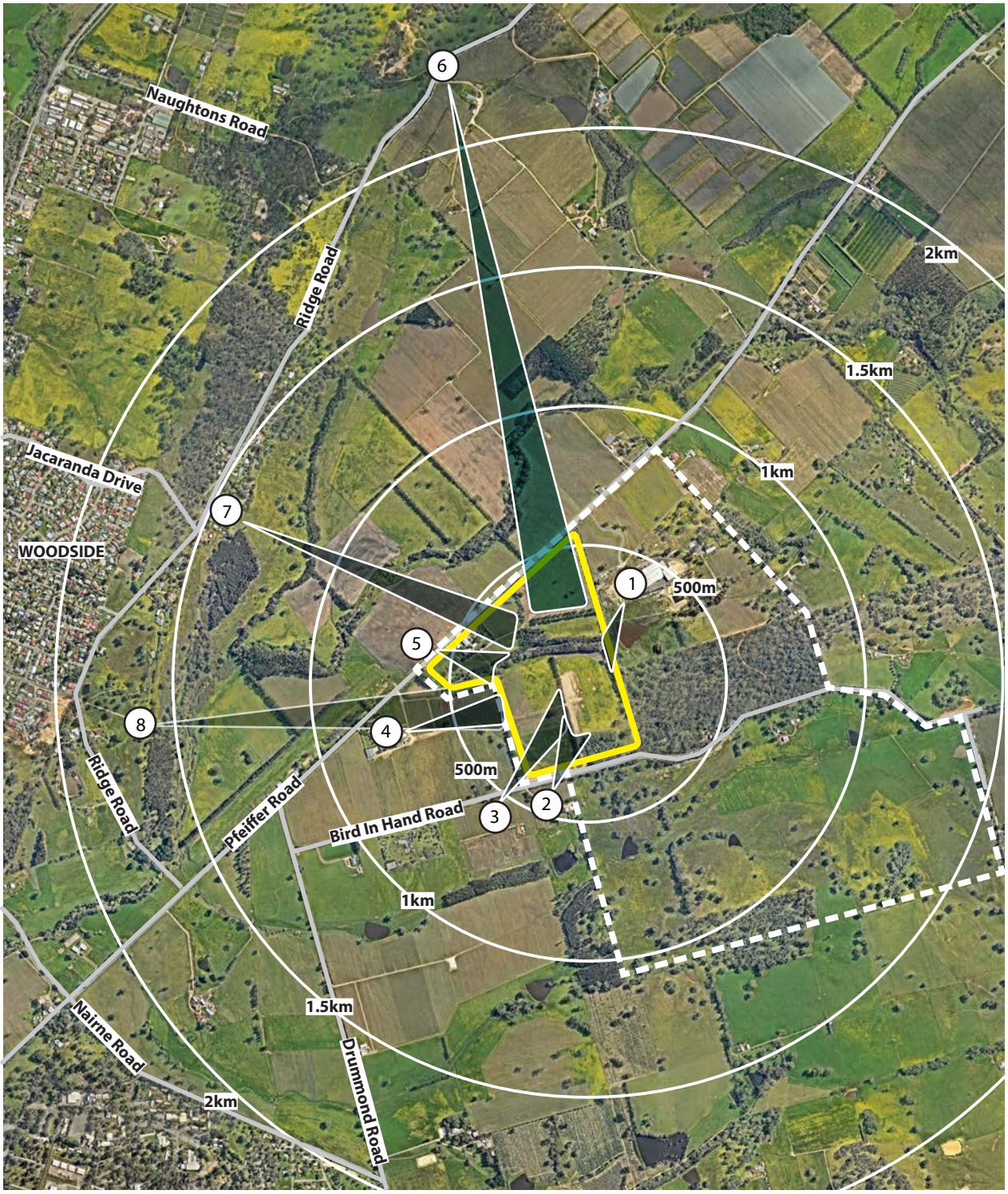


Figure 4: Viewshed + Distance From Terramin Property

1. Petaluma Winery
2. Bird In Hand Road Residence
3. Artwine Winery
4. Bird In Hand Winery
5. Pfeiffer Road Residence
6. Ridge Road Verge
7. Ridge Road Residence
8. 5A Ridge Road Residence

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3 LANDSCAPE CHARACTER

The landscape character of the surrounding area is rural with viticultural and agricultural land use within the undulating topography of the Onkaparinga Valley. Sparsely clustered trees within open paddocks and boundary tree rows provide definition of allotments. A predominately native tree cover follows the alignment of existing roads, creek lines and property boundary windbreaks throughout the region.

A large stand of native vegetation on the southern side of the property provides a visual and ecological link to the adjacent native vegetation zone protected under a heritage agreement.

The undulating topography of the valley generally limits long distant views unless viewed from higher elevations or lengthwise along the Onkaparinga Valley floor.

Ridge Road, located on the opposite (northern) side of the Onkaparinga Valley to the property, provides intermittent views towards the operations site.

Settlement Patterns + Built Form

Undulating Hills

Open paddocks with scattered tree clusters

Vineyards

Winery Infrastructure

Boundary planting and creekline vegetation

Open paddocks with neighbouring vineyards

Open paddocks with farm dams

Airfield runway land form

Notable Features

Built form and natural features within the surrounding landscape contribute to the visual amenity of the landscape of the Onkaparinga Valley. Built form reference points include the Petaluma Winery and winery roof, Bird In Hand Silos, mobile phone towers on Ridge Road and the surrounding network of overhead power lines.
Natural features include rows and stands of vegetation along creek corridors and roads within the rolling landform of agriculture and vineyards within the Onkaparinga Valley.

Settlement of the Woodside area results in a semi-urban setting within the township boundaries fringed with large rural living allotments. Beyond the residential fringe, larger land holdings are based on geometric land parcels intersected with public roadways and watercourses.

Built form is a mix of low density residential, agricultural and viticultural supported by large sheds, storage facilities, car parking and publicly accessible winery cellar doors.

Pockets of native vegetation provide high value ecological and biodiversity benefits and an indication of the pre-European natural environment.

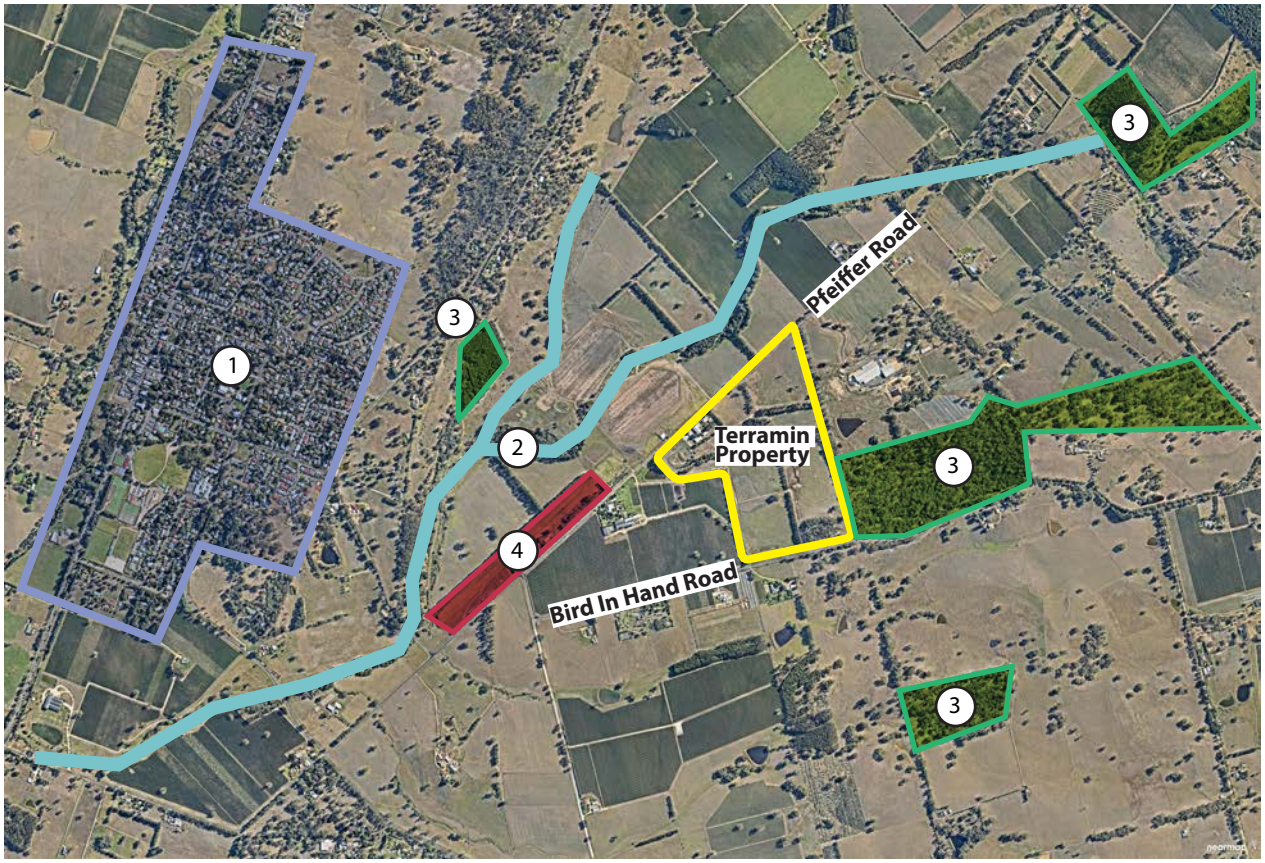


Figure 5: Landscape Character

① Woodside Township
② Inverbrackie Creek Corridor
③ Native Woodland Vegetation
④ Airfield

4 VISUAL IMPACT CRITERIA

The following external factors affect the extent to which the mine construction and operations impact visually on the landscape:

1. Landform and proportion
2. Colours and materials
3. Vegetation type and density
4. Built structures

Criteria 1 - Landform and proportion

Landform affects both close-up and distant views. From a distance, the existing landform provides a patchwork of roughly rectangular sections with fencing and vegetation defining property boundaries. The meandering Inverbrackie Creek alignment forms the base of the Onkaparinga Valley floor with adjacent farmland and vineyards on the hillslopes.

Criteria 2 - Colours and materials

The colours and colour contrast of materials within the landscape have a significant impact on visibility. Colour varies seasonally between summer and winter and is influenced by the evergreen nature of native vegetation and the cycle of cropping, deciduous vines and rainfall.

Criteria 3 - Vegetation type and density

The presence or absence of tree cover influences the character and perceived visual quality of the landscape. The perimeter of the property is relatively well vegetated with established canopy trees within a wide landscape buffer. Road verge planting within the local district also assists in breaking or screening views of the property from adjacent road corridors.

Criteria 4 - Built structures

Built structures effect landscape character as both objects within the landscape and as visual references for scale and proportion. Notable existing structures within the region include the Petaluma Winery facility and the Bird in Hand winery silos.

A mix of venue signage and public art contribute to placemaking and provide landmarks for wayfinding.

Landform

Terramin's property includes two spurs separated by a vegetated creekline. The northern spur screens the proposed operations area from Pfeiffer Road and the southern spur and vegetation cluster screens the operations area.

Bird In Hand Road is within cut at the south-eastern side of the property reducing the extent of views from westbound vehicles.

