



ATLAS Stage 3 –Pre-clearance Survey Report – Kinross Wells and Gathering

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Senex

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Table of contents

Glossary of Terms	3
1 Introduction	4
1.1 Project background	4
1.2 Scope	4
1.3 EPBC conditions	4
1.4 EA conditions	5
2 Methodology	8
2.1 Regional Ecosystem assessment and Threatened Ecological Communities	8
2.2 Targeted threatened flora surveys	8
2.3 Fauna habitat assessment	8
2.4 Threatened fauna surveys	9
2.5 Koala dispersal habitat	9
3 Results	12
3.1 Regional Ecosystems and Threatened Ecological Communities	12
3.2 Targeted threatened flora surveys	12
3.3 Opportunistic fauna surveys and habitat assessment	12
3.4 Ground-truthed koala dispersal trees	12
4 Discussion	34
Appendix A – Fauna records	35

Tables

Table 3-1 Dispersal habitat trees	13
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Figures

Figure 2-1 Kinross – Overview Map	11
Figure 3-1 – Map 1	20
Figure 3-2 Kinross - Map 2	21
Figure 3-3 Kinross - Map 3	22
Figure 3-4 Kinross- Map 4	23
Figure 3-5 Kinross- Map 5	24
Figure 3-6 Kinross - Map 6	25
Figure 3-7 Kinross - Map 7	26
Figure 3-8 Kinross - Map 8	27
Figure 3-9 Kinross - Map 9	28
Figure 3-10 Kinross - Map 10	29
Figure 3-11 Kinross - Map 11	30
Figure 3-12 Kinross - Map 11	31
Figure 3-13 Kinross - Map 11	32
Figure 3-14 Kinross – Kinross Flora Survey	33
Figure 4-1 Examples of adjacent vegetation avoided	34

Glossary of Terms

Acronym	Description
ATP	Authority to Prospect
GTRE	Ground-truthed regional ecosystem
DBH	Diameter at breast height
EA	Environmental Authority
ECPPFD	<i>Environmental Constraints Protocol for Planning and Field Development</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
<i>EP Regulation</i>	<i>Environmental Protection Regulation 2008</i>
ESA	Environmentally Sensitive Areas
ha	Hectares
m	Metres
MNES	Matters of National Environmental Significance
MSES	Matters of State Environmental Significance
PL	Petroleum Lease
RE	Regional Ecosystem
sp.	Species (singular)
spp.	Species (plural)
sqm	Square metres
SQP	Suitably qualified person
TEC	Threatened Ecological Community

1 Introduction

The pre-clearance survey methodology applied within this package of works is deemed appropriate to confirm the on-the-ground biodiversity values present.

1.1 Project background

The Atlas Stage 3 Gas Project (EPBC Act referral 2022/09410) involves developing, operating, decommissioning and rehabilitating up to 151 coal seam gas wells; gas and water gathering systems for the producing wells; access tracks; brine and produced water storages; borrow pits; and ancillary supporting facilities on Authority to Prospect (ATP) 2059, Petroleum Lease (PL) 445, the northern portion of PL1127 and parts of PL1037 in the central part of the Surat Basin, Queensland (Senex, 2024).

This report provides the results of pre-clearance survey on wells and gathering Infrastructure (well pads, gas and water gathering lines and access tracks) (known hereafter as ‘The Footprint’) and a 30 m buffer within the PL1037 and PL1127 of the Kinross property: 20FT672.

1.2 Scope

Ausecology Pty Ltd (Ausecology) was engaged by Senex Energy Pty Ltd (Senex) to undertake pre-clearance ecological surveys as part of the approval conditions for the Atlas Stage 3 Gas Project and in accordance with the *Atlas Stage 3 Environmental Constraints Protocol for Planning and Field Development* (ECPFPD) document (Senex, 2024). The ECPFPD provides a framework for identifying, assessing and managing potential impacts to Matters of National Environmental Significance (MNES) and Matter of State Environmental Significance (MSES) associated with development of the Atlas Stage 3 Gas Project. Data collected during the pre-clearance surveys will be used by Senex to ensure:

- infrastructure siting complies with relevant environmental approval conditions and does not exceed the maximum disturbance limits
- infrastructure siting adheres to the constraints mapping
- no functional change to Koala dispersal habitat, the approval holder must not remove more than a total of 4 ha of trees, measured in canopy cover within mapped koala dispersal habitat.

Results from the pre-clearance survey findings (this report) will be published on the website, including:

- the location and extent of trees to be cleared, including maps; and
- a discussion of how removal of trees will not change the ability of koalas to disperse across the landscape.

This survey also involved targeted threatened flora surveys, active threatened fauna surveys (where suitable habitat was identified) and fauna habitat identification (where encountered) as per the ECPFPD.

1.3 EPBC conditions

This report will validate compliance with the following EPBC approval conditions:

4. *In accordance with the Constraints Protocol, the approval holder must:*
 - b) *adhere to the constraints mapping.*
5. *To ensure no functional change to Koala dispersal habitat, the approval holder must not remove more than a total of 4 ha of trees, measured in canopy cover within mapped Koala dispersal habitat.*

PRE-CLEARANCE SURVEYS

6. Prior to commencing clearing, the approval holder must:

- a) undertake at least one pre-clearance survey of the proposed area of clearing, and
- b) publish on the website the pre-clearance survey findings, including:
 - i) the location and extent of trees to be cleared, including maps, and
 - ii) a discussion of how removal of trees will not change the ability of Koalas to disperse across the landscape.

1.4 EA conditions

This report is also provided to help ensure compliance with Conditions F2 to F13 of Environmental Authority (P-EA-100511614) and conditions F1 to F12 of Environmental Authority (EA0001207).

Condition F6 of EA0001207 define the authorised petroleum activities that can be carried out in each environmentally sensitive area (ESA) or their protection zones (Schedule F, Table 1) on the Kinross Property.

Schedule F, Table 1 – Authorised petroleum activities in environmentally sensitive areas and their protection zones

Environmentally sensitive area	Within the environmentally sensitive area	Primary protection zone of the environmentally sensitive area	Secondary protection zone of the environmentally sensitive area
<u>Category A environmentally sensitive areas</u>	No petroleum activities permitted.	Only low impact petroleum activities permitted.	Only essential petroleum activities permitted.
<u>Category B environmentally sensitive areas</u> that are other than 'endangered' regional ecosystems	Only low impact petroleum activities permitted.	Only low impact petroleum activities permitted.	Only essential petroleum activities permitted.
Category B environmentally sensitive areas that are 'endangered' regional ecosystems	Only low impact petroleum activities permitted	Only essential petroleum activities permitted.	Only essential petroleum activities permitted.
<u>Category C environmentally sensitive areas</u> that are 'nature refuges' or 'koala habitat'	Only low impact petroleum activities permitted.	Only low impact petroleum activities permitted.	N/A
Category C environmentally sensitive areas that are 'essential habitat', 'essential regrowth habitat' or 'of concern' regional ecosystems	Only low impact petroleum activities permitted.	Only essential petroleum activities permitted.	N/A
Category C environmentally sensitive areas that are 'regional parks' (previously known as 'resources reserves')	Only essential petroleum activities permitted.	Only essential petroleum activities permitted.	N/A
Category C environmentally sensitive areas that are 'state forests' or 'timber reserves'	Only essential petroleum activities permitted.	Petroleum activities permitted.	N/A

Similarly, condition F7 and F8 of P-EA-100511614 define the authorised petroleum activities that can be carried out in each environmentally sensitive area (ESA) or their protection zones (F7, Table). Authorised petroleum activities in ESAs and protection zones are authorised under P-EA-100511614 include:

Table – Authorised petroleum activities in ESAs and their protection zones

Environmentally sensitive area	Within the environmentally sensitive area	Primary protection zone of the environmentally sensitive area	Secondary protection zone of the environmentally sensitive area
Category B environmentally sensitive areas that are 'endangered' regional ecosystems.	Only low impact activities permitted.	Only essential activities permitted; and Only in areas of pre-existing disturbance; and Only providing the activities do not have a measurable negative impact on the adjacent environmentally sensitive area.	Only essential activities permitted.
Category C environmentally sensitive areas that are 'essential habitat' or 'of concern' regional ecosystems	Only low impact activities permitted.	Only essential activities permitted; and Only in areas of pre-existing disturbance; and Only providing the activities do not have a measurable negative impact on the adjacent environmentally sensitive area.	

NB: Table adapted from EA P-EA-100511614 to highlight conditions relevant to locations addressed within this report.

Schedule F5, subsection c, of EA0001207 specifies that for linear infrastructure that is an essential petroleum activity authorised in an ESA or its protection zone, be no greater than 18 m in total width. Comparably, schedule F6, subsection c, of P-EA-100511614 specifies that for linear infrastructure that is an essential petroleum activity authorised in an ESA or its protection zone, be no greater than 40m in total width. However, the overlying Atlas Stage 3 EPBC approval limits infrastructure corridors to 18m width, or 24m for trunklines.

EA0001207 and ESA Categories and definitions that apply to this report include:

- **Category A ESA** means any area listed in Schedule 12, Section 1 of the *Environmental Protection Regulation* (EP Regulation) 2008.
 - *Not applicable*
- **Category B ESA** means any area listed in Schedule 12, Section 2 of the EP Regulation 2008.
 - an endangered regional ecosystem identified in the database known as the 'Regional ecosystem description database' kept by the department
- **Category C Environmentally Sensitive Area** means any of the following areas:
 - *an area validated as 'essential habitat' or 'essential regrowth habitat' from ground-truthing surveys in accordance with the Vegetation Management Act 1999 for a species of wildlife listed as endangered, vulnerable, rare or near threatened under the Nature Conservation Act 1992*
 - *'of concern regional ecosystems' identified in the database called 'RE description database' containing regional ecosystem numbers and descriptions*

- **Primary protection zone** means an area within 200m from the boundary of any Category A, B or C ESA
- **Secondary protection zone** (P-EA-100511614 only) in relation to a Category A or Category B ESA means an area within 100 metres from the boundary of the primary protection zone

As per condition F11 of EA0001207, significant residual impacts to prescribed environmental matters are not authorised under the EA, apart from up to 10.5 ha of habitat for glossy-black cockatoo (*Calyptorhynchus lathami lathami*) within PL1037.

