

20 December 2024

Company Announcement Officer
ASX Limited
Exchange Centre
20 Bridge Street
SYDNEY NSW 2000

BOWDENS OPTIMISATION STUDY OUTLINES ROBUST, HIGH MARGIN SILVER PROJECT

HIGHLIGHTS

- **Bowdens Silver Project (“BSP” or “Project”) Optimisation demonstrates robust economics from output of 53Moz silver, 92kt zinc and 67kt lead recovered to concentrate over a 16-year mine life and 14½-yrs of ore processing.**
- **Silver contributes 86% of revenue over the life of mine – placing the BSP as one of the most leveraged projects in the world to the silver commodity price.**
- **Optimisation based on 28.1Mt at 71 g/t Ag with low strip ratio of 1.49:1.0, a subset of the Ore Reserve (32.8Mt at 68 g/t Ag - strip ratio of 1.53:1.0).**
- **Initial capital costs estimated at A\$331m and All-In-Sustaining-Costs (AISC) estimated at A\$24.80oz (US\$16.60/oz).**
- **Based on a silver price of US\$29/oz and US\$:A\$ exchange rate of 0.67, the BSP generates the following financial metrics:**
 - Profitability Index of 1.76x (2.12x at spot silver price of A\$48.43/oz).
 - Payback of 3.9-yrs from start of production (3.4-years at spot).
 - Life of mine operating margin of A\$948m (A\$1.19bn at spot).
 - Undiscounted, pre-tax operating surplus of A\$631m (A\$877m at spot).
 - Pre-tax NPV_{5%} of A\$359m and IRR of 21% (A\$528m and 27% at spot).
- **Optimisation of the mining schedule and process flow sheet has smoothed material movements and silver production over the first 10-years.**
- **Key metrics over the first 10-years include:**
 - Average production of 4.25Moz silver.
 - AISC of A\$22.67/oz / US\$15.19/oz.
 - Pre-tax operating cash flow of A\$84m per annum (A\$103m at spot).
- **Significant options available to extend mine life and optimise output including:**
 - Potential for mine cutbacks to the south and west.

- Underground mine development to access high-grade depth extensions.
- Upgrading of medium and low-grade ores through ore-sorting.
- Plant expansion to increase processing of low-grade material over later years.
- **Post-optimisation, 70% of engineering completed to Definitive Feasibility Study level, with remaining 30% at Feasibility Study level.**

PROJECT APPROVALS AND PERMITS

- **The priority for the Bowdens team remains securing the Development Consent (“Consent”) from the NSW state government. While it is not possible to provide a definitive timeline on the regulatory process, the Company remains very confident that the Consent will be returned in due course.**
- **Once the Consent is obtained, the Company will be able to update timelines on finalising project approvals including the federal permit in accordance with the Environmental Protection and Biodiversity Conservation Act 1999 and the subsequent Mining License approval from the state government.**

TIMING FOR DFS AND FINANCIAL INVESTMENT DECISION (FID)

- **The completed optimisation will allow the Company to commence more detailed project funding discussions with potential financial partners. These discussions will be conducted in parallel with the completion of the balance of work required to convert the optimisation to Definitive Feasibility Study (DFS) level and into the Front-End Engineering and Design (FEED) process.**

Silver Mines Managing Director, Jo Battershill said: “The Board of Silver Mines is delighted with the outcome of the optimisation work completed by our site team, particularly given the significant distractions resulting from the NSW Court of Appeal’s decision to set aside the Bowdens development consent.

With the pathway to regaining the Project’s consent now firmly in-hand, it is important to focus on the economic benefits the BSP can bring to the community and investors alike.

The Project is expected to deliver attractive returns with the optimisation confirming the potential for a long-life, low-cost operation, with an initial operating life of more than 15-years, average C1 margins of over 45% and an internal rate of return of over 20%. Given the large ore reserves and mineral resources in place, the Project also has significant optionality for future extensions of the open pit and the potential to access higher grades from an underground development.

We very much look forward to continuing to advance the BSP through to FEED, which could occur over the next 12-months depending on timing around regaining the Bowdens Consent.”

Silver Mines Limited (ASX:SVL) (“Silver Mines” or the “Company”) is pleased to announce the results of the recently completed Optimisation Study for its Bowdens Silver Project (“Project” or “BSP”) which has resulted in significant improvements to the economic parameters of the Project.

Summary

The Bowdens Silver Project Optimisation Study has demonstrated strong economics and significant improvements to the Feasibility Study (“2018 FS”) from 2018.¹

The key economics of the BSP from the Optimisation Study are set out in Table 1 below:

Table 1: Bowdens Silver Project Economic Parameters

Parameter	Unit	Feasibility Study (Jun 2018)	Optimisation Study (Dec 2024)	Difference
Processing Plant, Infrastructure and Sustaining Capital				
Process Plant (2.0Mtpa)	A\$m	62.6	93.8	+50%
Non-Processing Infrastructure	A\$m	102.5	122.1	+19%
Other	A\$m	28.7	78.6	+174%
Indirect	A\$m	52.3	37.1	-29%
Total (including contingency)	A\$m	246.0	331.6	+35%
Sustaining Capital (LOM)	A\$m	53.9	14.8	-73%
LOM Capex	A\$m	299.9	346.4	+16%
Production Summary (Optimisation Study – Subset of Ore Reserve)				
Life of Mine (LOM)	Years	16.0	16.0	n/c
LOM Strip Ratio	W:O	1.61	1.49	-7.4%
Processing Rate	Mtpa	2.0	2.0	n/c
LOM Payable Silver Production	Moz	48.1	50.3	+4.6%
LOM Payable Zinc Production	kt	92	31	-66%
LOM Payable Lead Production	kt	75	56	-25%
LOM Average Silver Production	Mozpa	3.2	3.7	+16%
LOM Average Silver Recovery	%	79.8	82.7	+3.6%

¹Silver Mines Limited (ASX:SVL) release: “Feasibility Study – Bowdens Silver Project” dated 14 June 2018.

Parameter	Unit	Feasibility Study (Jun 2018)	Optimisation Study (Dec 2024)	Difference
LOM Operating Costs				
Mining (including rehabilitation)	A\$/t milled	14.98	17.99	+20%
Processing	A\$/t milled	18.15	20.78	+14%
Administrative	A\$/t milled	3.30	5.65	+71%
C1 Costs	A\$/oz	15.47	23.28	+50%
C1 Costs	US\$/oz	11.60	15.59	+34%
AISC	A\$/oz	17.25	24.81	+44%
AISC	US\$/oz	12.94	16.62	+28%
Project Economics				
LOM Pre-Tax Operating Margin	A\$m	559	948	+70%
NPV _{5%} (Pre-Tax)	A\$m	144	359	+149%
NPV _{5%} (Post-Tax)	A\$m	71	253	+256%
IRR (Pre-Tax)	%	17.9	21.0	+17%
Payback (Post-Tax)	Years	4.8	3.9	-19%
Profitability Index	(x)	1.29	1.76	+36%
NPV (Pre-Tax) / Pre-Prod Capex	(x)	0.58	1.08	+86%

The Optimisation Study results have been released on the back of the updated Ore Reserve Statement² released earlier today.

The Optimisation Study commenced in H1 2023 and has been running concurrently with ongoing permitting activities. A number of scoping changes relative to the 2018 FS were made during the Optimisation Study. The key changes include:

- Simplification of the process flow sheet with production of a single precious metal bulk concentrate now preferred over the original two concentrate stream (Ag/Pb and Zn) – with the added benefits of increased overall payability for silver, improved silver recovery and removing cyanide from the process.

²Silver Mines Limited (ASX:SVL) release: “Bowdens Silver Project Ore Reserves Increased to 71.7Moz Silver” dated 20 December 2024.

- Changing the Tailing Storage Facility (“TSF”) design from a large, conventional hydraulic tail to a dewatered facility (dry-stack), which is considered world’s best practice and allows for progressive rehabilitation of the TSF and improved dust management.
- Redesign of the Waste Rock Emplacement Facility to lower the height and reduce potential visibility to the community.
- Removal of the requirement to haul waste rock on the public road.
- The movement to a dayshift only mining roster which benefits the community and the local workforce at the BSP.

Revenue Assumptions

The commodity price and FX assumptions used in the Optimisation Study were derived from Consensus Economics and are set out in Table 2 below:

Table 2: Bowdens Silver Project FX Assumptions

Parameter	Unit	Feasibility Study (Jun 2018)	Optimisation Study (Dec 2024)	Difference
Commodity Prices				
Silver Price	US\$/oz	22.50	29.00	+29%
Zinc Price	US\$/lb	1.25	1.35	+8.0%
Lead Price	US\$/lb	1.00	1.05	+5.0%
Exchange Rates				
USDAUD		0.75	0.67	-11%

Production Summary

The following charts provide a visual summary of the key production estimates.

Figure 1: Annual mined ore tonnes and Ag grade (2024 Optimisation versus 2018 FS)

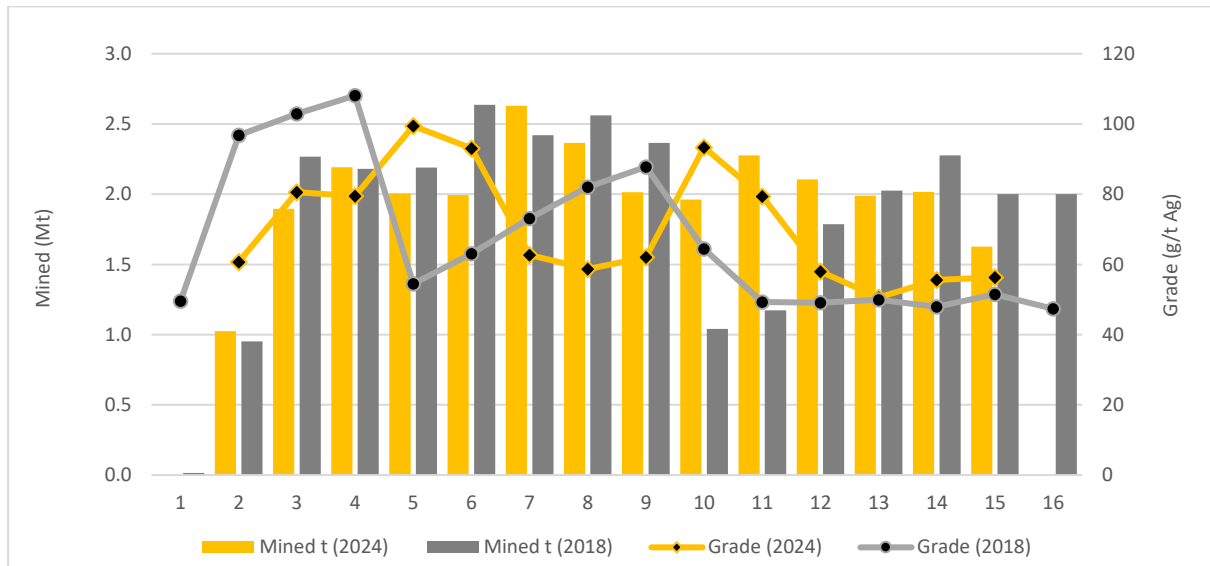


Figure 2: Annual processed tonnes and Ag grade (2024 Optimisation versus 2018 FS)

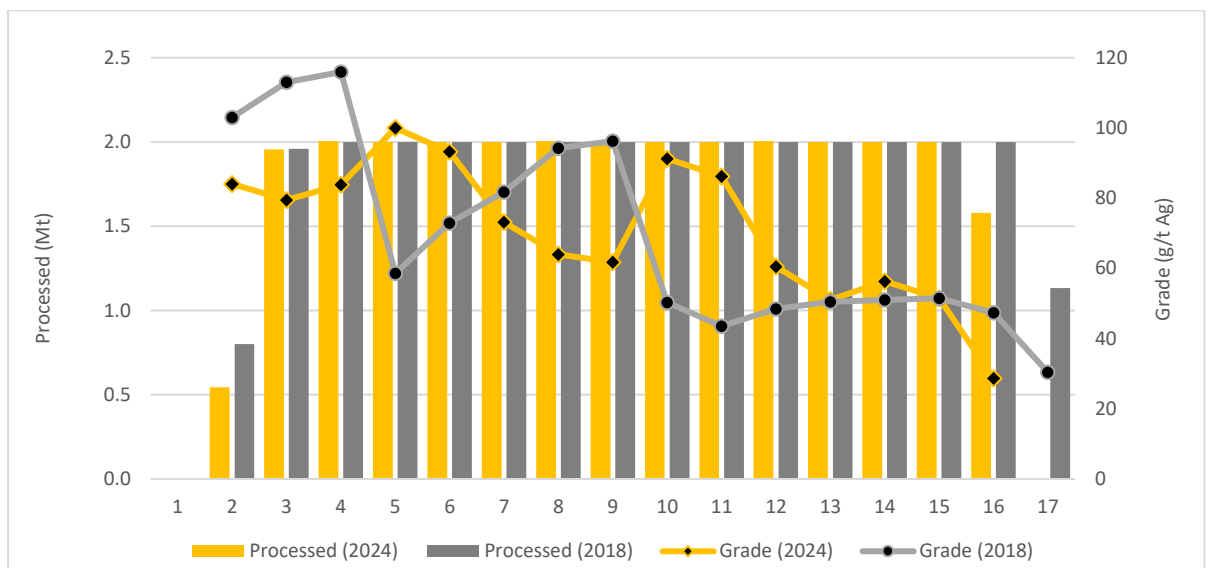


Figure 3: Annual Ag output and Cumulative LOM (2024 Optimisation versus 2018 FS)

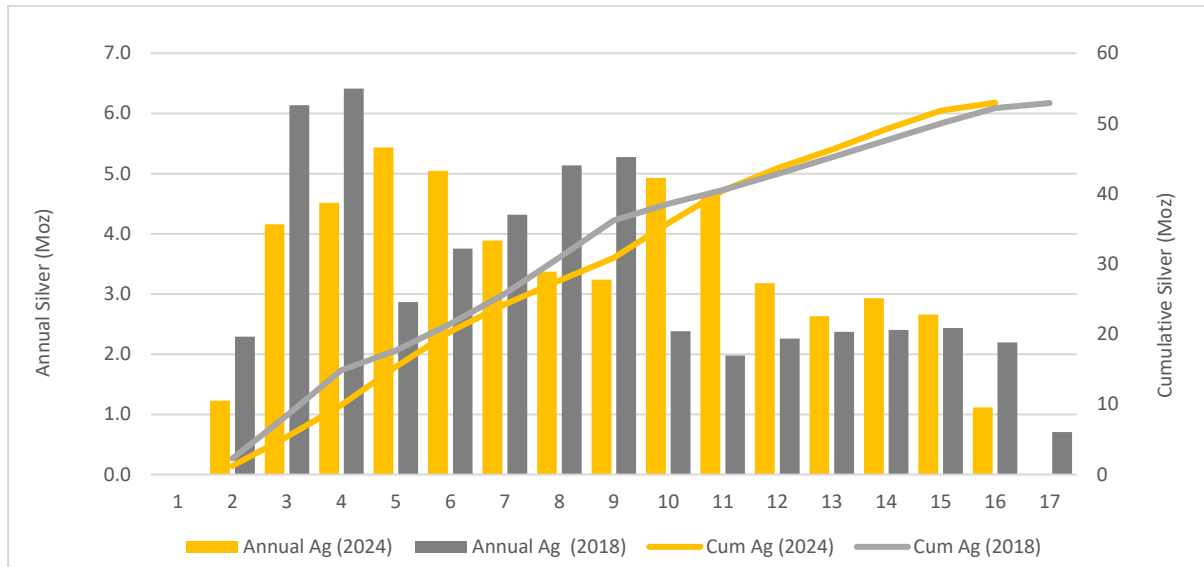
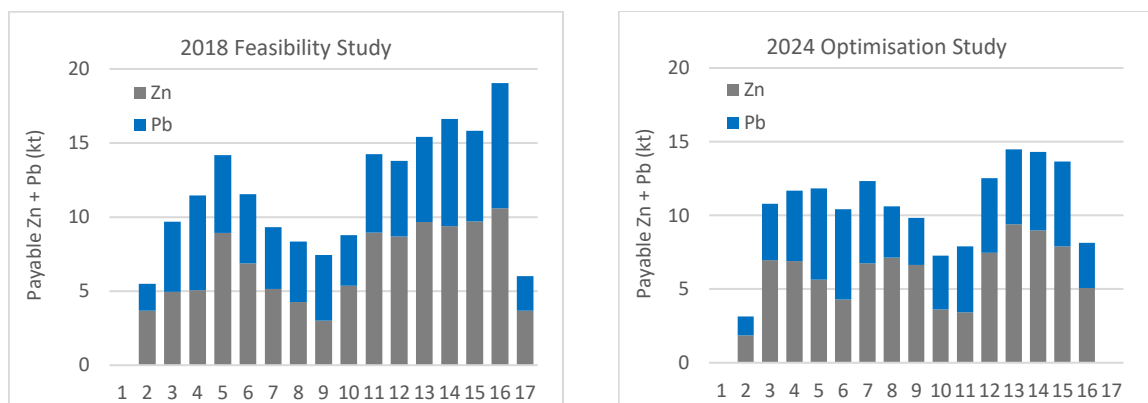


Figure 4: Annual Base Metal output (2024 Optimisation versus 2018 FS)



Capital Costs

The total capital cost estimate of A\$346 million (including mining pre-production) represents a 16% increase when compared to the 2018 FS capital cost estimate of A\$300 million, which is less than real inflation over the period. The net real reduction in capital is a result of scope changes and design improvements incorporated in the Optimisation.

Operating Costs

Mining costs are based on a primarily owner operator cost model that were validated against a detailed early contractor involvement pricing model provided by a Tier 1 Australian mining contractor. The operating plan includes progressive rehabilitation, which is included in the mining operating costs.

Overall operating costs are also impacted by lower by-product credits and higher royalties relative to the 2018 FS.

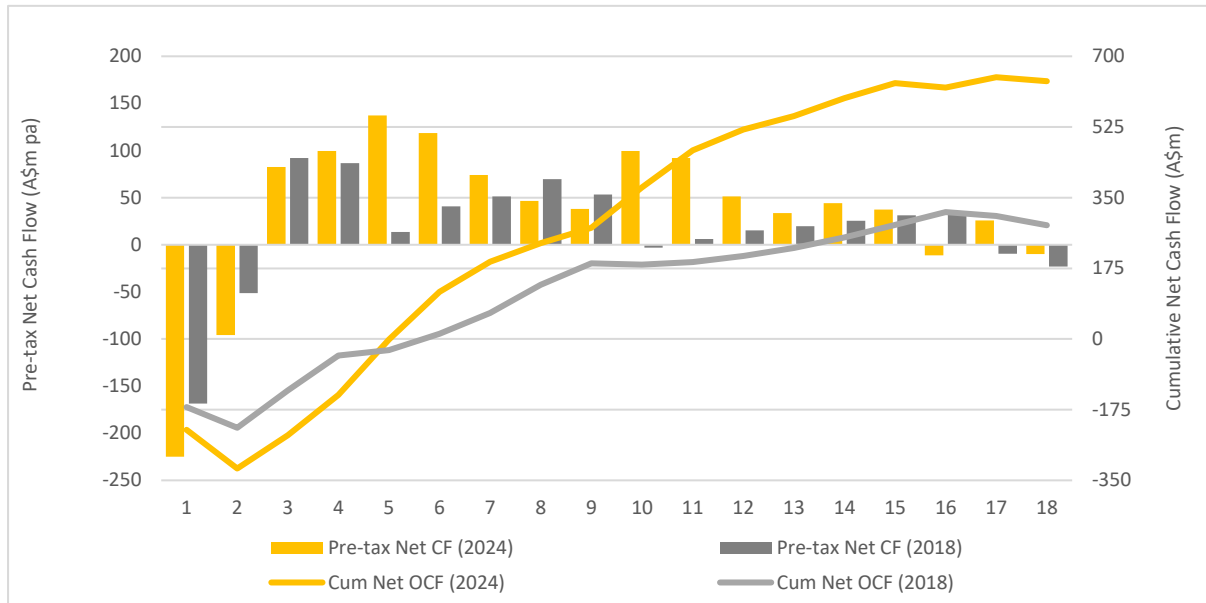
Project Economics

The financial model developed for the Project indicates a total operating margin of A\$948 million, with project payback 3.9 years from the commencement of production. Project Pre-Tax NPV₅ is estimated at A\$359 million, with an IRR of 21%. Project Post-Tax NPV₅ is estimated at \$253 million, with an IRR of 18%.

Table 3: Bowdens Silver Project Economics

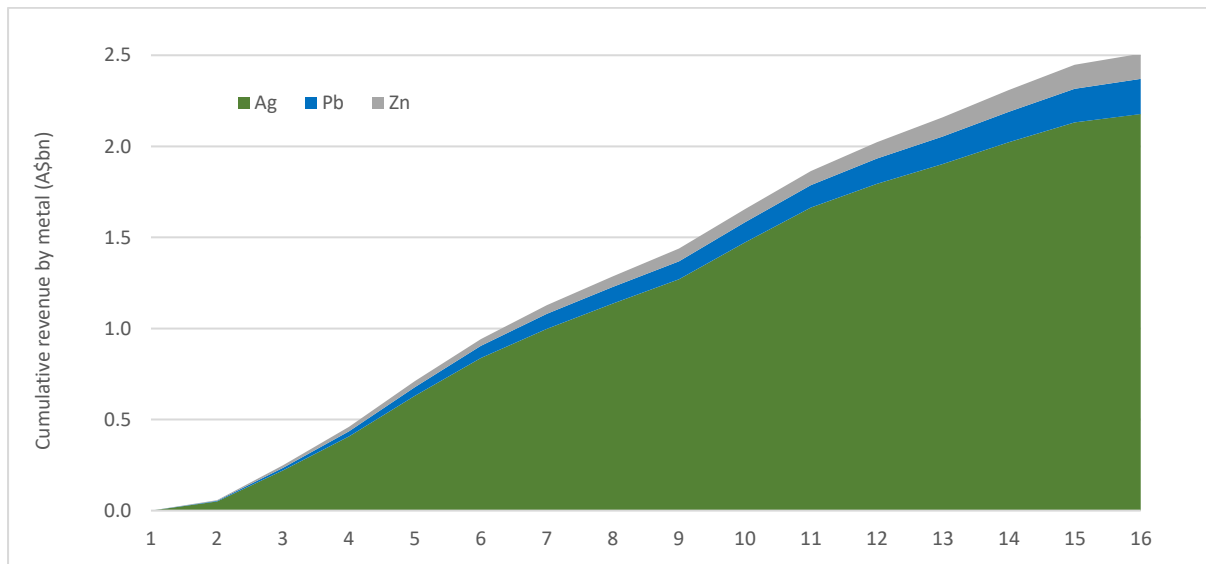
Project Economics				
Parameter	Unit	2018 FS	2024 Optimisation	Diff
Revenue	A\$m	1900	2510	+32%
Operating Expenses	A\$m	1341	1562	+17%
Operating Margin	A\$m	559	948	+70%
Undiscounted Cash Flow Pre-Tax	A\$m	258	631	+145%
Undiscounted Cash Flow Post-Tax	A\$m	158	469	+197%
NPV ₅ (Pre-Tax)	A\$m	144	359	+149%
NPV ₅ (Post-Tax)	A\$m	71	253	+256%
IRR (Pre-Tax)	%	17.9	21	+17%
IRR (Post-Tax)	%	14.6	18	+23%
Payback (Post-Tax)	Years	4.8	3.9	-19%
Profitability Index	(x)	1.29	1.76	+36%
NPV (Pre-Tax) / Pre-Prod Capex	(x)	0.58	1.08	+86%

Figure 5: Pre-tax Cash Flow – Annual and Cumulative (2024 Optimisation versus 2018 FS)



In terms of product value, under the 2024 Optimisation Study, the combination of silver and zinc, both of which are included on the NSW Critical Minerals and High-Tech Metals list, account for over 90% of revenue from the Bowdens Silver Project. Silver alone contributes 86%, making the Bowdens Silver Project one of the most leveraged silver development projects in the world.

Figure 6: Cumulative Revenue by Metal



Next Steps

The short-term priority for the Bowdens team remains securing the Consent from the NSW state government. While it is not possible to provide a definitive timeline on the regulatory process, the Company remains very confident that the Consent will be obtained in due course.

Once the Consent is obtained, the Company will be able to provide an updated timeline on finalising project approvals including the federal permit in accordance with the *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)* and the subsequent Mining Lease approval from the state government.

The work completed on the Optimisation will allow the Company to commence more detailed project funding discussions with potential financial partners. These discussions will be conducted in parallel with the completion of the balance of work required to convert the optimisation to Definitive Feasibility Study (DFS) level and through into the Front-End Engineering and Design process.