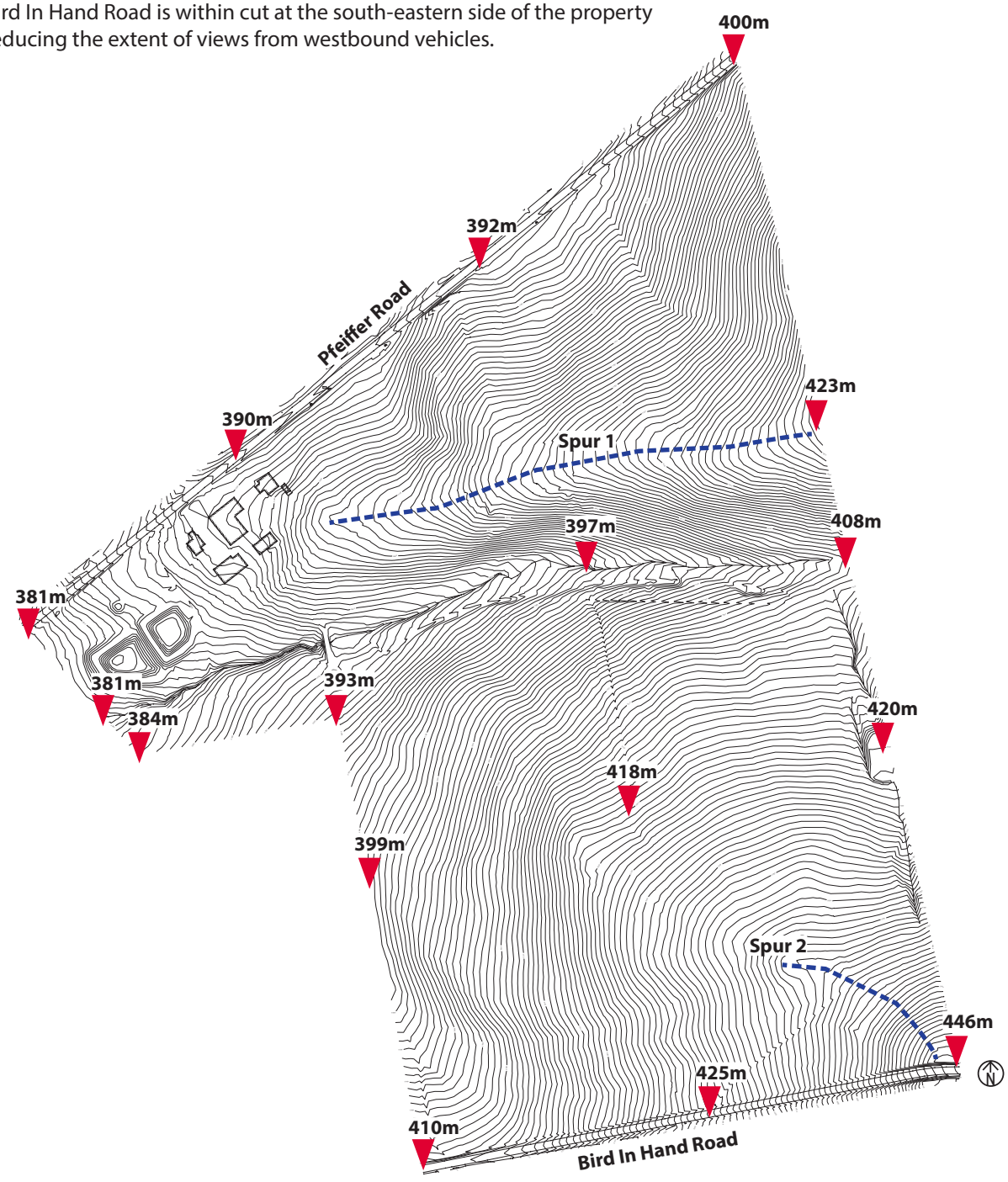
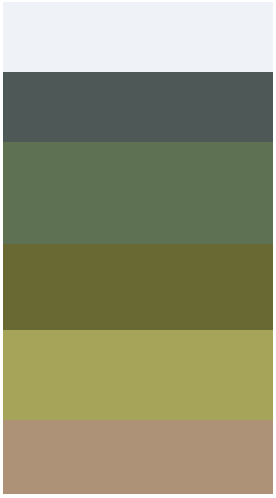


Figure 6: Site Contours

Colours

Colours of the local region are generally muted and earthy tones of green and brown without any bright or highly contrasting features. The grey Petaluma winery roofline contrasts with the surrounding green backdrop and is a distinct horizontal visual line amongst the rolling valley hills.

Rolling Hills and Valley



Vineyard Colours

Colour Palette

Building materials

Materials

Materials of the surrounding region are generally natural without applied finishes. The use of stone and brick for buildings and galvanised steel for sheds and facilities is typical of rural development.

Red Brick

Saltbush

Colorbond

Bluestone

Weathered steel

Corrugated Iron

Seasonal cropping

Vineyards

Organic mulch/leaf litter

Ephemeral water

Red Gum

Galvanised steel

Vegetation

Existing mature vegetation screens views of the operations site from multiple directions and elevations. Tall canopy trees include Spotted Gum (*Corymbia maculata*), River Red Gum (*Eucalyptus camaldulensis*) and S.A. Blue Gum (*Eucalyptus leucoxylon subsp. leucoxylon*). Retention of trees as natural assets assists in screening the property during the establishment phase and throughout the operational period of the mine.

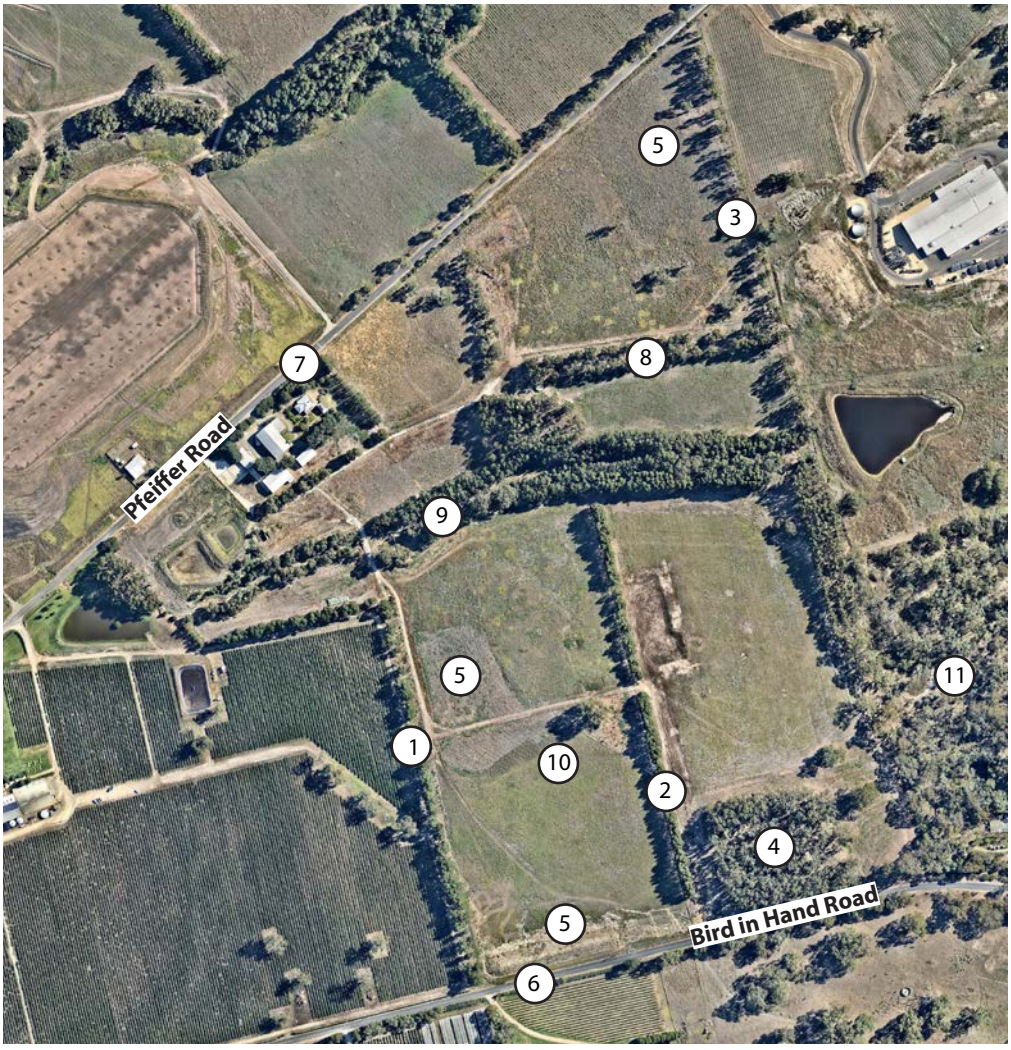


Figure 7: Notable Vegetation

1. Perimeter eucalypt tree rows
2. Mid-block eucalypt tree rows
3. Perimeter eucalypt tree rows
4. Clustered eucalypt trees
5. Revegetation
6. Bird In Hand Road verge hedge
7. Roadside vegetation
8. Ridgeline trees
9. Creekline trees
10. Isolated Regulated trees
11 Heritage Agreement Area

Vegetation

Existing vegetation at the perimeter and within the property consists of mature eucalypt row plantings at regular spacings with a joined canopy from around 3 metres in height. A cluster of native eucalypts south of the proposed operations area is proposed for retention, providing a vegetated link to the adjacent heritage agreement land.

Vegetation within the existing creekline is proposed to be retained, strengthening biodiversity and habitat potential.

Planting of local native species in winter 2016 is now at approximately 1 metre in height and is expected to provide further effective screening of the property within 3-5 years.

Revegetation understorey establishment (2016)

Perimeter Eucalypt rows

Native vegetation stand

Revegetation mound (2016)

Native vegetation (From Bird in Hand Road verge)

Regulated Eucalyptus camaldulensis

Existing Natural and Built Structures

Notable visual elements existing within the surrounding areas contrast size, materials, colour and proportions with the adjacent landscape. The Bird In Hand Winery silos are the most recognisable and distinct visual landmark in the vicinity due to their height and colour.

Bird In Hand Winery silos

Orchard/vines bird netting

Bird In Hand Winery signage

Mobile phones towers (Ridge Road)

Artwine Winery artwork

Native vegetation stands

VISUAL IMPACT ASSESSMENT

The table below summarises the visual assessment included in this report, considering visibility, significance and likely visual impact from each viewpoint.

Viewpoint	Location	Visibility (H,M,L)	Significance (H,M,L)	Visual Impact (H,M,L)
1	Petaluma Winery	Low Limited views through existing trees.	Low Non-public area of winery.	Low
2	Bird In Hand Road Residence	High Elevated views of dam and landscape bunds.	High Elevated outdoor entertaining area and driveway.	High
3	Artwine Winery	Medium Elevated and restricted views of dam and landscape bunds.	High Public cellar door and carpark.	Medium
4	Bird In Hand Winery	Medium View beneath existing perimeter trees.	Medium Public pathway from cellar door to carpark faces the operations area.	Medium
5	Pfeiffer Road Residence	Low Living areas face the dairy and are setdown lower than Pfeiffer Road.	Low Limited views through creekline vegetation towards ROM silo.	Low
6	Ridge Road Verge	Low Limited views through roadside vegetation of the operations site.	Low Distance and elevation reduces views of the operations site.	Low
7	Ridge Road Residence	Low Outdoor entertaining area and swimming pool are screened by existing vegetation at rear of property.	Low Existing screening provided by vegetation.	Low

Visual Impact Summary

Existing vegetation and the orientation of adjacent dwellings and businesses facing away from Terramin's property result in a low visual impact catchment. Seven viewing locations were identified with a visual impact from the proposed project, of these only one is considered to have a high visual impact due to its elevation above the operations site and exposure to the greatest amount of visual change within the landscape.

The generally low visual catchment is attributed to the following elements:

- Visual screening provided by the density of existing boundary planting and internal vegetation.
- Existing landform restricting 'whole of site' views from the surrounding road network.
- The central siting and orientation of proposed infrastructure within a lowered ground level working platform.
- The sparse number of neighboring properties including residences, and agricultural/viticultural businesses.
- The distance of potential external views from the property.

Recommendations for visual amenity improvements are based on strengthening existing vegetation screening and adopting landscape forms and elements similar to those within the surrounding region.

