

31 May 2023

Assistant Secretary
Environment Assessments NSW and ACT
Department of Climate Change, Energy, the Environment and Water
GPO Box 858
Canberra ACT 2601

Sent by email: [REDACTED]

Dear [REDACTED],

Re: Proposed variation to a controlled action (EPBC 2018/8372)

Bowdens Silver Pty Limited (Bowdens Silver) hereby requests that the Minister for the Environment (the Minister) accept a variation to a controlled action (reference EPBC 2018/9372) for the Bowdens Silver Project (the Project). The variation is sought in accordance with Section 156A of the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In accordance with Clause 5.08 of the *Environmental Protection and Biodiversity Conservation Regulations 2000*, this letter presents the following information to assist the Minister in their decision making.

- a) Details of the proposed variation to the action.
- b) The reasons for the proposed variation.
- c) How the impacts of the proposed variation on matters of national environmental significance compare with those of the original proposal.
- d) The impacts of the proposed variation on matters of national environmental significance not considered in the referral or assessment of the original proposal.
- e) If applicable, alternatives, mitigation measures and offsets to compensate for additional impacts on matters of national environmental significance.

Background to the Project

On 5 April 2019, Bowdens Silver was notified by the then Department of the Environment and Energy of the decision that the Project was considered a controlled action and would require approval under Part 9 of the EPBC Act. The Project was identified as potentially having a significant impact on threatened species and communities listed within the EPBC Act. The assessment of the proposed action was to be undertaken in accordance with the *NSW Bilateral Agreement relating to environmental assessment 2015*.

In May 2020, an Environmental Impact Statement (EIS) for the Project was submitted to the NSW Department of Planning and Environment (DPE) for public exhibition. Following the completion of the EIS, the Project was amended on two occasions. The Project amendments were supported by updated reporting on the environmental outcomes and assessment of residual environmental impacts. A *Biodiversity Assessment Report - Updated* was prepared by EnviroKey and a *Biodiversity Offset Strategy* was prepared by Niche Environment and Heritage (Niche) in March 2022 to support the second amendment to the Project. These documents are hereafter referred to as EnviroKey (2022) and Niche (2022) respectively.

As part of the NSW Government assessment of the Project, the Biodiversity, Conservation and Science Directorate (BCS) of the DPE provided an assessment of the Project under the EPBC Act in September 2022¹. This approach is consistent with the *NSW Bilateral Agreement relating to environmental assessment 2015*.

On 3 April 2023 the NSW Independent Planning Commission (IPC) approved Development Application SSD 5765 (SSD 5765) for the Project.

Original Referral

At the time of the original referral, the Project's disturbance footprint was comprised of an approximately 436 hectare (ha) Mine Site (including the re-alignment of an existing 500kV transmission line), the proposed relocated Maloneys Road and an approximately 60 kilometre (km) water supply pipeline. The water supply pipeline had an average disturbance width of 6 metres (m) and therefore was to cover approximately 36ha. Based on the referral and supporting information, a decision was made under EPBC 2018/8372 that the Project was a controlled action as it was likely to have the following impacts to Matters of National Environmental Significance (MNES).

- Clearing 148ha of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (hereafter referred to as Box Gum Woodland).
- Clearing 402ha of potential habitat for Koala, Regent Honeyeater, Swift Parrot, and Spotted-tail Quoll.

EPBC 2018/8372 also identified the Project as potentially having impacts on the following MNES, and it was noted that this may not be a complete list.

- | | | |
|---|-----------------------------|---|
| • A leek-orchid (<i>Prasophyllum sp. Wybong</i>) | • Grey-headed Flying Fox | • Pink-tailed Legless (Worm) Lizard |
| • <i>Philothea ericifolia</i> | • Striped Legless Lizard | • Corben's Long-eared Bat |
| • Tarengo Leek Orchid (<i>Prasophyllum petilum</i>) | • Brush-tailed Rock Wallaby | • Small Purple-pea (<i>Swainsona recta</i>) |
| • Painted Honeyeater | • Superb Parrot | • Large-eared Pie Bat |
| • <i>Euphrasia arguta</i> | • Booroolong Frog | |

The Proposed Variation

The proposed variation takes into account changes to the disturbance footprint of the Project that have occurred since the original referral of the Project. **Figure A** presents the Mine Site layout as approved under SSD 5765. In summary, the changes include:

- removal of the originally proposed water supply pipeline as a Project component;

¹ See <https://www.planningportal.nsw.gov.au/major-projects/projects/bowdens-silver-temp> for a publicly available copy of that assessment.