Competent Persons Statement

The information in this report that relates to Mineral Resources is based on and fairly represents information and supporting documentation compiled by Mr Arnold van der Heyden who is a Director of H & S Consultants Pty Ltd. Mr van der Heyden is a member and Chartered Professional (Geology) of the Australian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC code). Mr van der Heyden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to Exploration Results that underpin the Mineral Resources and Ore Reserves for the Bowdens Silver Project is based on and fairly represents information and supporting information compiled by the Bowdens Silver team and reviewed by David Biggs who is an employee of the Company. Mr Biggs is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC code). Mr Biggs consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to Ore Reserves within the Bowdens Silver Project is based on and fairly represents information and supporting information compiled or reviewed by Mr Andrew Hutson, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of Resolve Mining Services. Mr Hutson has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Mr Hutson has no economic, financial or pecuniary interest in the company and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Ore Reserves underpinning the production targets were prepared by a Competent Person in accordance with the JORC Code.

The information in this report that relates to Mineral Resources and Ore Reserves within the Bowdens Silver Project is extracted from the ASX release titled "Bowdens Silver Project Ore Reserves Increased to 71.7Moz Silver" which was released on ASX today on 20 December 2024.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resources or Ore Reserves in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Disclaimer

This announcement has been prepared by Silver Mines Limited based on information from its own and third party sources and is not a disclosure document. No party other than the Company has authorised or caused the issue, lodgement, submission, despatch or provision of this announcement, or takes any responsibility for, or makes or purports to make any statements, representations or undertakings in this announcement. Except for any liability that cannot be excluded by law, the Company and its related bodies corporate, directors, employees, servants, advisers and agents disclaim and accept no responsibility or liability for any expenses, losses, damages or costs incurred by you relating in any way to this announcement including, without limitation, the information contained in or provided in connection with it, any errors or omissions from it however caused, lack of accuracy, completeness, currency or reliability or you or any other person placing any reliance on this announcement, its accuracy, completeness, currency or reliability. This announcement is not a prospectus, disclosure document or other offering document under Australian law or under any other law. It is provided for information purposes and is not an invitation nor offer of shares or recommendation for subscription, purchase or sale in any jurisdiction. This announcement does not purport to contain all the information that a prospective investor may require in connection with any potential investment in the Company. Each recipient must make its own independent assessment of the Company before acquiring any shares in the Company.

Forward-Looking Statements

This announcement contains certain forward-looking statements, guidance, forecasts, estimates, prospects, projections or statements in relation to future matters that may involve risks or uncertainties and may involve significant items of subjective judgement and assumptions of future events that may or may not eventuate ("Forward-Looking Statements"). Forward-Looking Statements can generally be identified by the use of forward-looking words such as "anticipate", "estimates", "will", "should", "could", "may", "expects", "plans", "forecast", "target" or similar expressions and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production and expected costs. Indications of, and guidance on future earnings, cash flows, costs, financial position and performance are also Forward Looking Statements.

Although the Forward Looking Statements contained in this announcement reflect management's current beliefs to be reasonable assumptions, persons reading this announcement are cautioned that such statements are only predictions, and that actual future results or performance may be materially different. A number of factors could cause events and achievements to differ materially from the results expressed or implied in the Forward-Looking Statements. These factors should be considered carefully, and prospective investors should not place undue reliance on the Forward-Looking Statements. Forward-Looking Statements necessarily involve significant known and unknown risks, assumptions and uncertainties that may cause the Company's actual results, events, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements. Although the Company has attempted to identify important risks and factors that could cause actual actions, events or results to differ materially from those described in Forward-Looking Statements, there may be other factors and risks that cause actions, events or results not to be anticipated, estimated or intended, including those risk factors discussed in the Company's public filings. There can be no assurance that the forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, prospective investors should not place undue reliance on forward-looking statements. Any Forward-Looking Statements are made as of the date of this announcement, and the Company

assumes no obligation to update or revise them to reflect new events or circumstances, unless otherwise required by law.

This announcement may contain certain Forward-Looking Statements and projections regarding:

- Estimated Mineral Resources and Ore Reserves;
- Planned production and operating costs profiles;
- Planned capital requirements; and
- Planned strategies and corporate objectives.

Such forward-looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of the Company. The forward-Looking Statements are inherently uncertain and may therefore differ materially from results ultimately achieved. The Company does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws.

The Optimisation Study referred to in this announcement is based on technical and economic assessments to support the estimation of Ore Reserves. Silver Mines believes it has reasonable grounds to support the results of the Optimisation Study, however there is no assurance that the intended development referred to will proceed as described. The production targets and forward-looking statements referred to are based on information available to the Company at the time of release and should not be solely relied upon by investors when making investment decisions. Material assumptions and other important information are contained in this release. Silver Mines cautions that mining and exploration are high risk, and subject to change based on new information or interpretation, commodity prices or foreign exchange rates. Actual results may differ materially from the results or production targets contained in this release. Further evaluation is required prior to a decision to conduct mining being made.

Bowdens Silver Project

Project Optimisation Report

Executive Summary

December 2024

Table of Contents

Table of Contents	16
Table of Figures & Tables	18
1. Introduction	19
1.1. Introduction	19
1.2. Project Optimisation	19
1.3. Key Updates from the 2018 Feasibility Study	19
1.4. Optimisation Contributors	20
2. Location, Tenements and Ownership	20
2.1. Location	20
2.2. Tenements	22
2.3. Ownership	23
3. Community	24
3.1. Community	24
3.2. Community Investment Program	25
3.3. Planning Agreement with Mid-Western Regional Council	26
4. NSW Critical Minerals and High-Tech Metals Strategy 2024-2025	26
5. Project Approval Status	26
6. Environment	27
6.1. Topography	27
6.2. Climate	27
6.3. Biodiversity	29
6.4. Land and Soil Capability	30
6.5. Heritage	30
6.6. Air Quality	31
6.7. Water Management	31
6.7.1. Surface Water Management	32
6.7.2. Pit Dewatering	33
6.8. Energy and Emissions	33
6.9. Traffic	34
6.10. Noise	34
6.11. Waste Management	35
6.11.1. Production Waste	35
6.11.2. Non-production Waste	35
7. Geology	36
7.1. Geology	36
7.1.1. Regional Geology	36
7.1.2. Local Geology	37
7.1.3. Local Stratigraphy	38
7.1.4. Mineralisation	38
7.1.5. Structure	39
7.1.6. Alteration	39
8. Ore Reserve and Mineral Resource Estimate	39
8.1. Ore Reserve	39
8.2. Mineral Resource Estimate	40
9. Mining	42
9.1. Geotechnical	42
9.2. Limitation of Optimised Design	44
9.3. Optimisation	44
9.4. General	46

9.5.	Pre-Production Activities	48
9.6.	Drill and Blast.....	49
9.7.	Load and Haul	49
9.8.	Waste Rock Management.....	50
10.	Metallurgy and Processing	52
10.1.	Metallurgical Test Work and Revenue Optimisation	52
10.2.	Process Plant	53
10.2.1.	Crushing.....	54
10.2.2.	Grinding	55
10.2.3.	Flotation	55
10.2.4.	Concentrate Thickening and Filtration	55
10.3.	Tailings Disposal.....	56
10.3.1.	Tailings Filtration	56
10.3.2.	Transportation and Placement.....	57
10.3.3.	Dewatered Tails Dam	58
11.	Infrastructure	59
11.1.	Site General Layout.....	59
11.2.	Site Access and Transportation	59
11.3.	Power Supply	60
12.	Environment and Water	61
12.1.	Reduced Disturbance Area.....	61
12.2.	Water Resources.....	61
13.	Employment and Accommodation	61
13.1.	Construction	61
13.2.	Operations.....	62
14.	Project Implementation.....	63
14.1.	Construction	63
15.	Costs.....	63
15.1.	Capital Costs Estimates	63
15.2.	Operating Cost Estimates.....	64
16.	Marketing	65
17.	Financial Modelling.....	65
17.1.	Key Updates.....	65
17.2.	The First 10 Years	68
17.3.	Cumulative Metal Production.....	68
17.4.	Sensitivity Analysis	69
18.	Risk Register	70
19.	Conclusions and Next Steps.....	70
19.1.	Conclusions.....	70
19.2.	Next Steps.....	71
19.3.	Additional Approvals	71
20.	JORC Table 1 Report	71
	Section 1 Sampling Techniques and Data	72
	Section 2 Reporting of Exploration Results.....	75
	Section 3 Estimation and Reporting of Mineral Resources	77
	Section 4 Estimation and Reporting of Ore Reserves	82

Table of Figures & Tables

Figure 1 - Bowdens Silver Project Location	21
Figure 2 - Tenements	23
Figure 3 - Site Topography	29
Figure 4 - Regional Geology and Prospects	36
Figure 5 - Local Geology and Drill Collars	37
Figure 6 - Cross Section with Generalised Geology	37
Figure 7 – Schematic Long Section with Typical Ore Body Geometry and Grade Zonation (2024 Opt Pit)	42
Figure 8 - Whittle Optimisation Shells	46
Figure 9 - General Site Layout	47
Figure 10 - Pit Design with Stages	48
Figure 11 - Mining Schedule	49
Figure 12 - Process Feed Schedule	50
Figure 13 - Waste Rock Entrainment	51
Figure 14 - Process Flow Diagram	54
Figure 15 - Tailings Filtration	57
Figure 16 - Section of Dewatered Tailings Storage Facility Construction	58
Figure 17 - Liner and Underdrainage System	58
Figure 18 - Site Access and Maloneys Road Realignment	60
Figure 19 - Organisational Chart	62
Figure 20 - Cumulative Metal in Concrete	69
Figure 21 - Cumulative Gross Revenue from Metal	69
Table 1 - Optimisation Contributors	20
Table 2 - December 2024 Ore Reserve	40
Table 3 - December 2024 Mineral Resource Estimate (30 g/t AgEq Cut-Off)	40
Table 4 - Mineral Resource Grade Tonnage Data by EqAg Cut-off	41
Table 5 - Pit Geotechnical Design Angles	43
Table 6 - Key NSR Input	45
Table 7 - Capital Summary	63
Table 8 - Operating Cost Summary	64
Table 9 - Updates to FX and Metal Prices	66
Table 10 - Updates to Mining Inventory, Metallurgy and Payable Metal	66
Table 11 - Key Financial Metrics - Comparison to 2018 Feasibility Study	67
Table 12 - Key Financials - Project vs First 10 Years and Alternate Ag Pricing	68
Table 13 - JORC Table 1 Report	72

1. Introduction

1.1. Introduction

Bowdens Silver Pty Ltd ("**Bowdens**") is a wholly owned subsidiary of Silver Mines Limited ("**Silver Mines**"). Silver Mines acquired Bowdens from Kingsgate Consolidated Limited in 2016. The Bowdens Silver Project ("**BSP**" or "**Project**"), discovered by CRA Exploration in 1989, is the largest undeveloped silver project in Australia and one of the largest worldwide.

The Project, as designed, involves a single open pit Silver (Ag) mine also containing Zinc (Zn) and Lead (Pb) with an onsite processing plant and waste storage facilities.

1.2. Project Optimisation

This 2024 Project Optimisation ("**Optimisation**") is an update from the 2018 Feasibility Study ("**2018 FS**") and incorporates a redesign of certain key elements and an optimisation of the mining and processing schedules.

Since the September 2017 Mineral Resource Estimate ("**MRE**") used in the FS, targeted additional resource development drilling led to an updated MRE in 2023 with a further MRE update in December 2024. The 2024 MRE consists of 179Mt at 31 g/t Ag, 0.39% Zn and 0.28% Pb. The Optimisation process has been derived from the Ore Reserve estimate of 32.8Mt at 68 g/t Ag, 0.38% Zn and 0.29% Pb.

The Optimisation has confirmed a technically and financially viable, and environmentally responsible long-life, low-cost silver operation with the first 10 years delivering an average >4.0 Moz payable Ag per year at an AISC of A\$22.67/oz (US\$15.19/oz).

1.3. Key Updates from the 2018 Feasibility Study

Key updates and changes from the 2018 FS that have been considered and included in the Optimisation include:

- updated FX and metal price assumptions;
- significant reduction of the Project's development footprint resulting in substantially less clearing and potential environmental and community impacts;
- improvements to the mine design, operating strategy and scheduling;
- reduced visual impacts from adjusting infrastructure shapes and locations;
- change from wet to dewatered tailings placement methodology;
- simplified processing flowsheet to a single, high-grade silver, bulk concentrate, which increases recoveries, payability of silver and removes the requirement for cyanide;
- single concentrate marketing strategy; and
- removing the requirement to relocate the TransGrid 500kV powerline, or deferring it to a potential future expansion.

1.4. Optimisation Contributors

Bowdens acknowledges and thanks the following engineering, consulting and supplier companies who were significant contributors to the project optimisation process in varying levels of detail. Included contributors are listed in Table 1, in alphabetical order.

Company	Contribution Area
Aggreko	Hybrid power
AGL	Hybrid power
Ausdrill	Drill and blast
Barnson	Road designs and surface geotechnical
Calgacus AG	Concentrate marketing
Core Resources	Metallurgical review
Dempers & Seymour	Open pit geotechnical
EMM Consulting	Noise
Epiroc	Drilling equipment selection, capex and opex
GHD	Grid power connection
Glastonbury Mining Consultants	Independent technical expert
GR Engineering Services	Process plant design and principal consultant
Iberdrola	Site based power generation
Komatsu	Mobile fleet selection, capex and opex
KYSPYMet	Metallurgy and flotation labwork
Mineco	Mining and infrastructure operational and costing review
Norshore Capital	Financial modelling
O'Kane Consulting	Material classification
Qube	Concentrate handling and road, rail and sea freight
Resolve Mining Solutions	Mine optimisation, design, scheduling and owner mining costs
Roc-Drill	Drill and blast
Sandvik	Drilling and battery vehicle selection, simulation, capex and opex
Schneider Electric	Grid power costs
SRK Consulting	WRE, tailings and geochemistry
Thearle Engineering	Noise
Westrac	Mobile fleet selection, capex and opex

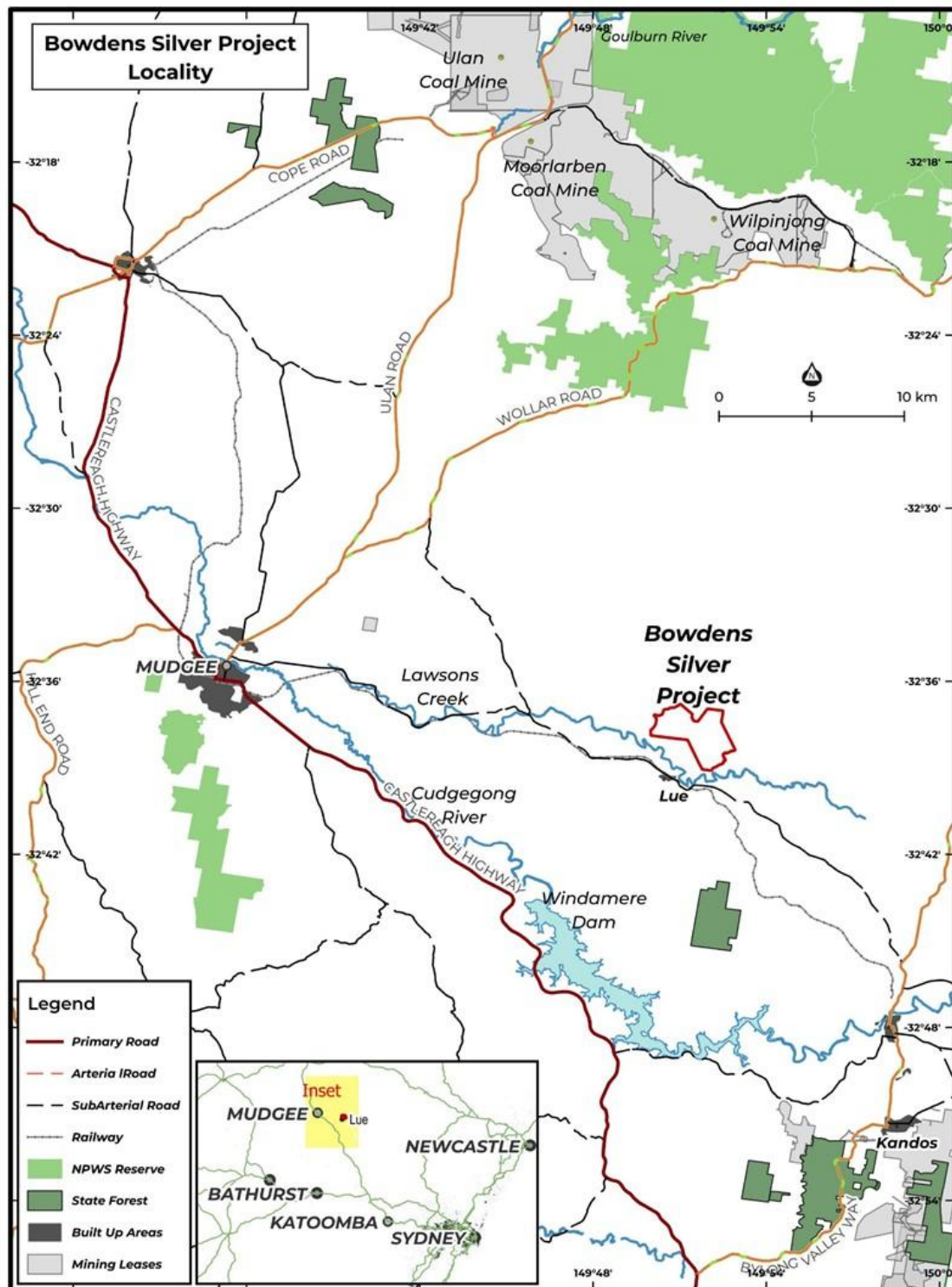
Table 1 - Optimisation Contributors

2. Location, Tenements and Ownership

2.1. Location

The Bowdens Silver Project is located near the village of Lue, approximately 26 kilometres from the regional town of Mudgee, in the Mid-Western Regional (“**MWRC**”) Local Government Area (“**LGA**”) of New South Wales (Figure 1).

The mine site is located approximately 2.5 kilometres north-east from the village of Lue. A large topographical ridge lies between the site and village and provides the benefit of shielding the village from visual aspects as well as relief from potential noise impacts.



File path: Z:\Bowdens Silver\04_GEO\04_MAPS\04_MINE_INFRASTRUCTURE\DFS_Optimisation_2024\Map_Regional_2024.qgs Drawn : 2024-11-28T17:27:09.181

Figure 1 - Bowdens Silver Project Location

At the last Census (2021), Lue had a population of 216 residents, the majority of whom reside within the Lue village. The Census also identified 105 private dwellings throughout the Lue suburb boundary. The village includes a public school, community facilities such as a Rural Fire Service shed and park/recreation area, a licenced hotel as well as a limited number of small businesses and small lot residential land parcels.

Nearby the village of Lue, land is predominantly zoned for primary production and is used mainly for larger grazing and cropping enterprises with interspersed small hobby farms / lifestyle properties. Other land uses within the region include viticulture and olive production, small accommodation venue providers and a motocross track.

The main access to the mine site is via Lue Road, which provides a link between Ulan Road, near Mudgee in the west, and Bylong Valley Way near Rylstone in the east. Lue Road is an approved B-double route for general mass limit (GML) B-double vehicles up to 25 metres long between Ulan Road and Bylong Valley Way. Use of Lue Road by such vehicles is subject to a speed limit of 80 km/h and only permitted outside of school bus operation times.

Maloneys Road is an unsealed local road that currently bisects the mine site. This road will be relocated to the west of Lue when development commences to minimise mine related traffic through Lue. Final produced concentrate will be transported from the mine site via the relocated Maloneys Road and travel west, negating any concentrate dispatch trucks traveling through Lue. The relocated Maloneys Road will be sealed in-line with expectations from Mid-Western Regional Council and will link up with the existing Maloneys Road to provide road users with continued access to the north.

2.2. Tenements

Bowdens Silver currently holds eleven Exploration Licences within the MWRC LGA ([Figure 2](#)). These are all 100% owned by the Company and comprise 2,115 km² (521,000 acres) of titles covering approximately 80 kilometres of strike of the highly prospective Carboniferous Rylstone Volcanics. The Bowdens Silver deposit sits within Exploration Licence 5920 (EL5920).

In March 2021, the Company submitted its Mining Lease Application (MLA601) with the then Department of Regional NSW – Mining, Exploration and Geoscience (now NSW Resources) for Group 1 Minerals silver, zinc and lead. MLA601 covers approximately 998.85 hectares and falls within both EL5920 and EL6354.

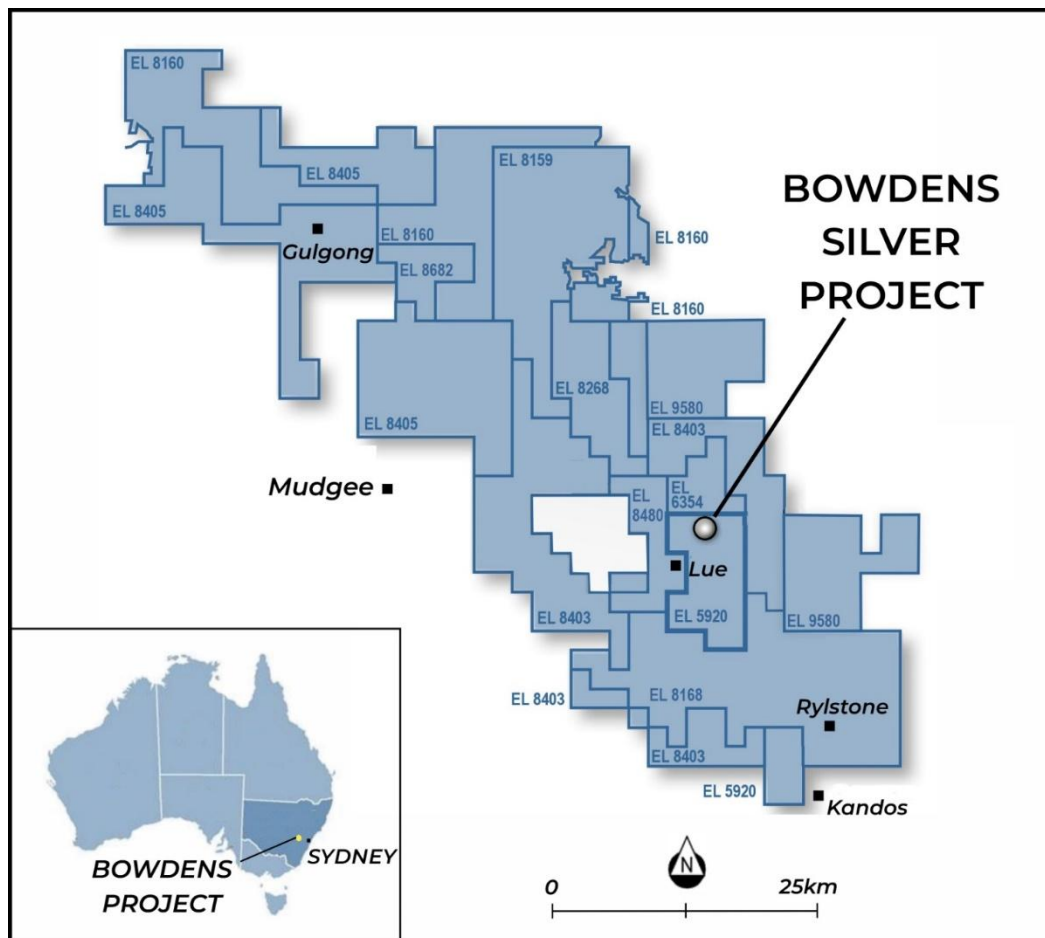


Figure 2 - Tenements

2.3. Ownership

Silver Mines Limited's subsidiary companies, Bowdens Silver Pty Ltd and Bowdens Agriculture Pty Ltd own the majority of land that falls within the mine site boundary as well as those that border it. One privately owned parcel of land falls within the mine site area. The Company has an agreement in place with the landowner that allows for mining activities to occur.

A registered Native Title Claim (Warrabinga Wiradjuri #7) covers a vast tract of land of more than 14,000km² in multiple Local Government Areas. This claim covers the Bowdens mine site area. A portion of NSW Crown Land exists within MLA601 where Native Title has not been extinguished. The Company has completed an agreement in relation to this parcel with the registered Native Title Claimants. In addition, the related Section 31 Deed has also been executed by the NSW Minister for Natural Resources on behalf of the State of New South Wales. This completed the "Right to Negotiate" process in accordance with Section 31 of the Native Title Act 1993 (Cth).

3. Community

3.1. Community

Bowdens Silver has been an honest, open and active community member since commencing its involvement in the Project.

The Company's objective is to develop and operate an environmentally, socially and financially responsible mine that employs local people and which adds to the economic resilience and skills base of the Lue, Rylstone, Kandos and Mudgee region. Importantly, the sustainability of Lue village is a priority, and Bowdens remain committed to maintaining a positive relationship with nearby neighbours, residents and agriculture, tourism and business industry participants.

Since 2016, engagement with various stakeholders has enabled the flow of accurate information through the planning and design phases and been instrumental in capturing feedback from community members who have ultimately had an input into design elements of the mine.

Bowdens Silver has actively consulted with a range of stakeholders on a range of topics. These include, but are not limited to:

- local neighbours, residents and landholders;
- community groups, education providers and residents within the MWRC LGA;
- community Consultative Committee (“CCC”) which includes members from Mid-Western Regional Council, local community groups, Business Chamber, Registered Aboriginal Party, business owners and community members and neighbours;
- local and State Government agencies; and
- infrastructure and service providers.