Initial mitigation measures have commenced and are proposed to continue during the operational phase of the mine in accordance with environmental conditions.

It is recommended the strategic Visual Amenity Plan is reviewed in accordance with changing conditions and operational requirements during the mine life and in response to emerging community and environmental issues.

VISUAL IMPACT OBJECTIVES

The following landscape objectives assist in determining appropriate actions that minimise the visual impact of mining reestablishment and ongoing operations.

Objective 1 - Landform
Integrate new landforms with the natural ridgelines and contouring of the adjacent hills. Screen temporary and dynamic stockpiles with a perimeter landscaped bund.

Recommendations:
- Landforms resulting from mining operations including the landscape bunds and Integrated Mullock Landform should reflect the softer, undulating profiles of the adjacent Onkaparinga Valley.
- Planted earth bund heights should follow the fall of the adjacent natural contours and grades.
- Ridge lines should vary in height to avoid unnatural straight lines, steep slopes and flat horizontal crests.
- Batters should be planted to reduce the contrast of disturbed surfaces.
- The integrated mullock landform should be shaped to continue the adjacent natural spur.
- The integrated mullock landform should be fully planted at completion of mine operations with a tree setout to match the adjacent native eucalypt cluster.

Objective 2 - Colour and materials
Soften contrasting and reflective surfaces to blend with the natural site colour palette.

Recommendations:
- Contrasting colours of new landforms should be visually softened with planting or surface colour spray to integrate with the surrounding landscape and adjacent vegetated hill crests.
- Artificially applied colours should be utilised to reduce the visual impact of contrasting landscape surfaces where vegetation is not able to be quickly established or maintained.
- Materials for building cladding should be selected for non-reflective surfaces and which do not detract from the amenity and character of the area.
- Material colours should blend in with the natural surrounding environment.
- Preferred colours should generally be of natural tones of browns, greens and greys.

Objective 3 - Vegetation
Integrate new planting to expand existing native tree cover within the site, perimeter and adjacent water courses.

Recommendations:
- Strategic planting with upper, middle and lower story vegetation improves visual amenity and increase the habitat and biodiversity value of the property.
- Trees should be planted in same species clusters to improve integration with the surrounding existing tree cover and provide links to the adjacent Heritage Agreement area.
- Early works planting of areas outside the operations area provide new screening potential and allow establishment growth ahead of the construction phase.
- Ongoing maintenance and weed control maintains a high quality landscape.

Objective 4 - Built structures
Screen visually prominent structures with landform, vegetation or built structures.

Recommendations:

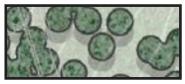
- Prominent built structures should be screened from view by a landscape bund and associated surface vegetation.
- Tall structures unable to screened like the ROM silo and loading structure should be sited to minimise views from surrounding areas.
- Fixed or mobile screens may be utilised within the operations area to reduce the impact of lightspill due to night time vehicle movements.

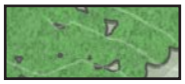
5 SITE MASTER PLAN

The Site Master Plan is derived from the Site Layout Plan produced by Tonkin Engineering.

LEGEND


Existing Vegetation


Existing Revegetation


Proposed Planting


Grass Meadow


Existing Creek

1. Vehicle Entry and Roadway
2. Landscape Bund
3. Heritage Chimney
4. Creek Vegetation
5. Office + Workshop
6. Mine Portal
7. Concrete Batching Plant
8. Vehicle Wash Bay
9. Fuel Store
10. Integrated Mullock Landform
11. Ventilation Shaft #1
12. Landscape Bund
13. Existing Eucalypt Woodland
14. Emergency Exit Shaft
15. Maintenance Track
16. Landscape Bund
17. Mine Water Dam
18. Pump Shed
19. Ventilation Shaft #2
20. Water Treatment Plant
21. Storm Water Basin
22. Ore Storage Silo
23. Vehicle Wheel Wash
24. Farm Dams (Unused)
25. Former Dairy Building
26. Existing Farmhouse
27. Staff + Public Carpark

Entry

A new vehicle entry point provides access from Pfeiffer Road to the property. Public and staff parking is proposed during business hours with controlled pedestrian turn styles for staff access to the operations area. A proposed shuttle bus moves staff to and from the operations area.

Automatic security gates provide controlled access to the mine entrance and operations area for transport trucks.

Legend

- Pfeiffer Road Entry
- Staff Entry Control
- Mine Entry Control
- Property Boundary

Pfeiffer Road entry

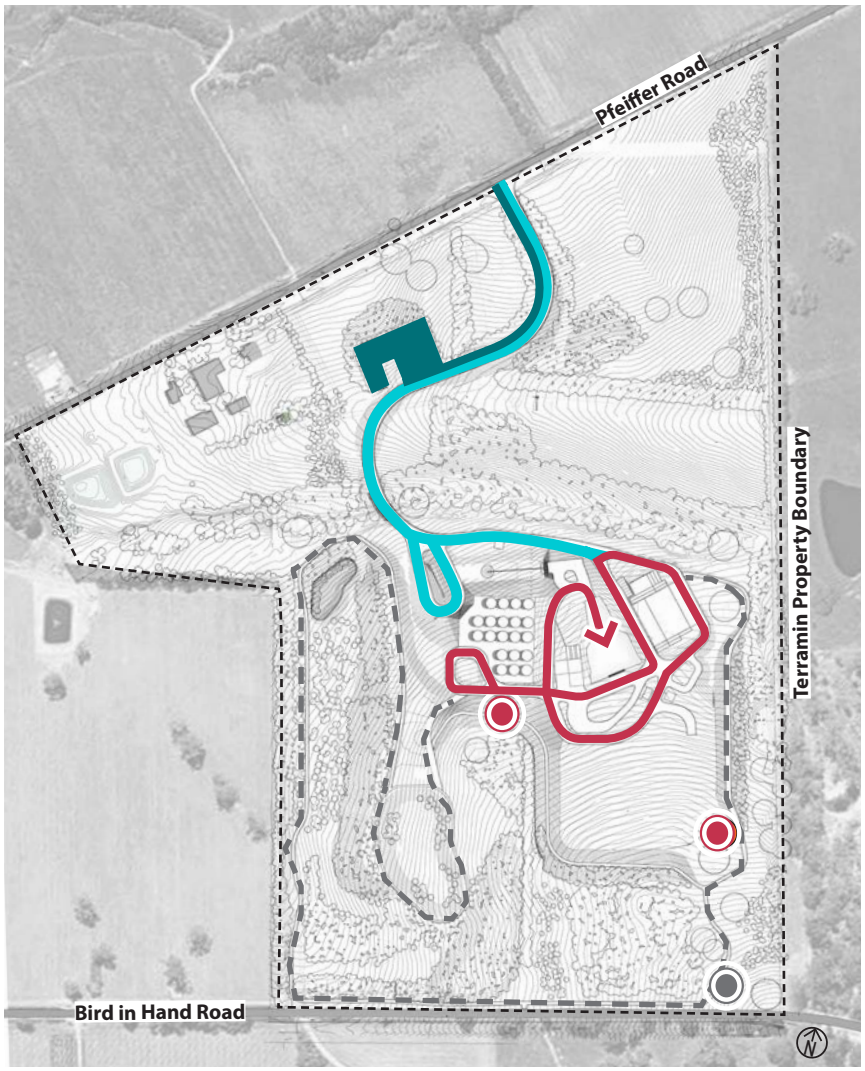
Pedestrian turn style

Secure vehicle gates

Internal Roads + Mine Portal

A new internal sealed road system provide access to the mining and operations area supported by a maintenance and fire access track to the property boundary. The carpark design allows capacity for staff and visitor parking including a coach bay and turnaround.

The mine entry is a concrete archway within a box cut retaining wall. Ventilation shafts and a ground level emergency exit are surrounded by a chain link security fence.



Legend

- Internal Mining Vehicles (Sealed/Gravel)
- Ore Transport Vehicles (Sealed Bitumen)
- Maintenance Vehicles (Compacted Rubble)
- Staff/Public Vehicles (Sealed Bitumen)
- Mine Portal Entry
- Ventilation Shaft
- Emergency Exit
- Property Boundary

*Elements are shown diagramatically and not to scale.

Transport truck

Mine portal

Built Structures

Built structures change the existing landform through the terracing of working and parking areas, excavation for the water storage dam and the creation of perimeter earth bunds. Views of the operations area are restricted due to the existing vegetation and natural topography of the spurs.

The mine design includes a series of earth bunds to screen ground level infrastructure and vehicle movements. The earth bunds are topsoiled and planted on the outer batter faces to provide a visual softening and to integrate within the surrounding natural landscape.

Figure 8: Dominant Forms

1. Administration Office and Workshop
2. Integrated Mullock Landform
3. Run of Mine Silo (ROM)
4. Landscape Bunds
5. Carpark batter
6. Water Treatment Plant
7. Mine Water Dam
8. Vehicle Bridge
9. Concrete Batching Plant
10. Topsoil mound

On-site structures to support the mining operations include:

1. Administration Office and Workshop
An office building provides administration and coordination of mine logistics. Staff facilities include change rooms, first aid and toilets. The workshop services machinery and vehicles and is sized according to roof clearance and access requirements of the mine.

2. Integrated Mullock Landform (IML)
Non-gold bearing material from the mine is stored on the surface before being returned as fill within the mine voids. The IML contrasts with the surrounding surfaces and provides a dynamic element through the operations phase of the mine. Once placed within the IML the undisturbed material may be in-situ for five years. The movement of material and the potential for light spill and dust require controls to reduce the visual impact of daily operations.

3. Run of Mine Silo (ROM)
The run of mine silo is used to store 4-5 days supply of ore ready for transport to the Angas processing facility. The height of the silo is anticipated to be around 19 metres above existing ground level depending on width and holding capacity requirements. The form and material selections are important in reducing the visual impact of the silo.

4. Landscape Bunds
Landscape bunds change the existing landform and internal and external viewsheds of the property. The form avoids unnaturally straight or horizontal ridgelines contrasting with the surrounding landforms.

Batter slopes require revegetation to soften the surface appearance and seasonal weed control during maintenance may be required until native groundcover species are established.

5. Carpark Batter
Car park batters are likely to be visible from Pfeiffer Road through gaps in the existing farmhouse perimeter planting. Batters require landscape remediation and provide the opportunity to establish canopy trees to provide shade to the parking areas.

6. Water Treatment Plant and Mine Water Dam
Excess mine water and storm water from the operations area is treated within an on-site water treatment plant consisting of interconnected water tanks. The tanks are likely to be plastic and may be set down on split level terraces to reduce earthworks and the visibility of the tanks from the western side of the property.

7. Mine Water Dam
The Mine Water Dam provides storage for treated water to be reused within the mine operations and for irrigation.

8. Vehicle Bridge
An open culvert bridge spans the existing creekline to provide vehicle access to the operations area and maintain the alignment of existing water flows.