- amendment to the Mine Site layout to support the proposed integrated water management and supply strategy, and to consolidate disturbance areas; and
- amendment to the alignment of the 500kV transmission power line that would need to be relocated.

In addition, four individuals of the threatened plant Small Purple-pea (*Swainsona recta*) were identified in targeted field surveys of the Mine Site after the submission of the EIS. Bowdens Silver personnel identified the species during routine environmental monitoring and commissioned additional surveys to confirm the presence of the species. During subsequent surveying, additional populations were found outside of the Mine Site boundary. This species is also now included in the biodiversity offsetting strategy of the Project.

In summary, the proposed variation is principally required to account for minor changes to the physical disturbance of land required for the Project. The changes occurred through areas being either added or removed from the proposed layout or from specific infrastructure being relocated. Changes to the Project layout were necessary to incorporate the proposed integrated water management and supply strategy that included additional water management infrastructure but allowed the complete removal of the water supply pipeline component. Some areas within the Mine Site were also consolidated to limit indirect impacts. Finally, the alignment of the relocated 500kV power transmission line was moved to the east following feedback from the community regarding potential visual impacts of the originally proposed alignment.

These changes are all considered to ultimately provide for a **reduction in residual impacts to biodiversity**, including MNES when compared to the original referral. This is particularly the case for the removal of the water supply pipeline that was to extend from the Mine Site to the Ulan Coalfields and would have passed through the Mudgee-Wollar key breeding area for the Regent Honeyeater as defined by the *National Recovery Plan for Regent Honeyeater* (DoE, 2016) and required removal of 8.13ha of vegetation identified as Box Gum Woodland.

Comparison of Original Referral and Proposed Variation

Figure B presents a comparison of the change to the disturbance areas proposed in the original referral and as now required for the Project.

The approved Project represents:

- a reduction of approximately 15ha in total physical disturbance, from approximately 472ha considered in the original referral to approximately 457ha approved under SSD 5765; and
- a reduction of approximately 21ha in native vegetation clearance, from approximately 402ha considered in the original referral to approximately 381ha approved under SSD 5765.

Table A provides a comparative summary of outcomes from the assessments of significance for the original referral and those of the proposed variation as presented in EnviroKey (2022).

Impact of the Proposed Variation

The residual impacts of the approved Project (following all amendments) on biodiversity are assessed in a *Biodiversity Assessment Report - Updated* prepared by EnviroKey (2022) with the approach to satisfying the Project's biodiversity offsetting obligations evaluated and presented in an updated *Biodiversity Offset Strategy* prepared by Niche (2022). EnviroKey (2022) and Niche (2022) were respectively provided as Appendix 5 and Appendix 6 of the *Water Supply Amendment Report* and are attached to this letter as **Attachment 1** and **Attachment 2**. In summary, the EnviroKey (2022) and Niche (2022) reports demonstrate

that the amended Project has not materially changed from the original Project and disturbance areas are slightly less.

Table A
Comparison of MNES Significance Assessments for Proposed Action and Variation

MNES	Original Referral	Proposed Variation	Comment
Migratory species	No direct or indirect impact upon migratory species.	Two migratory species identified in field surveys (White-throated Needletail and Rainbow Bee-eater) and two migratory species likely to occur (Lathan's Snip and Cattle Egret).	EnviroKey (2022) concluded that the Project would not significantly impact these or other migratory species.
Box Gum Woodland	Clearing of 148ha.	Clearing of 146.72ha.	Clearing of this vegetation community has been reduced by 1.1ha.
Koala (<i>Phascolarctos cinereus</i>)	Removal of 402ha of suitable habitat.	Removal of 381.17ha of suitable habitat.	Clearing of suitable habitat reduced by 20.83ha.
Large-eared Pie Bat (<i>Chalinolobus dwyeri</i>)	Not considered for offsetting as there would be no direct impact to potential habitat areas (sandstone outcropping adjacent Mine Site).	Following consultation with BCS it was agreed that offsetting would be required for the removal of 337.80ha of potential foraging habitat.	There was no appreciable change to the outcomes of assessment for this species. The Large-eared Pie Bat is now included in the biodiversity offset strategy. Species credits are separately required for this species. The proposed on-site offset area would conserve habitat for this species.
Spotted-tail Quoll (<i>Dasyurus maculatus</i>)	Removal of 402ha of potential foraging habitat.	Removal of 381.17ha of potential foraging habitat.	Clearing of potential foraging habitat has been reduced by 20.83ha.
Swift Parrot (<i>Lathamus discolor</i>)	Removal of 402ha of potential foraging habitat	Removal of 381.17ha of potential foraging habitat.	Clearing of potential foraging habitat has been reduced by 20.83ha.
Regent Honeyeater (<i>Anthochaera Phrygia</i>)	Removal of 402ha of potential foraging habitat	Removal of 381.17ha of potential foraging habitat.	Clearing of potential foraging habitat has been reduced by 20.83ha. The Mudgee-Wollar key breeding area for the Regent Honeyeater as defined by the National Recovery Plan for Regent Honeyeater (DoE, 2016) would no longer be impacted for the water supply pipeline. 7.3ha of impact to this mapped important habitat would be avoided.
Small Purple-pea (<i>Swainsona recta</i>)	Removal of 148ha of Box Gum Woodland (potential habitat for the species) but no Small Purple-pea individuals identified.	Removal of four individuals.	Four individuals of the Small Purple-pea (<i>Swainsona recta</i>) were identified in targeted field surveys of the Mine Site after the original referral.