Engagement has involved a wide range of techniques in order to communicate in a manner that suited the diverse community and ensure Bowdens could listen, explain outcomes and take comments for consideration.

These variety of methods have included, but not been limited to:

- personalised interactions including face-to-face meetings, personalised correspondence, emails and phone calls;
- community Open Days on site and at the Lue Hall;
- drop-In Information Sessions in Kandos, Rylstone and Mudgee;
- virtual Information Sessions during the Covid-19 pandemic;
- distribution of community newsletters and media releases;
- CCC Meetings since Project inception;
- two separate rounds of personal interviews with members of the community as part of the Social Impact Assessment;
- consultation with Native Title Claimants and Registered Indigenous Parties;
- information sessions, site excursions and meetings with local schools and education providers;
- mentoring, work experience and collaborative work with high school students and university students;
- meetings and presentations with local business chambers;

- local business and service supplier surveys as part of the Social Impact Assessment;
- consultation with Mid-Western Regional Council and relevant State government agencies; and
- independently conducted random telephone surveys in 2019 and 2022 for opinions and sentiment.

As above, the last independent community survey was conducted in 2022 and sought opinions from community members throughout the entire MWRC LGA.

Highlights included:

- 83% of people in the LGA were aware of the Project;
- 68% of people in the LGA were supportive of the Project;
- only 17% of people were not supportive of the Project while the remaining 15% were neutral; and
- 75% of people believed that the Project would have a positive impact on the local economy. Job creation, the potential for growth generation and investment in local infrastructure and services and the need for mining were the primary drivers of this positive sentiment.

This confirmed that Bowdens engagement has been wide reaching, informative and well-supported by a large portion of the community.

3.2. Community Investment Program

The Bowdens Silver community investment program has been running since 2016 and was formalised as the Bowdens Silver Community Investment Program (“CIP”) in 2020.

Since 2016, Bowdens Silver has placed a high importance and invested strongly in local initiatives, events, clubs and schools within the Lue, Rylstone, Kandos, Mudgee and Gulgong communities. Bowdens Silver is committed to being an active and participatory member of the local community and sees the progression of the CIP as a long-term partnership between the Company and the wider community.

The focus of Bowdens Silver’s support revolves around the following core areas:

- **Education** - Support across the range of educational institutions; local public schools, local high schools, TAFE, Universities and other higher education. Development of industry relevant local training and skills.
- **Community Infrastructure** - Support to improve social facilities and areas of greater benefit for local communities such as infrastructure enhancements, land use enhancement and improved amenity and environment.
- **Sport** - Support sporting organisations promoting teamwork, health and the wider social function to local communities.
- **Health, Safety and Environment** - Support for organisations that provide rescue services and emergency and health services, the promotion of safety and wellbeing in the community and community environmental programs.
- **Arts and Culture** - Support for projects in areas such as indigenous cultural heritage, local history and community arts and cultural programs.

- **Charity** - Support for local charities active in the local communities.

The CIP will continue to develop and expand as mine development progresses.

3.3. Planning Agreement with Mid-Western Regional Council

Separate to the CIP, a Planning Agreement has been agreed between Bowdens Silver and MWRC. In summary, the Planning Agreement provides for Bowdens Silver to make contributions towards community infrastructure and maintenance.

4. NSW Critical Minerals and High-Tech Metals Strategy 2024-2025

The NSW government has underscored the importance of the critical minerals and high-tech metals industry by updating and committing to its Critical Minerals and High-Tech Metals Strategy for the next decade. Importantly, silver has been identified as one of five “priority metals” which underpins the importance of the Bowdens Silver Project for the state of NSW as it transitions to a low-carbon future.

The Strategy aims to generate economic prosperity through exploration, mining, processing, recycling and advanced manufacturing to ultimately drive innovation and sovereign capability while creating jobs and export revenue across the critical minerals supply chain.

The Strategy also includes a Royalty deferral scheme whereby the NSW Government will defer Royalties up to \$250M to help new critical minerals projects get started through the state.

The full Strategy can be found here:

<https://www.nsw.gov.au/sites/default/files/noindex/2024-10/nsw-critical-minerals-and-high-tech-metals-strategy-2024-35.pdf>

5. Project Approval Status

Bowdens originally obtained NSW government approval for the Project as per the Amended Environmental Impact Statement (March 2022) through a *Development Consent for State Significant Development* (SSD) 5765 on 3 April 2023 from the New South Wales (NSW) Independent Planning Commission (IPC) (“**Previous Approval**”). The consent was subsequently set aside by the Supreme Court of NSW, Court of Appeal (“**Court**”), on 16 August 2024.

After the decision by the Court to set aside the Bowdens' development consent provided by the IPC, the NSW Minister for Planning and Public Spaces proposed amended legislation to the Environmental Planning and Assessment Act. The Environmental Planning and Assessment Amendment (State Significant Development) Bill 2024 passed into legislation in December 2024 and will permit the Planning Secretary to determine what forms part of a single proposed development, which in turn will provide more certainty on the approval pathway for off-site enabling infrastructure.

While the Court ruling voided the Project approval, the original Development Application remains on foot. Bowdens is actively seeking to resecure the IPC consent in a matter which addresses the Court's concerns and the amended NSW Environmental Planning and Assessment Act. Should the Consent be obtained, Bowdens will update anticipated steps and timelines for project development.

6. Environment

The bulk of the information presented in this section has been derived from the original Environmental Impact Statement ("**EIS**") and Previous Approval. The changes associated with the Optimisation have been designed to reduce overall environmental footprint and impacts, however some detailed assessments require updating as a result.

6.1. Topography

The Mine Site is situated on the outer western flanks of the Great Dividing Range with the regional topography dominated by elevated rocky ridges separated by either broad and flat or partially confined alluvial valley settings. The topography generally ranges in elevation from approximately 770m AHD within peaks and ridges associated with the Great Dividing Range in the northeast, to elevations below 550m AHD within the alluvial valley of Lawsons Creek to the southeast of the Mine Site.

Figure 3 displays the topography within and immediately adjacent to the Mine Site with the key ridges and watercourses within the Mine Site identified. The topography of the eastern and central sections of the Mine Site and its immediate surrounds is primarily influenced by three north/south orientated ridges with small intermediate valleys whilst three generally northeast/southwest orientated ridges influence the topography in the western section of the Mine Site. These ridges contain (from east to west) the confined valleys of the ephemeral Price Creek, an un-named watercourse, Blackmans Gully and Walkers Creek, plus valleys of minor drainage features.

6.2. Climate

Temperature and humidity data sourced from the Mudgee Airport AWS shows that January is the warmest month with a mean maximum temperature of 31.0°C and mean minimum temperature of 16.1°C. July is the coldest month with a mean maximum temperature of 14.4°C and a mean minimum temperature of 1.1°C.

The lowest average relative humidity generally occurs in the summer months, with January and December sharing the lowest relatively humidity values throughout the year. The highest average relative humidity occurs in June.

Rainfall data were sourced both from Mudgee Airport AWS and the two on-site weather stations. Whilst the on-site weather stations have a limited dataset (2013-2018), the rainfall generally reflects the trends displayed in the Mudgee Airport AWS dataset. Average annual rainfall at Mudgee Airport AWS is 663.2mm.

Notable differences between the wind speeds and directions can be attributed to the differing topographical features of the site, as winds experienced at the Mine Site are affected in the following manner:

- A general absence of southeasterly flow at the Mine Site due to blocking by the elevated terrain immediately to the southeast of the station. A component of the flow is likely channelled into the dominant northeasterly flow currently experienced.
- A general absence of northeasterly flow and a dominance of southeasterly flow at Lue due to winds from the northeastern direction being blocked by elevated terrain immediately to the northeast of the station.

As a consequence, wind blowing from the northeast of the Mine Site is generally diverted to the northwest before it reaches Lue. As shown by the data, the Mine Site is located in a valley orientated northeast to southwest and is hence associated with topographical interference. The wind regime at the Mine Site reflects the topography of the area with the predominant winds blowing from the north, northeast and southwest directions.

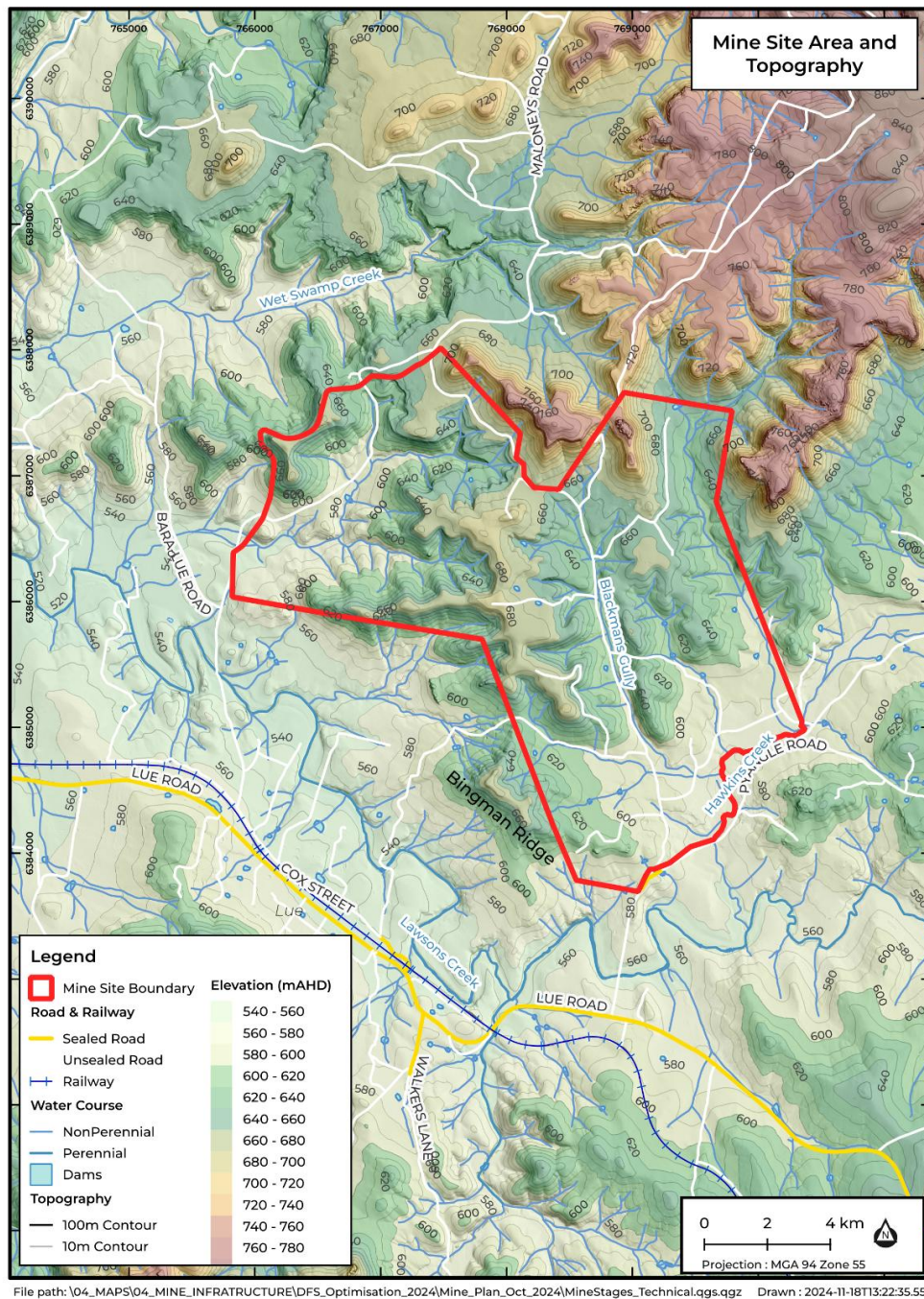


Figure 3 - Site Topography

6.3. Biodiversity

Comprehensive field surveys of the previously approved Project concluded the removal of approximately 381 hectares (Ha) of native vegetation. This included:

- 180 Ha of Biodiversity Conservation Act (BC Act) listed Box-Gum Woodland, of which 147 Ha also meets the classification of the Environment Protection and Biodiversity Conservation Act (EPBC Act) listed Box-Gum Woodland;
- impacts to at least 13 threatened species that are listed as ecosystem credit species; and

- impacts to six threatened species that are listed as species credit species.

In addition to the avoidance measures in the previously approved project, a range of avoidance measures have been implemented during the Optimisation to minimise the level of impact where possible. This has resulted in a significant reduction in native vegetation disturbance and reduced the impact on the listed CEEC and threatened species habitats.

No impacts to high priority Groundwater Dependant Ecosystems and minor to negligible impacts to the limited aquatic habitat within the mine site associated with ephemeral drainage lines, springs and groundwater bores are predicted.

Where impacts are not able to be avoided, a range of detailed mitigation measures are proposed, and these would be implemented. The implementation of a biodiversity offset strategy would meet the requirements of the NSW offset policy for major projects to offset any potential residual impacts of the Project.

6.4. Land and Soil Capability

The Land and Soil Capability class for Mine Site Soil Landscape Units was determined in accordance with the *Land and Soil Capability Assessment Scheme – Second Approximation*. Land and Soil Capability classes within the Mine Site ranged between 3 and 6 with approximately 86% of disturbance within the Mine Site located within areas with a class of 6 (i.e. low capability land with very high limitations for high-impact land uses). With the exception of the final void area, the soils in the rootzones of the modified landscapes would retain or improve their qualities required for the long-term rehabilitation of the Mine Site.

No Biophysical Strategic Agricultural Land is located within the Mine Site. A Site Verification Certificate, confirming the absence of Biophysical Strategic Agricultural Land within the Mine Site, was issued by the then NSW Department of Planning and Environment on 8 November 2017.

6.5. Heritage

Investigation into the Aboriginal and non-Aboriginal cultural heritage of the site have been conducted in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH, 2011), Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010b), Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW, 2010c), Historical Archaeology Code of Practice (NSW Heritage Office, 2006) and NSW Heritage Manual (NSW Heritage Office, 1996).

Based on the results of this cultural heritage investigation and consultation with representatives of the local Aboriginal community, a range of management and mitigation measures have been agreed to and would be implemented. Bowdens Silver will continue to consult with the local Aboriginal community throughout all phases of the Project.

6.6. Air Quality

Potential air quality impacts resulting from construction and operational activities of the previously approved Project have been quantitatively assessed using a Level 2 assessment in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA, 2016).

The air quality modelling predicts that there would be no exceedance of annual average total suspended particulates, particulate matter less than 10 microns in diameter (PM10) and particulate matter less than 2.5 microns in diameter (PM2.5), maximum 24-hour average PM10 and PM2.5, or dust deposition criteria at any privately-owned residences or receivers, either from the Project alone or cumulatively.

Furthermore, no exceedances of the impact assessment criteria are predicted at any Project-related or private residences for metal dust concentrations or respirable crystalline silica.

A proactive air quality management system would be adopted using a combination of the following:

- meteorological forecasts – to predict when the risk of dust emissions may be high (due to adverse weather) in specific directions around the Mine Site and allow procedures and preparatory measures to be implemented;
- real-time meteorological and air quality monitoring – to provide alerts for appropriate personnel when short-term dust levels increase, to allow management of the location and intensity of activities or increased controls; and
- the assessment of air quality focused on dust emissions from the Project to address community concerns.

The presence of lead and other metals in these dust emissions was also evaluated in detail. The assessment addressed multiple exposure pathways including:

- the inhalation of dust;
- the deposition of dust onto roofs and the washing of these dusts into rainwater tanks where water may be used for drinking/household use; and
- the deposition of dust to soil and other surfaces.

These aspects relating to air quality will be addressed in the mine's management plans.

6.7. Water Management

The Project is located on the western edge of the Great Dividing Range with the region dominated by rocky ridges with broad flat valleys intersecting the ridges. Elevations range from 550 m to 650 m AHD, with the elevation change in the immediate area of the open cut pit approximately 50 m.

Drainage associated with the region is generally towards the west where the western flanks of the Great Dividing Range flow until they reach local creeks and join the Cudgegong River. The most prominent local creek to the Mine Site is Lawsons Creek. All runoff within the regional

area flows into either Hawkins Creek or Lawsons Creek catchments before joining the Cudjegong River, northwest of Mudgee.

The Project will intersect water in the following water sources:

- *Water Sharing Plan for the NSW Murray Darling Basin Porous Rock Groundwater Sources Order, 2020* – Sydney Basin Murray Darling Basin Groundwater Source.
- *Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources Order, 2020* – Lachlan Fold Belt Murray Darling Basin Groundwater Source - (Other) Management Zone.
- *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Source 2012* – Lawsons Creek Water Source.

Based on the EIS, Bowdens Silver holds ample water licencing to account for water take from all water sources. Consideration was given to potential water quality impacts arising from Project-related activities, including leaching of metals from waste rock and seepages from the tailings dam. Based on the assessments undertaken, the potential for adverse health impacts within the off-site community due to Project-related surface water and groundwater impacts were considered to be negligible.

6.7.1. Surface Water Management

The surface water management strategy for the Project is based on the latest industry best practice, NSW Guidelines (e.g. Landcom, 2004, DECC 2008) and is designed for 1:100 flood conditions.

The surface water management strategy for the Project is predicated upon the classification of the contributing catchment, based on the level and type of catchment disturbance associated with mining activity. There are three types of catchments identified within the Project:

- clean;
- sediment laden; and
- contact.

The Project has three clean water catchments:

- Blackmans Gully (north): runoff generated within this catchment would be directed east towards Price Creek utilising longitudinal drainage installed along the alignment of the mine access road.
- Blackmans Gully (south): runoff generated within this catchment would be diverted via a series of diversion drains and contour banks upstream of the open cut pit and would discharge into the natural drainage features feeding into Hawkins Creek.
- Price Creek: runoff generated within this catchment would utilise existing flow paths and drainage features prior to collection in a detention basin upstream of the Waste Rock Emplacement. The detention basin would discharge around the Waste Rock Emplacement and into Hawkins Creek.

Sediment-laden catchments are limited to those areas required for soil stockpiles. Runoff generated on these soil stockpiles will be directed via contour banks on the stockpiles and then via gravity to sediment basins for capture and treatment. Discharge from those sediment basins situated within “contact” catchments will ultimately report to a water storage (e.g. stormwater detention pond or the TSF) for recycling and reuse in mining related activities.

Those catchments in which runoff can potentially be in contact with ore, acid-forming waste rock, processing chemicals, processing waste or other potential contaminants are as follows:

- mining facility and processing plant (north) runoff will discharge via a sediment sump into a stormwater detention pond (SDPA) for reuse in mining related activities;
- ROM Pad and Processing Plant (south) runoff water will be collected in the stormwater detention pond (SDPB) and would be pumped to a water management pond for recycling and reuse in processing activities;
- TSF: runoff generated within this catchment will be directed to a sump within the tailings impoundment area and pumped back to a water management pond; and
- WRE: runoff and leachate generated within the WRE footprint will be directed to a series of sumps developed sequentially throughout the staged development of the WRE. Runoff and leachate will be discharged from the sumps to a water management pond via pump and pipe for recycling and reuse in processing activities.

6.7.2. Pit Dewatering

Predicted mine inflows, including incident rainfall and rainfall runoff from contributing catchments will be managed via a dewatering system comprised of a network of ex-pit dewatering bores to facilitate advance dewatering as far as practical, with residual inflows to be collected and dewatered by pumping from sumps at the lowest elevations of the pit. Dewatering bores are proposed for the early stages of mining, with additional dewatering bores to be brought online as required. In addition, emergency pumping will be provided to dewater the mine in the event of a storm event.

6.8. Energy and Emissions

The preferred option for electricity supply is via a 66kV transmission line that would terminate at the Site main substation. All site components, including all crushing, grinding, flotation activities as well as power for the administration areas would operate from mains power. Outlying power requirements, such as site water infrastructure transfer pumps, may be powered by internal overhead or underground powerlines connected to a substation or by remote genset pending final environmental and financial assessments.

In the event of a power outage or failure, emergency diesel generators will be connected to the power distribution system to allow selected infrastructure to continue to operate. Emergency generators would also be retained on site for the key water management pumps.

The total estimated Greenhouse Gas emissions for the previously approved Project were as follows:

- Scope 1: 444 442t CO₂-e
- Scope 2: 812 319t CO₂-e
- Scope 3: 166 055 CO₂-e
- Total: 1 422 816 CO₂-e

Predicted annual average Project-related Scope 1 Greenhouse Gas emissions would represent approximately 0.02% of total Greenhouse Gas emissions for NSW (0.004% of total emissions for Australia).

6.9. Traffic

Assessment of the potential traffic-related impacts of the previously approved Project considered the proposed transportation routes, anticipated traffic volumes and traffic types. The assessment considered traffic-related impacts associated with:

- the initial 6-month construction period during which the relocated Maloneys Road would be constructed;
- the peak of the site establishment and construction stage; and
- the operational period for the Project.

Potential traffic-related impacts would be avoided or mitigated through improvements to the road network including the relocation of Maloneys Road and intersection treatments to suit traffic requirements.

6.10. Noise

Background noise measurements around the Mine Site and within Lue have established that the existing day-time noise levels are low and typically in the range 25dB(A) to 30dB(A). Background noise levels of an evening and night are also low and typically around 25dB(A) or less.

Management of noise impacts throughout the operation of the Project would involve the following:

- the use of noise-attenuated mobile equipment;
- restrictions on the number and location of mobile equipment items used;
- restricted operations of an evening and night-time;
- the use of interim or long-term noise barriers;
- full or partial enclosure of noisy fixed plant;
- use of predictive meteorological forecasting and a regime of real-time noise monitoring to inform adaptive site management; and
- regular liaison with surrounding landowners to inform and/or discuss any noise-related issues.

6.11. Waste Management

Beneficial re-use and/or recycling of all waste material generated will be prioritised with remaining waste disposed of in accordance with regulatory provisions.

6.11.1. Production Waste

Production related waste will be managed through on-site facilities.

Low grade and oxide ore generated by the mining operations may be stockpiled until processed. Timing of processing of these materials will be dependent on final mine and processing schedules.

During mining operations, material classified as Potentially Acid Forming (“**PAF**”) would be identified through modelling and analysis of blast hole cuttings as per the Acid Mine Drainage Management Plan. The proposed layout of the WRE has been designed to provide for the long-term storage and encapsulation of compacted PAF waste rock in a constructed landform.

Non-Acid Forming (NAF) waste rock would be transported to temporary (for subsequent construction or rehabilitation activities) or permanent landforms or used for on-site construction materials.

Topsoil and subsoil removed during the site establishment and construction stage would either be re-used as part of the initial stabilisation / rehabilitation activities or stockpiled in nominated soil stockpile locations. Soil stockpile areas would be cleared progressively prior to topsoil and subsoil removal throughout the early years of operation.

6.11.2. Non-production Waste

The principal non-production waste that would be generated during the proposed site establishment and construction stage and subsequent operations would include the following:

- residual materials remaining after the demolition of the residences, farm buildings and fencing within the active area of the Mine Site;
- general domestic type waste from the on-site offices, shower blocks, workshop and processing facilities and routine maintenance consumables;
- scrap steel, hydrocarbons including waste oil and other wastes remaining from equipment maintenance; and
- sewage.

Management of non-production waste will be in accordance with the Development Consent and final design parameters.

7. Geology

7.1. Geology

7.1.1. Regional Geology

The Bowdens Ag-Zn-Pb-Au mineral system lies at the southern edge of an 11 kilometre wide Carboniferous felsic volcanic caldera within the Macquarie Arc of NSW, Australia. The mineral system is a well-preserved, textbook example of a zoned intermediate to low-sulphidation epithermal system. The silver, zinc and lead mineralisation is hosted by the middle-Carboniferous aged Rylstone Volcanics (Klein *et al.*, 2022)) and the underlying Ordovician aged Coomber Formation, [Figure 4](#).