Condition F12 of P-EA-100511614 states that significant residual impacts to prescribed environmental matters are not authorised under the EA, apart from up to 69.71 ha of habitat for Koala (*Phascolarctos cinereus*) and 69.71 ha of habitat for Short-beaked Echidna (*Tachyglossus aculeatus*) within PL1127.

2 Methodology

An Ausecology principal ecologist (suitably qualified) and ecologist conducted field surveys on foot on the 6th of July 2024 to determine any further impacts not already avoided by re-aligning gas gathering, access tracks and well pads. An additional field survey was undertaken on the 1st of April 2025 to check some minor changes to the footprint. The area surveyed and mapped in this report include parts of PL1037 and PL1127 on the Kinross property as shown in Figure 2-1.

2.1 Regional Ecosystem assessment and Threatened Ecological Communities

2.1.1 Desktop assessments

Desktop assessment and baseline ecological assessments have previously been undertaken (Boobook, 2023), including ground-truthed regional ecosystem (GTRE) mapping and threatened ecological community surveys. This report has been reviewed as part of this desktop assessment prior to the preclearance surveys and were deemed to have been conducted to an acceptable level of detail. Given the level of detail in prior reports, no further detailed desktop analysis has been conducted.

2.1.2 Regional Ecosystem assessment

During pre-clearance surveys, quaternary site assessments to verify regional ecosystems were undertaken where necessary (i.e., where vegetation and ecological communities have been determined to vary from the mapped GTRE at the time of the pre-clearance surveys). These assessments were conducted in accordance with the ECPPFD.

2.1.3 Threatened Ecological Communities

Where necessary Threatened Ecological Community (TEC) assessments were undertaken to confirm the presence and condition of TECs identified as known or potential in The Footprint if these were determined to vary from the mapped TEC areas identified in the constraints mapping.

2.2 Targeted threatened flora surveys

These surveys were conducted by a suitably qualified person (SQP). Targeted flora surveys of all known, likely or potential threatened flora species were conducted within The Footprint and 30 m buffer, where mapped constraint areas were present and/or suitable habitat was identified by the SQP, in accordance with the ECPPFD.

These surveys were conducted using the random meander methodology and if a species was encountered, a population survey was undertaken to determine the extent and density of the population. Threatened flora species and the locations of all individuals were recorded and specimens collected of any unknown individual requiring confirmation by the Queensland Herbarium.

Potentially occurring threatened species in the area as per the ECPPFD include Belson's panic (*Homopholis belsonii*), red soil woolly wrinklewort (*Rutidosia lanata*) and winged nightshade (*Solanum stenopterum*).

2.3 Fauna habitat assessment

Senex has committed to not clearing any areas confirmed as habitat for threatened species (ECPPFD), with the exception of koala (*Phascolarctos cinereus*) dispersal habitat and short-beaked echidna (*Tachyglossus aculeatus*) habitat. Fauna habitat baseline assessments have been conducted to an adequate level of detail to enable known, likely and potentially present species to be identified and comprehensive Project impact assessment and constraints mapping has been completed (ECPPFD).

The pre-clearance surveys will reassess the habitat present (as mapped in the constraints mapping (ECPPFD)) or otherwise identified by the SQP during the pre-clearance surveys) in order to refine mapped habitat areas. They will also identify and record micro-habitat features and breeding sites to facilitate avoidance and minimisation of impacts to potentially utilised micro-habitat features and breeding sites. Recorded micro-habitat features, where present include:

- Hollow-bearing trees;
- Dead standing trees;
- Hollow logs;
- Termite mounds;
- Woody debris;
- Surface rocks;
- Gilgais;
- Soil cracks / cracking clay;
- Rocky outcrops, crevices, overhangs and caves;
- Mistletoes;
- Nests;
- Animal burrows;
- Watercourses, wetlands and dams (including proximity); and
- Any other significant habitat features, or values present, such as dense leaf litter, heavily decorticated bark, dense grass/shrub shelter, seeding grass cover, fruiting plants, nectar and pollen producing plants and koala food trees.

2.4 Threatened fauna surveys

As areas confirmed as habitat for threatened species have been effectively avoided by The Footprint (with the exception of koala dispersal habitat and echidna habitat), the area required to be surveyed was minimal.

Active fauna surveys of all known, likely or potential threatened fauna species are to be undertaken where suitable potential habitat is mapped or found to be present within the proposed disturbance footprint (refer to the constraints mapping and the habitat features listed in Appendix A of the ECPPFD). Active fauna searches as per Table 1, Appendix A of the ECPPFD include scanning trees, the ground and habitat features; overturning rocks, logs and other woody debris; searching under peeling bark; raking leaf litter and soil at the base of trees; and flushing birds from dense shrubs and groundcover.

Invasive active searches were not undertaken in the 30 m buffer of the disturbance footprint within mapped constraint areas, given no impact is expected and active searches outside of The Footprint would be detrimental to the fauna species habitat. Instead of invasive searches in the 30 m buffer, surveys included incidental observations and scat and sign searches.

2.5 Koala dispersal habitat

An initial desktop survey was undertaken to analyse all previous ecology data collected in the field, analysis of the ECPPFD and associated constraints mapping, and to identify areas of mapped koala dispersal habitat that would require further ground verification.

Areas identified were highlighted on GIS mapping for further identification and field verification. Additional points were collected in the field where applicable. All tree ID numbers have been provided in individual maps of the area surveyed and further details provided in the results.

Canopy cover was measured by walking the dripline of trees located in koala dispersal areas using a sub-10 cm accuracy handheld Trimble GPS unit. The diameter at breast height (DBH) of each of the abovementioned trees was measured and height data was collected. Where denser regrowth was present and canopy cover of individual trees could not be distinguished, the canopy cover of the clump of trees was walked at the outer dripline and average height assessed. Thorny tree species which are not able to be climbed by koala (i.e. desert lime (*Citrus glauca*)) were still recorded in the field but excluded from the final koala tree canopy cover calculations.

3 Results

The Kinross property has been historically cleared for cattle grazing and is dominated by cleared pasture lands of introduced pasture grasses, with scattered patches of remnant and regrowth brigalow woodlands (*Acacia harpophylla*, RE 11.9.5, 11.3.1 and 11.5.1) as well as poplar box (*Eucalyptus populnea*) woodland on alluvial plains (RE 11.3.2). Individual and small patches of paddock trees of various ages and species were scattered across cleared pastures.

3.1 Regional Ecosystems and Threatened Ecological Communities

Where mapped constraints areas occurred within the disturbance footprint or 30 m buffer, these were assessed in the field to ensure they aligned with the mapping. No mapped constraints on the property were found to require changes. The survey also confirmed that the proposed disturbance areas do not contain any TEC however three patches mapped as Brigalow TEC were reconfirmed and are within the 30 m buffer area in the following localities:

- -26.194104, 149.802960 – Confirmed Brigalow TEC
- -26.194049, 149.806281 – Confirmed Brigalow TEC
- -26.192723, 149.810074 – Confirmed Brigalow TEC

3.2 Targeted threatened flora surveys

No Belson's panic (*Homopholis belsonii*), red soil woolly wrinklewort (*Rutidosia lanata*) and winged nightshade (*Solanum stenopterum*) were identified within the areas mapped as constraints for these species. Areas searched are shown in Figure 3-7. Targeted flora surveys were undertaken in all areas identified as potentially supporting these threatened species as illustrated in Figure 3-14.

3.3 Opportunistic fauna surveys and habitat assessment

Active searches were not required within the disturbance footprint as no searchable fauna habitat was present (either mapped as constraints or identified during the survey). No habitat features other than the koala dispersal trees were recorded during the surveys.







No threatened fauna species were observed in suitable potential habitat within 30 m of a proposed disturbance footprint. Invasive searches were not undertaken in this patch since none of the coarse woody debris, trees with loose bark or areas with leaf litter will be impacted by the disturbance footprint. If invasive active searches had been undertaken on habitat features in this patch, fauna would be disturbed, and habitat may be unnecessarily destroyed.








Opportunistic sightings were recorded across the disturbance footprint and 30 m buffer. Twenty-two species of fauna (all birds) were recorded during the surveys (Appendix A).







3.4 Ground-truthed koala dispersal trees







Table 3-1 provides the results including canopy cover, height and DBH of the trees assessed in the field in koala dispersal areas. All trees were assessed and, where determined they could be avoided (through underground boring or realignment), have been marked up as "retain" and will be avoided during construction. Trees unable to be avoided have had their canopy cover assessed and calculated under disturbance limits. Mapping of each location (Desktop ID) are shown in Figure 3-1 to Figure 3-8.