A copy of vegetation mapping within the Mine Site, including the general arrangement of mining components that was provided as Map 15 of EnviroKey (2022) is provided as **Figure C**. It should be noted that EnviroKey (2022) assumed that all vegetation that may be habitat for a threatened species was

considered as habitat in the assessment, even though large areas were low in density/richness or were cleared paddocks with remnant vegetation consistent with a vegetation community. The EnviroKey (2022) assessment should be considered conservative in this regard.

EnviroKey (2022) assessed the potential occurrence of the MNES within the Project disturbance area (see Section 5.7, Section 5.8, Section 7.8 and Annexure 6 of EnviroKey (2022)). A total of 58 species were considered for assessment consistent with review of data provided by the Protected Matters Search Tool report for the Project (DoEE (2022) as presented in Annexure 2 of EnviroKey (2022)). EnviroKey (2022) based their final assessment of potential impacts to MNES on the extensive field surveys undertaken for the Project and described in Section 2.3 of EnviroKey (2022). Table 24 of EnviroKey (2022) presents a comprehensive review of the potential occurrence of the MNES within the Project disturbance area. It was concluded that the following species were potentially likely to occur.

- Box-Gum Woodland
- Large-eared Pied Bat
- Regent Honeyeater
- Swift Parrot
- Spotted-tailed Quoll
- Koala
- Small Purple-pea
- Rainbow Bee-eater (migratory species)
- Cattle Egret (migratory species)
- Latham's Snipe (migratory species)
- White-throated Needletail (migratory species)

In accordance with the *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* (DotE, 2013), EnviroKey (2022) completed a significance assessment for each of the MNES identified as likely to occur. The full significance assessment is presented as Annexure 6 of EnviroKey (2022).

Assessment of the above species against the impact criteria listed in the *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* concluded that significant impacts were not expected for the majority of species. Significant impacts were predicted for the Box Gum Woodland and potentially the Regent Honeyeater in the absence of any mitigation measures and biodiversity offsets. EnviroKey (2022) identified that the Project would not be consistent with recovery plans for these species / vegetation community.

- 146.72ha of vegetation that meets the definition of Box Gum Woodland under the EPBC Act would be removed for the Project. EnviroKey (2022) concluded that this has the potential to result in impacts to this critically endangered ecological community.
- No Regent Honeyeater were identified within the Project area or the previously proposed water pipeline alignment despite comprehensive surveys during varying periods of the year. However, the disturbance areas contain 381.17ha of vegetation that is potentially suitable habitat for the species. The Project is also located between known breeding areas in the Capertee Valley and at Mudgee-Wollar. As a result, EnviroKey (2022) considered that the Project may have impacts on the species.

EnviroKey (2022) noted that conclusions to these assessments were made in the absence of mitigation measures and biodiversity offsets. Both the Box Gum Woodland and the Regent Honeyeater are key components in the *Biodiversity Offset Strategy* (Niche, 2022) the status of which has been accepted by BCS, DPE and the IPC. The biodiversity offset strategy identifies land owned by Bowdens Silver and in close proximity to the Project that would be considered for land-based offsets. Any remaining biodiversity offsetting obligations would be satisfied by land-based offsets, purchase of credits on the market and/or paying into the Biodiversity Conservation Trust Fund. The land surveys for land-based offsets confirm the presence of Box Gum Woodland habitat for each of the threatened entities assessed and a large population of Small Purple-pea individuals. The biodiversity offsetting strategy would be finalised following an approval under EPBC 2018/8372. EnviroKey (2022) also note that substantial areas of vegetation and habitat that would not be disturbed are present within the area surveyed and the broader region.