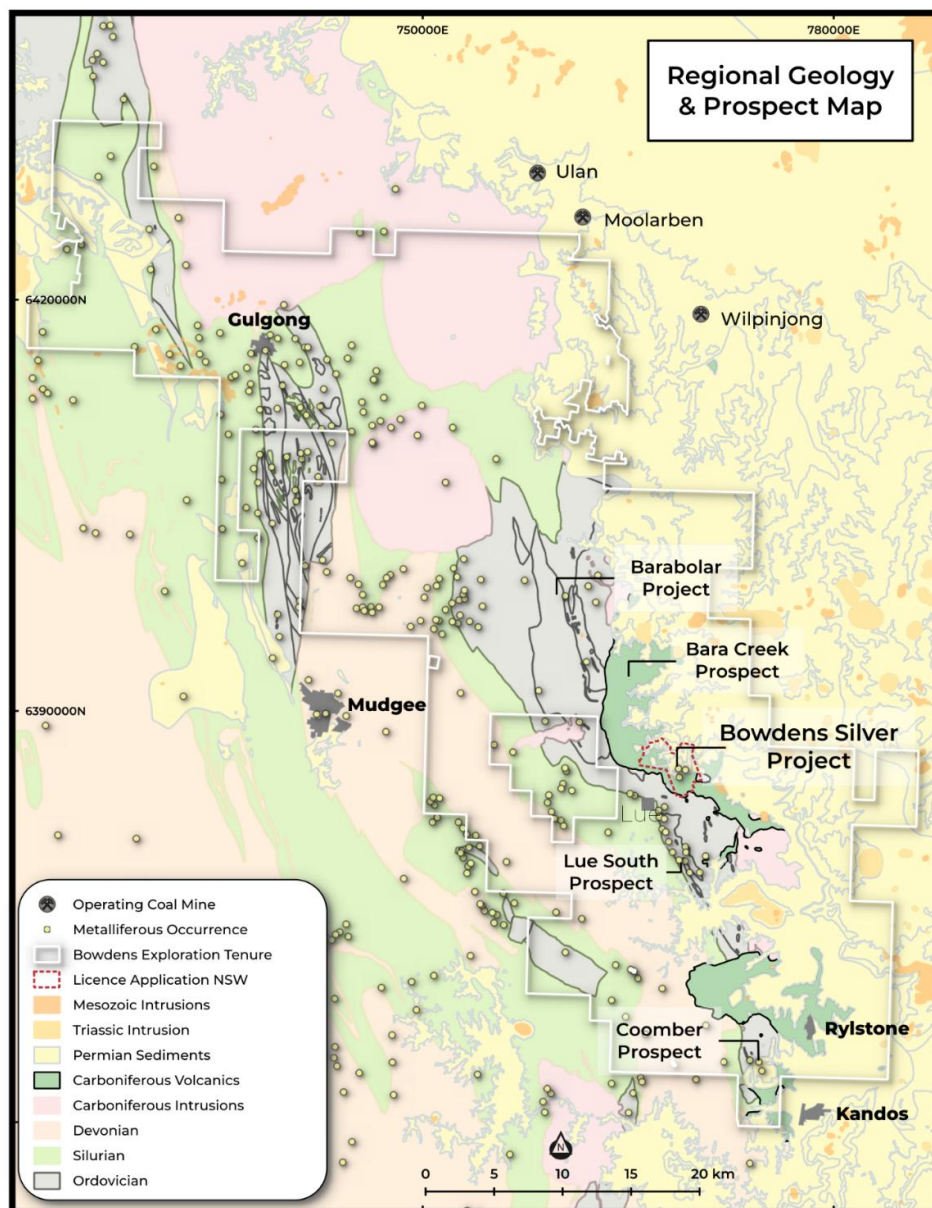


Figure 4 - Regional Geology and Prospects

7.1.2. Local Geology

Mineralisation outcrops on its southern extreme and plunges shallowly to the north along the contact between the Rylstone volcanics and Coomber Formation. The volcanics unconformably overlie the eastern side of the northwest trending Northern Capertee Rise and are themselves unconformably overlain by the Permian to Triassic aged shallow marine to alluvial sedimentary rocks of the Sydney Basin. (Biggs, Klein and Madayag, 2024).

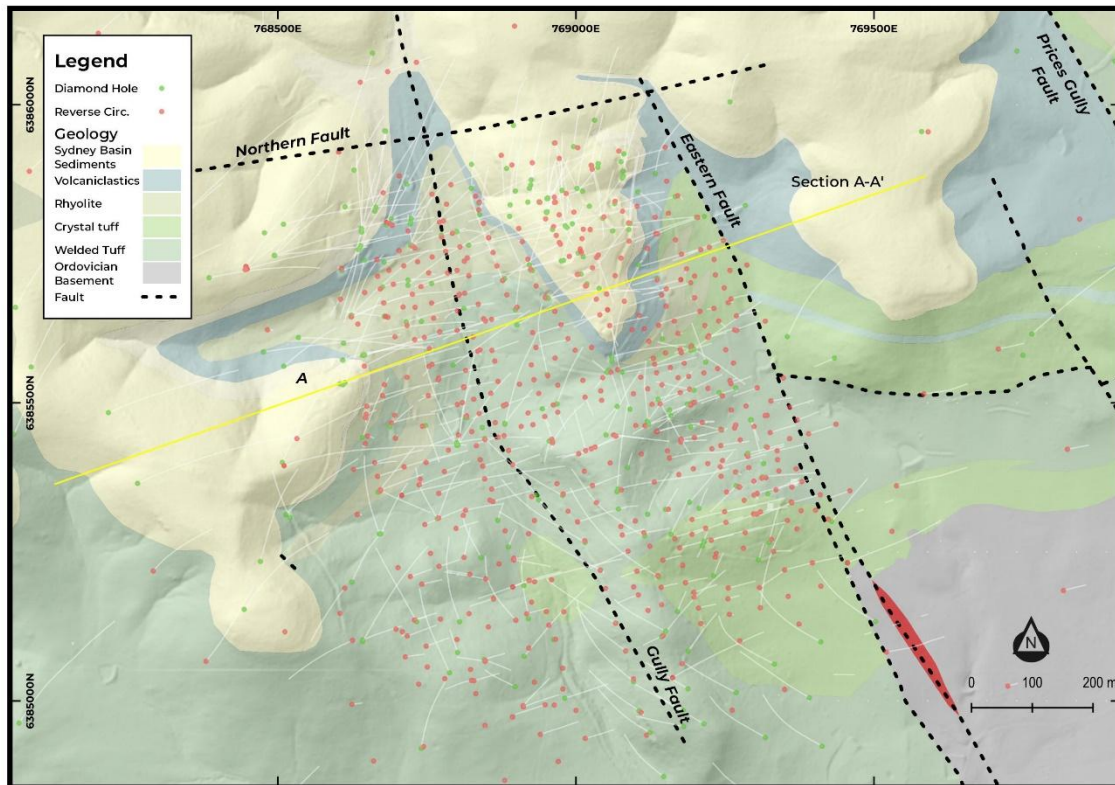


Figure 5 - Local Geology and Drill Collars

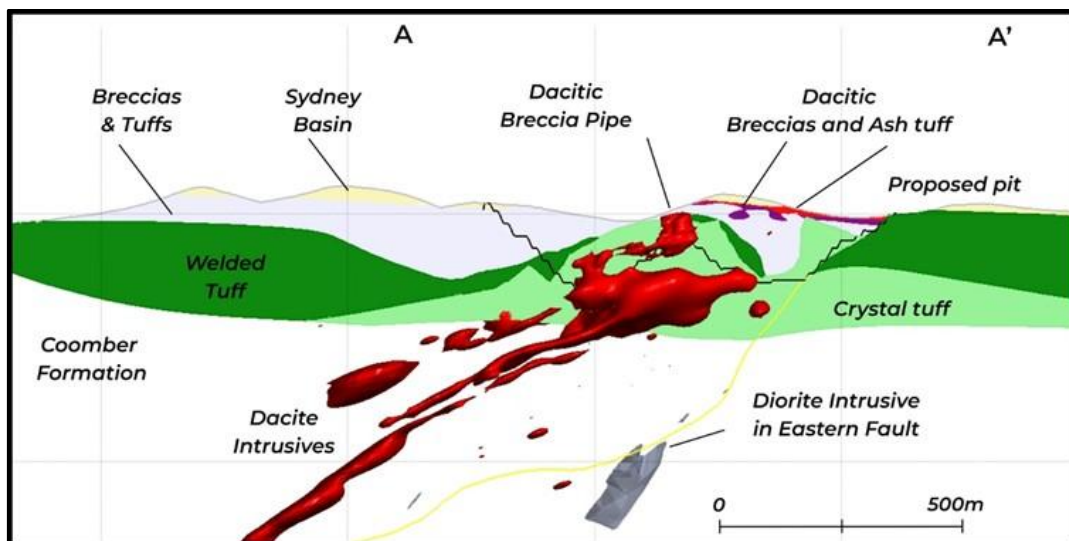


Figure 6 - Cross Section with Generalised Geology

7.1.3. Local Stratigraphy

The stratigraphy hosting the Deposit is principally the more reactive volcanic breccia and ignimbrites of the Rylstone Volcanics, which is a favorable setting for mineral deposition. The stratigraphic package central to the mineral system is located at the periphery of the caldera and originates from two or more rhyolitic eruptive centres. The local eruptive centre is defined by a crystal tuff dome that is partially capped by variably welded tuffs. This crystal tuff dome is suggested to have formed via magma emplaced as a shallow dome beneath pre-existing welded tuffs which was then subject to a vulcanian eruption from a later dacite breccia pipe. Later dacites continued to feed into this dome and have a similar texture as the crystal tuff.

The often-uniform nature of the crystal mass suggests the crystal tuff did not surface completely but was likely emplaced beneath the welded tuff and either domed or erupted through, brecciating and likely welding tuffs above. Early magmatic brecciation of the welded and crystal tuff is linked to the emplacement of a dacitic magma that triggered eruption. Manganese rich carbonates (rhodochrosite and kutnohorite) pervade the dacite breccia pipe and are also present in the earliest colloform veins of the Northwest Zone (Carter, 2023), linking the mobilization of manganese in the deposit to the dacite. The source from which this crystal rich dome was fed is posited to be the same as the dacitic intrusive, which lies on a chemical continuum with the dacite.

Welded tuffs fill an embayment within the crystal tuff and volumetrically it is unlikely to have erupted from the same vent. Later brecciation of this unit (including boulder clasts) on the flanks of the dome implies the crystal tuff also domed beneath and up the eastern fault, brecciating the overlying welded tuff and deposited it on the flanks of the dome. Additional welded tuffs have been identified onlapping the crystal tuff on its northern and western sides. Other key features of the Deposit that have been identified are minor paleo-channels along the flanks of the resurgent dome into which cobbles of early pyrite mineralized material were deposited. (Klein *et al.*, 2022; Biggs, Klein and Madayag, 2024).

7.1.4. Mineralisation

Mineralisation throughout the Deposit is interpreted to have been deposited at low temperatures, often emplaced within a halo of earlier silica – pyrite over breccia, which has clearly acted to impede porosity and create overpressures within a lower fluid pressure regime. Hydrothermal fracturing formed preferentially subparallel to bedding and volcanic stratigraphy and packages of steep, randomly anastomosing veins.

The deposit mineralogy consists of polyphasal pyrite, sphalerite, galena, arsenopyrite, marcasite, silver-bearing and silver minerals (e.g., acanthite, pyrargyrite, proustite, pearcite, polybasite, stephanite, Ag-rich tetrahedrite, freibergite, tetrahedrite and tennantite) with lesser chalcopyrite and gold. The system displays vertical and horizontal zonation, with the thermal gradient increasing at depth and to the southwest. Semi to massive sulphides of high-iron sphalerite–pyrite–galena–chalcopyrite are developed in the upper basement units (Bundarra Zone), along with anomalous gold, whereas the Aegean Zone at depth in the northeast consists of only polybasite/pearcite. Gold and copper are deposited more prevalently at depth and in the

south of Bowdens associated with galena–chalcopyrite overprinting pyrite–sphalerite. Ag–Bi sulfosalts (new minerals related to matildite) have also been observed at depth (Lay 2019).

Ample textural evidence suggests that failure was due to local low permeability and hydrothermal sealing permitting local overpressures (Carter, 2023). Flat lying faults with slicken fibers, and centimetre-scale black bands of cataclasite material, highlight the occurrence of repeated micro seismic events, characteristic of fluid injection stimulating brittle failure (Cox, 2020).

7.1.5. Structure

Fault control which has led to the localisation of vein networks consist of numerous west dipping listric faults, of which the Eastern and Gully Faults host the Bowdens Deposit. The Eastern Fault is characterised by strong deformation, sericite-clay alteration, and silica flooding (as well as Prices Gully Fault), while the Gully Fault is characterised by more fault gouge and clay milling.

Locally the stratigraphy and orebody geometry is controlled by NNW trending faults and crystal tuff dome. A dacite intrusive and later mineralising fluids have ascended these conduits and cross faults with mineralisation depositing principally in the hanging wall of the Eastern fault, along geological contacts and brittle host units of welded tuffs and ignimbrites.

7.1.6. Alteration

Alteration within the Rylstone Volcanics at Bowdens consists predominantly of an argillic assemblage of clays (illite-smectite) sericite, silica, adularia and a wide range of carbonates (i.e. calcite, ankerite, rhodochrosite), representative of a steam heated blanket (Le Wang 2019), with a peripheral propylitic assemblage of chlorite and hematite. The Bowdens alteration and mineralisation events consisted of initial fluidised brecciation of silica-pyrite-adularia followed by progressive alteration phases of clay-carbonate (Lay 2019). These alteration styles consist of wall rock replacement and open-space filling dominated by quartz and adularia, followed by phases dominated by sulphides, then carbonates and finally clay minerals.

8. Ore Reserve and Mineral Resource Estimate

8.1. Ore Reserve

The Bowdens Ore Reserve is estimated at 32.8 million tonnes at 68.0 g/t silver, 0.38% zinc and 0.29% lead for 71.7 million ounces of silver, 123.3 kilo-tonnes of zinc and 95.6 kilo-tonnes of lead in contained metal. The Ore Reserve estimate ([Table 2](#)) was prepared by Resolve Mining Solutions based on the 2024 Mineral Resource Estimate and incorporates the same costs and revenue assumptions as the Optimisation.

Classification	Reserve Grades				Contained Metal		
	Tonnes (millions)	Ag (g/t)	Zn (%)	Pb (%)	Ag (Moz)	Zn (kt)	Pb (kt)
Proved	31.5	68.7	0.38	0.3	69.6	120.8	93.5
Probable	1.3	50.6	0.19	0.16	2.1	2.5	2
Total	32.8	68	0.38	0.29	71.7	123.3	95.6

*Table 2 - December 2024 Ore Reserve**

*Notes:

- Ore Reserves are a subset of Mineral Resources.
- Ore Reserves conform with and use the JORC Code 2012 definitions.
- Ore Reserves are calculated using Silver, Lead and Zinc pricing of US\$29/oz, US\$1.05/lb and US\$1.35/lb respectively
- Ore Reserves are calculated using a Net Smelter Return cut-off grade
- Tonnages are reported including mining dilution
- All figures are rounded to reflect appropriate levels of confidence which may result in apparent errors of summation.

8.2. Mineral Resource Estimate

The Bowdens Mineral Resource Estimate in 2024 was completed by H & S Consultants using Multiple Indicator Kriging and the reporting is compliant with the 2012 JORC Code and Guidelines. JORC Table 1 is provided in [Section 20](#). The Mineral Resource Estimate for the Bowdens Silver Project as at December 2024 is outlined in [Table 3](#).

Resource Class	Resource Grades						Contained Metal				
	Mass (Mt)	Ag (g/t)	Zn (%)	Pb (%)	Au (g/t)	AgEq (g/t)	Ag (Moz)	Zn (kt)	Pb (kt)	Au (koz)	Ag Eq (Moz)
Measured	100	42	0.37	0.27	0.03	65	135	368	265	109	207
Indicated	43	21	0.41	0.28	0.11	52	30	176	121	152	71
Inferred	36	14	0.42	0.32	0.14	48	16	152	115	166	55
Total	179	31	0.39	0.28	0.07	58	180	696	501	426	334
<i>Differences may occur in totals due to rounding</i>											

*Table 3 - December 2024 Mineral Resource Estimate (30 g/t AgEq Cut-Off)**

*Notes:

- Bowdens Silver Mineral Resource Estimate reported to a 30g/t Ag Eq cut off extends from surface and is trimmed to above 300 metres RL, approximately 320 metres below surface, representing a potential target volume for future open-pit mining and expansion.
- Bowdens' silver equivalent assumes prices of US\$27.50/oz silver, US\$2,950/t zinc, US\$2,350/t lead and US\$2,200/oz gold with metallurgical recoveries of 86.2% silver, 92.2% zinc, 84.7% lead and 80% gold estimated from test work commissioned by Silver Mines Limited. Silver equivalent formulae $AgEq = Ag + Pb \cdot 0.002612 + Zn \cdot 0.003569 + Au \cdot 74.25$ with all metals stated in g/t. It should be noted metal prices used in the Ore Reserve differ due to different timing of the Ore Reserve reporting.
- In the Company's opinion, the silver, zinc, lead and gold included in the metal equivalent calculations have a reasonable potential to be recovered and sold.
- Stated Mineral Resources are partially inclusive of areas of the total Underground Mineral Resource Estimate at 150 g/t Silver Equivalent (Ag Eq) Cut-off Grade above 300mRL. See ASX announcement dated 5th September 2022.
- Variability of summation may occur due to rounding.
- Oxide and transitional material comprise 0.4% and 2.9% of the Resource tonnage, containing 1 Moz and 9 Moz Silver Eq respectively.

Cut-off	Resource Grades				Contained Metal		
	Tonnes (Mt)	Ag (g/t)	Zn (%)	Pb (t)	Ag (M oz)	Zn (kt)	Pb (kt)
30	179	31.3	0.39	0.28	180.1	698.1	501.2
40	119	39.3	0.45	0.32	150.4	535.5	380.8
50	78	49.3	0.50	0.36	123.6	390.0	280.8
60	53	61.1	0.53	0.39	104.1	280.9	206.7
70	37	74.1	0.55	0.41	88.1	203.5	151.7
80	24	87.8	0.56	0.43	67.7	134.4	103.2
90	20	101	0.58	0.45	64.9	116.0	90.0

Table 4 - Mineral Resource Grade Tonnage Data by AgEq Cut-off

Diamond drilling has continued since the previous Ore Reserve by AMC in May 2018, relying on the MRE completed by H&S Consultants in 2017. The additional diamond drill core and assays has facilitated progressive revisions of the deposit geology and estimation domains. This domain is a key difference in estimation technique as compared to the 2023 MRE.

Estimation domains were updated using photographic records of all diamond drill core and analysed using transformer vision models, combined with assays, largely independent of the underlying variables being estimated

Key areas that provided additional resources compared to the previous estimates were typically at depth below the reserve pit designs within the Coomber formation and increasingly gold and base metal rich.

For the purposes of estimation, the Rylstone and the Coomber formations were divided into several domains to reflect the local orientation of mineralisation. While the higher-grade veins in the Rylstone Volcanics are broadly conformable with stratigraphy, the Bundarra veins in the Coomber Formation are disconformable with stratigraphy. Grades were generally estimated using the same parameters as the 2023 MRE for full details refer to Appendix 1 - apart from the implementation of a mineralised fracture domain as a hard boundary for some elements (Ag, Pb, Zn, Sb and Cd) in the Rylstone Volcanics. Silver grades were initially estimated by recoverable MIK into larger panels, and then localised by discretising the estimated metal distribution into sub-blocks.

Gold was estimated by MIK, using the e-type or average block grade estimate at the scale of the panels; this coarser resolution reflects the lower confidence in gold grade estimates due to substantial under-assaying of gold compared to silver, particularly in the Rylstone Volcanics. All other attributes were estimated by OK into sub-blocks, including Pb, Zn, S, Cu, As, Cd, Sb, Mn, Fe and dry bulk density. Dry bulk density was estimated directly by OK using available immersion method data. All grades were estimated using nominal 2.0 metre composites. All attributes were estimated independently and separately within each stratigraphic unit. Elements

affected by oxidation (Zn, S, Cd and Mn) were estimated with search parameters oriented parallel to topography in the oxide zone. No top cutting was applied to any of the grade estimates because none of the grade distributions are strongly skewed.

The updated model was validated in a number of ways, including visual and statistical comparison of block and drill hole grades, examination of grade-tonnage data, and comparison with the previous estimate.

The resource classification for the updated model is based on the estimation search pass for silver, using a scheme identical to the 2023 and January 2024 MRE's. The MRE has been restricted to above a nominal elevation considered reasonable for a potential open pit mining operation and has been classified according to the JORC 2012 guidelines (H&S Resource Report 2024). The JORC Code, 2012 Edition Table 1 Report is included as Table 13 in Section 20.

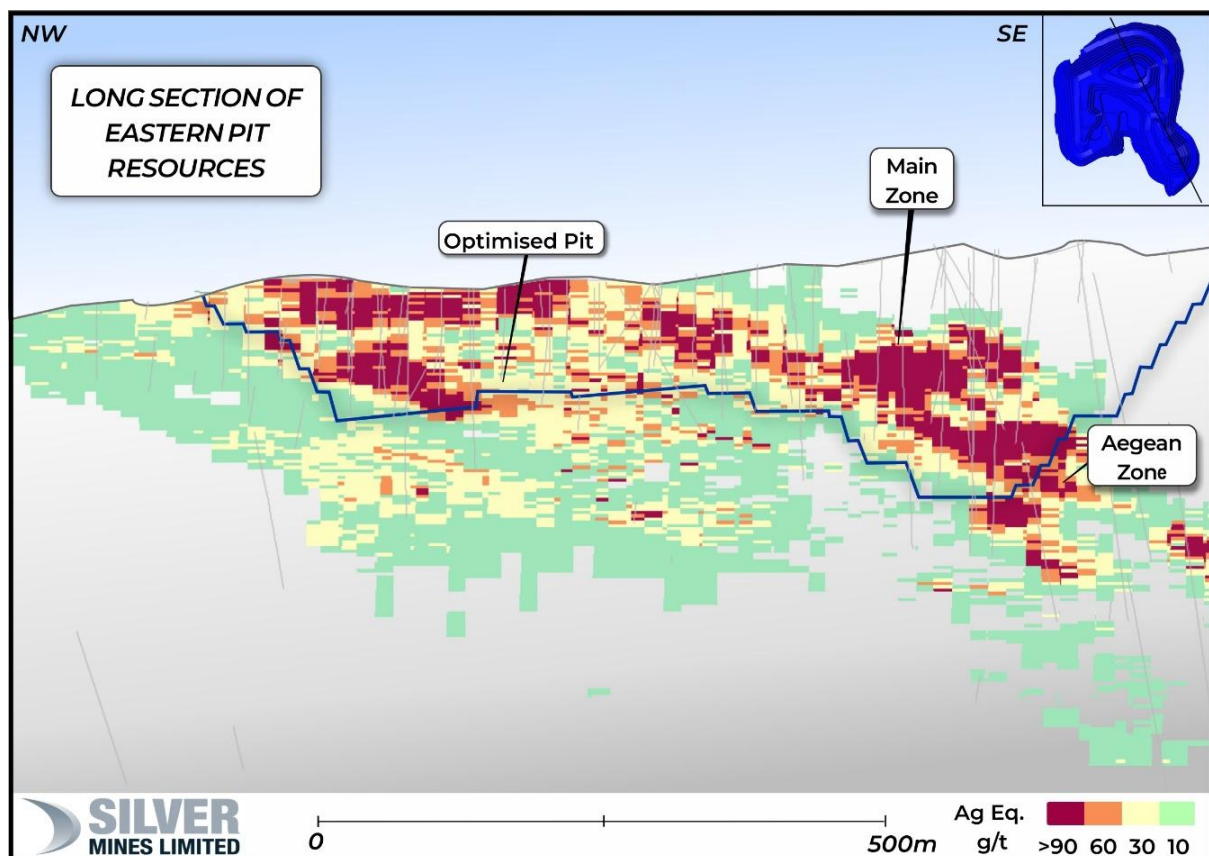


Figure 7 – Schematic Long Section with Typical Ore Body Geometry and Grade Zonation (2024 Optimised Pit)

9. Mining

9.1. Geotechnical

The mining geotechnical assessment and open pit slope design were conducted by Dempers and Seymour Pty Ltd (D&S) in 2023. The assessment included collection and interpretation of various types of data including:

Silver Mines Limited

ABN: 45 107 452 942

- site geological interpretations;
- geotechnical and structural logging (D&S) of 21 drillholes, core and photographs;
- significant geotechnical feature review (D&S) of 63 drillholes and photographs;
- validation/calibration (D&S) of structural logs (Bowdens) of 166 drillholes, core and photographs;
- 30 individual UCS and elastic properties tests;
- 5 direct shear tests; and
- 31 Brazilian tensile tests.

These data were used to generate the different geotechnical models and in conducting analyses as listed below:

- 3D Significant Geotechnical Features Model (SGFM);
- 3D Mining Rock Mass Model (MRMM);
- kinematic structural analyses;
- probabilistic and deterministic structural analyses; and
- deterministic and probabilistic limit equilibrium analyses, and finite element analysis to determine a stress reduction factor (SRF) for rigorous pit slope design.

The D&S analyses resulted in the mining area being split into 7 domains with the recommended open pit design parameters provided in [Table 5](#).

Domain	From	To	Bench Height (m)	Berm Width (m)	Batter Angle (degrees)	Slope Angle (degrees)
West Domain West Wall (WW)	Surface	630	15	6	55	
	630	510	15	6	65	
	510	470	20	7	70	
	470	460	10	Pit Floor	70	51
West Domain East Wall (WE)	Surface	585	15	6	55	
	585	570	15	6	65	
	570	470	20	7	70	
	470	460	10	Pit Floor	70	54
North Domain & Satellite Pits	Surface	630	15	6	55	
	630	570	15	6	65	
	570	450	20	7	70	52
East Domain West Wall (EW)	Surface	630	15	6	55	
	630	570	15	6	65	
	570	450	20	7	70	52
East Domain East Wall (EE D1)	Surface	630	15	6	55	
	630	570	15	6	65	
	570	450	20	7	70	52
East Domain East Wall (EE D2)	Surface	615	15	6	55	
	615	570	15	6	65	
	570	450	20	7	70	52
East Domain East Wall (EE D3)	Surface	600	15	6	55	
	600	570	15	6	65	
	570	450	20	7	70	52

Table 5 - Pit Geotechnical Design Angles

9.2. Limitation of Optimised Design

Prior to the Court ruling, the Optimisation was intentionally limited (largely relating to mining inventory and process throughput rate) to be ‘*substantially the same*’ as the Previous Approval to minimise the complexity and timeframe of any subsequent modification approval requirements related to engineering design changes. Bowdens further chose to limit the western extent of the open pit to defer relocation of a 500kV TransGrid powerline for a potential future expansion. Therefore, the Optimised design is a sub-set of the full Ore Reserve.