Table 3-1 *Dispersal habitat trees*








Location (Desktop ID)	Area (sqm)	Species	DBH (cm)	Height (m)	Action	Photo
RR18	10.31	<i>Acacia harpophylla</i>	13	3.8	Remove	
RR19	12.83	<i>Acacia harpophylla</i>	13	3.2	Remove	
RR20	9.41	<i>Acacia harpophylla</i>	16	5	Remove	
RR21	11.11	<i>Acacia harpophylla</i>	22	5.2	Retain	
RR22	55.09	<i>Casuarina cristata</i>	31	10	Retain	
RR23	26.19	<i>Atalaya hemiglauca</i>	23	5.4	Retain	





Location (Desktop ID)	Area (sqm)	Species	DBH (cm)	Height (m)	Action	Photo
RR24	48.33	<i>Acacia harpophylla</i>	25	6	Remove	
RR26	45.92	<i>Casuarina cristata</i>	34	10.2	Remove	
RR27	35.54	<i>Casuarina cristata</i>	24	10.4	Remove	
RR28	231.71	<i>Acacia harpophylla</i>	55	8.2	Remove	
RR29	15.17	<i>Casuarina cristata</i>	21	7.2	Remove	
RR30	7.31	<i>Acacia harpophylla</i>	16	3.8	Remove	
RR31	128.74	<i>Acacia harpophylla</i>	24	7.6	Retain	

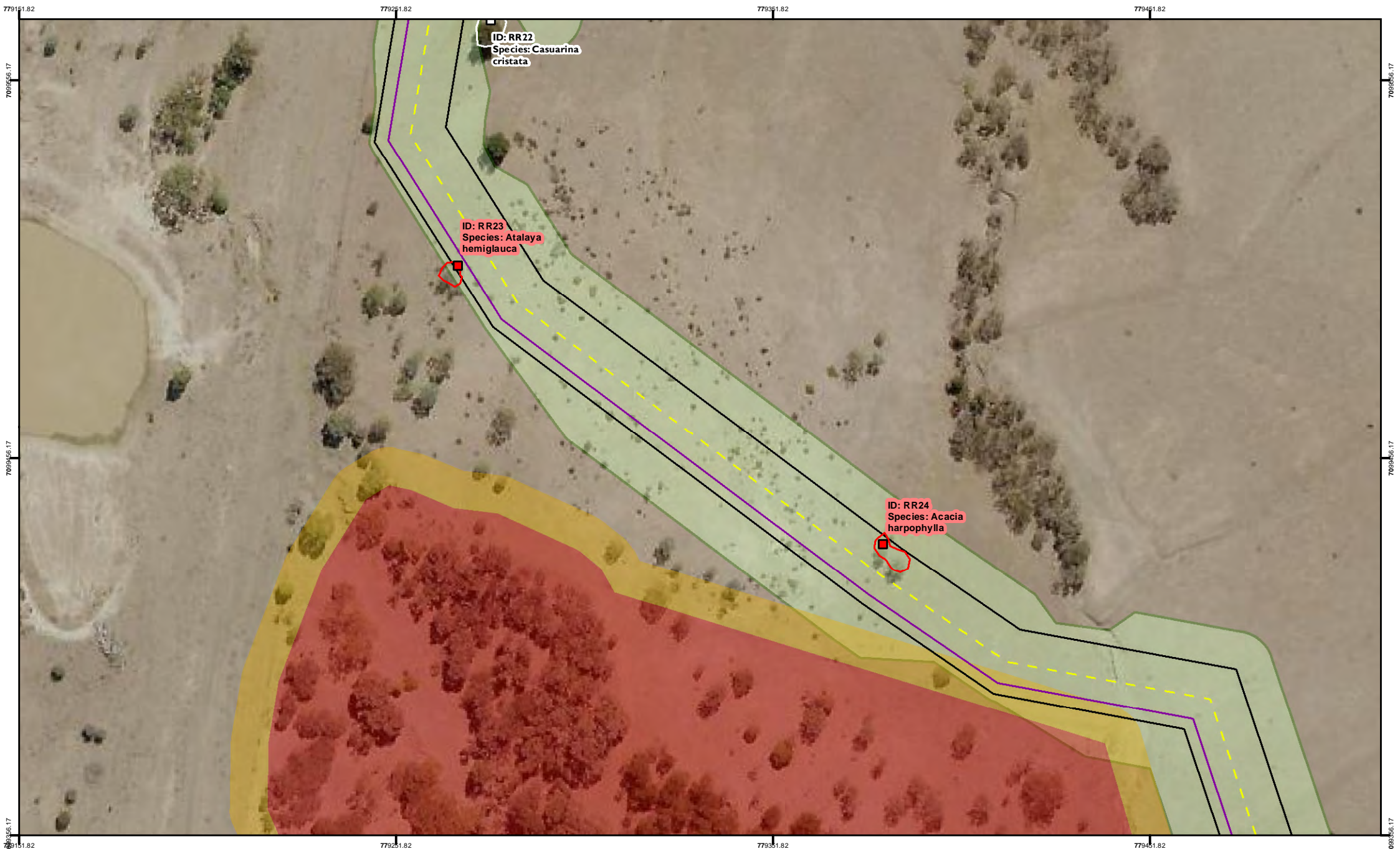
Location (Desktop ID)	Area (sqm)	Species	DBH (cm)	Height (m)	Action	Photo
RR32	115.40	<i>Eucalyptus cerebra</i>	64	16	Retain	
RR25	5.50	<i>Casuarina cristata</i>	20	4	Remove	N/A
1	186.84	<i>Eucalyptus tereticornis</i> (Digitized)	-	-	Retain	
2	69.01	<i>Eucalyptus tereticornis</i> (Digitized)	-	-	Retain	
3	43.58	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
4	22.67	<i>Eucalyptus populnea</i> (Digitized)	-	-	Remove	
5	56.51	<i>Eucalyptus populnea</i> (Digitized)	-	-	Remove	
6	123.89	<i>Eucalyptus populnea</i> (Digitized)	-	-	Remove	
7	225.76	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
8	48.38	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	N/A
9	32.71	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
10	53.17	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	

Location (Desktop ID)	Area (sqm)	Species	DBH (cm)	Height (m)	Action	Photo
11	18.81	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
12	33.92	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
14	251.14	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
15	58.71	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
16	56.79	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
17	66.26	<i>Eucalyptus tereticornis</i>	-	-	Retain	N/A
RR200	65.07	<i>Eucalyptus populnea</i>	-	-	Retain	
RR201	19.31	<i>Eucalyptus populnea</i>	-	-	Remove	
RR203	55.81	<i>Eucalyptus melanophloia</i> x <i>Eucalyptus populnea</i>	-	-	Remove	
RR204	10.22	<i>Eucalyptus populnea</i>	-	-	Remove	

Location (Desktop ID)	Area (sqm)	Species	DBH (cm)	Height (m)	Action	Photo
RR205	72.55	<i>Eucalyptus populnea</i>	-	-	Retain	
RR206	70.67	<i>Eucalyptus populnea</i> (Digitized)	-	-	Retain	
RR207	106.05	<i>Eucalyptus populnea</i> (Digitized)	-	-	Remove	
Kin01	7.07	<i>Eucalyptus populnea</i>	10	6	Retain	
Kin02	14.38	<i>Eucalyptus populnea</i>	16	9.4	Retain	
Kin03	19.54	<i>Eucalyptus populnea</i>	17	9	Remove	
Kin05	15.51	<i>Eucalyptus populnea</i>	16.5	8	Remove	
Kin06	16.44	<i>Eucalyptus populnea</i>	12.5	8.5	Retain	
Kin07	4.81	<i>Eucalyptus populnea</i>	10	7	Retain	
Kin08	4.12	<i>Eucalyptus populnea</i>	12	9.3	Retain	
Kin09	10.84	<i>Casuarina cristata</i>	16	6.6	Retain	

Location (Desktop ID)	Area (sqm)	Species	DBH (cm)	Height (m)	Action	Photo
Kin10	27.62	<i>Casuarina cristata</i>	18	9.1	Retain	
Kin11	9.23	<i>Casuarina cristata</i>	12	6	Retain	
Kin12	14.85	<i>Casuarina cristata</i>	11	7.5	Remove	
Kin13	19.78	<i>Casuarina cristata</i>	18	10.4	Retain	
Kin14	14.06	<i>Casuarina cristata</i>	16	7	Retain	
Kin15	16.33	<i>Casuarina cristata</i>	21	12	Retain	
Kin16	27.04	<i>Casuarina cristata</i>	17	9.5	Retain	

Location (Desktop ID)	Area (sqm)	Species	DBH (cm)	Height (m)	Action	Photo
Kin17	26.35	<i>Casuarina cristata</i>	18	8.2	Retain	
Kin18	20.80	<i>Lysiphyllum carronii</i>	10	6.5	Retain	
Kin24	15.11	<i>Eremophila mitchellii</i>	13	5	Remove	N/A
Kin26	176.21	<i>Casuarina cristata</i>	35	14	Remove	
Kin27		<i>Acacia harpophylla</i>	16	8		
Kin28		<i>Acacia harpophylla</i>	20	9		
Kin29		<i>Acacia harpophylla</i>	25	10		
Kin30	15.19	<i>Eucalyptus populnea</i>	22	7	Retain	
Remove area:		Total (sqm)	1057.69			
		Total (ha)	0.11			
Retain area:		Total (sqm)	1923.96			
		Total (ha)	0.19			

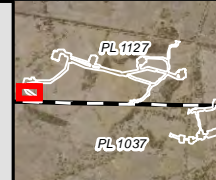


Ausecology

FIGURE 3-1:
Kinross
Atlas 3 (2022/09410) - Detailed

- Atlas S3 Proposed tree clearance assessment area
- Koala tree
- Remove
- TreeDriplines**
- Dripline Extent**
- Remove
- Proposed row
- Tracks
- Proposed Gathering