It is also noted that Bowdens Silver and the general public have identified Koala within the Mine Site and in adjacent areas both before and following the original referral. The possible presence of Koala has been an interest for the community. EnviroKey (2022) considered previous records, Koala sightings and the possible effects of the Summer 2019/2020 bushfires in its assessment of the possible significance of impact to the species. Bowdens Silver commissioned Niche (2021) to undertake a desktop assessment of the possible impacts of the Summer 2019/2020 bushfires on Koala in the locality (see Appendix 5 of the Submissions Report of June 2021). Niche (2021) concluded that although the bushfires may cause Koala dispersal patterns to change, by the time the Project was likely to be developed, the effects would have largely diminished through regrowth in burnt areas. Due to continued public interest in the Koala, Bowdens Silver also commissioned AREA Environment & Heritage Consultants to undertake additional field surveys for the Koala based on the Spot Assessment Technique (SAT) developed by Phillips & Callaghan (2011). The outcomes of that assessment are provided as **Attachment 3**. In summary, AREA Environment & Heritage Consultants confirmed the apparent low-density presence of Koala that was consistent with the findings of EnviroKey (2022) and the occasional sightings of the species. Finally, it should be noted that all vegetation to be removed in association with the Project has conservatively been considered potential Koala habitat for the purpose of assessment and the biodiversity offset strategy includes ecosystem as well as species credits that would offset residual impacts to the species. These outcomes were accepted by the NSW BCS in its review of the Project.

Alternatives, mitigation measures and offsets

The changes to the Project layout include the results of Bowdens Silver's consideration of alternatives for the location of mining and ancillary infrastructure supported by the traffic light model developed by EnviroKey for the assessment of impacts to vegetation communities in the vicinity of the Mine Site. Management and mitigation measures were unchanged as a result of the variation to the Project layout including the proposed approach to biodiversity offsetting.

The proposed biodiversity offset strategy for the Project is presented in Niche (2022) and summarised in the *Amended Project Description* (see Appendix 1 to the Water Supply Amendment Report). The final biodiversity offsetting obligations of the Project are presented in Table 8 of SSD 5765 and reproduced here in **Table B** and **Table C**. The key features of the biodiversity offset strategy are as follows.

- It is proposed that the required offsets would be met in a staged manner as outlined in **Table B** and **Table C**.
- Bowdens Silver proposes to establish or facilitate the establishment of Biodiversity Offset Sites using Biodiversity Stewardship Agreements.
- The Biodiversity Offset Sites would be established either on land within or adjacent to the Mine Site (on-site offsets) or on other freehold land within the region where offsets can be sourced under the FBA rules (off-site offsets).
- If necessary, any residual offset requirements would be satisfied by purchasing available credits from the market, through payment into the NSW Biodiversity Conservation Trust Fund, or other supplementary measures, subject to agreement.

The approved bilateral agreement in place between the NSW and the Commonwealth allows for impacted threatened species listed under the EPBC Act to be offset in accordance with the NSW Biodiversity Offset Scheme. Therefore, the approved biodiversity offset strategy which addresses the NSW offset requirements would be applied to the impacted threatened biodiversity under the EPBC Act. The BCS assessment of the Project under the EPBC Act noted the following in relation to biodiversity offsetting for the Project (see page 15, Section 4 of the BCS assessment).

If the biodiversity credit obligation is fulfilled in accordance with the Biodiversity Conservation Act 2016, no residual impacts will occur.