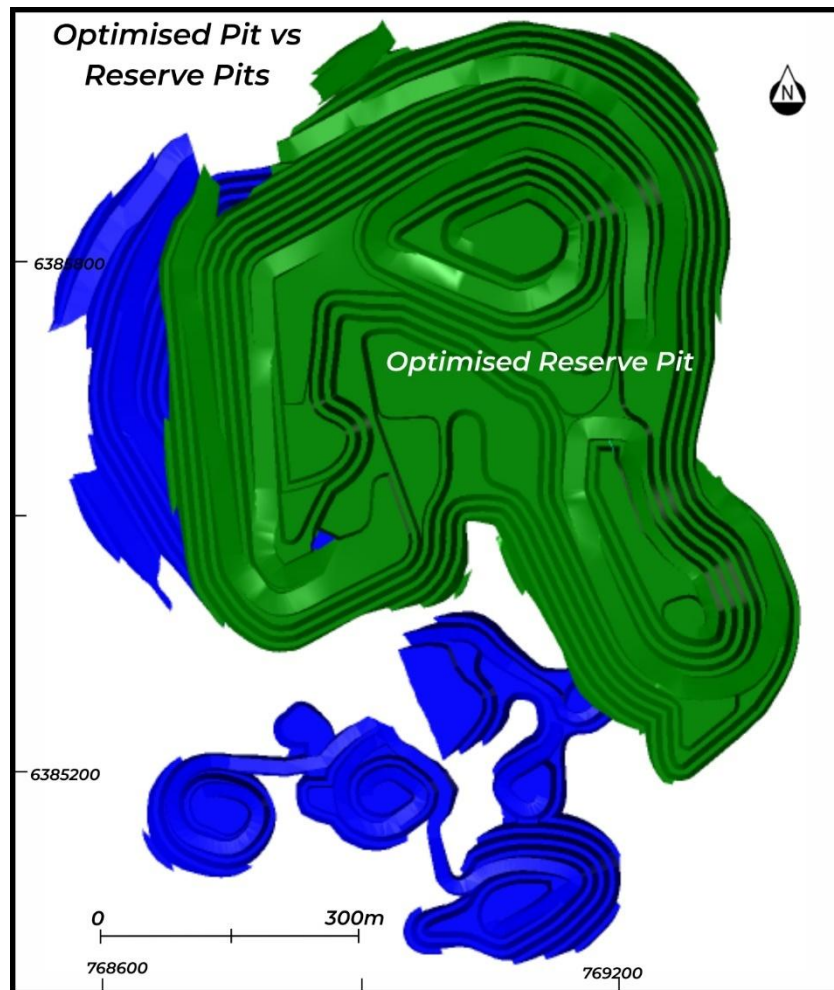


Figure 8 Optimised Pit footprint compared to Reserve footprint in Blue

9.3. Optimisation

Mine optimisation, design and scheduling were conducted by Resolve Mining Solutions using Whittle, Surpac and MineSched software packages respectively. The key Net Smelter Return (NSR) inputs used in the final optimisation are provided in [Table 6](#).

As can be seen in [Figure 8](#), the optimisation shells contained two inflection points for tonnes and cashflow, one at Revenue Factor (RF)=0.46 and the other at RF=1.0. Due to the limitations discussed in [Section 9.2](#), the RF=1.0 shell was selected as the general extremity from which a sub-set of the material was included in the Optimised design.

Item	Unit	A\$	US\$
Currency		1.00	0.67
Silver (Ag) Price	\$/oz	43.28	29.00
Zinc (Zn) Price	\$/t	4,442	2,976
Lead (Pb) Price	\$/t	3,455	2,315
Ag Recovery to concentrate	%	82.6%	
Zn Recovery to concentrate	%	88.7%	
Pb Recovery to concentrate	%	82.7%	
Treatment charge	\$/t	136	91
Ag Refining charge	\$/oz	0.90	0.60
Transportation	\$/t	221.22	148.22
Ag min deduction	g/t	50	
Ag payability	%	95	
Zn min Deduction	%	8	
Zn Payability	%	85	
Zn discount	%	50	
Pb min deduction	%	3	
Pb Payability	%	95	
NSW Royalty	%	4	
Other Royalties (approx.)	%	2.5	

Table 6 - Key NSR Input

**Note: Due to the time lag between running the original Whittle optimisations and completing the financial report, the original Whittle inputs were slightly different. The Whittle optimisations were re-run based on the final financial model inputs with no material differences in the shells.*

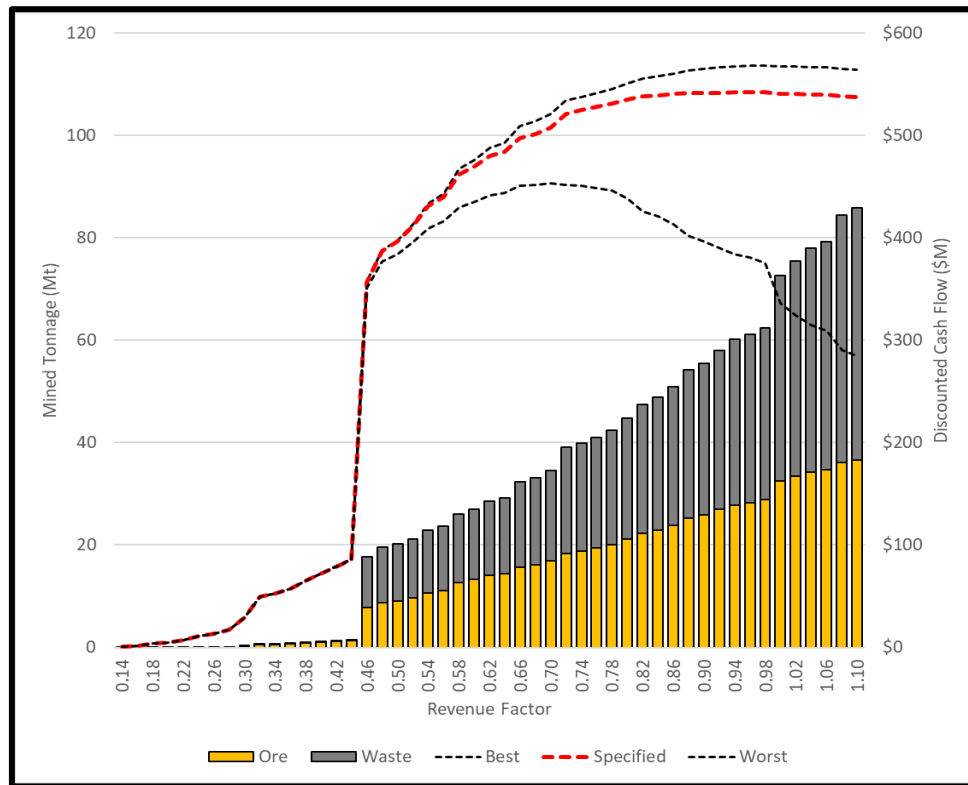


Figure 9 - Whittle Optimisation Shells

9.4. General

The Optimised design is for a single open pit using drill and blast for primary rock fragmentation with load and haul transportation to the Run of Mine (ROM) ore pad adjacent to the primary crusher. Mining is scheduled for 15 years (including pre-production) producing 28.1 million tonnes of ore and 41.8 million tonnes of waste at a strip ratio of 1.49:1.

As illustrated in Figure 10, the pit has a north-south orientated saddle separating the eastern and western sections of the pit. The pit will be mined in five stages as depicted in Figure 11.

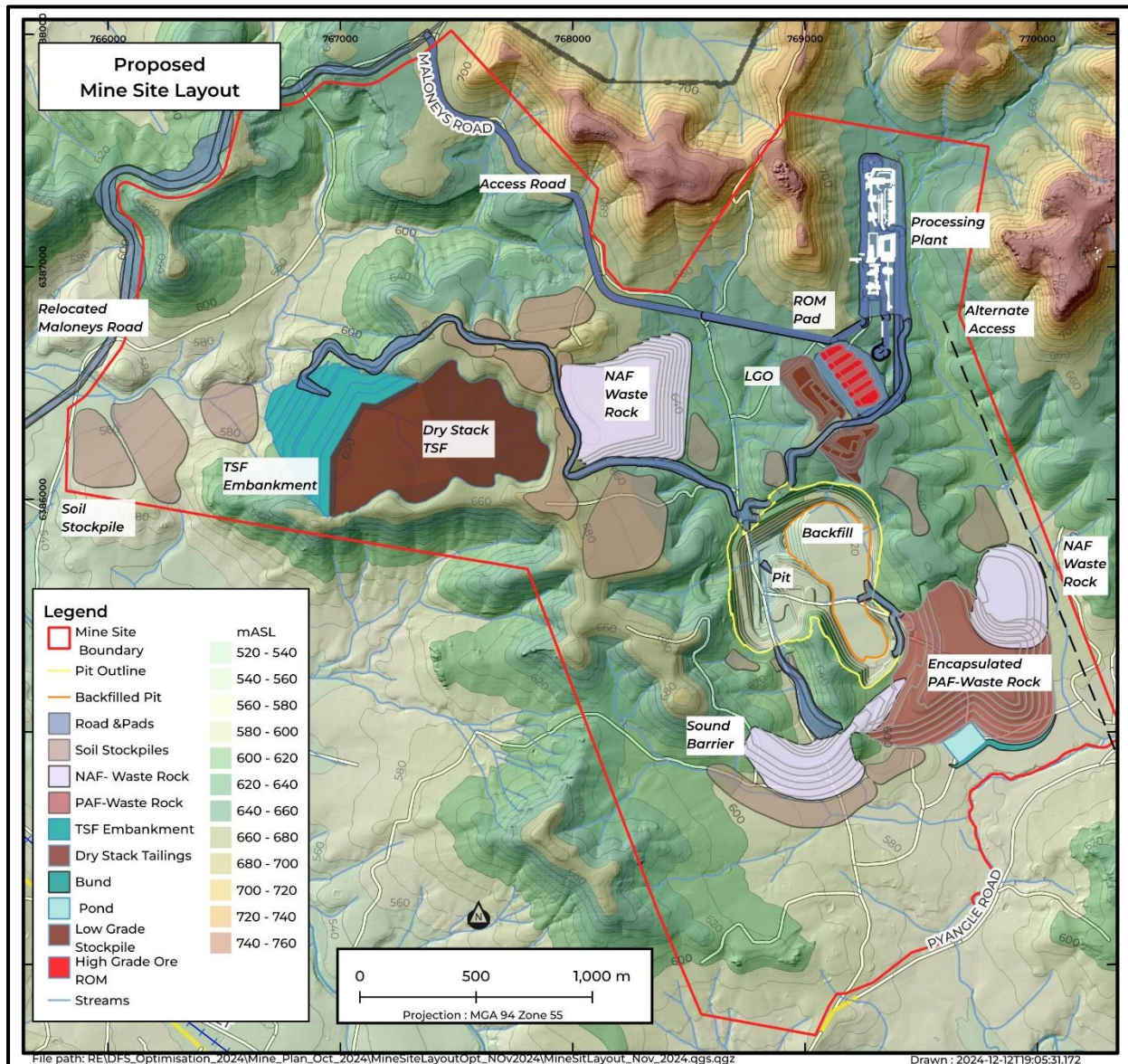


Figure 10 - General Site Layout

Stages 1 – 4 are the eastern sections of the pit and represents approximately 72.5% of the ore tonnes. Mining of Stage 5 commences in year 9.

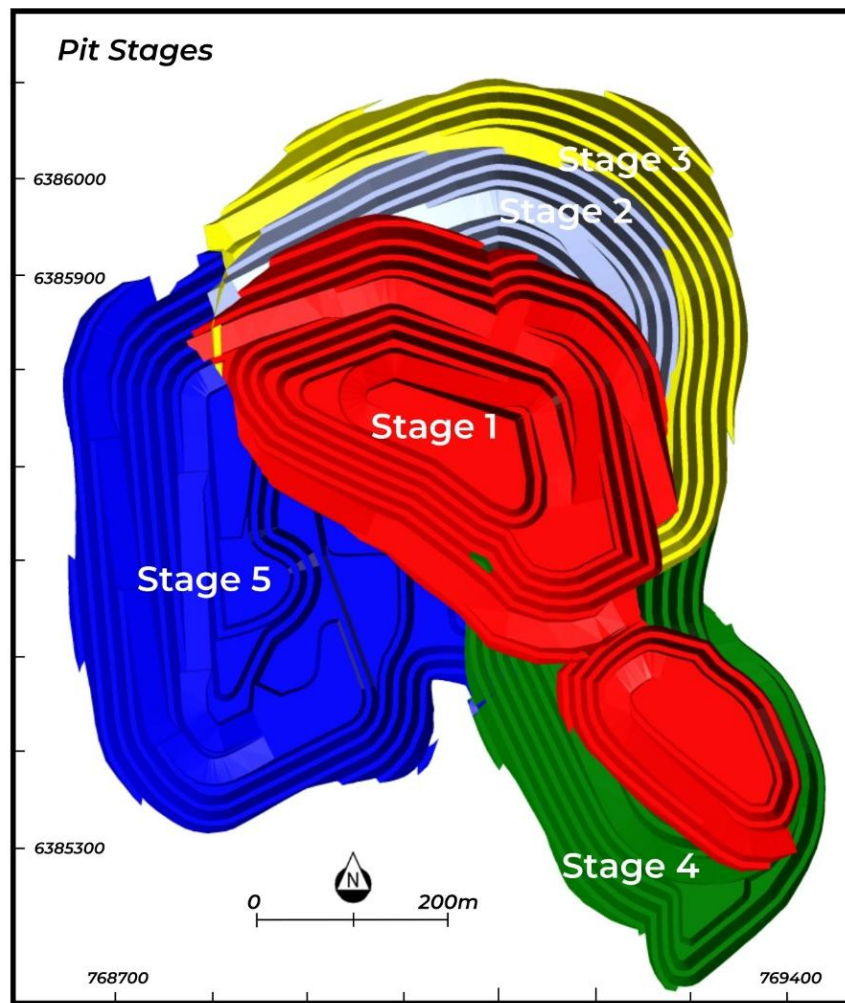


Figure 11 - Pit Design with Stages

Primary mining activities are planned to be on a 7-day per week, dayshift only operating schedule although 24/7 operations are an option. Some ancillary, drilling and maintenance activities may be scheduled on nightshifts.

9.5. Pre-Production Activities

To prepare the mining area, construct the starter Waste Rock Entrainment (“**WRE**”) and Tailings Storage Facility (“**TSF**”), construct mine haulage and service roads, and ensure sufficient ROM stocks; pre-production activities will commence approximately 18-months before process commissioning. Pre-production activities will include:

- tree removal;
- topsoil removal and stockpiling;
- construction of internal (non-public) roads;
- building site water management facilities;
- foundation preparation, starter embankment and seepage recovery for the WRE;
- foundation preparation, starter embankment and seepage recovery for the TSF;
- construction of mine workshop and laydown area;

- installation of light and heavy vehicle fuelling and fuel storage facilities; and
- construction of light and heavy vehicle wash down bays.

9.6. Drill and Blast

Due to the strict noise and vibration limitations associated with the Project's close proximity to neighbouring landowners, drill and blast will be conducted by a specialist contractor under a 'rock on ground' contract.

Unique drill and blast designs will be required in certain situations and no single drill and blast pattern is nominated as standard. Hole sizes may vary from 89mm to 127mm and bench heights are planned at 5m. To match this situation, fixed and variable rate tenders were provided by multiple experienced drill and blast contractors. Cost assumptions are based on these submissions.

To manage drilling noise, only drill rigs that can be fitted with noise reduction kits will be used in the production cycle noting that, as noise level impacts will vary with drilling location and pit depth, the noise reduction kits may not be required at all times.

9.7. Load and Haul

The process plant throughput rate has been set at 2 million tonnes per annum. The mine design and schedule were developed from the optimisation shells to deliver the highest grade possible to the ROM while minimising pre-production mining and overall mining rate, but also limit the size of low-grade stockpile to a maximum of 2 million tonnes. The resultant mining schedule was then used to select an appropriate mining fleet. The mining schedule is demonstrated in [Figure 11](#) with the resulting process feed schedule demonstrated in [Figure 12](#).

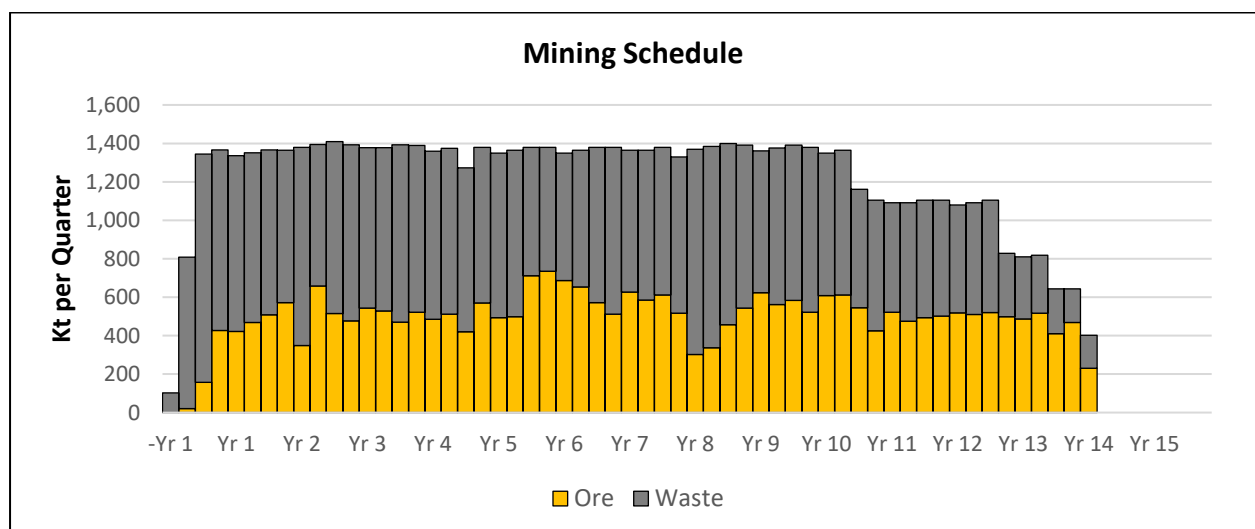


Figure 12 - Mining Schedule

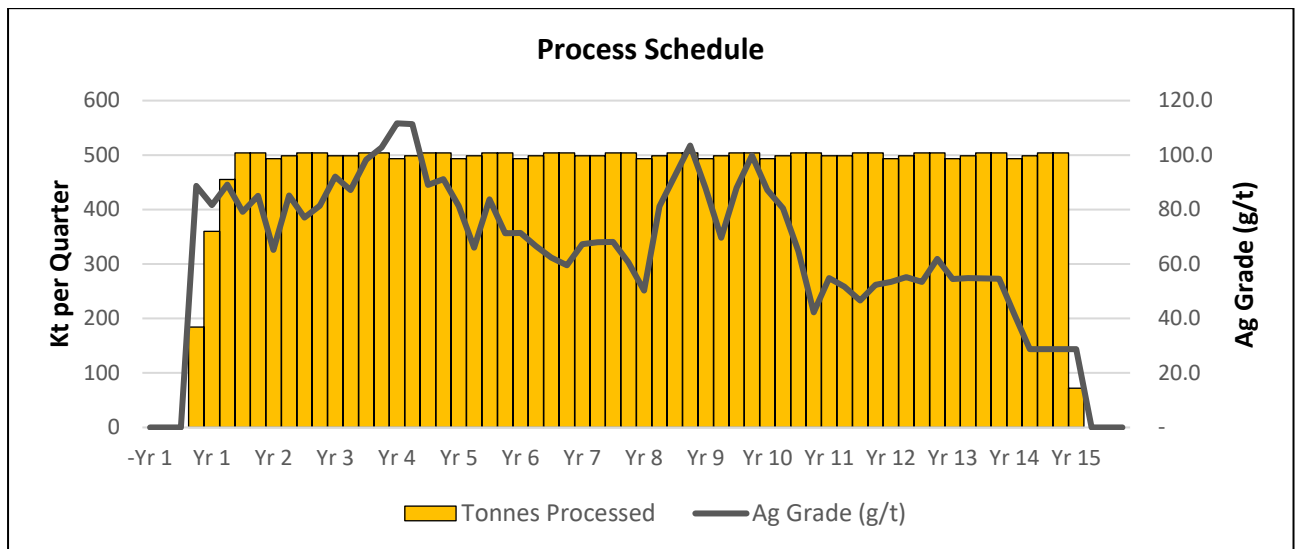


Figure 13 - Process Feed Schedule

The selected primary fleet is a 200t class excavator loading 100t trucks. A primary fleet of 1 excavator and up to 7 trucks will be required over the life of the operation, based on mechanical availability, utilisation and efficiency calculations. A smaller excavator, approximately 100t class, will be available to operate as batter puller and production back-up to the primary excavator. Equipment selection advice along with detailed lifecycle ownership costs were provided by Westrac.

Load and haul activities will be supported with ancillary fleet including dozers, water cart, grader and maintenance service vehicle.

9.8 Waste Rock Management

The mining schedule contains approximately 20.5Mt of Non-Acid Forming (“NAF”) waste rock and 20.4Mt of Potentially Acid Forming (“PAF”) waste rock.

PAF waste will either be stored in a single WRE or as in-pit backfill. The preliminary WRE design has been provided by SRK Consulting with the following objectives:

- stable storage of PAF waste rock;
- construction by paddock dumping with traffic compaction to promote compaction and limit permeability;
- divert clean water flows away from the WRE;
- contain contact water;
- collection of potential seepage;
- minimise the potential for sediment loss to the environment;
- avoid PAF rock interaction with potential flood envelopes of adjacent creeks;
- visually fit with natural topography; and
- be progressively rehabilitated and fully encapsulated by NAF waste at closure.

PAF stored as in-pit backfill will be limited to below the final water level to prevent oxidation and acid generation.

Figure 14 demonstrates some of the design features of the preliminary WRE. The WRE design was based on a pre-final pit design and will be updated and completed to match the final pit design during the final engineering phase of Project development.

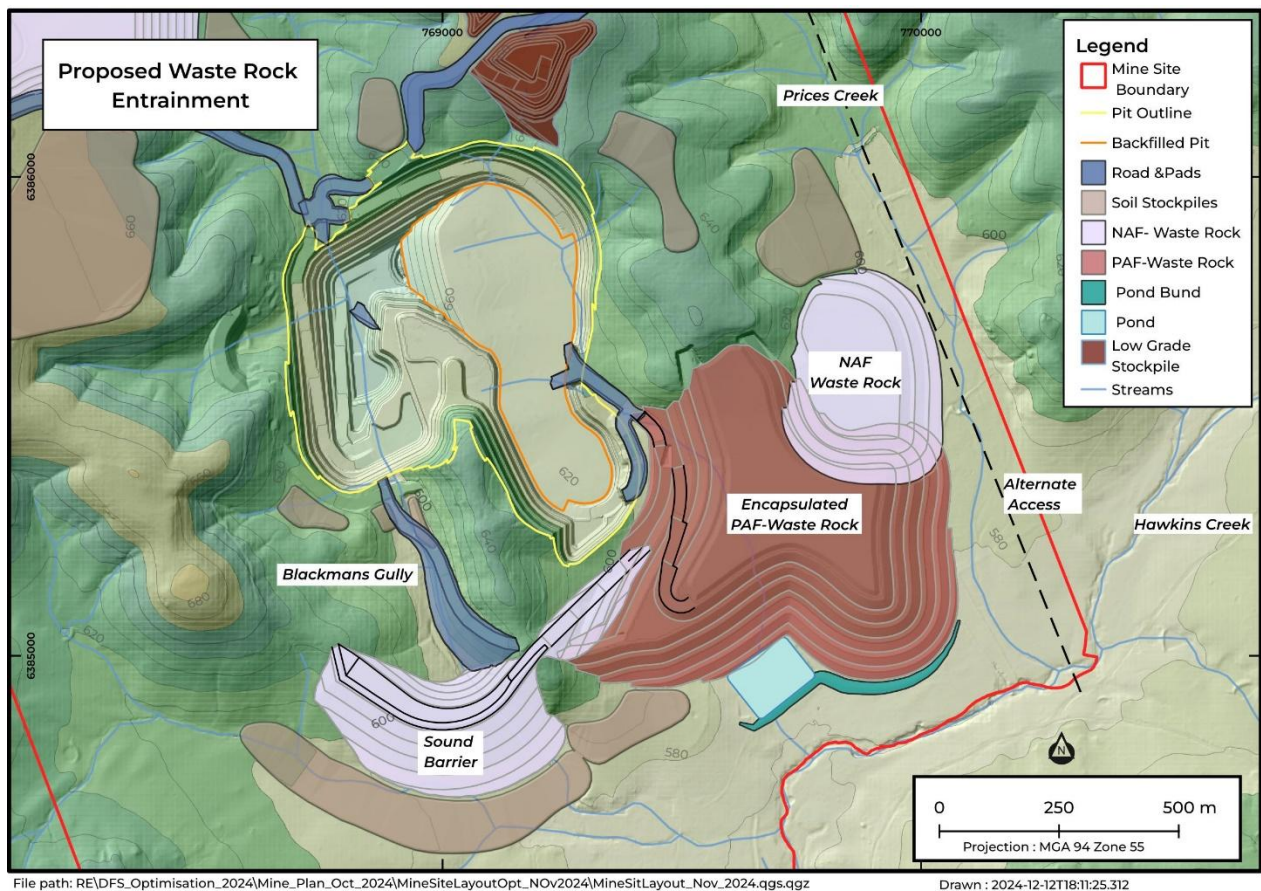


Figure 14 - Waste Rock Entrainment

NAF waste will be used and stored in a variety of ways including:

- site road and pad construction;
- site water dam construction;
- erosion control barriers;
- sound barriers;
- PAF encapsulation during operations and closure;
- stored in temporary and permanent stockpiles and dumps; and
- backfill in pits (potentially).