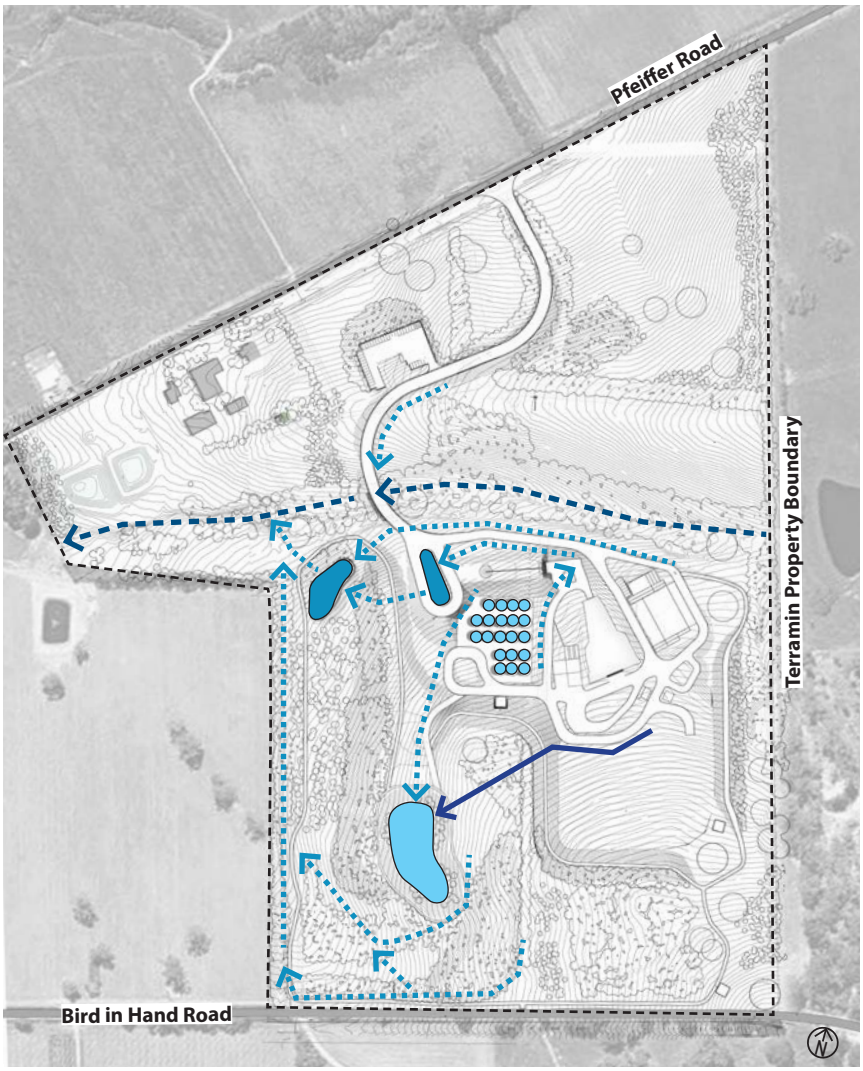
9. Concrete Batching Plant
The concrete batching plant provides shotcrete and backfill to be used within the mine tunnel.

10. Topsoil Mound
Topsoil bunds are used for storage of topsoil to be used for rehabilitation at mine closure.

Water Management

The design for water management includes two separate systems, one for the control of runoff water from the operations and mine areas, and one for water from the natural parts of the property.

A system of overland swales directs site water to detention basins. A water treatment plant consisting of a series of interconnected water tanks is proposed to improve water quality.



Legend

- Existing Creekline
- Overland Flow
- Pit and Pipe
- Treatment Tanks
- Mine Water Dam
- Storm Water Dam
- Property Boundary

Water dam

Water treatment tanks

Planted Bunds + Integrated Mullock Landform

Planted bunds screens the operations area from surrounding views and provide a landscape buffer to the property perimeter. A topsoil bund provides storage for reuse during mine rehabilitation and closure.

The Integrated Mullock Landform is a dynamic storage of surplus rock before being reused to infill the mine voids. The height and extent of fill material changes over time with the final landform intended to be revegetated following completion of mining operations.

Legend

- Planted Bund
- Topsoil Bund
- Integrated Mullock Landform
- Property Boundary

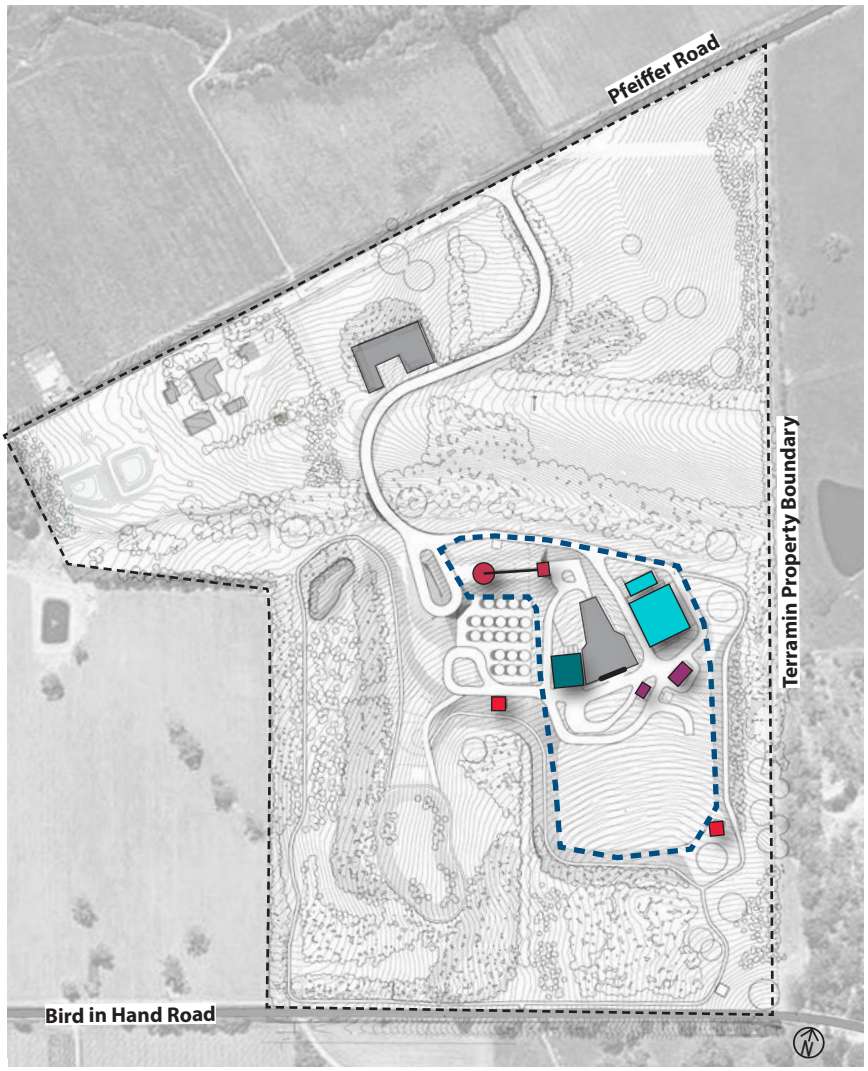
Planted bund

Integrated Mullock Landform

Operations Area

The operations area is within cut to provide a relatively flat working platform for operational activity. Operations and maintenance vehicles access the workshop, fuel store and batching plant with transport trucks loading at the 'Run Of Mine' Silo.

The administration office includes change room facilities and amenities for staff with a shuttle bus bay to transport workers to and from the main car park.



Legend

- Administration office and workshop
- Concrete batching plant
- Fuel store and wash bay
- Storage silo
- Mine portal within box cut
- Car park
- Ventilation Shafts
- Property Boundary
- Operations Area

Administration office

Workshop

Concrete batching plant

Vegetation

Retained existing perimeter vegetation provides screening of activities and maintains biodiversity. Recent revegetation planting transform former paddocks to open native woodland and provide trees and shrubs to the landscape bunds.

Creekline vegetation is retained with a new heavy vehicle crossing located to avoid established trees.

Legend

- Existing vegetation
- Proposed revegetation
- Existing revegetation
- Property Boundary

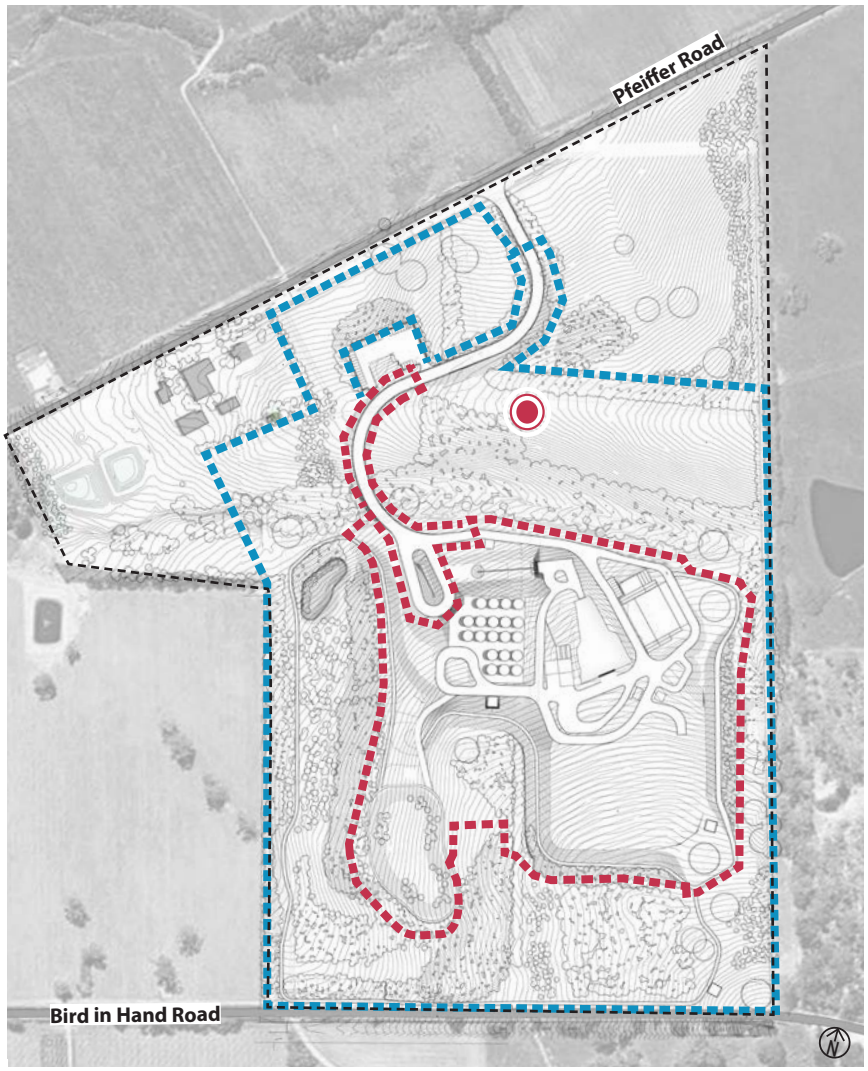
Perimeter trees

Internal trees

Fencing + Heritage

Fencing provides definition of the property boundary and security for the control of access to the mining operations area. Automated gates allow transport truck access to the ROM silo.

The State Heritage listed chimney is retained with a 25 metre protection buffer.