Table B
Staged Offset Requirement – Ecosystem Credits

Credit Type	Credits Required							
	Total		Stage 1		Stage 2		Stage 3	
Ecosystem Credits	Area (ha)	Credits	Area (ha)	Credits	Area (ha)	Credits	Area (ha)	Credits
PCT277 Blakely's Red Gum – Yellow Box grassy tall woodland	22.97	1,250	5.64	307	4.39	233	13.05	710
PCT324 Inland Scribbly Gum grassy open forest	58.69	4,150	40.95	2,895	7.70	544	10.05	711
PCT323 Red Stringybark Inland Scribbly Gum Dry Open Forest (Moderate/good-high)	84.38	5,603	45.35	3,012	24.85	1,650	14.18	941
PCT323 Red Stringybark Inland Scribbly Gum Dry Open Forest (Moderate/good-medium)	13.93	654	2.24	105	6.44	302	5.26	247
PCT323 Red Stringybark Inland Scribbly Gum Dry Open Forest (Moderate/good-poor)	21.26	703	12.10	400	6.91	229	2.25	74
PCT358 Mugga Ironbark – Red Box – White Box – Black Cypress Pine tall woodland	0.71	42	0.62	37	0.08	5	0	0
PCT281 Rough-Barked Apple – red gum – Yellow Box woodland (Moderate/good-medium)	90.80	6,803	74.23	5,562	6.80	510	9.76	731
PCT281 Rough-Barked Apple – red gum – Yellow Box woodland (Moderate/good-poor)	66.40	3,315	29.87	1,491	20.47	1,022	16.06	802
PCT273 White Box shrubby open forest	22.04	1,360	22.04	1,360	0	0	0	0

Source: SSD 5765 – Condition B53 and Table 8

Table C
Staged Offset Requirement – Species Credits

Credit Type	Credits Required							
	Total		Stage 1 Years 0-1		Stage 2 Years 3-4		Stage 3 Years 6-12	
Species Credits (Fauna)	Area (ha)	Credits	Area (ha)	Credits	Area (ha)	Credits	Area (ha)	Credits
Koala (<i>Phascolarctos cinereus</i>)	381.17	9,910		6,059		2,016		1,835
Regent Honeyeater (<i>Anthochaera Phrygia</i>)	381.17	29,350		17,943		5,970		5,437
Large-eared Pied Bat (<i>Chalinolobus dwyeri</i>)	337.80	4,391		2,860		835		696

Credit Type	Credits Required							
	Total		Stage 1 Years 0-1		Stage 2 Years 3-4		Stage 3 Years 6-12	
	Area (ha)	Credits	Area (ha)	Credits	Area (ha)	Credits	Area (ha)	Credits
Species Credits (Fauna)								
Squirrel Glider (<i>Petaurus norfolcensis</i>)	381.17	8,386		5,127		1,706		1,553
Species Credits (Flora)								
	Num. plants	Credits	Num. plants	Credits	Num. plants	Credits	Num. plants	Credits
Silky Swainson-pea (<i>Swainsona sericea</i>)	54	972		954		0		18
Small Purple-pea (<i>Swainsona recta</i>)	4	104		0		104		0
Source: SSD 5765 – Condition B53 and Table 8								

Closure

In closure, the approved Project as presented in the proposed variation results in the following.

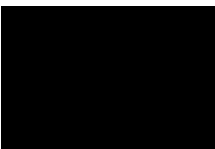
- An overall reduction in total disturbance footprint and approximately 21ha reduction in native vegetation disturbance compared with the original referral.
- Reduced opportunity for indirect biodiversity impacts by developing a more compact disturbance footprint.
- Removal of the previously proposed water supply pipeline removes the need to disturb vegetation within the Mudgee-Wollar key breeding area for the Regent Honeyeater, as defined by the *National Recovery Plan for Regent Honeyeater* (DoE, 2016).
- The Small Purple-pea (*Swainsona recta*) has been added to the MNES that would be impacted but would not experience significant impacts from the Project.

EnviroKey (2022) undertook a thorough assessment of the residual impacts of the proposed action and the conclusions of the assessment for the proposed action as varied would remain substantially the same as previously presented. The biodiversity assessment has also been reviewed by the NSW BCS and determined to be acceptable under the EPBC Act by that Government agency.

As noted by EnviroKey (2022), offsetting potential impacts to MNES are key components of the Project's Biodiversity Offsetting Strategy. The Project's offsetting obligations are described in Condition B53 of SSD 5765 that states Project-related disturbance cannot be undertaken prior to the retirement of the type and number of biodiversity credits specified in Table 8 of SSD 5765.

I trust the information provided in this document and accompanying figures are sufficient for the Minister to make a decision on the variation application. However, please do not hesitate to contact me to discuss any aspect further.

Yours sincerely,



General Manager

Encls: Attachment 1: *Biodiversity Assessment Report - Updated* prepared by EnviroKey (2022)

Attachment 2: *Biodiversity Offset Strategy* prepared by Niche (2022).

Attachment 3: *Koala Population Survey* prepared by AREA Environment & Heritage Consultants (2022).