10. Metallurgy and Processing

10.1. Metallurgical Test Work and Revenue Optimisation

Numerous metallurgical test programs have been conducted since the discovery of the Bowdens deposit in 1989. These programs were conducted by different laboratories on different ore samples and composites; and included mineralogy, comminution, flotation, leaching, and gravity concentration.

The most recent (and ongoing) test program has been conducted by KYSPYMet with input from GR Engineering Services (“GRES”) and focuses on optimising the flotation process and Ag recovery considering various grind sizes, flotation methodologies and conditioning. This program has been conducted with 10 composites samples. These samples represent high, medium and low Ag grade samples from each of the three metallurgical zones, plus a further master composite representing approximately 60% of the first 10 years of production.

Three flotation sequences were investigated:

- Three sequential stages targeting Ag, Pb, then Zn
 - Ag and Pb concentrates combined to produce a Pb concentrate with high Ag content – while marketing of a separate Ag concentrate was considered, the resulting Pb concentrate was less marketable
 - Zn concentrate
- Two sequential stages targeting Ag & Pb, then Zn
 - Pb concentrate with high Ag content
 - Zn concentrate
- Single stage targeting Ag, Pb and Zn simultaneously
 - High-grade Ag concentrate with marketable Pb and Zn content

Each of the flotation options result in a different distribution of the metals in the different concentrate options.

The results of the metallurgical test program were considered in much larger terms than just metallurgy. The focus was on overall project economics incorporating consideration of:

- process plant capital costs;
- process plant operating costs;
- flow sheet robustness in terms of dealing with varying head grades and mineralogy;
- potential environmental and community impacts;
- material handling and transportation costs; and
- marketing terms and providing the Project with the ability to deal with potential market variations.

After consideration of operational, technical and financial factors, the single stage flotation producing a high-grade Ag concentrate with marketable Pb and Zn content was selected.

Key benefits of the selected process include:

- highest total recovery of Ag and Zn;

- highest payability of Ag and Pb;
- lowest capital and operating costs;
- significant reduction in mine scheduling dynamics to manage variable ore characteristics; and
- elimination of Cyanide within the process stream.

10.2. Process Plant

The process plant design and cost estimation has been completed by GRES. The plant has been designed to treat 2 million tonnes per annum of ore with the primary crusher located approximately 750 metres from the pit ramp crest.

The plant will contain the following major unit operations as demonstrated in Figure 15.

- single stage primary jaw crushing;
- two stage SAG and ball mill including pebble crusher;
- rougher and scavenger flotation with concentrate regrind prior to cleaner flotation to produce a high-grade, bulk silver, lead and zinc concentrate; and
- concentrate dewatering utilising a thickener and filter to produce transportable concentrate.

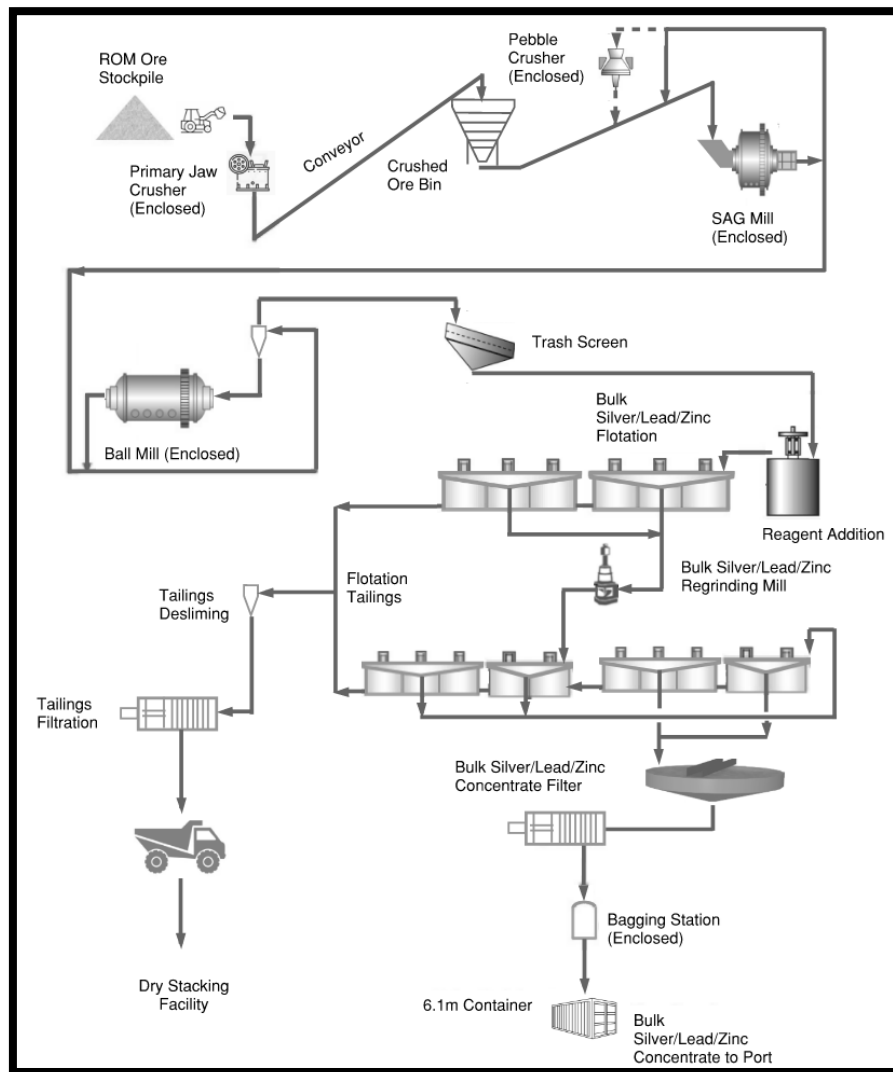


Figure 15 - Process Flow Diagram

10.2.1. Crushing

The crushing plant will operate 24-hours a day, 7-days a week at 70% utilisation with a design hourly crushing rate of 326 tonnes per hour (tph). The crushing plant feed size F100 is 700 mm controlled by a static grizzly designed to produce a grinding circuit feed of F100 of 232 mm. Ore will be fed from the ROM by front end loader (FEL) or directly truck tipped into a 150 tonne capacity covered bin. Oversize material will be removed and broken on a campaign basis by a mobile rock breaker.

The ROM bin will be enclosed with sound attenuating panels and automatic timed sprays for dust suppression. A dust collector is also included immediately downstream of the primary crusher. The primary crusher will be installed in a concrete bunker designed to attenuate the low frequency noise associated with jaw crushers.

A diverter bin is included in the belt arrangements between the primary crusher and the crushed ore bin to allow potential future modifications such as ore sorting without a major tie-in shutdown. A crushed ore bin is included instead of a crushed ore stockpile to minimise noise and dust generation. The bin has a design capacity of 4,230 tonnes or 17-hours of milling.

10.2.2. Grinding

The two-stage closed grinding circuit contains a SAG mill with 10 mm trommel screen, ball mill, pebble crusher and classification cyclone cluster producing the optimised p80 passing 106 μm . The grinding circuit will operate 24-hours a day, 7-days a week at 91% utilisation with a design hourly grinding rate of 250 tph.

The variable speed SAG mill will be 7.47 metre diameter by 3.51 metres long with a soft start 3,800 kW motor operating at 60 - 80% of critical speed drawing approximately 2,800 kW. SAG mill discharge will be over a trommel screen with 10 mm apertures. Undersize will report to the cyclone feed hopper and oversize will report to the pebble crusher.

The variable speed ball mill will be 5.03 metre diameter by 7.47 metres long with a soft start 3,800 kW motor and operating between 60 - 80% critical speed drawing approximately 3,000 kW. Ball mill overflow will discharge through a trommel screen fitted with 8 mm aperture screen panels. Undersize will report to the cyclone feed hopper while oversize can be recycled to the grinding circuit via the emergency feed hopper or discarded.

Cyclone cluster underflow will report back to the ball mill while overflow product at a target density of 30% solid by weight will report to the vibrating deck trash screen with 1 mm aperture panels.

10.2.3. Flotation

Trash screen underflow will gravitate to a 53 m³ conditioning tank at a flow rate of 687 m³/hr for a residence time of 5 minutes. The conditioned slurry will be pumped to the rougher/scavenger float circuit consisting of six 50 m³ mechanically agitated, forced air Metso tank cells in series. Scavenger tails will report to the tailings hopper while the rougher and scavenger concentrate will report to a dewatering cyclone cluster. Underflow at 55% solids will report to a Metso 355 kW stirred media detritor for regrinding to a p80 of 17 μm . Cyclone overflow and reground underflow then report to the 4.4 m³ cleaning circuit conditioning tank.

Conditioned concentrate will be pumped to the cleaner circuit consisting of five 5 m³ Metso TankCell flotation units in series. Tails from the cleaner circuit will report directly to the tailings hopper while concentrates will report to the re-cleaner circuit consisting of five 1.5 m³ Metso OK flotation cells in series. Tails from the re-cleaner circuit are recycled to the cleaner circuit while concentrates are pumped to the concentrate thickener.

10.2.4. Concentrate Thickening and Filtration

Re-cleaner concentrates will be passed over a trash screen and On-Stream Analyser (OSA) enroute to the 6.0 metre diameter high-rate concentrate thickener. Thickened concentrates are then pumped to a 50 m³ (17-hr) storage tank prior to the filtering. Concentrates will then be

batch filtered by a vertical plate pressure filter with 0.8 metre wide by 0.8 metre high plates. The pressure filter will dewater the concentrate slurry to produce a filter cake containing nominally 12% by weight moisture in 18 - 20 minute cycles.

10.3. Tailings Disposal

Bowdens has elected to operate a dewatered tailings storage facility, often referred to as 'dry stack', due to the numerous benefits over wet tailings including:

- the methodology is considered world best practice;
- dewatered tailings results in substantially reduced site water losses;
 - no tailings decant pond with large evaporation surface;
 - only approximately 20% water entrained in tailings;
 - minimal seepage to leachate pond;
- the TSF will ultimately have a substantially reduced environmental disturbance footprint – less than 50% of the original design footprint from the 2018 FS;
- simplified management of potential dust emissions due to significantly smaller operating areas that are 100% accessible; and
- reduced potential for failure.

10.3.1. Tailings Filtration

Tailings at 27 - 30% solids will be pumped approximately 1.8 kilometers from the tailings hopper to the Tailings Filtration Plant (TFP) operating 24-hours a day, 7-days a week. The TFP will dewater the tailings to approximately 20% moisture for placement on the dewatered tailings storage facility.

Figure 16 demonstrates the tailings filtration process.

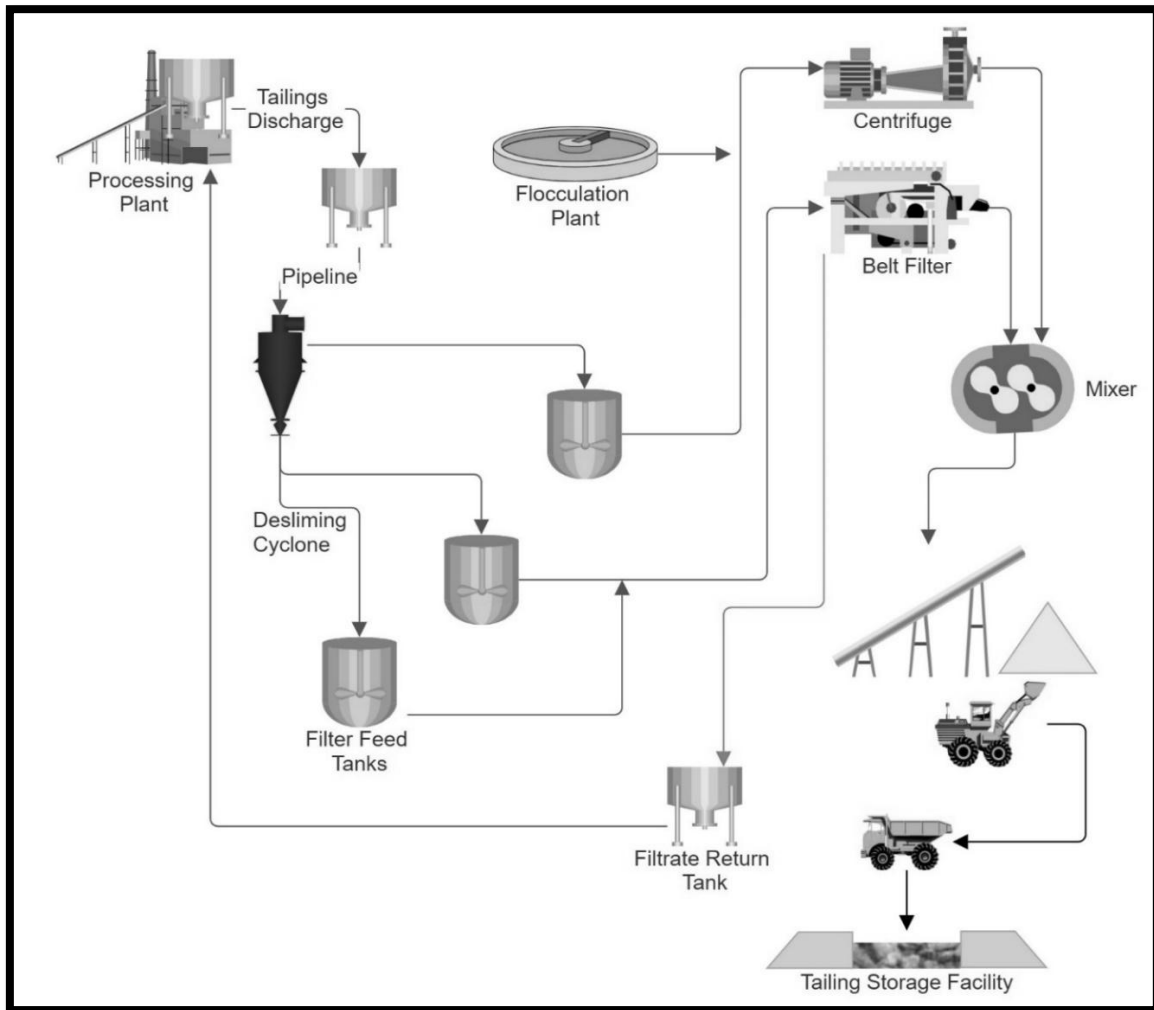


Figure 16 - Tailings Filtration

Tailings will arrive at the TFP and enter a holding tank. From the holding tank, tailings will be pumped to desliming cyclones to remove the slimes (-20 μ m fraction), approximately 15-20% of tailings mass. The desliming cyclone overflow (slimes) will report to a slime holding tank and the deslimed tailings will report to other holding tanks. The slimes will be pumped to and dewatered in a bowl centrifuge while the deslimed tails will be pumped to and dewatered on belt filters. The dewatered tailings from both the bowl centrifuge and belt filters will then be mixed back together and placed on one of two stacker belts via a reversible belt. Each belt will dump onto a holding pad with a minimum 24-hr capacity and sump for recycling of runoff.

10.3.2. Transportation and Placement

Transportation and placement of tailings is planned to be operated 7 days per week on dayshift only although 24/7 operations are an option. The dewatered tailings will be picked up by front end loader and placed into trucks for haulage to the TSF. Tailings will be dumped from the ejector tray trucks while they are moving forward to initially spread the tails. The dewatered tailings will then be further spread into <300mm layers and compacted using a soil compactor.

10.3.3. Dewatered Tails Dam

The dewatered tails dam will be constructed in an up-valley manner in 5 metre lifts. As demonstrated in Figure 17, the embankment will be constructed of compacted ROM NAF waste with a maximum diameter of 500 mm. Dewatered tails will be dumped, spread, shaped and compacted (with engineering checks and controls) in thin layers. The tailings placed nearest and underneath embankment raises will be within the structural zone which will have stricter property and compaction controls than the non-structural zone.

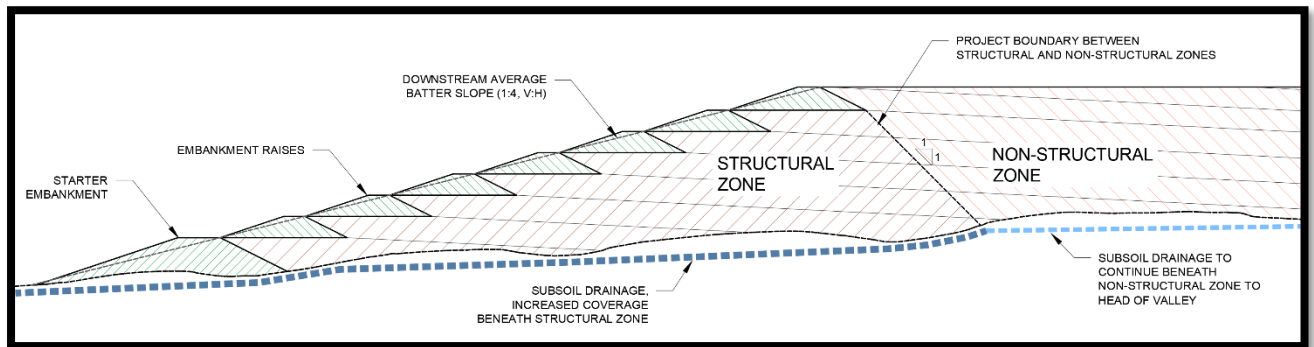


Figure 17 - Section of Dewatered Tailings Storage Facility Construction

The top surface of the tails dam will be sloped towards the head of the valley such that rainwater runoff will flow to and be controlled up-valley of the impoundment and not flow over embankment. There will be underdrainage seepage collection system and partial liner as demonstrated in Figure 18. The liner is expected to be compacted clay and/or HDPE and the detailed liner and underdrainage system to be determined during detailed engineering.

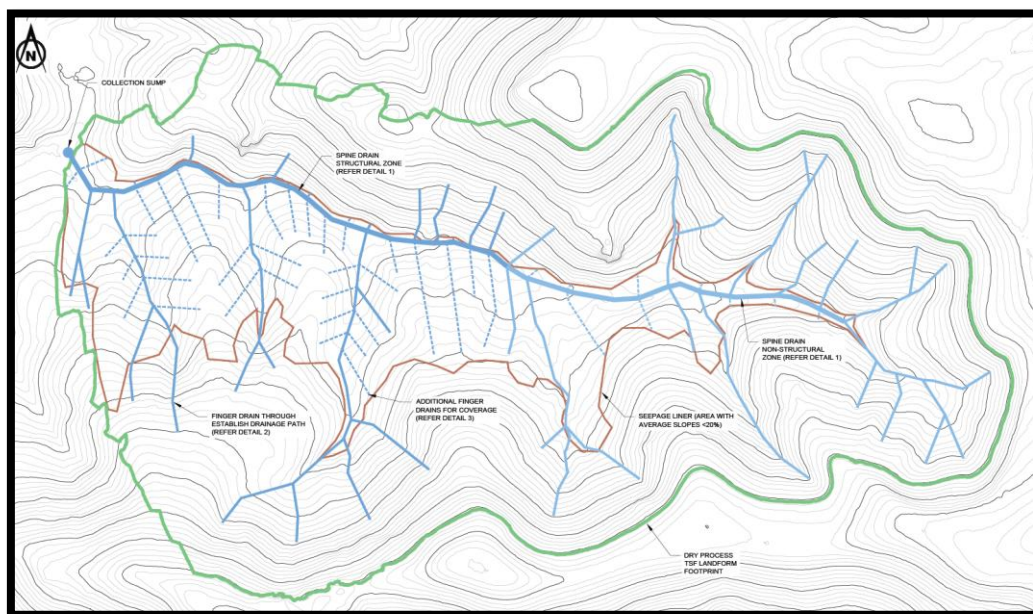


Figure 18 - Liner and Underdrainage System

11. Infrastructure

The Project key onsite and offsite infrastructure and facilities include:

- open pit mine including mobile plant workshop facilities;
- process plant – including fixed plant workshop facilities;
- office complex for all staff and contractors including site access control;
- separate PAF and NAF waste rock temporary and permanent storages;
- ore and low-grade pads and stockpiles;
- tailings dewatering filtration plant and dewatered tailing storage facility;
- external and internal electrical supply and distribution system including construction, startup and backup diesel generation;
- diesel storage and dispensing for both light and heavy vehicles;
- separation of clean and contact water managed via bunds, trenches, and ponds;
- water supply network including pit dewatering bores, production bores, pit runoff, waste dump runoff, TSF runoff, and harvestable rights collection via bores, pipes, pumps, ponds and tanks;
- internal light and heavy vehicle haul roads; and
- realignment of a section of the public Maloneys Road.

11.1. Site General Layout

The open pit is central to the overall Site layout. Waste dumps and the ROM pad surround the pit and are located to minimise haul distances while also meeting environmental design requirements. The TSF is located in the valley northwest of the open pit connected by a mine haul road such that PAF rock for embankment construction can be hauled directly from the pit to the TSF. The site offices, warehouse, process plant, mining workshop and other general facilities are located north of the open pit. There will be a single site office complex for administration, mining, process and maintenance technical staff.

11.2. Site Access and Transportation

Site access is currently via Lue Rd, Pyangle Rd and Maloneys Rd.

As the existing Maloneys Rd bisects Site, a section of Maloneys Rd will be realigned as demonstrated in Figure 19. Approximately 4.5 kilometres of the existing Maloneys Rd will be closed and replaced with a re-aligned section approximately 5.3 kilometres long. A short section of the existing Maloneys Rd, immediately north of the Pyangle Rd / Maloneys Rd intersection, will remain open to provide access to a private landowner. Upgrades to Lue Rd including turning lanes will be constructed for the Lue Rd / Pyangle Rd and Lue Rd / New Maloneys Rd intersections.

During Construction, access will be via Pyangle Rd and Maloneys Rd with an alternate access off Powells Rd. When construction of the New Maloneys Rd is complete, primary access will be via New Maloneys Rd and the mine access road. A security gate, which will control all vehicle movements entering and leaving Site, will be located on the mine access road adjacent to the office complex.

The majority of goods transported to and from Site will be transported via the state road network through Mudgee. By connecting New Maloneys Rd directly to Lue Rd north of Lue, regular mine related heavy traffic through Lue will be eliminated. B-double deliveries and concentrate haulage on Lue Rd are currently restricted to non-school bus hours.