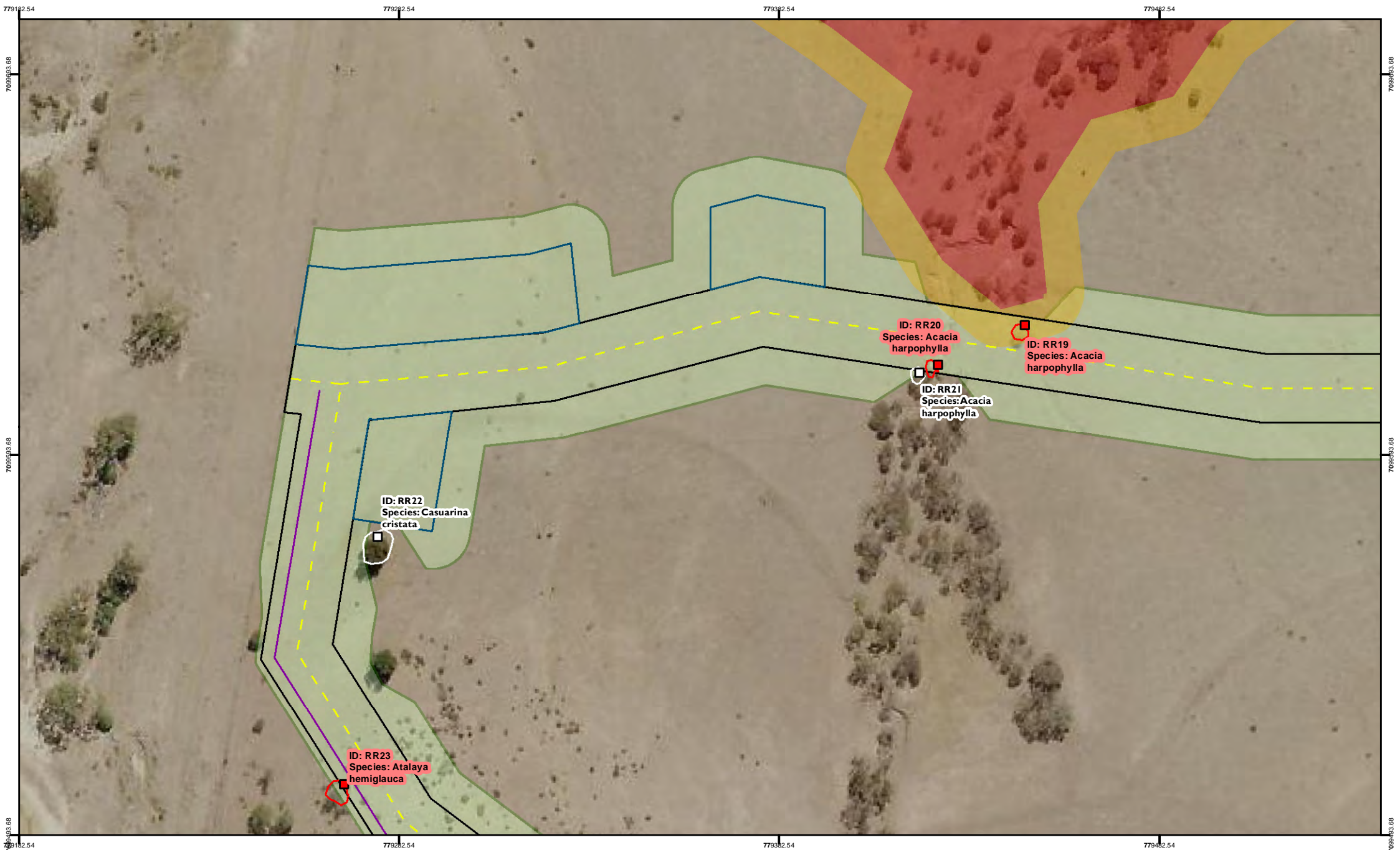
Data Accuracy Notes:
Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres



Ausecology

FIGURE 3-2:
Kinross
Atlas 3 (2022/09410) - Detailed

Atlas S3 Proposed tree clearance assessment area

Koala tree

- Retain
- Remove

TreeDriplines

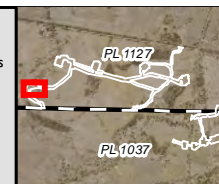
Dripline Extent

- Retain
- Remove
- Workspace
- Proposed row

- Tracks
- - - Proposed Gathering

Data Accuracy Notes:

Ground-Truthed data mapped using Fixed RTK GNSS Receivers with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,240

0 10 20 30
Metres

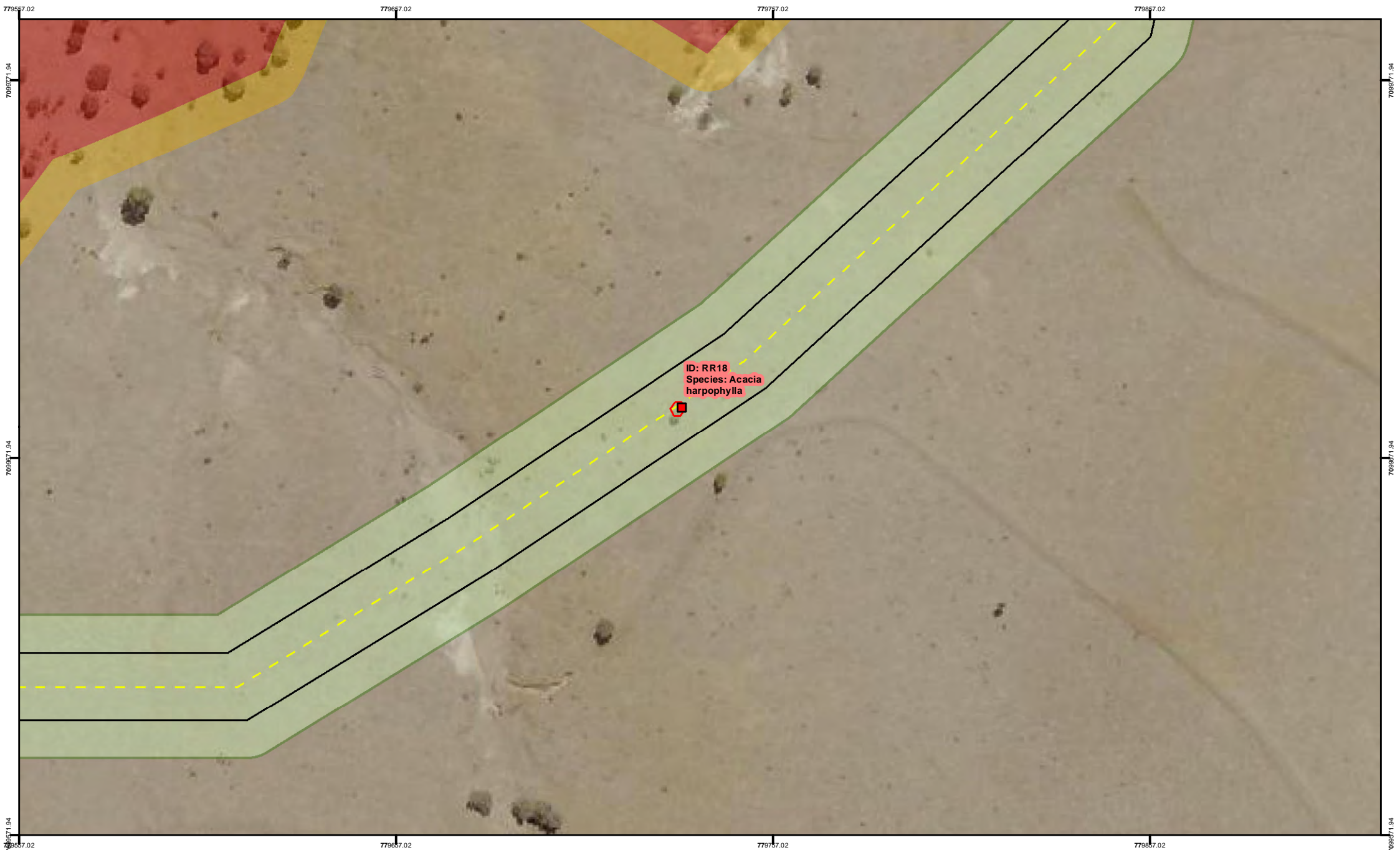


FIGURE 3-3:
Kinross
Atlas 3 (2022/09410) - Detailed

Atlas S3 Proposed tree clearance assessment area

Koala tree

Remove

TreeDriplines

Dripline Extent

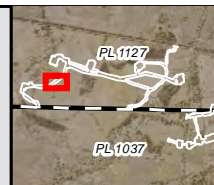
Remove

Proposed row

Proposed Gathering

Data Accuracy Notes:

Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres

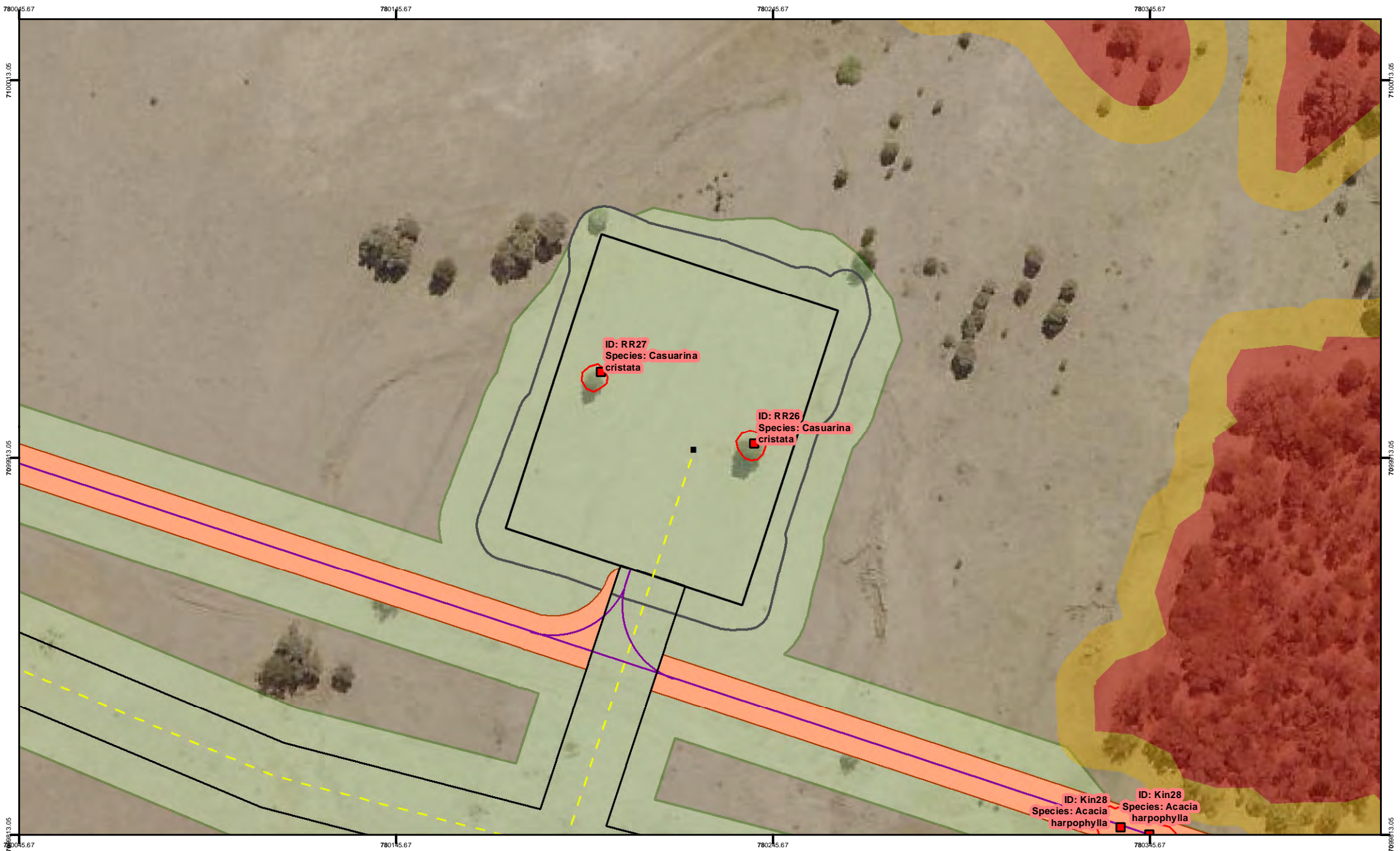
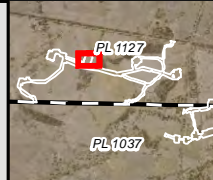