Legend

- Security Fence - 3 metre Chain mesh
- Boundary Fence - Post and Wire (Rural)
- SA State Heritage Item Chimney and Flue

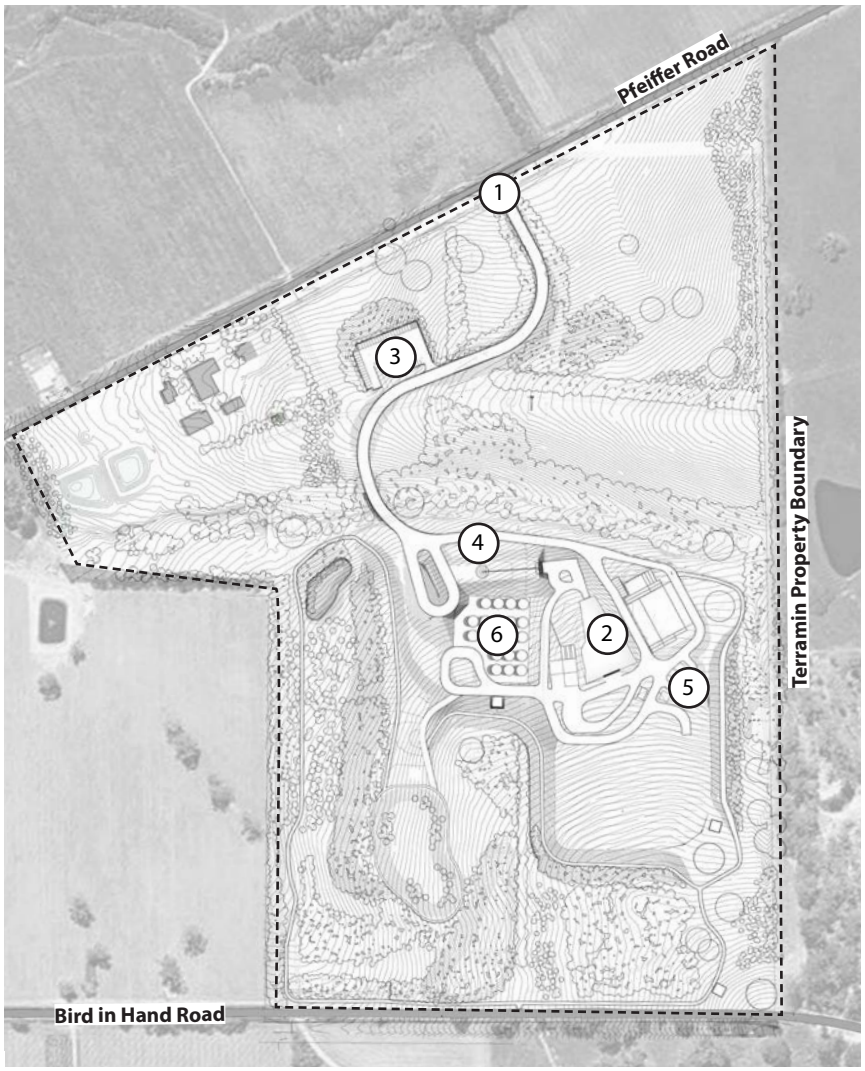
Rural perimeter fencing

Security fencing

Heritage Chimney

Lighting

Lighting of the entry road, car park, operations area and water treatment plant are expected to be permanent fixtures. Temporary lighting for ventilation shafts and the integrated mullock landform is expected to be required when activity is occurring. The State Heritage listed chimney is retained with a 25 metre protection buffer.



Legend

Potential Permanent Light Sources

1. Entry and Roadway
2. Operations Area
3. Car park
4. ROM Silo
5. Fuel Store
6. Water Treatment Plant

Potential Temporary Light Sources

- Site vehicles
- Mobile light tower
- Emergency exit
- Ventilation shaft

Operations area lighting

6 LANDSCAPE TECHNIQUES

The following landscape techniques are proposed to mitigate the visual impacts arising from mine operations and assist with the management of the mine's development:

1. Surface spray
2. Direct seeding and tubestock revegetation
3. Strategic Planting
4. Landscape Maintenance

Surface spray

Technique 1. Surface Spray

- A bio-degradable green surface spray is proposed for temporary or short term surfaces that are subject to ongoing changes or activity as part of mine operations.
- The surface spray reduces the potential glare and contrast with adjacent surface colours.
- The surface spray can remain visible for up to 12 months depending on site and environmental conditions.
- The spray technique enables application in difficult to reach areas including top of batters and areas too steep to be safely planted and maintained.
- The spray mix may also incorporate dust suppression additives, soil binders and hydroseeding mixes.
- Successfull hydroseeding reduces the need to reapply the spray establishing grass and/or groundcovers.

Green batters

Tubestock

Technique 2. Direct seeding & tubestock revegetation

- Direct seeding is proposed to establish vegetation on relatively flat areas by sowing seed directly into prepared site soils. Direct seeded plants often have healthier, stronger and deeper root systems as they develop in the site soils instead of within a container or pot.
- Direct seeding often produces random plant locations and is suited to a mix of native revegetation species including shrubs, grasses and ground covers.
- Tubestock planting is proposed on newly shaped and stabilised landforms within a layer of site won topsoil. Ripping of subgrades improves drainage and allow ease of manual planting.
- Existing planted areas may be enhanced with targeted spot and row planting to develop an understorey canopy to screen ground level mine activity.
- Planting is recommended to be undertaken in same species clusters to integrate with the surrounding open woodland landscape and avoid a forestry planted appearance.
- Planting is proposed for additional screening around the property perimeter, mine operations buildings, car parking and office facilities.
- Select tubestock species are recommended to be protected by the use of tree guards to minimise damage from rabbits and weed control spray drift.
- Planting is proposed to occur as soon as possible following the finalisation of landforms and at the right time of year to make use of seasonal rain and soil moisture.
- Use of temporary irrigation (utilising reclaimed site water) is proposed to enable planting and establishment during spring and summer.
- Local provenance plant stocks are sourced from a native plant nursury to ensure plants are conditioned for the soils and environment of the property.

Revegetation bund

Screen planting

Technique 3. Strategic Planting
Planting is proposed in select locations to screen infrastructure from adjacent properties and screen dynamic elements including vehicle movements and the integrated land form.

Terramin Boundary Perimeter

- Strategic planting is proposed to provide natural screening of internal security fencing and site facilities. New planting reinforces the existing property vegetation and provides upper, lower and middle storey vegetation to screen views.
- A landscape buffer is offset from the site boundary to preserve vegetation within a defined corridor for ease of maintenance and land management.
- Where possible, all new perimeter fencing is internally off-set from the property boundary to allow for the consistent creation of a planted screening zone.

Screening Buildings & Operations Area

- New tree and shrub planting is proposed to screen views of buildings and facilities. Species are proposed to be selected for growth rate, crown density and robustness within the local environment.
- Advanced plant stocks may be used in some areas to provide an immediate visual effect.

Car Park& Administration Office

- Advanced canopy trees (45 Litre min.) are proposed for car parking areas and the administration office surrounds to soften the extent of surrounding hardstand and to provide shade amenity for users.

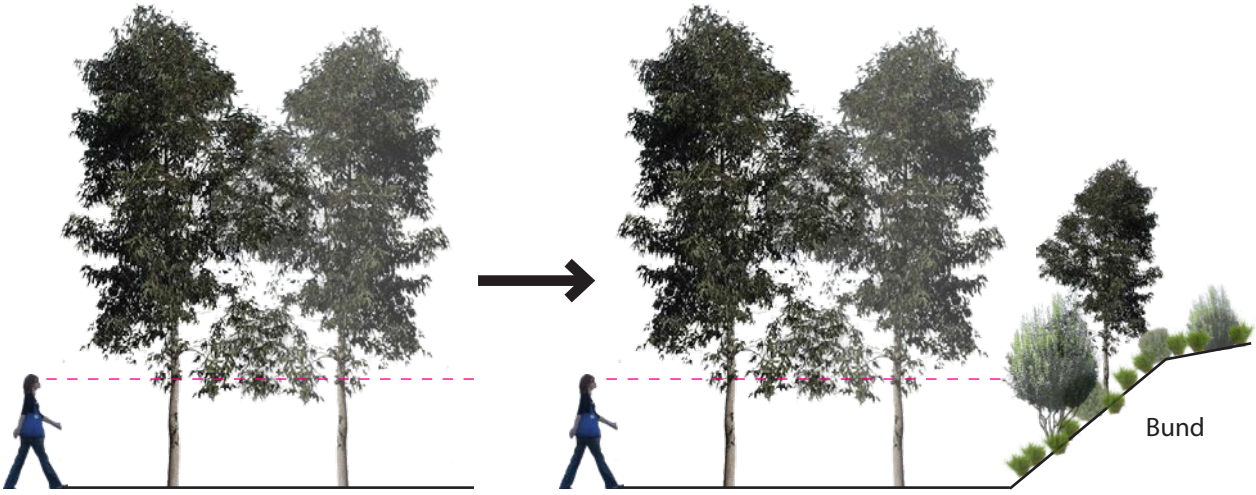
Earth Bunds

- The proposed earth bunds retain site-won material and provide opportunities to improve biodiversity through the establishment of new planting associations. Bund alignments direct water towards collection dams for reuse.

Existing row of native trees

Proposed underplanting of existing tree rows with native shrubs and ground covers screen low level views.

Figure 9: Underplanting Existing Trees



Existing row of native trees

Recent revegetation of earth bunds provide trees and shrubs to screen low and medium level views.

Figure 10: Earth Bunds

Technique 4. Landscape Maintenance

- Planted areas are managed through regular landscape maintenance responding to site and environmental conditions and ongoing monitoring of planting success and weed management.
- A maintenance track allows for regular monitoring of plant health and condition and provides fire and emergency access to the property perimeter.
- The regular landscape maintenance ensures that landscape qualities are sustained over time and the Terramin property contributes positively to the visual amenity, biodiversity and natural assets of the wider region.

PLANT SPECIES LIST

A native plant palette is proposed to improve biodiversity and ensure the highest chance of success within the local environmental conditions. A mix of trees, shrubs, ground covers and grasses are proposed to assist in screening the operations area and provide a vegetation link to the adjacent heritage agreement area.

New aquatic species planting is proposed for the mine water dam and storm water swales to integrate new water bodies within the surrounding landscape. Review of the initial planting success and species range of tubestock planted in 2016 is recommended to inform future plantings on landscape bunds.

Native Trees and Shrubs
Acacia acinacea
Acacia melanoxylon
Acacia myrtifolia
Acacia paradoxa
Acacia pycnantha
Acacia retinoides
Acacia verticillata
Acacia verniciflua
Allocasuarina verticillata
Atriplex semibaccata
Banksia ornata
Banksia marginata
Bursaria spinosa
Callistemon sp.
Callitris preissii
Calytrix tetragona
Daviesia leptophylla
Dodonea viscosa
Eremophila sp.
Eucalyptus camaldulensis
Eucalyptus cosmophylla
Eucalyptus fasciculosa
Eucalyptus leucoxylon subsp. leucoxylon
Eucalyptus obliqua
Eucalyptus odorata
Eucalyptus viminalis
Hakea carinata
Hakea rostrata
Leptospermum continentale
Leptospermum myrsinoides
Melaleuca lanceolata
Olearia ramulosa
Pittosporum phillyraoides
Pultenaea daphnoides
Pultenaea largiflorens
Santalum acuminatum
Xanthorrhoea semiplana

Groundcovers
Atriplex suberecta
Dianella revoluta
Einadia nutans
Enchyleana tomentosa
Hardenbergia violacea
Kennedia prostrata
Myoporum parvifolium

Native Grasses
Austrodanthonia ssp.
Austrostipa ssp.
Bothriochloa macra
Chloris truncata
Cymbopogon ambiguous
Danthonia sp
Gahnia sp
Lomandra sp
Themeda triandra

Aquatics
Baumea juncea
Carex appressa
Carex tereticaulis
Cyperus gymnocaulos
Eleocharis acuta
Ficinia nodosa
Gahnia filum
Juncus kraussii
Juncus subsecundus
Microlaena stipoides var. stipoides
Schoenoplectus validus
Triglochin striatum

Non-local Native Species
Corymbia maculata

Farmhouse Surrounds
Cuppressus sp.
Pinus halepensis

7 VISUAL OUTCOMES

The following renders provide an impression of the proposed development when viewed from designated viewpoints. The renders provide an indication of the visible change within the site from the existing condition, peak operations period and mine closure.

The majority of the site is screened from view by the existing landform and perimeter tree buffers. A landscaped bund screens the operations area from adjacent properties.