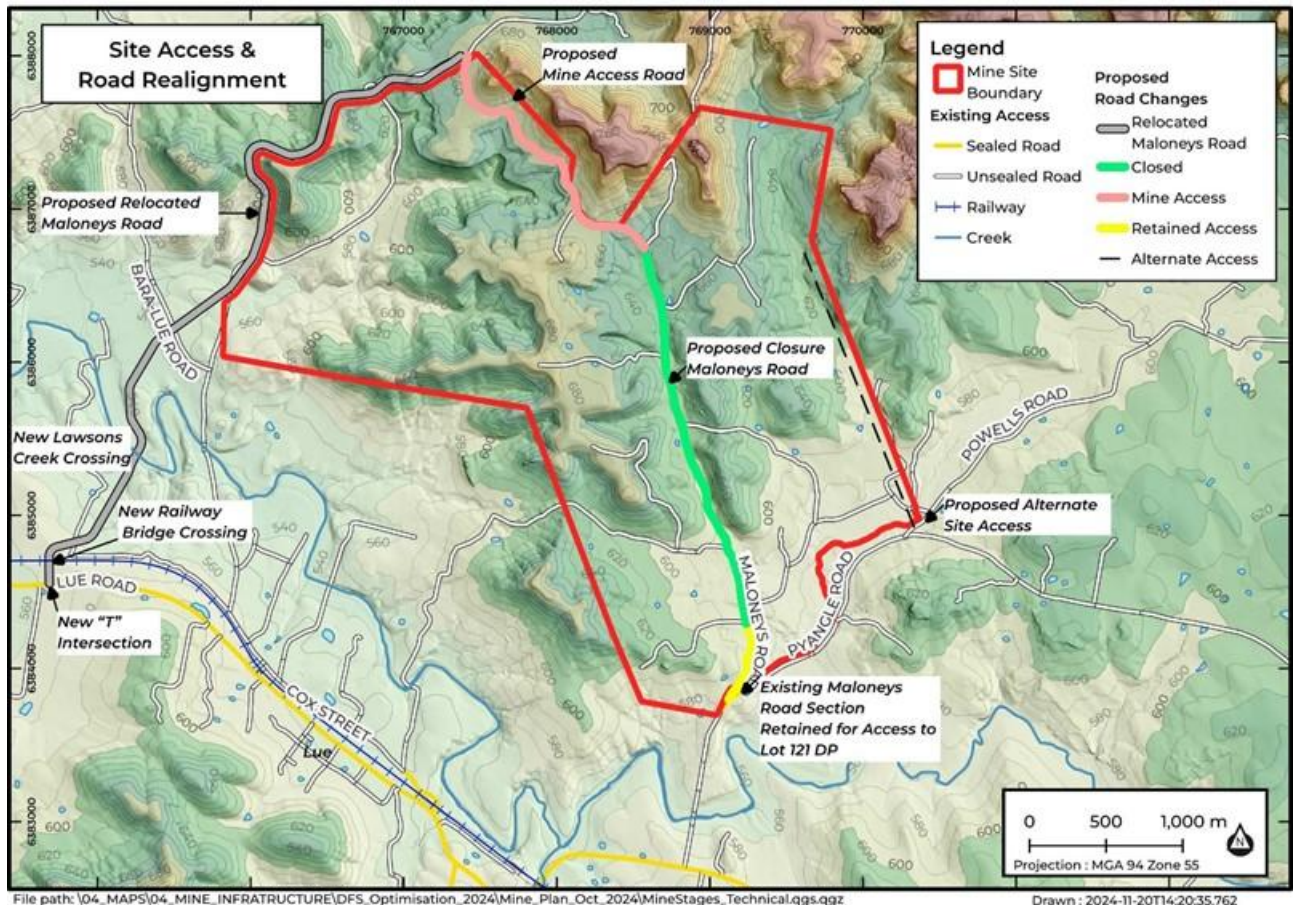


Figure 19 - Site Access and Maloneys Road Realignment

11.3. Power Supply

During construction, power will be provided by diesel generators located near the process plant and mining workshop area. Following construction, diesel generators will be maintained as backup power supply only.

The preferred power supply option is by a 66kV combined overhead/underground powerline connected to the Endeavour Energy 66kV feeder 839 between Kandos and Bylong. The final route is yet to be determined as various route options, along with landowner discussions, are still in progress.

Outlying locations requiring intermediate power (such as pumps for harvestable water from dams) will also be powered by remote diesel generators.

12. Environment and Water

12.1. Reduced Disturbance Area

One of the key objectives of the Optimisation has been to minimise the overall environmental footprint of the mine development and potential impacts to the environment and the community. The updated WRE, tailings and other infrastructure designs have significantly reduced the total disturbance area. The total disturbance area for the Optimisation is approximately 331 hectares (pending final designs) as compared to 456 hectares for the Previous Approval – equating to a reduction of over 27%.

12.2. Water Resources

During the site establishment and construction stage, water will be sourced from advanced pit dewatering bores and harvestable rights dams within Bowdens' contiguous landholdings.

During operations, water sources will include:

- harvestable rights entitlements within Bowdens' contiguous landholdings;
- tailings filtration reclaim;
- leachate management dams;
- groundwater and surface water returned from the open pit;
- surface water collected in sediment dams if unsuitable for release; and
- groundwater extracted by license(s).

The primary requirements for water are the process plant and dust suppression. Bowdens will manage the collection, recovery, separation of clean and dirty water, and re-use of water through a system of dams/ponds and tanks holding and transferring water from harvestable rights, open pit return, recycled process water, raw water and surface contact water. Water transfer and usage will be monitored, measured and controlled through environmental sampling protocols and water flow meters. The number, location and size of the various water storage facilities will be determined during the next phase of engineering design following an updated site water balance that is currently in progress.

Where practical, clean and site contact runoff water will be separated and controlled with diversion/separation bunds and sediment dams.

13. Employment and Accommodation

13.1. Construction

A total workforce of up to 320 personnel are estimated during site construction, although some of these personnel will be engaged in off-site activities such as procurement, engineering, drafting and administration. The instantaneous workforce numbers (both on and off-site) will vary depending on the actual work being performed at any point.

The site establishment and construction workforce will predominately comprise of persons engaged under one the following employment arrangements:

- employed by the contractor appointed to construct the processing plant engaged from local, state and inter-state locations;
- employed by other contractors or service providers undertaking specific tasks such as clearing, bulk earthworks, waste rock and tailings foundation preparations, road construction and electrical reticulation engaged primarily from local and state locations; and
- employed directly by Bowdens engaged primarily from local areas such as Kandos, Rylstone and Mudgee.

Non-local personnel may be accommodated in a variety of facilities including company owned housing, commercial temporary facilities, and rental agreements.

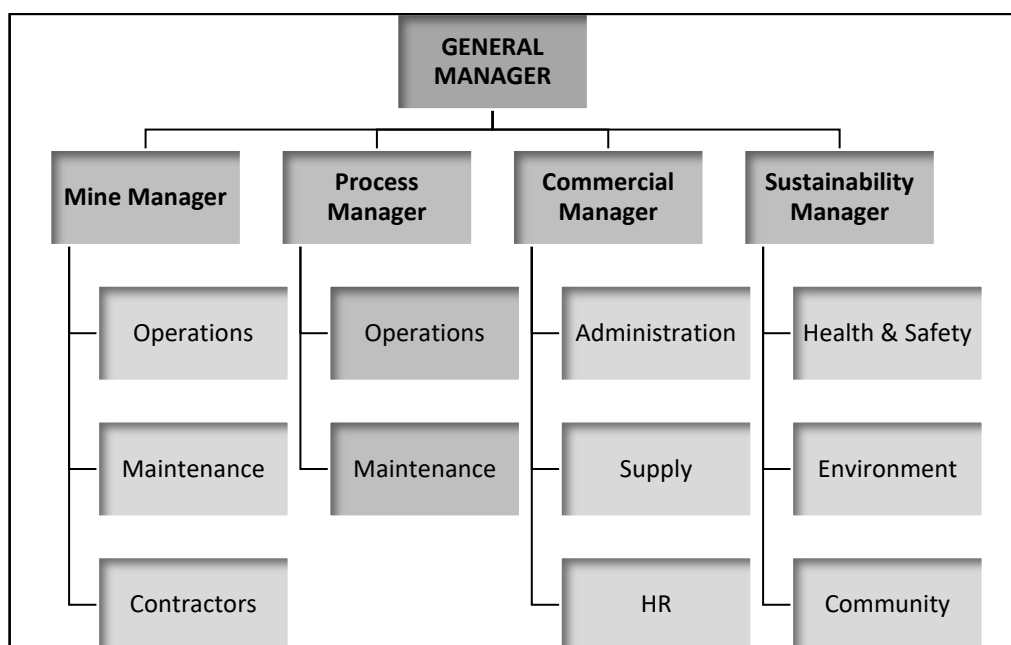


Figure 20 - Organisational Chart

13.2. Operations

A total workforce of approximately 220 personnel will be engaged during operations. While there will be a few specialist contractors required, such as the drill and blast contractors, the majority of all operational and technical personnel are planned to be directly employed by Bowdens.

Bowdens is committed to prioritising employment of local personnel, especially those living within daily driving distance of Site. Non-local permanent staff and temporary contractors (projects, shutdown maintenance, etc) may be accommodated through a number of options including company owned housing, long-term commercial accommodation agreements and short-term hire accommodation. Allocation of company owned housing will be prioritised for permanent staff with school age children.

14. Project Implementation

14.1. Construction

Upgrading of the Lue Rd / Pyangle Rd and Lue Rd / New Maloneys Rd intersections will be the first construction item to prepare site access for full construction. Once commenced, site construction is expected to take approximately 18-months. Following construction, a 6-month process plant commissioning and ramp up phase is expected.

A primary contractor will lead the process plant and tailings filtration plant construction, likely under a modified form of EPC contract. Other smaller contracts will be established for ancillary items such as bulk earthworks, WRE and tails dam foundation and embankment construction, building supply and installation, grid power connection, and road construction.

15. Costs

15.1. Capital Costs Estimates

The total capital cost estimate for the BSP is A\$346.4 million consisting of:

- initial capital of A\$302.9 million;
- capitalised pre-production operating expenses of A\$28.7 million; and
- sustaining capital of A\$14.8 million.

Initial Capital	Estimation Class	331,609,858
Process Plant	Class 2	93,836,122
Site Infrastructure	Class 3	81,252,684
Off-site Infrastructure	Class 5	40,786,308
Waste Management	Class 5	43,535,100
Mobile Equipment	Class 3	6,305,756
Capitalised Pre-Production	Class 3	28,748,509
Indirects	Class 2	37,145,380
Sustaining Capital		14,814,441
Mobile Equipment	Class 3	11,091,018
Waste Management	Class 5	3,723,423
Total Capital		346,424,298

*Table 7 - Capital Summary**

*Capital Costs are inclusive of A\$17.6 million in combined contingencies

The total capital cost estimate of A\$346 million (including mining pre-production) represents a 15% increase when compared to the 2018 FS capital cost estimate of A\$300 million, which is less than real inflation over the period. The net real reduction in capital is a result of scope changes and design improvements incorporated in the Optimisation.

The capital costs are primarily based on estimates provided by the relevant contributors listed in [Section 1.4](#). The overall capital cost estimate is considered to be consistent with a Class 3 estimate, while individual components range from Class 2 to Class 5. As demonstrated in [Table 7](#), approximately 75% of the initial capital is Class 2 or Class 3 with the remaining 25% at Class 5. External Infrastructure is considered as Class 5 due to the exact powerline route not being fully confirmed at this stage.

Waste landforms are considered as Class 5 due a late-stage decision to proceed with dewatered tailings resulting in the Class 3 TSF and WRE designs being deferred until the final site water modelling is completed.

15.2. Operating Cost Estimates

A summary of operating cost estimates are provided in [Table 8](#).

Operating Cost Summary	A\$ (m)	A\$/t ore	A\$/Oz
Mining (incl Grade Control and Stockpile Adj)	508.46	18.10	10.10
Rehabilitation	17.64	0.63	0.35
Processing	583.77	20.78	11.60
G & A	158.71	5.65	3.15
TC / RCs	97.85	3.48	1.94
Shipping Costs	75.08	2.67	1.49
non-NSW State Royalties	61.85	2.20	1.23
Zinc Revenue	-138.35	-4.92	-2.75
Lead Revenue	-192.66	-6.86	-3.83
Gold Revenue	-0.25	-0.01	-0.01
C1 Cost	1,172.11	41.71	23.28
Initial Capital Depreciation	328.59	11.69	6.53
Sustaining Capital Depreciation	14.81	0.53	0.29
C2 Cost	1,515.51	53.94	30.10
NSW State Royalty	62.14	2.21	1.23
C3 Cost	1,577.65	56.15	31.34
Initial Capital Depreciation	-328.59	-11.69	-6.53
All-in Sustaining Cost (AISC)	1,249.06	44.45	24.81

Table 8 - Operating Cost Summary

The operating costs are primarily based on estimates provided by the relevant contributors listed in [Section 1.4](#) with some estimates provided by Bowdens. Mining costs are based on a primarily owner operator cost model with the inclusion of a rock-on-ground drill and blast contract. The mining cost inputs were validated against a detailed early contractor involvement pricing model provided by a Tier 1 Australian mining contractor.

The operating plan includes progressive rehabilitation, which is included in the mining operating costs. The listed rehabilitation cost is only for rehabilitation of the final surface areas or closure costs. The cost of demolition/demobilising of the process plant and other site buildings is assumed to be offset by selling useable assets and scrap materials at a net zero cost.

16. Marketing

As discussed in [Section 10.1](#), a high-grade Ag concentrate with marketable Pb and Zn content was selected as the single product to be marketed. The selection process included consideration of all related costs including payment terms, TCs and RCs, on and off-site storage and handling, road transport, rail transport (when relevant) and ocean transport.

While no off-take agreements are currently in place, the Optimisation is based on bagged concentrates being shipped to Korea. The Optimisation costs are based on a quote received for handling & shipping process involving:

- bagging of concentrates at site;
- road transport of bagged concentrate to Mudgee, NSW;
- loading of bagged concentrates into containers;
- road transport from Mudgee, NSW to Port Botany, NSW; and
- shipping to Korea.

It is likely that the operational plan will include placing bagged concentrates into containers prior to leaving Site.

17. Financial Modelling

Bowdens prepared a detailed financial model to evaluate the economic parameters of the Project. The model was used to assess various combinations of options on a total project basis and select the final Optimisation case. It is important to note that the results presented herein incorporate the Optimisation limitations discussed in [Section 9.2](#) to be '*substantially the same*' as the Previous Approval.

The Optimisation incorporates 28.1Mt of the 32.8Mt Ore Reserve with the remaining ore being physically mineable as cutbacks and satellite pits via a future design update or expansion under the same financial assumptions.

17.1. Key Updates

Foreign Exchange rates and metal prices applied in the Financial Model were update from the 2018 FS as demonstrated in [Table 9](#).

	2018 FS		2024 Opt Study		Change	
	AUD	USD	AUD	USD	AUD	USD
Exchange Rate	1	0.75	1	0.67		
Metal prices						
Silver Price	\$/oz	27.88	20.91	43.28	29.00	15.41 8.09
Zinc Price	\$/lb	1.67	1.25	2.01	1.35	0.35 0.10
Lead Price	\$/lb	1.33	1.00	1.57	1.05	0.23 0.05

Table 9 - Updates to FX and Metal Prices

The wholistic Optimisation process has resulted in updates to mining inventory, metallurgical recoveries and payable metal as demonstrated in [Table 9](#).

It is worth noting that while the overall Ag recovery has improved by 2.9%, the overall payability for silver has increased significantly due to the single, high-grade silver, bulk concentrate – the previous two-product strategy of the 2018 FS resulted in 10.7% of the overall Ag recovery reporting to the Zn concentrate at 70% payability, which compares to 95% payability in the Ag concentrate.

Item	Unit	2018 FS	2024 Opt Study	Change
Ore Mined	kt	29,893	28,099	-1,794
Waste Mined	kt	48,183	41,809	-6,374
Strip ratio	x	1.61	1.49	-0.12
Ag Mined Grade	g/t	69.01	70.94	1.93
Zn Mined Grade	%	0.44%	0.37%	-0.07%
Pb Mined Grade	%	0.32%	0.29%	-0.03%
Ag Recovery to con	%	79.8%	82.7%	2.9%
Zn Recovery to con	%	82.5%	88.7%	6.2%
Pb Recovery to con	%	83.1%	82.7%	-0.4%
Payable Ag	k oz	48,103	50,344	2,242
Payable Zn	kt	92	31	-61
Payable Pb	kt	75	56	-20

Table 10 - Updates to Mining Inventory, Metallurgy and Payable Metal

Table 11 compares key financial metric of the Optimisation to 2018 FS.

The Optimisation has managed both capital and operating cost increases while benefitting from significant improvements to the metallurgical recovery and metal prices, resulting in an improved and more robust project.

		2018 FS		2024 Opt Study		Delta	
Revenue & Costs		AUD	USD	AUD	USD	AUD	USD
Gross Revenue from Metals	\$m	1,900	1,425	2,510	1,682	611	257
Operating Costs	\$m	1,341	1,006	1,562	1,047	222	41
Operating Margin	\$m	559	419	948	635	389	216
Initial Capex	\$m	222	166	303	203	81	37
Pre-Prod (capitalised opex)	\$m	24	18	29	19	5	1
Sustaining Capex	\$m	54	40	15	10	-39	-30
Total Capital	\$m	300	225	346	232	46	7
Financials							
Undisc Cashflow After Tax	\$m	156	117	469	314	314	198
Cost (AISC): Ag Basis	\$/oz	17.25	12.94	24.81	16.62	7.56	3.68
Project NPV (Pre-Tax)	\$m	144	108	359	240	215	133
Project NPV (Post Tax)	\$m	71	53	253	170	183	117
Project IRR (Pre-Tax): Real	%	17.9%		21.0%		3.1%	
Project IRR (Post Tax): Real	%	11.8%		17.6%		5.8%	
Payback Period	Yrs	4.8		3.9		-0.9	
Maximum Drawdown	\$m	254	190	336	225	71	29
Profitability Index	Ratio	1.29		1.76		0.47	
Breakeven Silver Price	\$/oz	24.8	18.6	32.5	21.7	7.7	3.2
Silver Price to achieve 30% IRR	\$/oz	39.5	29.6	57.2	38.3	17.8	8.7

Table 11 - Key Financial Metrics - Comparison to 2018 Feasibility Study

17.2. The First 10 Years

The Optimisation has smoothed the production profile significantly compared to the 2018 FS. Subsequently, the first 10-years of the BSP benefit from the highest-grade profile before seeing a grade reduction from year 11 out to the end of the Optimised mine schedule.

Table 12 compares project financials to the first 10-years and provides sensitivities for the first 10 years at varying Ag prices.

		Project US\$29/oz	1st 10yrs US\$29/oz	1st 10yrs			
				\$25/oz	\$30/oz	\$35/oz	\$40/oz
Revenue & Costs (AUD)							
Gross Revenue from Payable Metals	A\$m	2,510	1,956	1,715	2,016	2,316	2,617
Operating Costs	A\$m	1,562	1,118	1,102	1,122	1,142	1,162
Operating Margin	A\$m	948	838	613	894	1,174	1,455
Operating Margin per year	A\$m/yr	65	84	61	89	117	145
Financials (AUD)							
Undiscounted Cashflow After Tax	A\$m	469	359	202	399	595	792
Cost (AISC): Ag Basis	\$/oz	24.81	22.67	22.29	22.74	23.13	23.61
Cost (AISC): Ag Basis	US\$/oz	16.62	15.19	14.93	15.24	15.50	15.82
Project NPV (Pre-Tax)	A\$m	359	287	122	328	534	740
Project NPV (Post Tax)	A\$m	253	196	78	225	370	515
Project IRR (Pre-Tax): Real	%	21.0%	19.9%	12.0%	21.8%	30.3%	38.1%
Project IRR (Post Tax): Real	%	17.6%	16.4%	9.8%	17.9%	24.9%	31.2%
Payback Period	yrs	3.9	3.9	4.9	3.7	3.2	2.7
Profitability Index	#	1.76	1.44	1.34	1.86	1.93	2.33
Physicals							
Average Annual Silver (mined)	oz/yr	4,660,683	5,267,997				
Average Annual Silver (in concentrate)	Oz/yr	3,654,744	4,237,199				
Average Annual Silver (payable)	oz/yr	3,472,007	4,025,339				

Table 12 - Key Financials - Project vs First 10 Years and Alternate Ag Pricing

17.3. Cumulative Metal Production

Cumulative metal production (metal contained in concentrate) is demonstrated in Figure 21. Note that Silver should be read on the left axis while Zinc and Lead should be read on the right axis.

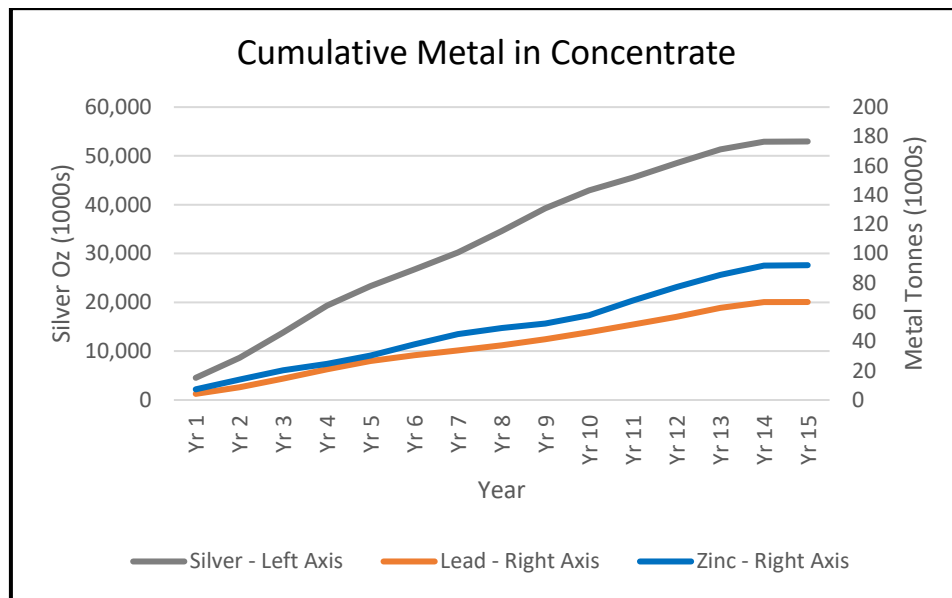


Figure 21 - Cumulative Metal in Concentrate

Cumulative gross revenue (prior to transport, TCs and RCs) is demonstrated in [Figure 22](#). Revenue contributions for Silver, Zinc and Lead are approximately 87%, 8% and 5% respectively.

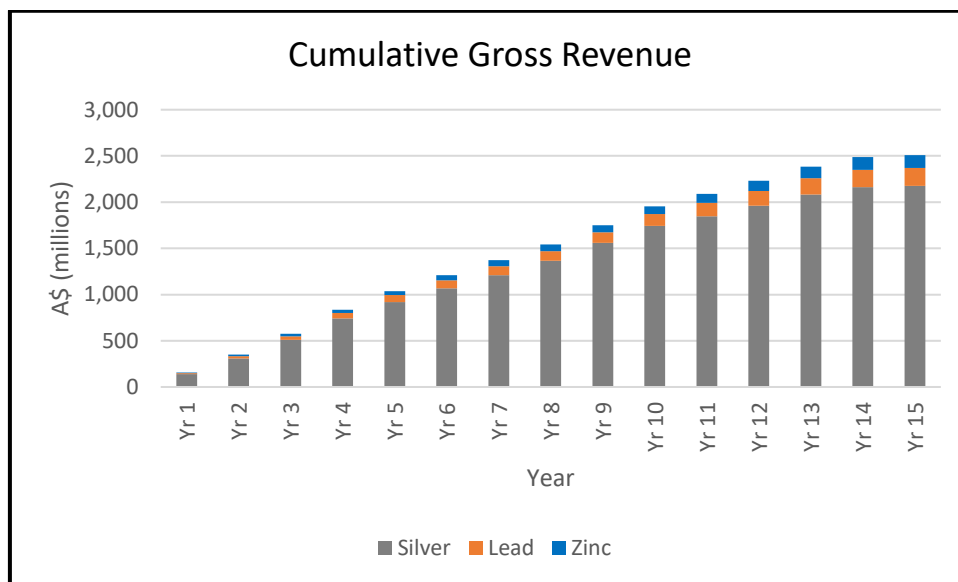


Figure 22 - Cumulative Gross Revenue from Metal

17.4. Sensitivity Analysis

NPV sensitivity analyses were run on a range of key performance drivers and are summarised in Figure 22. The data is presented from -15% to 15% variation in 5% increments. Note that red/green is relative to impact on NPV not the performance driver.

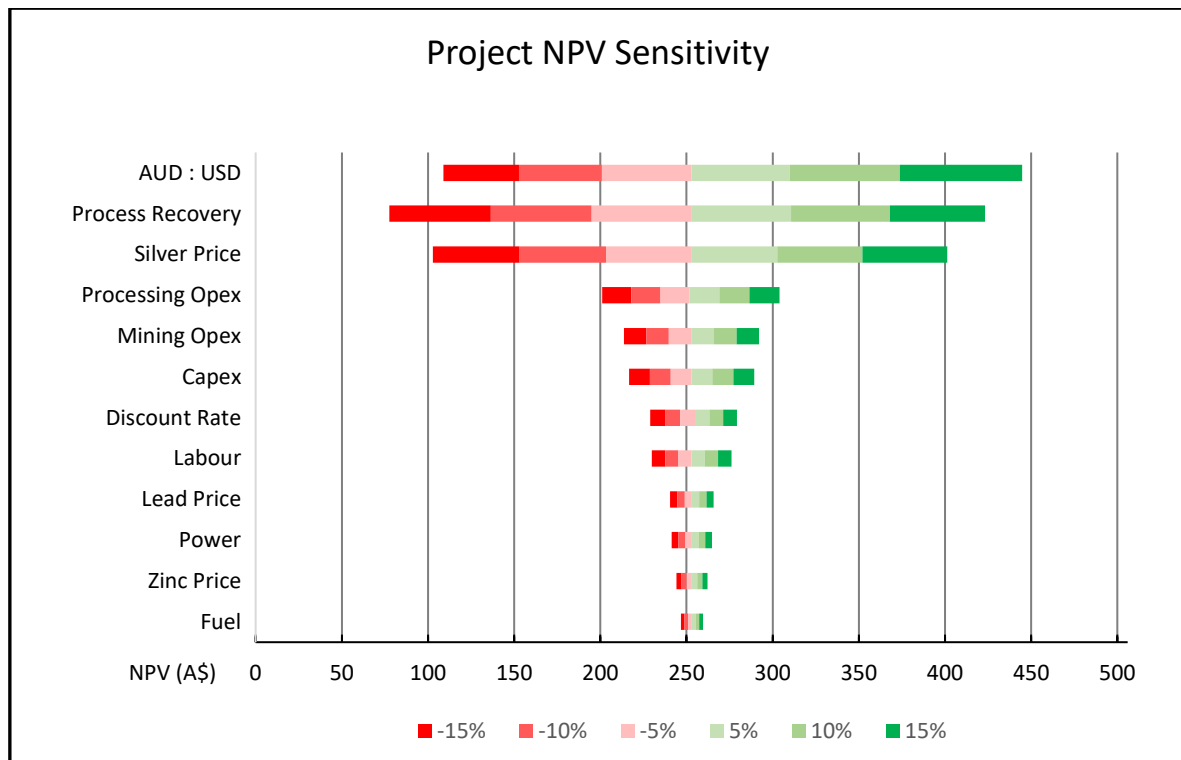


Figure 23 – Project NPV Sensitivity

18. Risk Register

A project risk register was developed for the 2018 FS and was referenced as part of this Optimisation process. The risk register will be reviewed and updated following this Optimisation which will in turn be a guide during the final engineering design and project planning phase.