Figure A

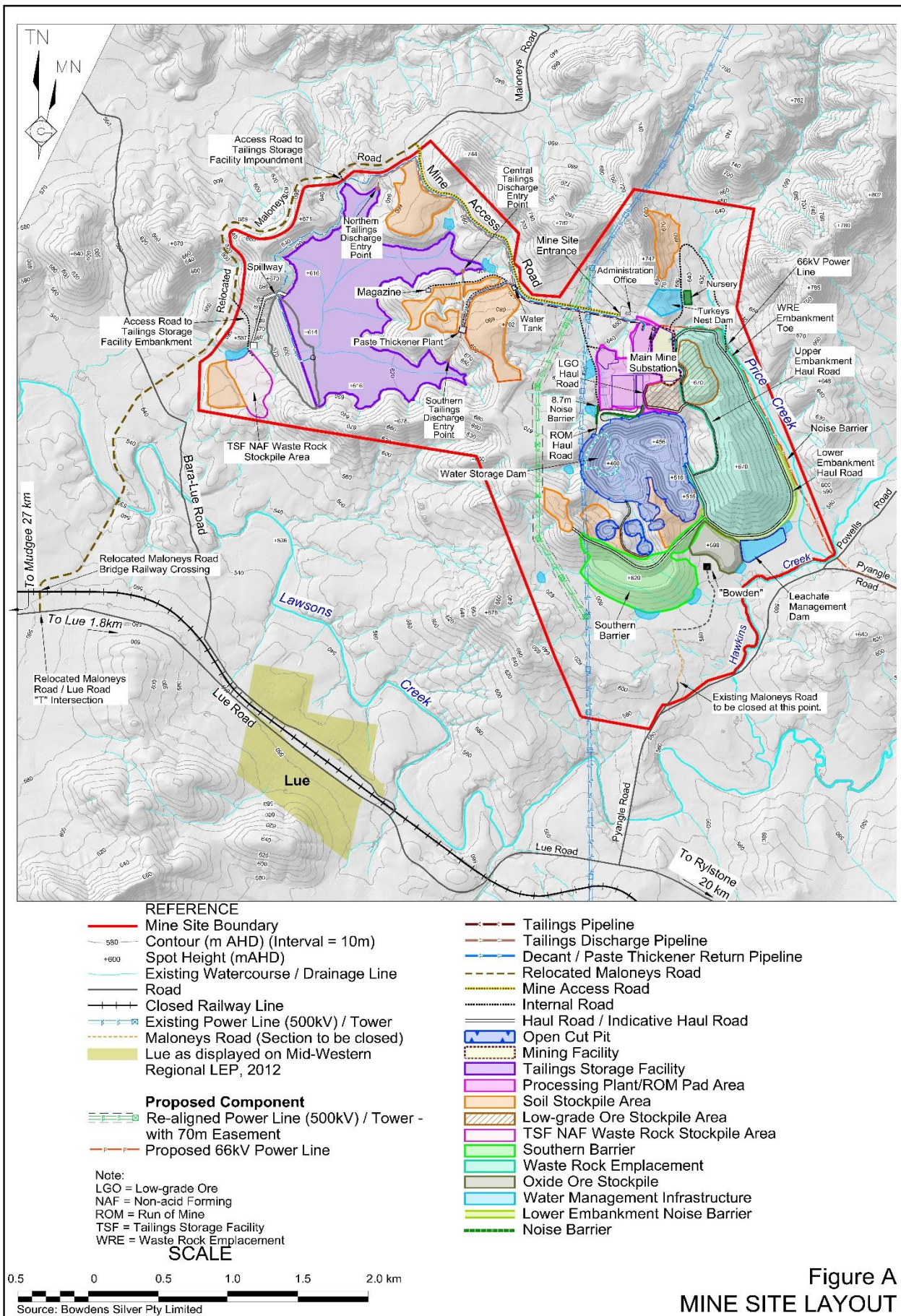