FIGURE 3-4:
Kinross
Atlas 3 (2022/09410) - Detailed

- Atlas S3 Proposed tree clearance assessment area
- Koala tree**
- Remove
- TreeDriplines**
- Dripline Extent**
- Remove

- Proposed row
- Proposed well pads
- Proposed Wells
- Tracks
- Tracks corridor
- Wellpad earthworks extent
- Proposed Gathering

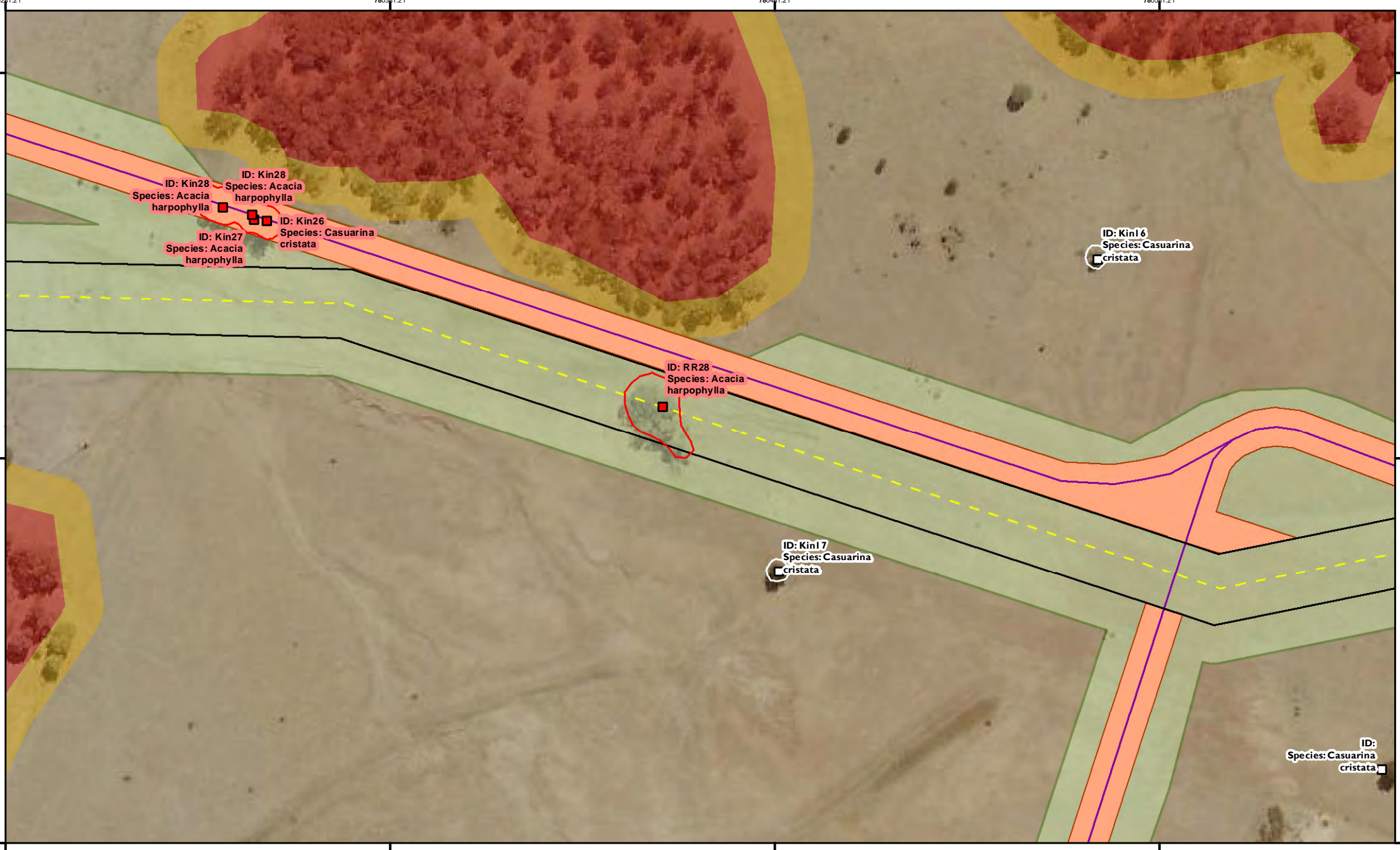
Data Accuracy Notes:
Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres






FIGURE 3-5:
Kinross
Atlas 3 (2022/09410) - Detailed

Atlas S3 Proposed tree clearance assessment area

Koala tree

- Retain
- Remove

TreeDriplines

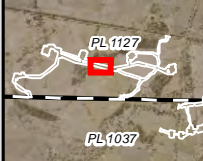
Dripline Extent

- Retain
- Remove
- Proposed row
- Tracks

Tracks corridor

Proposed Gathering

Data Accuracy Notes:
Ground-Truthed data mapped using Fixed RTK GNSS Receivers with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres

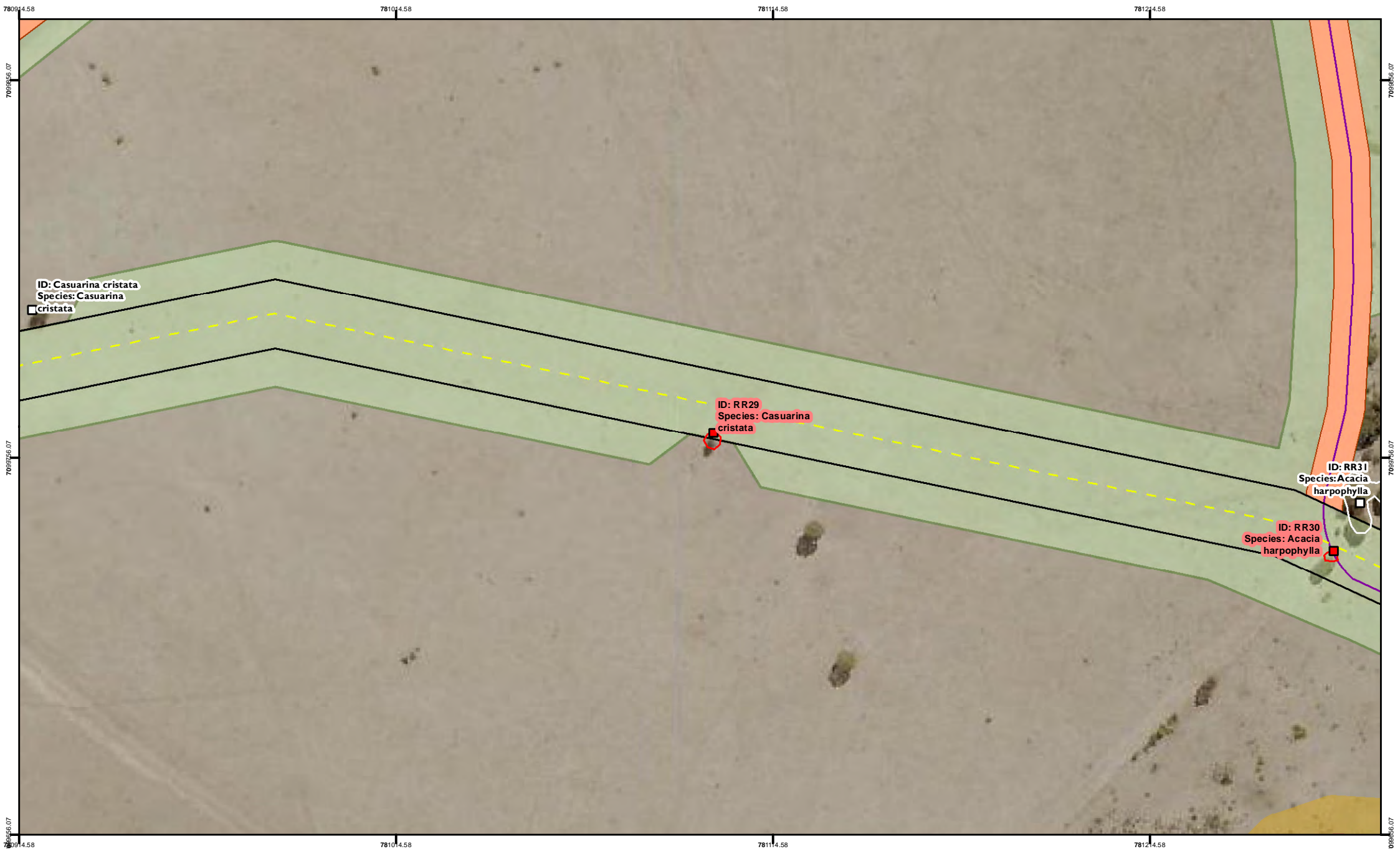
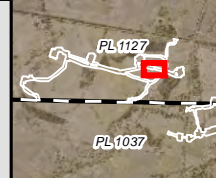


FIGURE 3-6:
Kinross
Atlas 3 (2022/09410) - Detailed

- Atlas S3 Proposed tree clearance assessment area
- Koala tree**
- Remove**
- TreeDriplines**
- Dripline Extent**
- Remove**