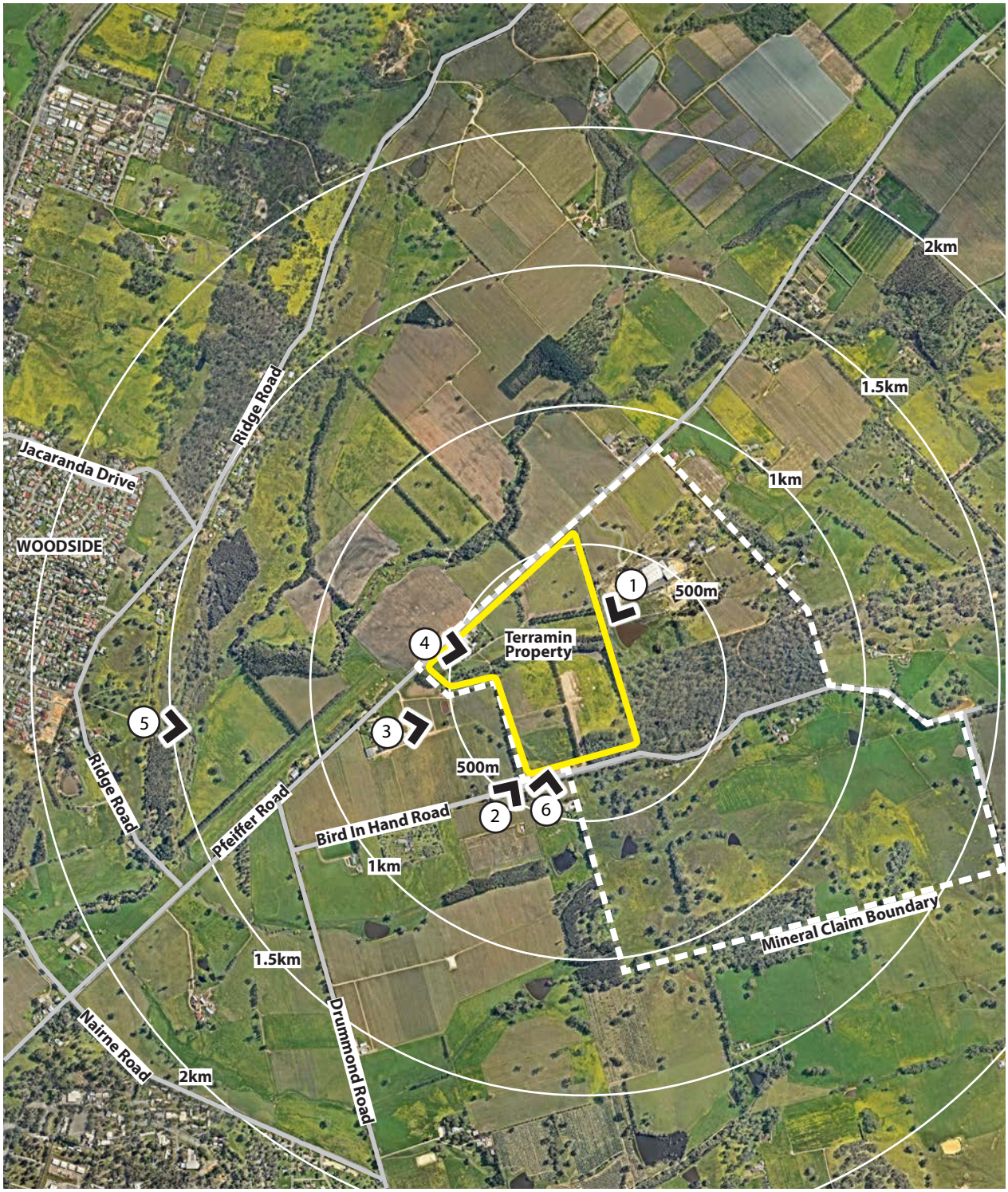


Figure 3: Photo Points

1. Petaluma Winery
2. Artwine Winery
3. Bird In Hand Winery
4. Pfeiffer Road
5. Ridge Road Residence
6. 86 Bird in Hand Road (residence)

Petaluma Winery

Existing View (2017)

— Site views through gap in existing tree canopy towards an open paddock with seasonal grass cover.

End of Construction (Worst Case)

— Construction hoarding / fencing in place.
— No planting.
— Silo in view.

Operations View

— Run of Mine silo visible above tree canopy.
— Silo colour to be confirmed and shown for illustration purposes only. Final colour subject to community input.
— Loading zone and foreground are partially visible through the tree canopy.
— Initial plantings installed

1 Year Vegetation Growth

— Native shrubs, groundcovers established.

Closure View

— Run of Mine silo is removed.
— Silo area is regraded for water control and topsoil reused from site.
— Native trees established further.

Artwine Cellar Door

Existing View (2017)

— Site views framed by cellar door carpark trees.
— Open grassed paddock and existing tree line is visible.

End of Construction (Worst Case)

— Construction hoarding / fencing in place.
— No planting.

Operations View

— Water storage dam and partial views of pump shed are visible.
— Dam fringe planting and maintenance track partially visible.
— Initial plantings installed.

1 Year Vegetation Growth

— Batter planting and adjacent re-vegetation partially obscuring dam edge.

Closure View

— Water storage dam with minimal water.
— Native shrubs, ground-covers + trees established further.

Bird In Hand Winery

Existing View (2017)

— Site views under the existing perimeter tree canopy.
— Recent re-vegetation in adjacent paddock and perimeter tree rows starting to be visible.
— Foreground colour and depth perception changes with seasonal vine leaf cover.

End of Construction (Worst Case)

— Construction hoarding / fencing in place.
— No planting.
— Silo in view.

Operations View

— Run of Mine silo visible above tree canopy.
— Silo colour to be confirmed and shown for illustration purposes only. Final colour subject to community input.
— Initial plantings established.

1 Year Vegetation Growth

— Re-vegetation at perimeter partially obscures views into the site.

Closure View

— Run of Mine silo is removed.
— Native shrubs, ground-covers + trees established

Pfeiffer Road Entry

Existing View (2017)

— Farm gate and rubble entry verge.
— Seasonal grass cover in verge.
— Views to open paddock.

End of Construction (Worst Case)

— New entry road to allow vehicle turn path.
— New fence around entry (similar to Polo Club).
— Stormwater infrastructure and scour protection in verge.
— Road and verge linemarking.
— Construction hoarding / fencing still in place.
— No planting within construction zone.

Operations View

— Shade tree avenue established.
— Initial plantings established.

1 Year Vegetation Growth

— Native shrubs, groundcovers + trees

Closure View

— Entry road and storm water infrastructure retained for future land-use.
— Further tree growth.

5A Ridge Rd

Existing View (2019)

— View through existing large trees to site.

End of Construction (Worst Case)

— Silo in view in the distance.
— Silo colour to be confirmed and shown for illustration purposes only. Final colour subject to community input.

Operations View

— Run of Mine silo visible above tree canopy.
— Initial plantings established.

1 Year Vegetation Growth

— Re-vegetation at perimeter partially obscures views into the site.

Closure View

— Run of Mine silo is removed.
— Native shrubs, ground-covers + trees established further.

86 Bird In Hand Rd

Existing View (2017)

— View through existing large trees to site.

End of Construction (Worst Case)

— Silo in view in the distance.
— Silo colour to be confirmed and shown for illustration purposes only. Final colour subject to community input.

Operations View

— Run of Mine silo visible above tree canopy.
— Initial plantings established.

1 Year Vegetation Growth

— Re-vegetation at perimeter partially obscures views into the site.

Closure View

— Run of Mine silo is removed.
— Native shrubs, ground-covers + trees established further.

8 IMPLEMENTATION

The proposed implementation plan provides a four-staged approach to project establishment and development prior to commencement of the mine operations phase and transport of ore to the Angas processing facility.

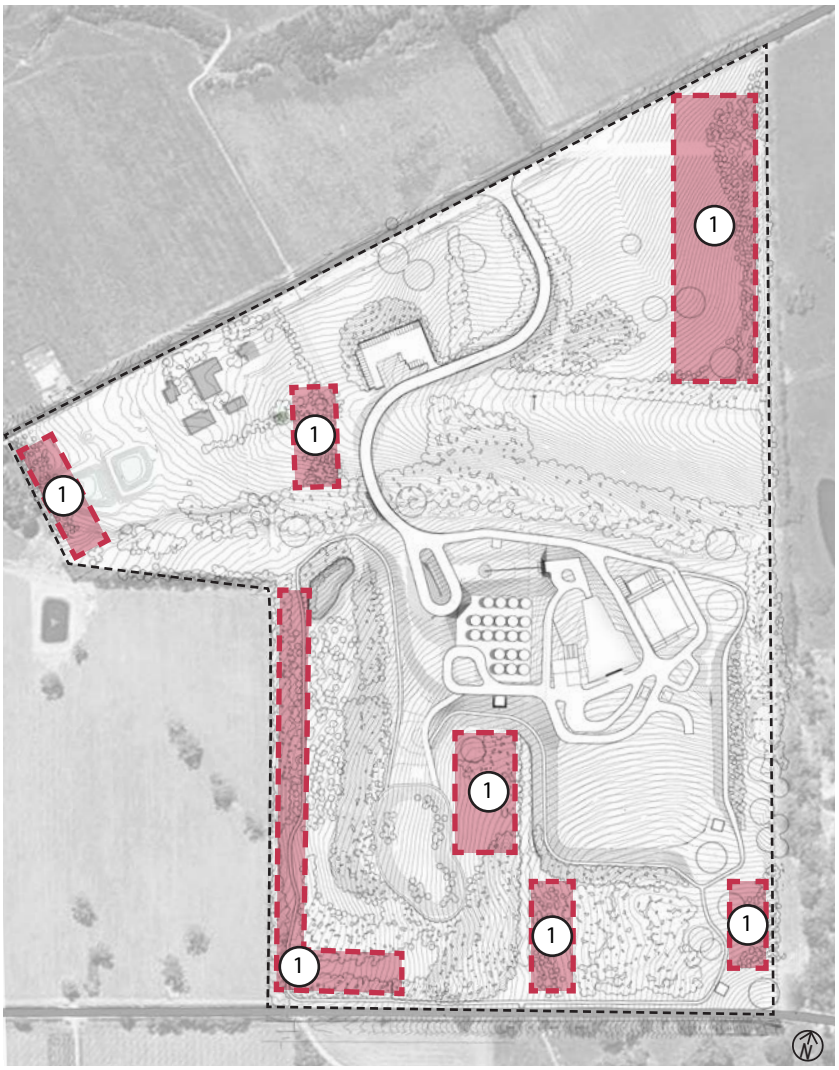
The implementation phase is anticipated to commence following the successful granting granting of the plan for environment protection and rehabilitation (PEPR).

Figure 11: Implementation Plan

Stage 1 - Land Management

Stage 1 works include preliminary site investigations, test drilling and ground water sampling. In 2016 multiple areas of revegetation were established to supplement existing tree coverage and to revegetate former open paddocks.

Successful native plant species are expected to inform the palette of subsequent plantings of strategic, amenity and revegetation planting zones.



Legend

Stage 1 - Land Management (Existing)

Property Boundary

Figure 12: Stage 1 - Early Works Locations

Stage 2 Works

Stage 2 works create the proposed vehicle access through the property and commences earthworks for establishing the proposed operations area. Overland storm water controls including minor bunding and swales establish water flows towards the excavated storm water dam.

Material gained from excavations is proposed to be reused for the initial formation of earth bunds around the operations area perimeter. Revegetation is proposed for disturbed surfaces and earth bund batters.

Legend

Stage 2

Property Boundary

Figure 13: Stage 2 Works

Stage 3 Works

Stage 3 works create access to the proposed mine portal with excavation of the box cut and initial underground mine access. Earthworks for the proposed integrated mullock landform, water treatment and storage area provide additional material to finalise the perimeter earth bunds.

Planting techniques are proposed to be reviewed according to the final batter grades and extension of the early works revegetation.

Legend

Stage 3

Property Boundary

Figure 14: Stage 3 Works

Stage 4 Works

Stage 4 consists of the construction of the proposed above-ground infrastructure including the administration office, workshop, fuel store, wash down bays and ore silo ready for commencement of the operational phase.

Revegetation of the open space between the earth bund and perimeter trees is proposed to further screen views from the western side of the property and connect new planting with the early works revegetation.