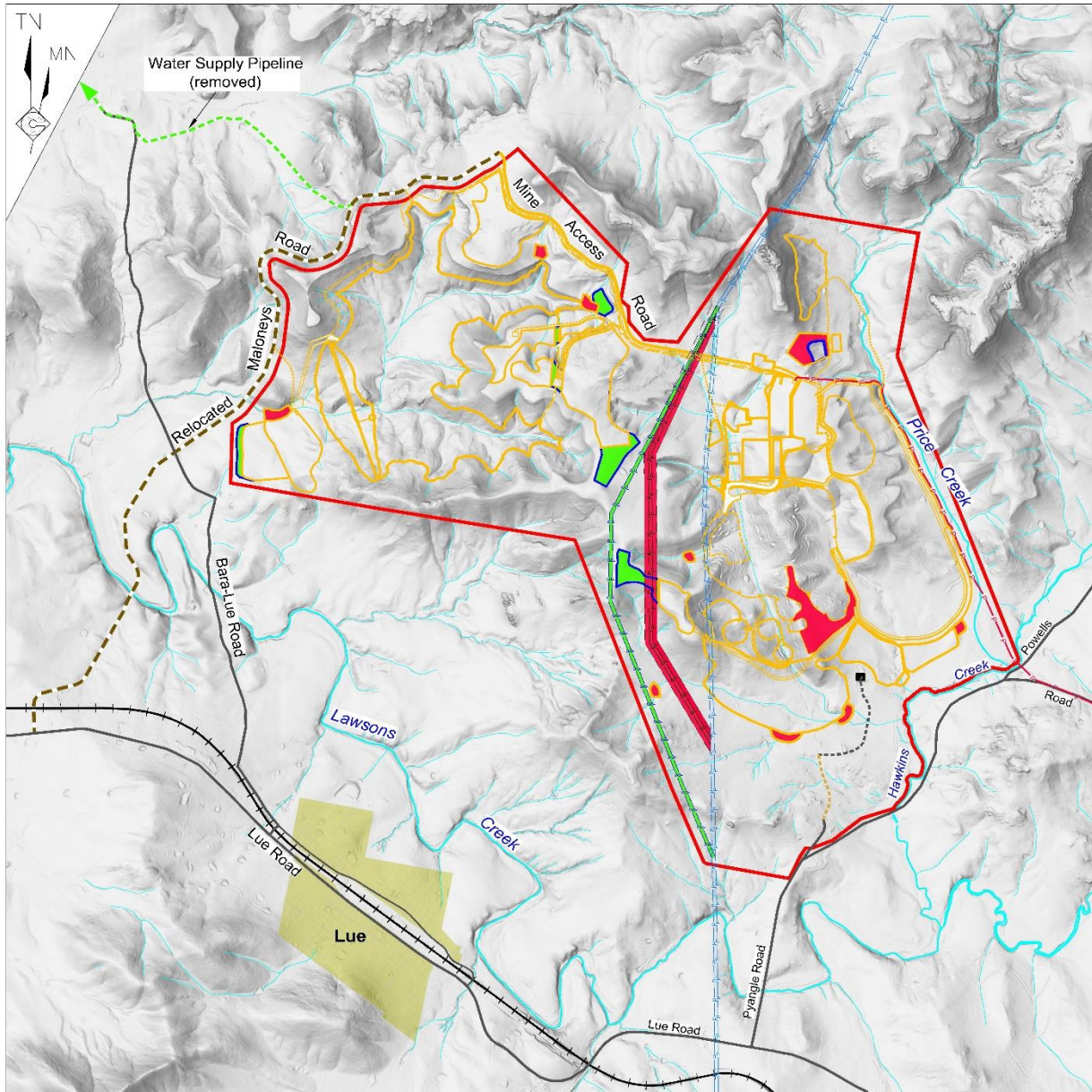