- Proposed row
- Proposed Gathering

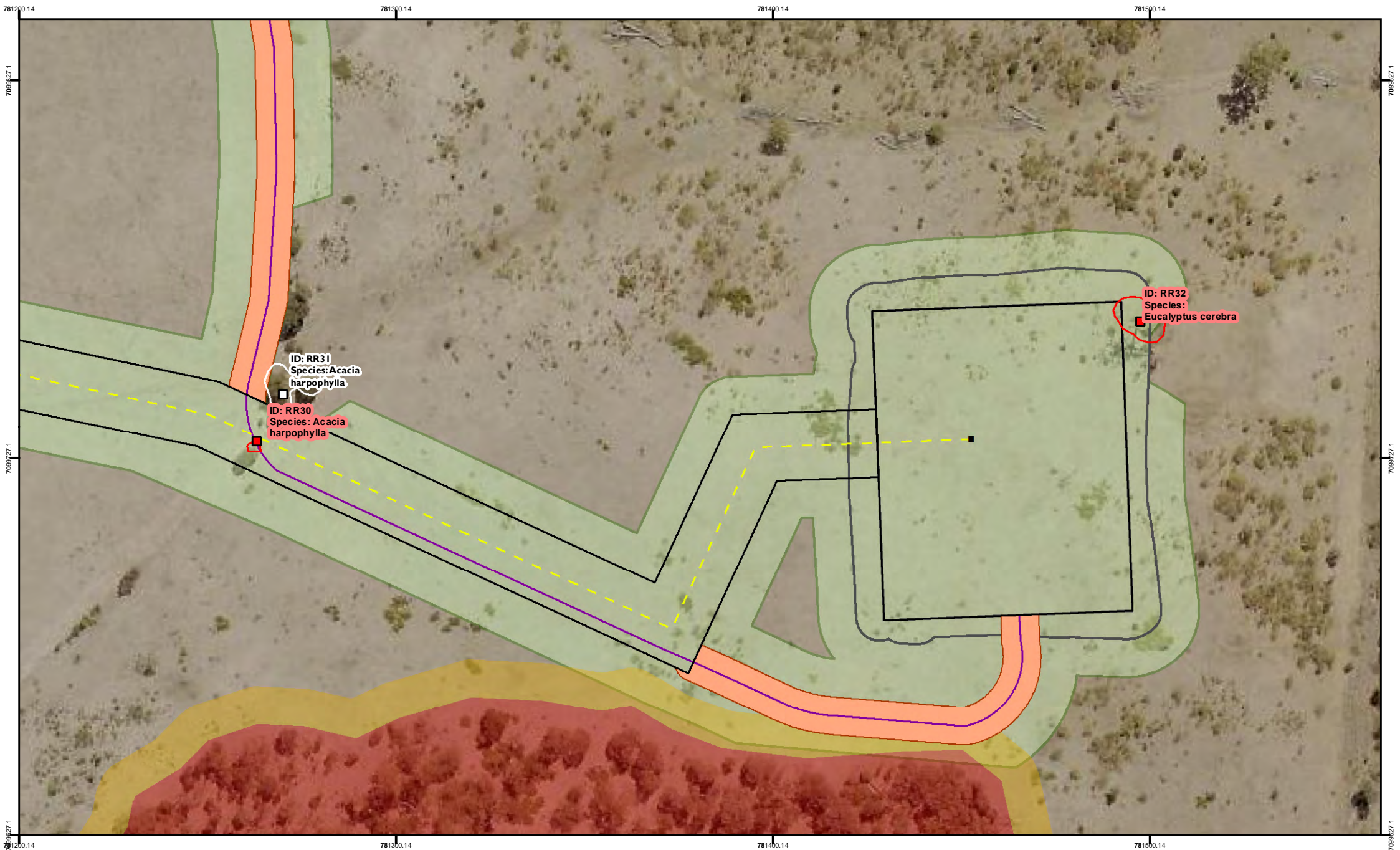
Data Accuracy Notes:
Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres



Ausecology

FIGURE 3-7:
Kinross
Atlas 3 (2022/09410) - Detailed

Atlas S3 Proposed tree clearance assessment area

Koala tree

- Retain
- Remove

TreeDriplines

Dripline Extent

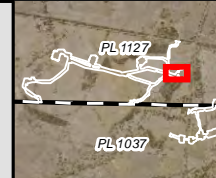
- Retain
- Remove
- Proposed row
- Proposed well pads

■ Proposed Wells

- Tracks
- Tracks corridor
- Wellpad earthworks extent
- Proposed Gathering

Data Accuracy Notes:

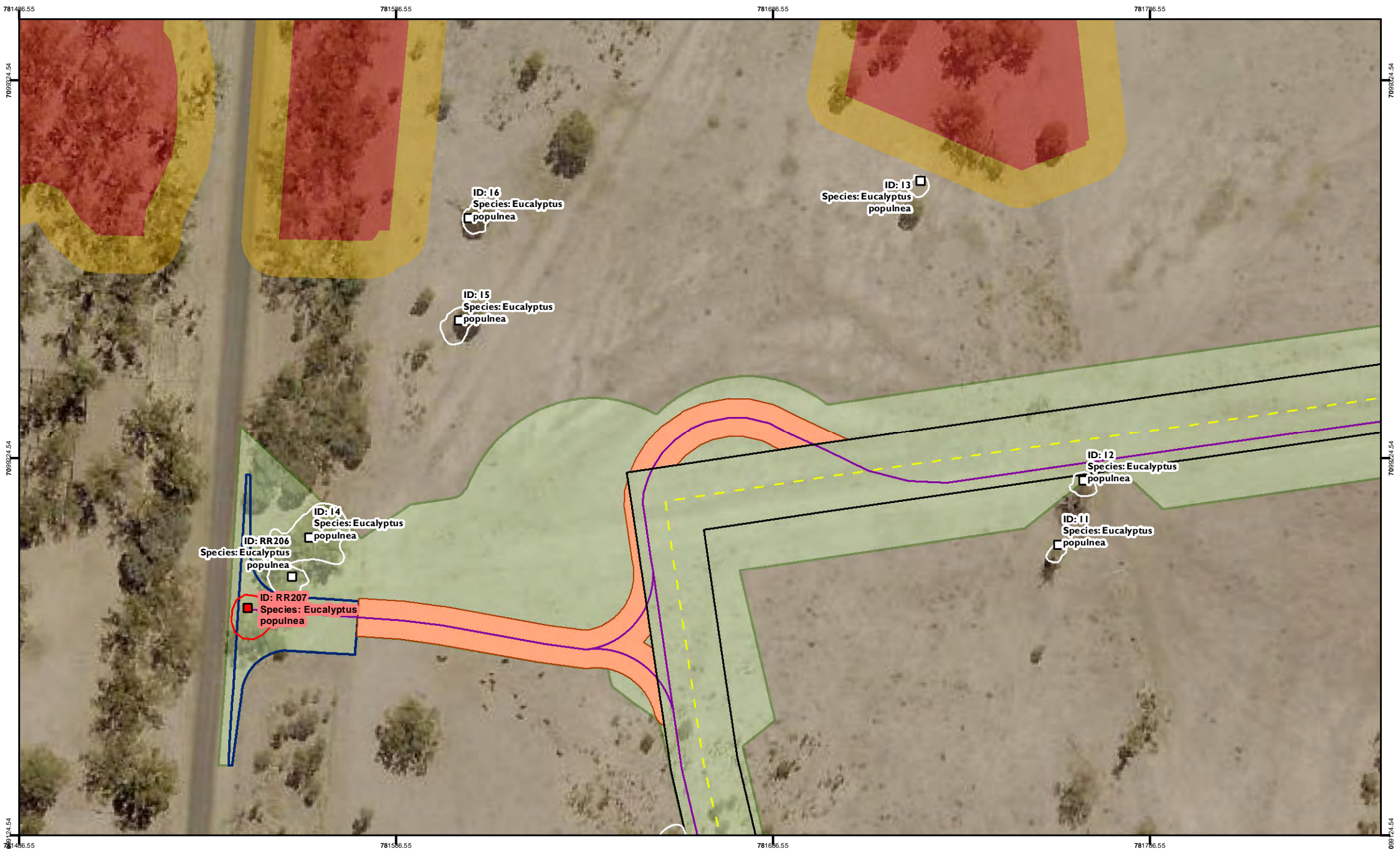
Ground-Truthed data mapped using Fixed RTK GNSS Receivers with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres



Ausecology

FIGURE 3-8:
Kinross
Atlas 3 (2022/09410) - Detailed

Atlas S3 Proposed tree clearance assessment area

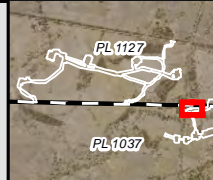
- Koala tree**
- Retain
 - Remove

TreeDriplines
Dripline Extent

- Retain
- Remove
- Proposed row
- Tracks

- Tracks corridor
- Turnout
- Proposed Gathering

Data Accuracy Notes:
Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres



FIGURE 3-9:
Kinross
Atlas 3 (2022/09410) - Detailed

Atlas S3 Proposed tree clearance assessment area

Koala tree

Retain

TreeDriplines

Dripline Extent

Retain

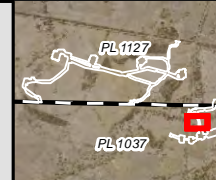
Proposed row

Tracks

Proposed Gathering

Data Accuracy Notes:

Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres

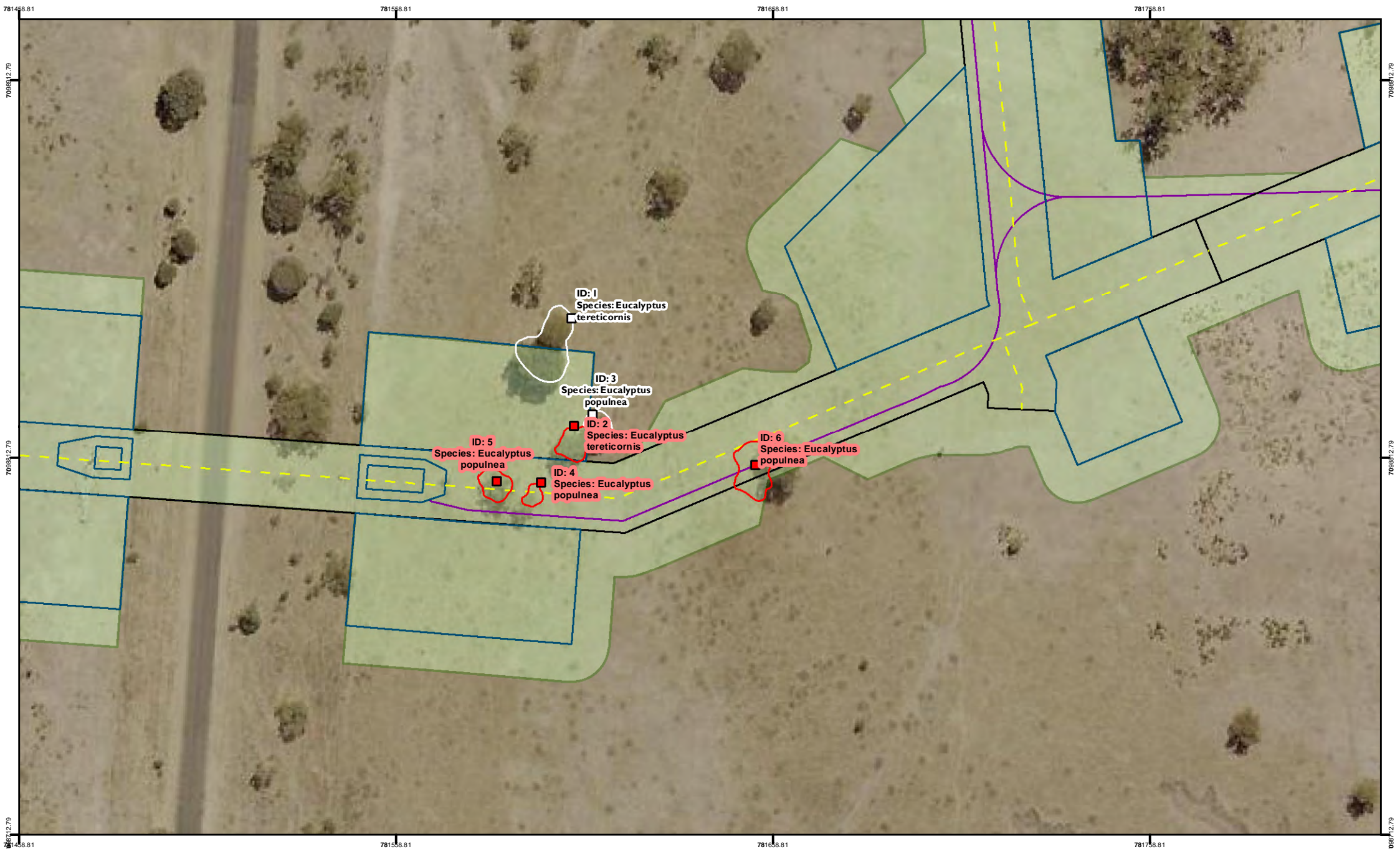
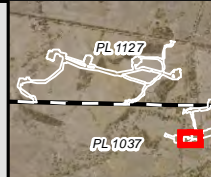


FIGURE 3-10:
Kinross
Atlas 3 (2022/09410) - Detailed

- Atlas S3 Proposed tree clearance assessment area**
- Koala tree**
- Retain
 - Remove

- TreeDriplines**
- Dripline Extent**
- Retain
 - Remove
 - Workspace
 - Proposed row
- Tracks
- Proposed Gathering

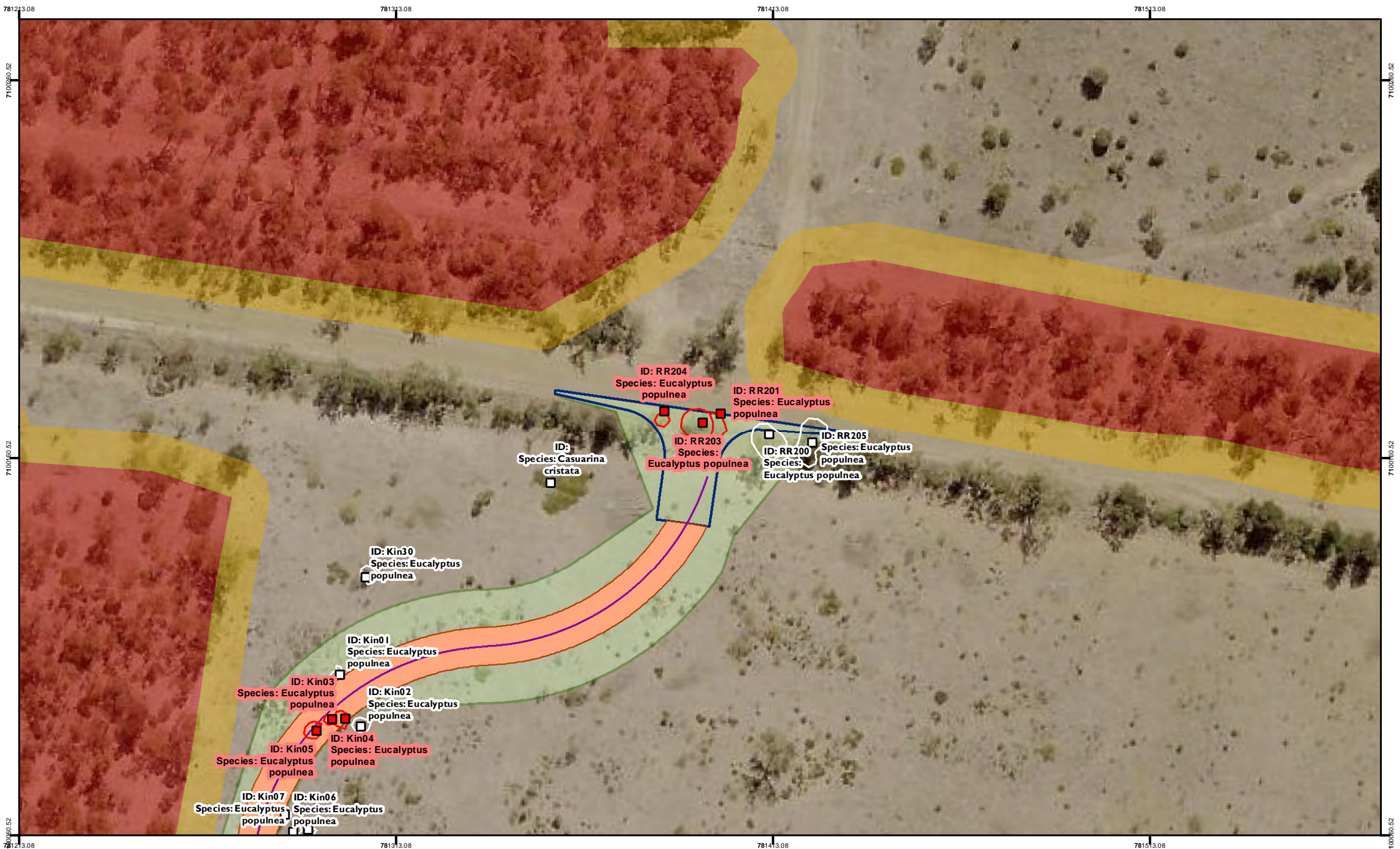
Data Accuracy Notes:
Ground-Truthed data mapped using Fixed RTK GNSS Receivers with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres



Ausecology

FIGURE 3-11:
Kinross
Atlas 3 (2022/09410) - Detailed

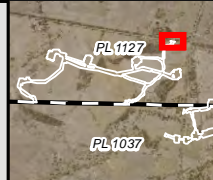
Atlas S3 Proposed tree clearance assessment area

Koala tree
Retain
Remove

TreeDriplines
Dripline Extent
Retain
Remove
Tracks
Tracks corridor

Turnout

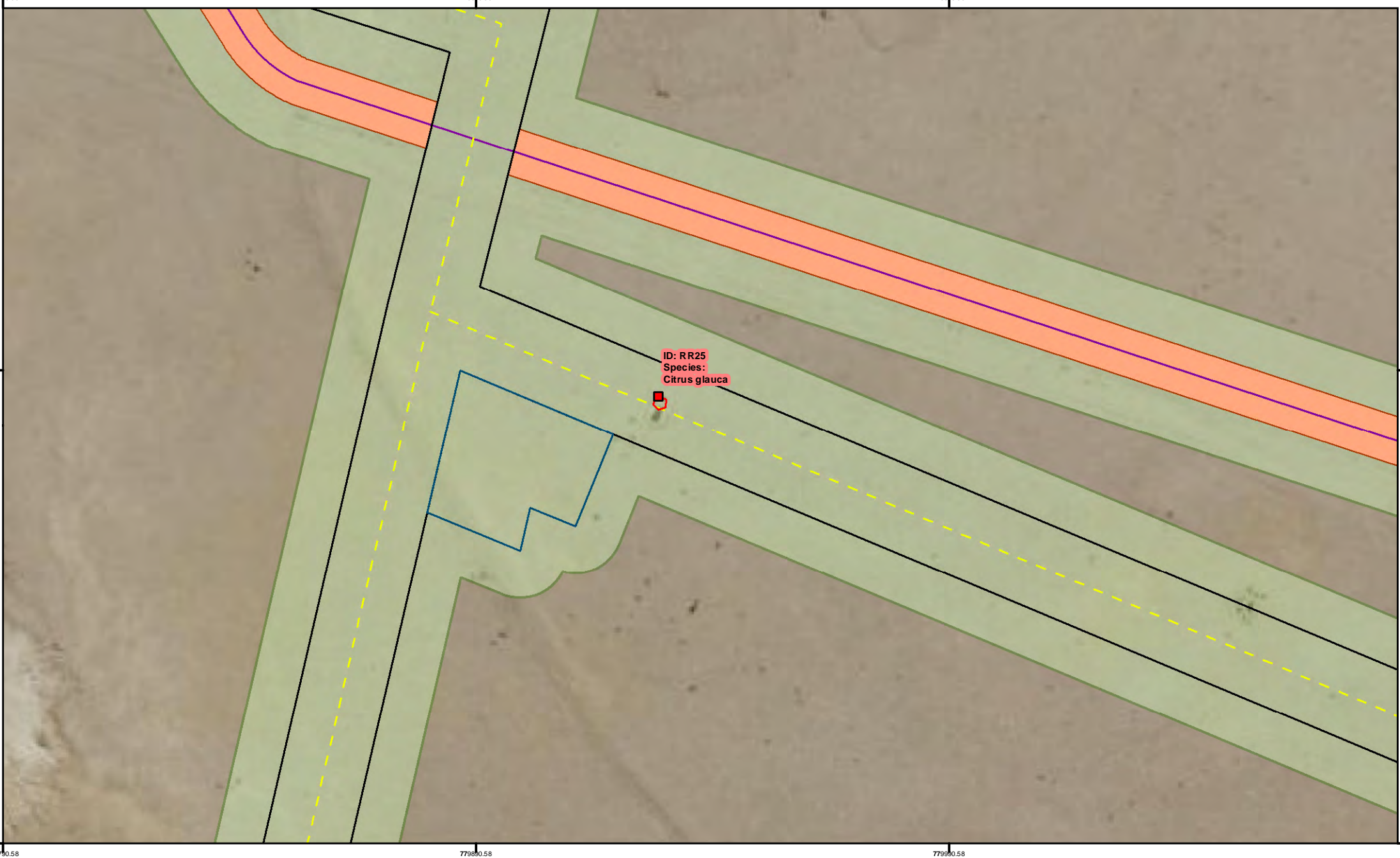
Data Accuracy Notes:
Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