Legend

Stage 4

Property Boundary

Figure 15: Stage 4 Works

Stage 5 - Final Establishment

Stage 5 includes final establishment and commencement of mining operations. The integrated mullock landform stores site-won rock before being reused to infill mine voids. Ventilation shafts and the emergency exit shaft will be installed as the underground mining progresses

Landscape maintenance, weed control and replacement planting is proposed to continue during the operations phase.

Legend

Stage 5

Figure 16: Stage 5 - Final Establishment

Mineral Claim Extent

The Mineral Claim Boundary is for an area larger than the current property ownership boundary. This plan considers the projects visual impact within the property boundary based on the assumption that all project works outside the property boundary are underground and therefore not visible or are temporary in nature.

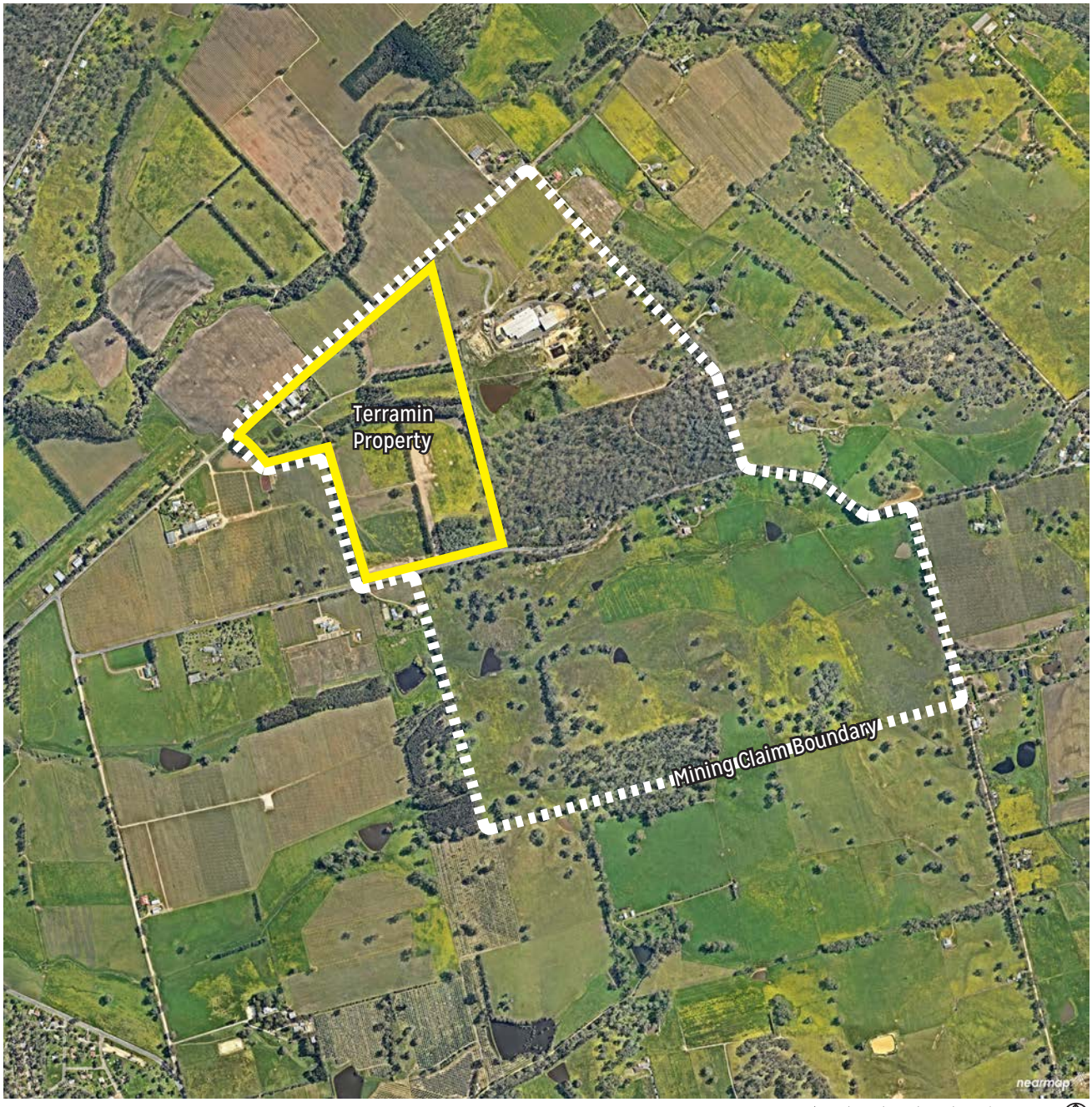


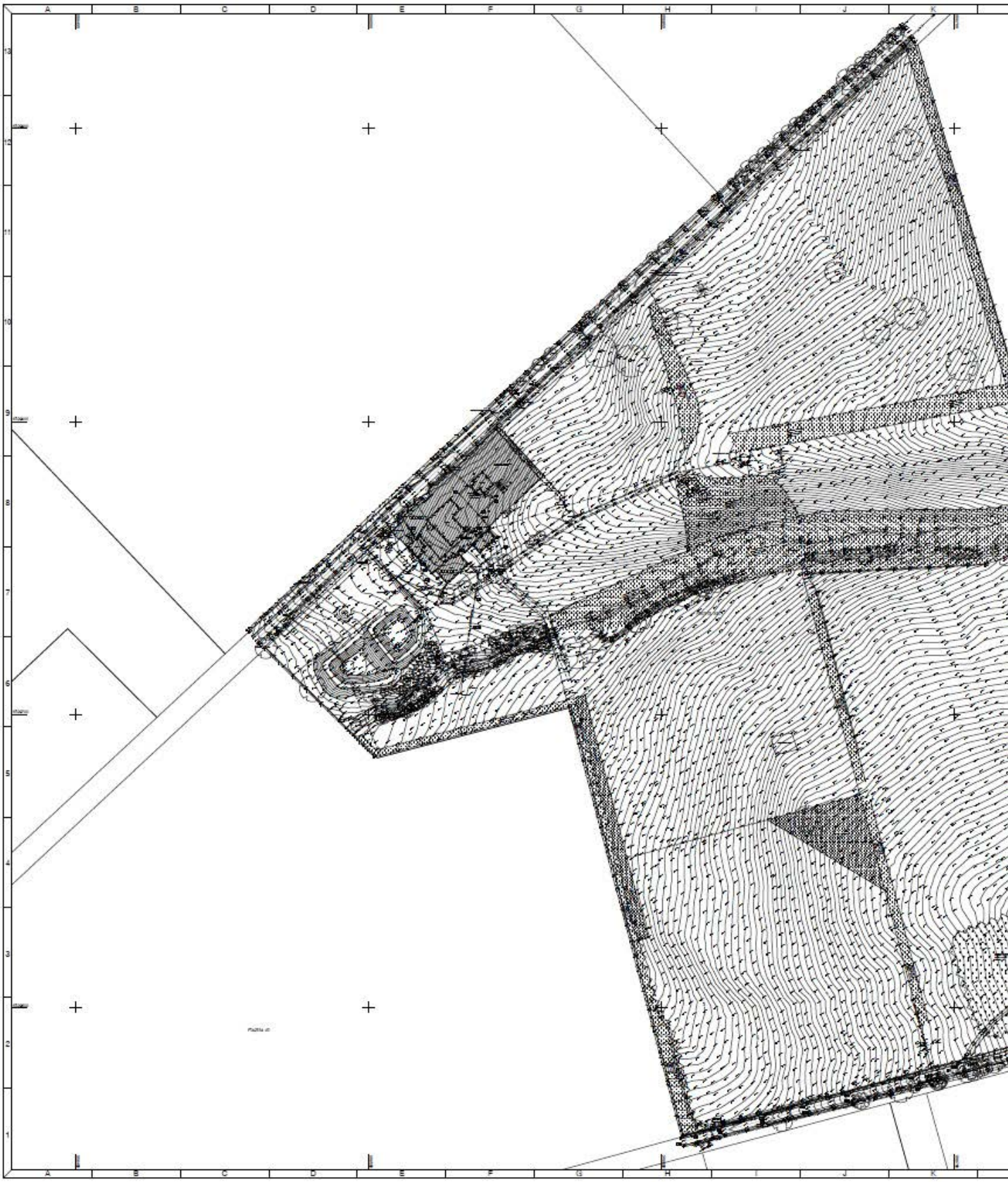
Figure 12: Mineral Claim Boundary

Mine Closure

A Mining Operation Plan is required to be provided by Terramin Exploration Pty Ltd meeting the requirements of the The South Australian Mining Regulations 2011 under the Mining Act 1971 including *"ongoing and final rehabilitation of the site, site closure, and future use of the site"*

The Mine Closure Plan will outline how the mine facilities will be decommissioned to an agreed state with the State Government and community.

Appendix i - SITE SURVEY PLAN



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N

LEGEND

NOTES

HORIZONTAL CONTROL IS BASED ON MGA. ALL DISTANCES ARE GROUND DISTANCES.

HEIGHT DATUM IS AHD.

BOUNDARIES SHOWN ARE FROM THE DCDB.

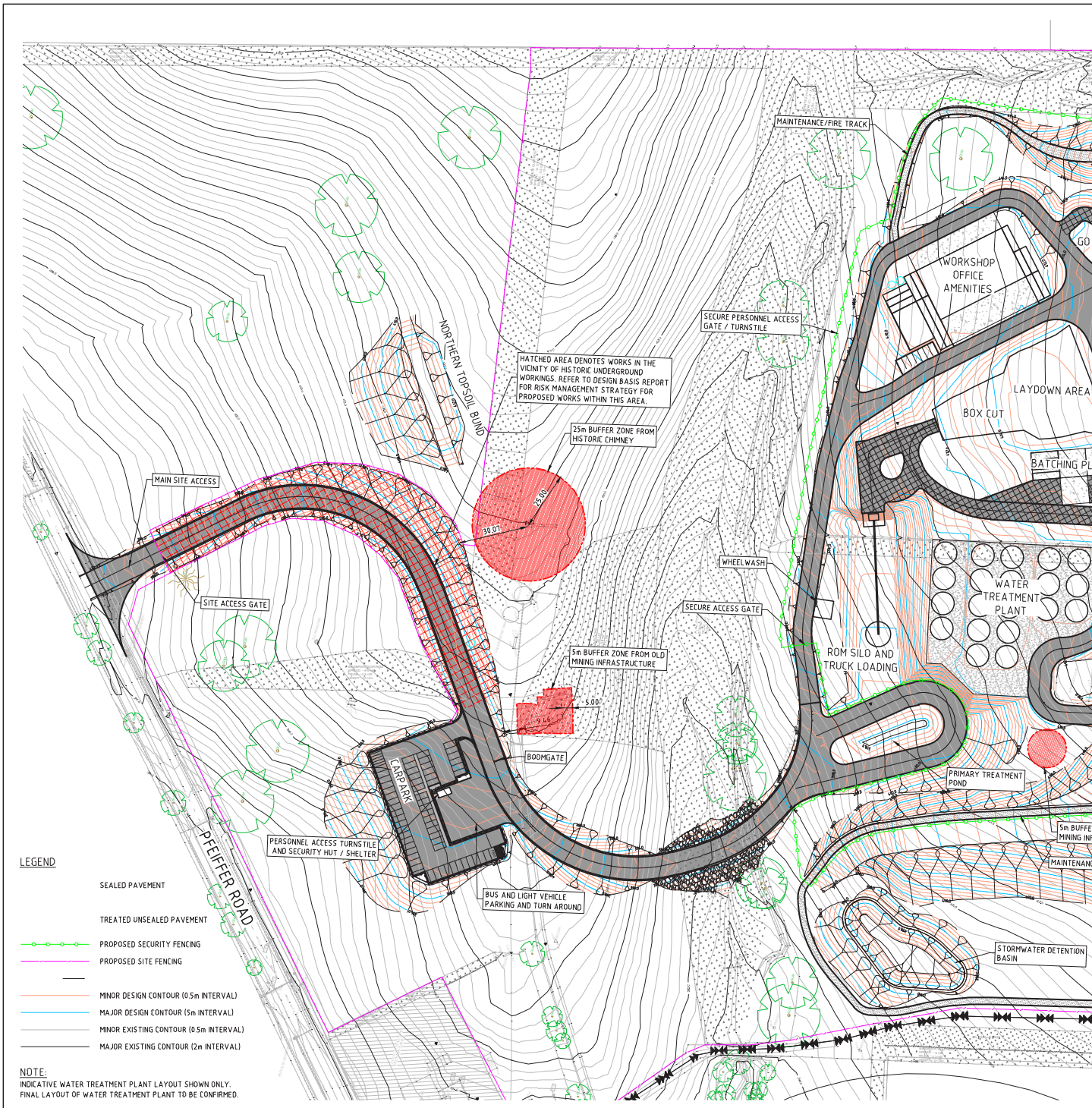
SERVICES SHOWN WHERE ACCESSIBLE AND VISIBLE. UNDERGROUND SERVICES SHOWN WHERE IDENTIFIABLE. MINOR IRRIGATION PIPES FOR FARM TROUGHS, ETC. NOT SHOWN.