Figure A
MINE SITE LAYOUT

Figure B

Y:\Jobs 001 to 530\429\Post 29 June 2016\Reports\42924_EIS_2020\CAD\429BaseMGA55.dwg_2.01 Site Layout-28.04.2023-2:33 PM



- REFERENCE
- Mine Site Boundary
 - Existing Watercourse / Drainage Line
 - Road
 - - - Closed Railway Line
 - Existing Power Line (500kV)
 - - - Maloneys Road (Section to be closed)
 - - - Relocated Maloneys Road
 - Lue as displayed on Mid-Western Regional LEP, 2012
 - Approved Disturbance Area
 - Changed Disturbance Area - Reduction
 - Changed Disturbance Area - Addition

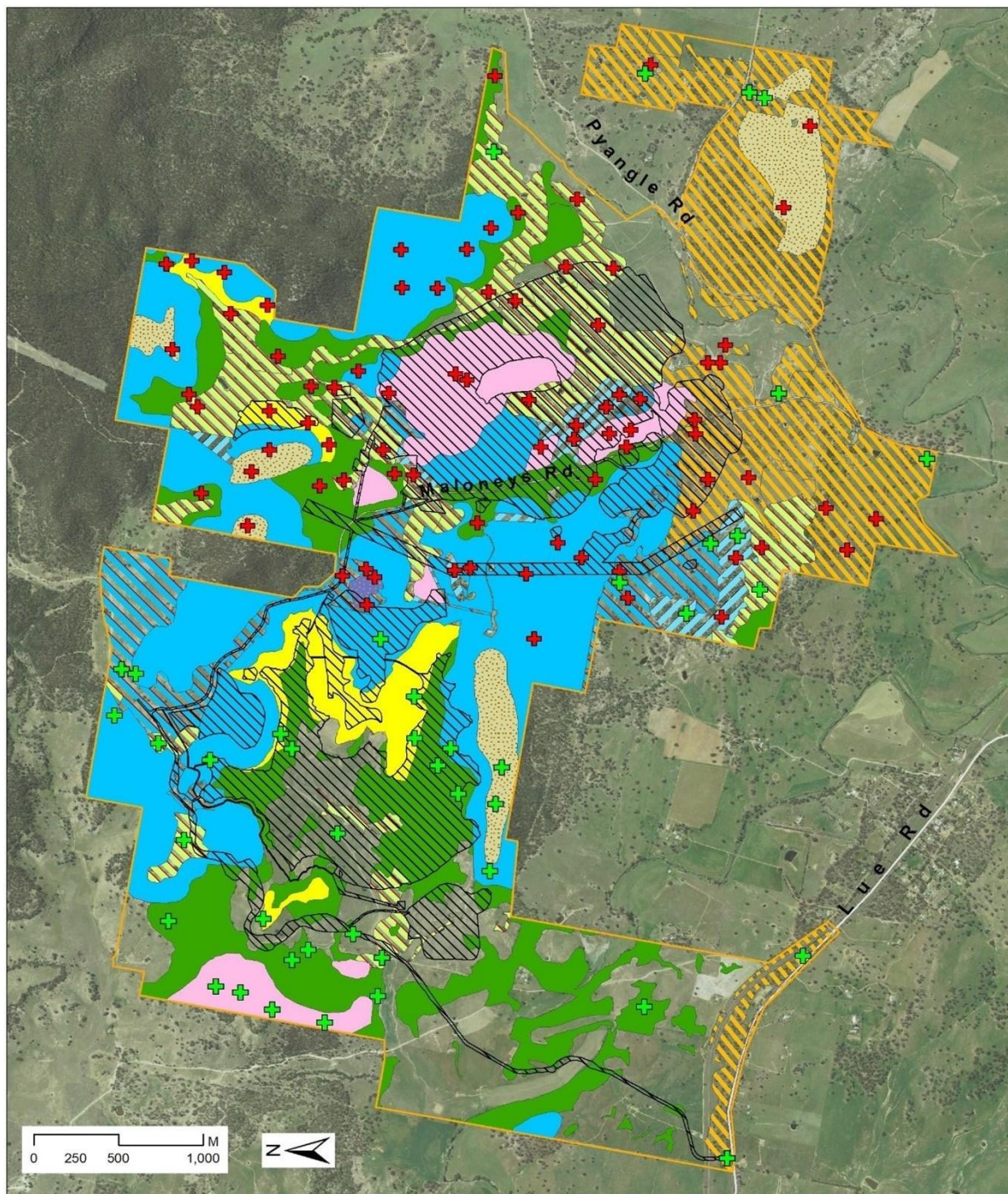
SCALE 1:40 000 (A4)



Source: Bowdens Silver Pty Limited

Figure B
DISTURBANCE
FOOTPRINT COMPARISON

Figure C



Vegetation zone

- CW111, Moderate/Good_Medium
- CW111, Moderate/Good_Poor
- CW112, Moderate/Good_Poor
- CW217, Moderate/Good_Medium
- CW242, Moderate/Good_High

- CW263, Moderate/Good_High
- CW270, Moderate/Good_High
- CW272, Moderate/Good_Medium
- CW291, Moderate/Good_High
- CW291, Moderate/Good_Medium
- CW291, Moderate/Good_Poor

- Transect/Plot - ELA
- Transect/Plot - EK
- BAR Footprint
- Study Area

Datum, proj: GDA94, MGA z55.
 Data sources:
 Study area, Veg,
 EK trans/plots: Envirokey.
 ELA trans/plots: Eco Logical.
 BAR footprint: Bowdens.
 Aerial image: SIX (NSW Govt).
 Mapping date: 3/12/2021



Figure C Map 15 - EnviroKey (2022)