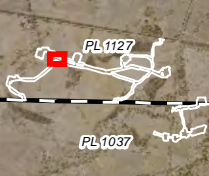
COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,250

0 10 20 30
Metres



- Atlas S3 Proposed tree clearance assessment area
- Koala tree**
- Remove
- TreeDriplines**
- Dripline Extent**
- Remove
- Workspace
- Proposed row
- Tracks
- Tracks corridor
- Proposed Gathering

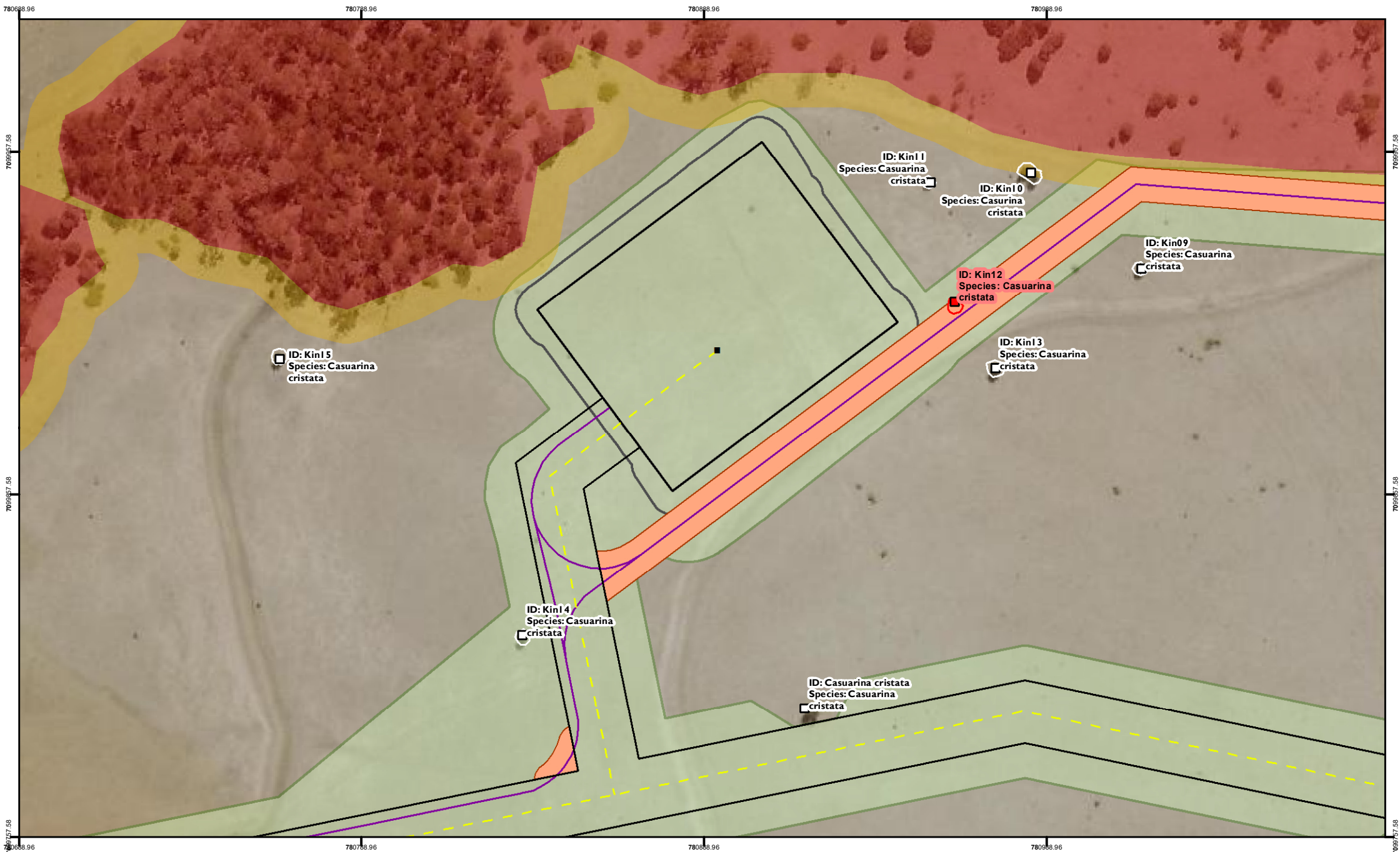
Data Accuracy Notes:
Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
0	MS	BO	18/11/2024
1	NC	LG	31/03/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,020

0 10 20 30
Metres



Ausecology

FIGURE 3-14

Kinross
Atlas 3 (2022/09410) - Detailed

Atlas S3 Proposed tree clearance assessment area

Koala tree

Retain

Remove

Dripline Extent

Retain

Remove

Proposed row

Proposed well pads

Proposed Wells

Tracks

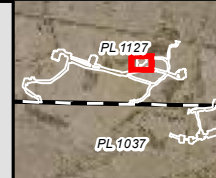
Tracks corridor

Wellpad earthworks extent

Proposed Gathering

Data Accuracy Notes:

Ground-Truthed data mapped
using Fixed RTK GNSS Receivers
with 1cm Accuracy



REVISION	AUTHOR	REVIEWER	DATE
2	NC/BD	LG	10/04/2025
3	NC/BD	LG	11/04/2025

COORDINATE SYSTEM: GDA2020 MGA Zone 55
SCALE: 1:1,380

0 20 40
Metres

4 Discussion

The surveys on the Kinross property found that the projects' impacts to koala habitat or dispersal habitat would be minimal with a total of 0.11 ha to be potentially cleared. The majority of the impact footprint is located within predominantly cleared agricultural areas and has actively avoided major remaining fragments of habitat and potential dispersal trees following the constraint mapping. In all cases, trees retained within close proximity to those that are unable to be avoided and the clearing of 0.106 ha is unlikely to have a significant effect on the ecological function of dispersal habitat on the property for koalas. Adjacent areas of dispersal habitat avoided are shown in Figure 4-1.

Threatened flora searches found no threatened species within or in proximity to the impact footprint. No threatened flora were encountered during the survey and no TECs were present within the disturbance footprint however three patches were reconfirmed within 30 m of the disturbance footprint. No remnant or HVR regulated vegetation, potential threatened fauna habitat or environmentally sensitive areas (ESAs) are present within the disturbance footprint. Several patches or ESAs in proximity to the footprint will require protection zones, however according to the relevant EA conditions, essential petroleum activities are permitted in these zones. It should be noted the overlying Atlas Stage 3 EPBC approval limits infrastructure corridors to 18 m width, or 24 m for trunklines and these conditions should be adhered to prior to construction commencing.

The area is known echidna and koala dispersal area and other least concern species were observed in the area during the surveys. It is recommended that a qualified fauna spotter/catcher should undertake a pre-clearance survey across the disturbance footprint to identify habitat features prior to clearing and be present during clearing works to check habitat features and relocate fauna, and where possible habitat features in order to minimise impacts to fauna.



Figure 4-1 Examples of adjacent vegetation avoided

Appendix A – Fauna records

Common Name	Scientific Name	Latitude	Longitude
Yellow-rumped thornbill	<i>Acanthiza chrysorrhoa</i>	-26.199808	149.79808
Australasian pipit	<i>Anthus novaeseelandiae</i>	-26.195852	149.795807
Red-winged parrot	<i>Aprosmictus erythropterus</i>	-26.195368	149.79892
Wedge-tailed eagle	<i>Aquila audax</i>	-26.194267	149.81459
White-necked heron	<i>Ardea pacifica</i>	-26.197695	149.811005
Australian bustard	<i>Ardeotis australis</i>	-26.192759	149.813268
Australian wood duck	<i>Chenonetta jubata</i>	-26.197691	149.810791
Black-faced cuckoo-shrike	<i>Coracina novaehollandiae</i>	-26.195276	149.799057
Torresian crow	<i>Corvus orru</i>	-26.194754	149.799408
Australian magpie	<i>Cracticus tibicen</i>	-26.195766	149.796265
Blue-faced honeyeater	<i>Entomyzon cyanotis</i>	-26.195799	149.796402
Brown falcon	<i>Falco berigora</i>	-26.193665	149.812332
Welcome swallow	<i>Hirundo neoxena</i>	-26.197681	149.810776
Brown honeyeater	<i>Lichmera indistincta</i>	-26.191776	149.805084
White-winged fairy-wren	<i>Malurus leucopterus</i>	-26.196012	149.794754
Crested pigeon	<i>Ocyphaps lophotes</i>	-26.197685	149.810791
Olive-backed oriole	<i>Oriolus sagittatus</i>	-26.195816	149.796387
Rufous whistler	<i>Pachycephala rufiventris</i>	-26.191961	149.798111
Striated pardalote	<i>Pardalotus striatus</i>	-26.195795	149.796402
Striped honeyeater	<i>Plectorhyncha lanceolata</i>	-26.200062	149.798996
Grey-crowned babbler	<i>Pomatostomus temporalis</i>	-26.194756	149.799408
Australasian grebe	<i>Tachybaptus novaehollandiae</i>	-26.197681	149.810791