CONTOUR INTERVAL – 2.0m MAJOR CONTOURS
0.5m MINOR CONTOURS

BIRD IN HAND PROJECT
WOODSIDE
DETAIL AND CONTOUR SURVEY

CLIENT: TERRAMIN		
COORDINATE DATUM: MGA	HEIGHT DATUM: AHD	
SURVEYED BY: M.ANKOR	DATE: 28/11/15	
DRAFTED BY: M.ANKOR	DATE: 1/12/15	
CHECKED BY: K.ANDERSON	DATE: 1/12/15	
CGS DRAWING REF: 20150009-1	PAGE: 5 OF 5	A0

Appendix ii - SITE LAYOUT PLAN

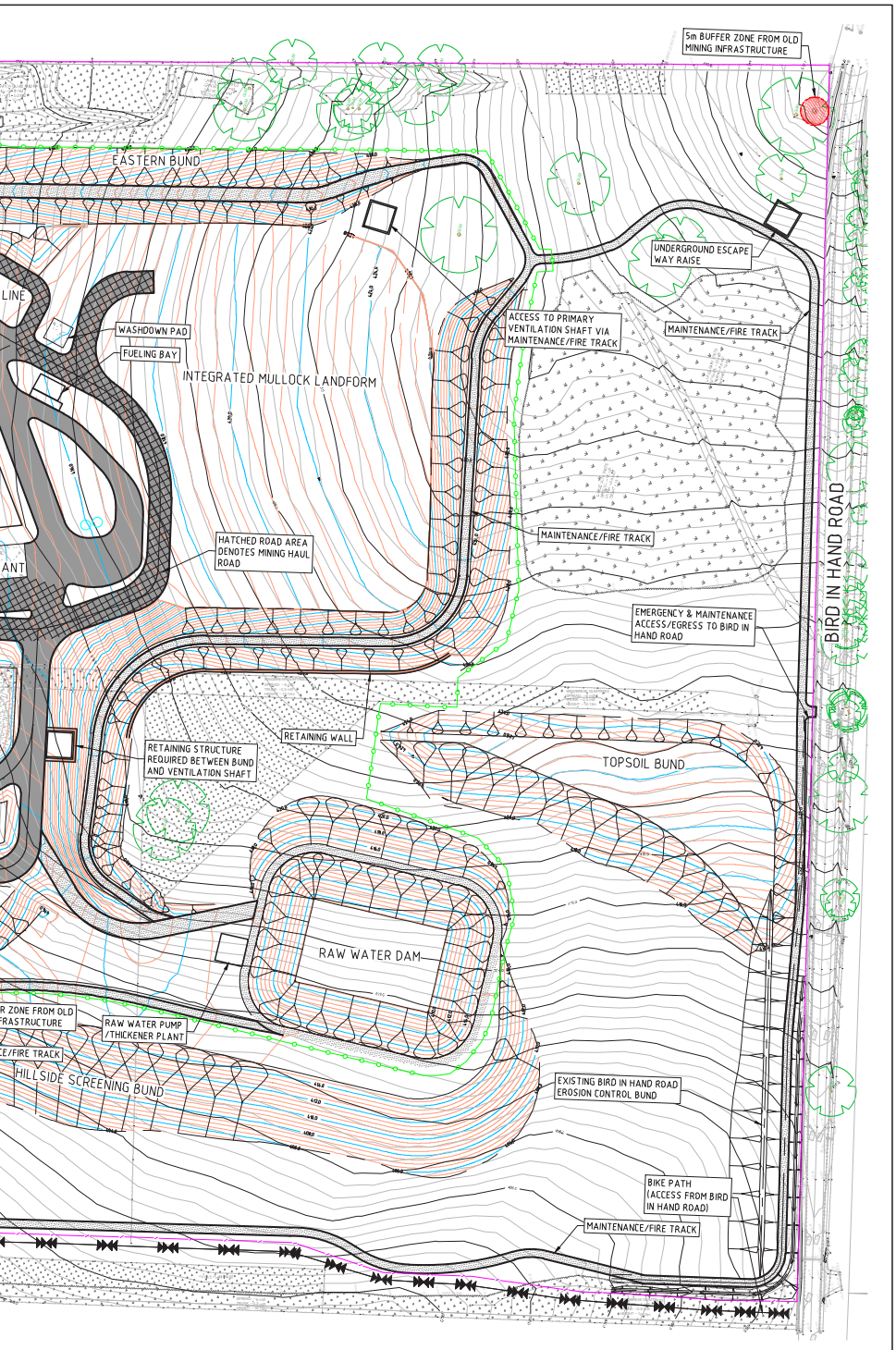


REV	AMENDMENT / REASON FOR ISSUE	DATE	DES.	DWN.	DWGCHK.	VERIFIED	APPROVED
C	FOR INFORMATION ONLY	4/10/2017	PMD	PMD	BSS		
B	FOR INFORMATION ONLY	16/03/2017	PMD	PMD	BSS		
A	FOR INFORMATION ONLY	2/03/2017		PMD	BSS		

0 10 20 40 60
1:1000 (A1); 1:2000 (A3)

PUBLIC UTILITIES:
THE SERVICES SHOWN ARE DERIVED FROM PLANS OBTAINED FROM THE RELEVANT SERVICE AUTHORITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE WITH THE RELEVANT SERVICE AUTHORITIES FOR CONFIRMATION OF SERVICES AND THEIR LOCATION BEFORE EXCAVATION WORK COMMENCES.

100mm ON ORIGINAL DRAWING - DO NOT SCALE DRAWING



NOT FOR CONSTRUCTION

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Tonkin CONSULTING

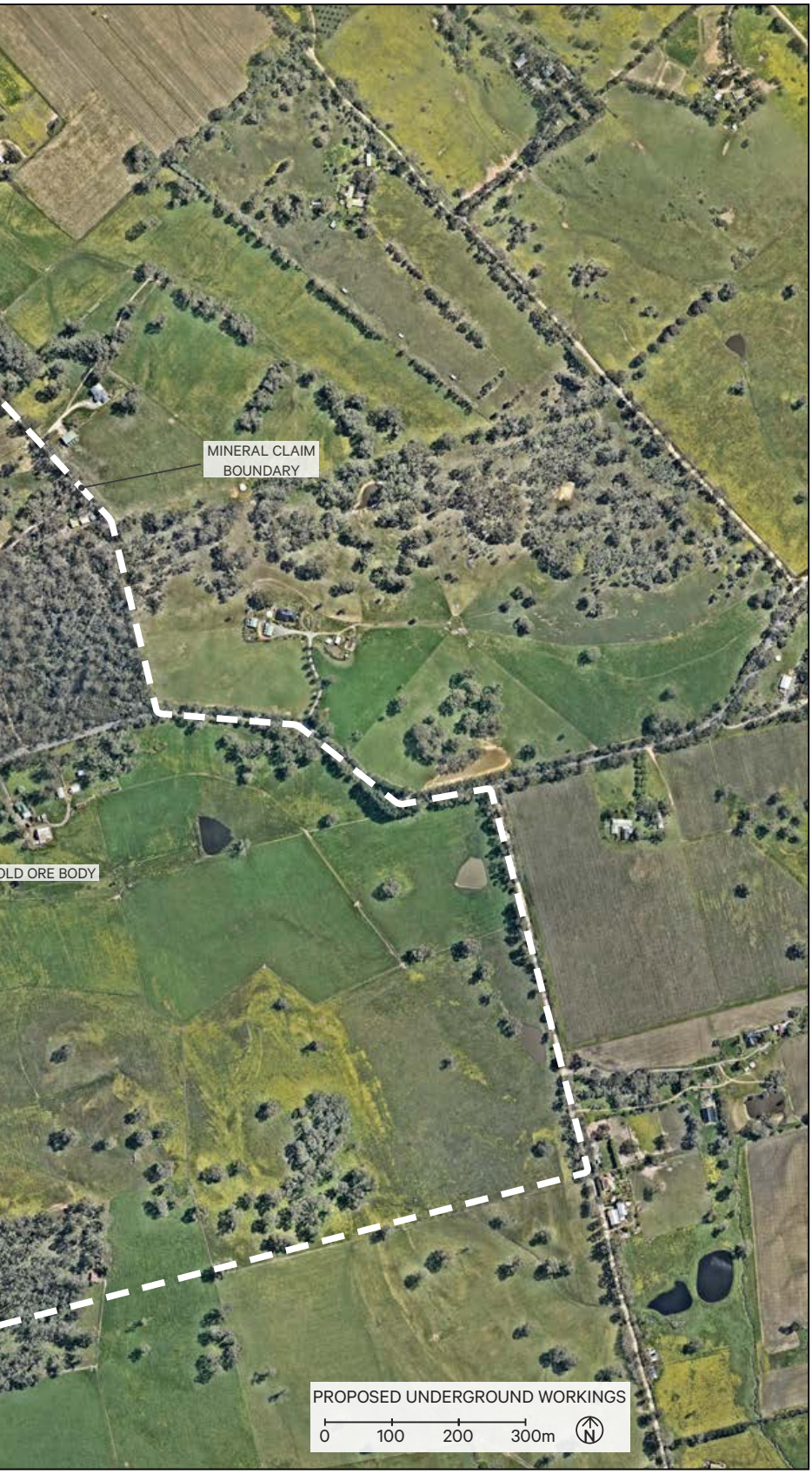
a better approach

SHEET SIZE A1	TERRAMIN AUSTRALIA LIMITED
SCALE: 1 : 1000 @ A1	BIRD IN HAND GOLD MINE SURFACE LAYOUT DESIGN SITE LAYOUT PLAN
ORIGINAL SURVEY BY	
SURVEY DATE:	
COORDS & DATUM COORDS TO (MGA94 ZONE54) ALL LEVELS TO A.H.D.	FILENAME: 20155706_BIH SURFACE LAYOUT-REVISED.DWG

JOB NUMBER	SHEET NUMBER	REVISION
20155706	200	C

T:\2015\20155706 BIRD IN HAND GOLD MINE - TERRAMIN AUSTRALIA\3_DEVELOPMENT\1 ACAD\20155706_BIH SURFACE LAYOUT-REVISED.DWG [SLP_01] April 10, 2017 15:07PM

Appendix iii - UNDERGROUND WORKINGS (Indicative Only)


MINERAL CLAIM
BOUNDARY
OLD ORE BODY
PROPOSED UNDERGROUND WORKINGS
0
100
200
300m
N