19. Conclusions and Next Steps

19.1. Conclusions

The Optimised BSP has demonstrated a positive business case for a silver focused mine project with a very strong first 10 years, genuine growth opportunities and exceptional leverage to any future increases in the silver price or improvements to unit operating costs.

The Optimisation has achieved all objectives in that:

- the environmental footprint and related potential impacts have been significantly reduced;
- measures to address community concerns relating to perceived potential impacts to surface and groundwater, noise, dust and visual amenity have been further enhanced;
- the mine design and schedule, metallurgical recovery and process plant design, and management of waste rock and tailings have been improved through the Optimisation;
- payability of contained silver has been increased over and above the 2018 FS;
- project financial metrics have been significantly improved; and
- the Mineral Resource Estimate and Ore Reserve have been updated.

19.2. Next Steps

The Optimisation has resulted in clear operational, financial and environmental improvements. A refinement of the detailed engineering, costing and environmental assessments are required to advance the project to a Definitive Feasibility Study and satisfy final government approvals. The key areas requiring further refinement of engineering and environmental assessment include:

- the Tailings Storage Facility;
- the waste rock geochemistry and storage facilities;
- tailings dewatering;
- surface and groundwater modelling;
- water resources and site water balance – based on improved tailings water management;
- power supply; and
- environmental and community impacts.

19.3. Additional Approvals

The initial priority for the Bowdens team remains securing the Development Consent (“**Consent**”) from the NSW state government. While it is not possible to provide a definitive timeline on the regulatory process, the Company remains very confident that the Consent will be returned in due course.

Once the Consent is obtained, the Company will be able to update timelines on finalising project approvals. The remaining approvals include, but are not limited to:

- the federal permit in accordance with the Environmental Protection and Biodiversity Conservation Act 1999;
- a Mining Lease issued under the Mining Act 1992 for the area referred to as the Mine Site. The issuing authority would be the Minister responsible for the administration of the Mining Act 1992 or his/her delegate;
- an Environment Protection Licence issued under the Protection of the Environment Operations Act 1997. The issuing authority would be the Environment Protection Authority (EPA); and
- miscellaneous licences relating to Mine Management plans and local council approvals.

20. JORC Table 1 Report

The JORC Table 1 report is included as Table 13.

Table 13 - JORC Table 1 Report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay.') In other cases, more explanation may be required such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Resources were estimated from RC and diamond core sampling. Results from exploratory RAB and Aircore drilling were not included in the resource dataset. For pre-Kingsgate drilling, RC holes were generally sub-sampled by riffle splitting, or spear or grab sampling for rare wet samples and diamond core was halved with a diamond saw. Samples were analysed by several accredited commercial laboratories by either 3, 4 or aqua-regia acid digestion and AA or ICP determination. Quality control measures included use of standards, blanks, field duplicates and external laboratory checks by a variety of methods including neutron activation. For Kingsgate and Silver Mines drilling, RC holes were sub-sampled by cyclone mounted cone splitters and diamond core was either halved or quartered with a diamond saw to provide representative assay sub-samples. The samples were analysed for a suite of elements including silver, lead and zinc by multi-acid digest with ICPAES determination. Measures taken to ensure the sample representivity included routine monitoring of sample recovery, RC field duplicates, and comparison of assay grades from closely spaced drill holes of different phases and types. Assay quality control measures included field duplicates, coarse blanks and reference standards. The available QAQC data demonstrate that the sampling and assaying are of appropriate quality for use in the current estimate. For gold, master pulps <250g of historic samples sent to ALS Global in Orange and assayed for gold using fire assay technique (Au-AA23). 400g sample taken from secondary split samples of historic RC holes (BRC17037, BRC17038, BRC17040, BRC17068, BRC17073, BRC17074, BRC17075 & BRC17076) and sent to ALS Global in Canningvale, Western Australia. These were assayed for gold through photon assay utilising a Chryso Corporation machine.
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Diamond core diameters are nominally either PQ3, HQ3 or NQ. Selected diamond core prior to Silver Mines was orientated by conventional spear. Silver Mines diamond core was oriented using Reflex ACT orientation tools. RC drilling was completed using face sampling hammers.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Core recovery is estimated at greater than 95%. Some zones (less than 10%) were broken core with occasional clay zones where some sample loss may have occurred. However, this is not considered to have materially affected the results. RC samples are weighed for each metre and assessed for recovery, contamination and effect of water if present. No significant relationship between sample recovery and grade exists.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	<ul style="list-style-type: none"> All diamond holes are logged using lithology, alteration, veining, mineralization and structure including geotechnical structure. RC chip samples are logged using lithology, alteration, veining and mineralization.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All core and chip trays are photographed using both wet and dry photography. In all cases the entire hole is logged by a geologist. Quantitative relogging of all Rylstone Volcanic diamond drill core was performed using a combination of geochemical features and depth registered core photography, allowing for quantitative determination of texture and chemistry to suitably distinguish geology and geotechnical features. These classes were verified and extended by a geologist over RC drilling chemistry were confirmed from proximal diamond drill holes.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core were taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance, results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Minor selective sub-sampling based on geology to a maximum size of 1.3m and a minimum of 0.3m. Pre-Kingsgate RC holes were sampled over one to two metre intervals with sub-samples generally collected by riffle splitting, or spear or grab sampling for rare wet samples. Un-mineralised samples were composited over intervals of up to five metres for assaying. Diamond core was halved with a diamond saw with samples collected over intervals ranging from 0.2 to 5.0 metres and averaging 1.0 metre. Kingsgate's RC drilling was sampled over one metre intervals and sub-sampled by cyclone mounted cone splitters. The majority of these samples (97%) were dry with wet samples generally coming from deeper drilling testing Inferred portions of the estimated resources. Kingsgate's diamond core was sampled over lengths ranging from 0.3 to 2.2 with around 92% of samples representing one metre lengths. Core was either halved or more commonly quartered with a diamond saw to provide assay sub-samples. Silver Mines RC samples are collected from a cone splitter at a 6% split. The cyclone/splitter system is checked periodically throughout each hole and cleaned when necessary. To assess the representation of material sampled a duplicate 6% split sample is collected from a secondary - sample chute on the opposite side of the rotary cone splitter at the rate of 1/20. Silver Mines core is cut using a Corewise core saw over lengths ranging from 0.3 to 1.3m with the majority of samples representing one metre lengths with core rotated 10 degrees to the orientation line to preserve the orientation for future reference. The half (NQ & HQ) or quarter (PQ) of the core without the orientation line is removed, bagged and sent to the laboratory for assay. Sample sizes are considered appropriate for the rock type, style of mineralisation, the thickness and consistency of the intersections and assay ranges expected at Bowdens.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Samples from all drilling phases were sent to commercial laboratories for preparation and analysis. No geophysical methods or hand-held XRF devices have been used for resource estimation. Samples from pre Kingsgate drilling were analysed by several accredited commercial laboratories by either 3, 4 or aqua-regia acid digestion and AA or ICP determination. Quality control measures included use of standards, blanks, field duplicates and external laboratory checks by a variety of methods including neutron activation assaying. Kingsgate's samples were analysed by ALS in Orange, NSW. After oven drying, and jaw crushing for core samples, the samples were pulverised to nominally 85% passing 75 microns and 25 gram sub-samples digested by multi-acid digest and analysed by ICPAES for a suite of elements including silver, lead and zinc. Quality control measures included field duplicates, coarse blanks and reference standards. Silver Mines samples were dispatched to ALS Global laboratories in Orange. At ALS the samples were pulverised to nominally 85% passing 75 microns with subsequent 4 acid digest and 33 multi-element analysis completed at ALS Brisbane using method ME-ICP61 and 4 acid digest and 38 multi-element analysis at SGS Townsville using method DIG41Q.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Site Standards are inserted every 20 samples to check quality control and laboratory standards and blanks every 25 samples to further check results.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections calculated by site-geologists and verified by an independent geological consultant. Several independent authors reviewed pre-Silver Mines sampling data during preparation of previous resource estimates. Both Silver Mines and Kingsgate's sampling, logging and survey data were electronically merged into a central database directly from original source files using Logchief field software and imported into an SQL database in accordance with database protocols and manuals. Data was viewed and interpreted using Leapfrog and Micromine software. Grade cutting was applied to the assay data for resource estimation where assay populations coefficient of variation (CV) were unsuitably high for OK Kriging.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Accredited surveyors using high accuracy RTK surveys accurately surveyed all resource drill hole collars. Pre-Kingsgate holes were down-hole surveyed by single shot cameras. Kingsgate's drilling was surveyed by either Reflex EZ-shot or Eastman camera. Silver Mines drilling was surveyed by a Reflex EZ-shot electronic camera at 30m intervals down hole. The terrain includes steep hills and ridges and with a LIDAR topographical model of 0.3 metre accuracy. All collars recorded in MGA94 zone 55.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> This drilling is designed as both infill and extensional to the overall mineral resource envelope. The nominal drill hole spacing is 50m (northing) by 50m (easting). Hole spacing varies from around 50 by 50 m and locally closer parts of the higher grade ore zones to more than 100 by 100 m in peripheral areas. The majority of holes were either orientated near vertically or northerly traversing mineralisation and easterly across regional structures. The data spacing and distribution establishes geological and grade continuity adequately for the current resource estimates.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Drill orientation was designed to intersect the projection of breccia zones and zones of veins within an overall mineralized envelope. An interpretation of the mineralization has indicated that no sampling bias has been introduced.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> All samples bagged on site under the supervision of two senior geologists with sample bags tied with cable ties before being driven by site personnel to the independent laboratory or sample pickup by the independent laboratory.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Pre-Kingsgate sampling techniques and data have been reviewed previously by renowned external geological consultants and most recently by Silver Mines geoscience staff. Kingsgate sampling techniques and data have been reviewed by several external geological consultants including MPR and AMC. Silver Mines sampling techniques and data have been independently reviewed by a number of

Criteria	JORC Code explanation	Commentary
		external geological consultants including AMC, GeoSpy and H&S.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Bowdens Resource is located wholly within Exploration Licence No EL5920, held wholly by Silver Mines Limited and is located approximately 26 kilometres east of Mudgee, New South Wales. The tenement is in good standing. The project has a 2.0% Net Smelter Royalty which reduces to 1.0% after the payment of US\$5 million over 100% of the EL5920. The project has a 0.85% Gross Royalty over 100% of EL5920.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Bowdens project was previously managed by Kingsgate Consolidated, Silver Standard Ltd, Golden Shamrock Mines and CRAE. The new results under this table draw on work from the previous owners. Work carried out by these parties has been assessed and verified to be of a high standard with rigorous QAQC, and assay verification programs across multiple laboratories. Similarly spatial and accuracy of collars has been verified to be accurate and compiled in an orderly and verifiable database.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Bowdens Deposit is a low to intermediate sulphidation epithermal base-metal and silver system hosted in Carboniferous aged Volcanic rocks and Ordovician aged sediments. Mineralisation includes veins, breccias and fracture fill veins within tuff and ignimbrite rocks, and semi massive veins, breccias and fracture fill in siltstone, shale and sandstone. Mineralisation is overall shallowly dipping (~15 degrees to the north) with high-grade zones preferentially following a volcanic intrusion. There are several vein orientations within the broader mineralized zones including some areas of stock-work veins.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> eastings and northing of the drill hole collar; elevation or RL (Reduced Level elevation above sea level in metres) of the drill hole collar; dip and azimuth of the hole; down hole length and interception depth; and hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> Not applicable as there are no exploration results reported as part of this statement.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 	<ul style="list-style-type: none"> This release is in relation to a Mineral Resource Estimate with no exploration results being reported.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Mineralisation is both stratabound and vein hosted. The stratigraphy dips moderately to the north in the Aegean and Northwest zones, while the majority of mineralised veins dip west. In Bundarra the mineralization is also stratabound and vein hosted dipping moderately to the Southwest Most holes have been drilled angled -60° to -80° to the north and east with occasional angled vertically.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Maps and cross-sections provided in the body of this report.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Not applicable as there are no exploration results reported as part of this statement.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including but not limited to: geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics and potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> The Bowdens diamond holes were also utilised for bulk density measurements. Geotechnical logging has determined suitable ground conditions for mining. Bulk sample sites have verified material estimates to be accurate. Extensive metallurgical test work and flowsheet optimisation has been undertaken across all ore types and grade ranges. Results typically demonstrate excellent recoveries. Checks for deleterious or other penalty elements (such as Cadmium of Mercury and Fluorine) have been assayed for in a routine manner and determined to be acceptable from metallurgical product results. Other penalty, elements including Arsenic have been appropriately estimated.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Further drilling prior to exploitation are intended to produce: metallurgical product samples, geotechnical, geo-metallurgical models and prove grade control materials classification methods and increased density of gold assays near and beneath existing pits. Large district scale step out drilling at Bara Creek is underway and further targets to the West and surrounds of the deposit remain highly prospective for potential deposit analogues. Albeit near most proximal extensions have been tested but doesn't preclude their existence.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in the preceding sections also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<p>All geological data is stored electronically with limited automatic validation prior to upload into the secure DataShed database, managed in the on-site office by Geological staff. The master drill hole database is located on an SQL server, which is backed up on a daily basis.</p> <p>Basic checks were performed prior to this resource estimate to ensure data consistency, including checks for FROM_TO interval errors, missing or duplicate collar surveys, excessive down hole deviation, and extreme or unusual assay values.</p> <p>All data errors/issues were reported to the Geological staff to be corrected or flagged as omitted but retained for audit in the primary DataShed database if repeat measurements could not be made.</p>
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<p>The Competent Person has visited the Bowdens project site on two occasions: for 2 days in late January 2022 and over a 2 week period in late July and early August 2017. During these visits, core samples and outcrops were examined, and discussion were held with SVL personnel about the geology and mineralisation of the deposit. The Competent Person concludes that data collection and management were being performed in a professional manner.</p>
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<p>SVL has developed a comprehensive geological interpretation of the Bowdens deposit based on geological logging, detailed petrography and chemical assays. In 2024 all diamond drill core photography within the Rylstone was analysed quantitatively separately and in conjunction with geochemical features. This work confirmed and further refined existing interpretations of unit contacts. SVL personnel have a good understanding of the geology of the Bowdens deposit, and this is reflected in the wireframe models they prepared, which form a solid framework for Mineral Resource estimation.</p> <p>SVL had previously interpreted a series of thin higher-grade mineralised horizons or lenses in the Rylstone Volcanics and the underlying Coomber Formation, which have an average intersection length of 2.90m in the Rylstone and 6.25m in the Coomber. The Rylstone Mineralised Horizons (RMHs) are typically silver-rich, while the Bundarra lenses in the Coomber Formation are primarily base metal (lead-zinc) dominant. The seven RMHs are thought to represent paleo-boiling horizons and can be quite discontinuous with numerous gaps and embayments. The six Bundarra lenses cut across stratigraphy and appear reasonably continuous spatially. The higher-grade lenses have variable orientation, with dominant directions of 12°>330° for the RMHs and 15°>180° for the Bundarra lenses. Additionally, SVL provided a mineralised fracture domain, which defines the boundary of the Ag,Pb and Zn propagation in the mineral system. This domain was derived in conjunction with DataRock Pty Ltd from core imagery and geochemistry, largely independent of silver assays. This domain was intended to be used as a hard mineralisation boundary within the Rylstone Volcanics for estimates of Ag, Pb, Zn, Sb and Cd. For other estimates of Au Mn, As, Cu, Sb, Fe and S it was treated as a soft boundary.</p> <p>Thin higher-grade mineralised horizons or lenses were used to guide the overall orientation of the lower-grade mineralisation locally and divide the deposit into a number of different orientation domains. The Rylstone Volcanics are divided into five separate domains, while the Coomber Formation is split into three</p>

Criteria	JORC Code explanation	Commentary
		<p>domains. The eastern edge of mineralisation is controlled but not constrained by the Eastern Fault, which forms a separate domain in each stratigraphic unit.</p> <p>Surfaces for base of complete oxidation and top of fresh rock were also interpreted, based on geological logging and assays. Only a small proportion of mineralisation occurs within the relatively thin oxide zone, and there is no obvious evidence of depletion or enrichment of silver due to oxidation.</p> <p>There is some scope for alternative geological interpretations of the deposit, principally in the correlation of intersections that comprise the different mineralised horizons or lenses. While this could affect estimates locally, it appears unlikely to have a significant impact on the global Mineral Resource estimate.</p> <p>Geology guides and controls Mineral Resource estimation by using the local orientation of the higher-grade horizons or lenses to guide the overall orientation of the lower-grade mineralisation and divide the deposit into a number of different orientation domains. The eastern edge of mineralisation is effectively truncated by the Eastern Fault, which forms a separate domain in each stratigraphic unit.</p> <p>The continuity of geology at Bowdens is controlled by stratigraphy and faulting. Continuity of grade has a weak stratigraphic control and is primarily controlled by local fracturing; faulting and permeability appear to act as broad control on localising mineralisation.</p>
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<p>The open-pit Mineral Resources at Bowdens have an approximate extent of:</p> <ul style="list-style-type: none"> 1,050m east-west, 1,250m north-south, From surface to 340m below surface.
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<p>Samples were composited to nominal 2.0m intervals within each unit for data analysis and resource estimation, reflecting the scale of open pit mining envisioned by SVL.</p> <p>The resource model uses a parent block size of 25x25x5m, while drill hole spacing is nominally 25x25m in the better drilled areas of the deposit. So, the parent block size is identical to the hole spacing, which is considered appropriate for MIK (multiple indicator kriging) estimation. Sub-blocks of 12.5 x 12.5 x 2.5m were used for ordinary kriging (OK) estimates, which is half the parent block dimensions in each direction and is considered appropriate.</p> <p>The resource model uses the GDA94 (Geocentric Datum of Australia) grid, zone 56.</p> <p>Silver was initially estimated by recoverable MIK into 25 x 25 x 5.0m panels. These estimates were then localised by discretising the metal distribution into sub-blocks with the dimensions of the selective mining unit (SMU) of 12.5 x 12.5 x 2.5m. The order of assigning the metal distribution to sub-blocks was based on an (OK) estimate for silver into the sub-blocks.</p> <p>Gold was estimated by MIK, using the e-type or average block grade at the scale of the panels; this coarser resolution reflects the substantial under-assaying of gold compared to silver in the Rylstone Volcanics.</p> <p>All other attributes were estimated by OK, including Pb, Zn, Cu, S, As, Sb, Cd, Mn, Fe and dry bulk density. OK is considered appropriate because the coefficients of variation (CV=SD/mean) are generally low to</p>

Criteria	JORC Code explanation	Commentary
		<p>moderate, and the grades are reasonably well structured spatially. Recoverable MIK was chosen for Ag primarily because it allows better mining selectivity than OK.</p> <p>MIK estimates were generated using GS3 software, while OK estimates were produced in Datamine software.</p> <p>Each of the major stratigraphic units (Rylstone, Coomber, Shoalhaven) were estimated separately, with each unit sub-divided into domains based on changes in mineralisation orientation.</p> <p>A four pass search strategy was used for the OK grade estimates:</p> <ol style="list-style-type: none"> 1. 35x35x12.5m search, 16-32 samples, minimum of 4 octants informed 2. 52.5x52.5x12.5m search, 16-32 samples, minimum of 4 octants informed 3. 105x105x25m search, 16-32 samples, minimum of 4 octants informed 4. 105x105x25m search, 8-32 samples, minimum of 2 octants informed <p>An additional larger pass was used for some elements with fewer assays to ensure estimates in all blocks that had an estimated silver value.</p> <p>The MIK estimates used 16-48 samples; search radii and octant constraints were identical to the OK estimates.</p> <p>The oxide zone was estimated using a dynamic search parallel to topography.</p> <p>The maximum extrapolation distance will be somewhat less than the maximum search radius due to the octants constraints requiring at least 2 drill holes. Maximum extrapolation distance is around 90m.</p> <p>It is assumed that a Ag-Pb-Zn sulphide concentrate will be produced. All elements have been estimated independently for each domain.</p> <p>No assumptions were made regarding the correlation of variables during estimation because each element was estimated independently. Some elements do show moderate to strong correlation in the drill hole samples, and the similarity in variogram models effectively guarantees that this correlation will be preserved in the estimates.</p> <p>A number of potentially deleterious elements have been estimated, including As, Sb and S.</p> <p>Dry bulk density was estimated directly into the model from the drill hole samples, using a similar methodology to the other elements; fewer samples were required, reflecting the wider distribution of density measurements.</p> <p>The geological interpretation controls the Mineral Resource estimates through the use of the major stratigraphic boundaries, which were used as hard boundaries during estimation. The Eastern Fault also controls the Mineral Resource estimates locally, with mineralisation parallel to this structure.</p> <p>No grade cutting was applied to any of the grade estimates because none of the grade distributions are strongly skewed. Sensitivity analysis on Ag estimates indicated that grade cutting has minimal impact on the grade estimates.</p>

Criteria	JORC Code explanation	Commentary															
		<p>The new model was validated in a number of ways – visual comparison of block and drill hole grades, statistical analysis, examination of grade-tonnage data, and comparison with previous models. All the validation checks indicate that the grade estimates are reasonable when compared to the composite grades, allowing for data clustering.</p> <p>The new Mineral Resource estimate is broadly comparable to the previous 2017 version. The new model has higher tonnage and metal content, but similar grades at the same cut-off grade as the old model. Differences are mostly attributed the substantial quantity of new drilling: ~18% more holes and ~37% more assays for silver. This indicates that the new Mineral Resource estimate takes appropriate account of this previous estimate.</p> <p>The deposit remains unmined so there is no reconciliation data.</p>															
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	Tonnages are estimated on a dry weight basis. Moisture content has been determined for some of the density samples, by comparing sample weights before and after oven drying.															
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<p>The cut-off grade is an equivalent Ag (EqAg) value, based on grades and recoveries for Ag, Pb, Zn and Au as shown below. The equivalent silver formula is: $\text{EqAg} = \text{Ag} + \text{Pb} \times 0.002612 + \text{Zn} \times 0.003569 + \text{Au} \times 74.25$ (all units g/t)</p> <table border="1"> <thead> <tr> <th>Metal</th><th>Price/Unit</th><th>Recovery</th></tr> </thead> <tbody> <tr> <td>Ag</td><td>US\$ 27.5/oz</td><td>86.2%</td></tr> <tr> <td>Pb</td><td>US\$ 2,350/t</td><td>84.7%</td></tr> <tr> <td>Zn</td><td>US\$ 2,950/t</td><td>92.2%</td></tr> <tr> <td>Au</td><td>US\$2,200/oz</td><td>80%</td></tr> </tbody> </table> <p>The cut-off grade of 30 g/t Eq Ag is considered likely to be economic for the mining method and scale of operation envisioned for Bowdens, based on preliminary mining studies and accounting for underlying price volatility.</p>	Metal	Price/Unit	Recovery	Ag	US\$ 27.5/oz	86.2%	Pb	US\$ 2,350/t	84.7%	Zn	US\$ 2,950/t	92.2%	Au	US\$2,200/oz	80%
Metal	Price/Unit	Recovery															
Ag	US\$ 27.5/oz	86.2%															
Pb	US\$ 2,350/t	84.7%															
Zn	US\$ 2,950/t	92.2%															
Au	US\$2,200/oz	80%															
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when 	Surface mining by open pit method is currently planned for Bowdens.															

Criteria	JORC Code explanation	Commentary
	<i>estimating Mineral Resources. Where no assumptions have been made, this should be reported.</i>	The recoverable MIK method implicitly incorporates internal mining dilution at the scale of the assumed SMU. No specific assumptions were made about external mining dilution in the Mineral Resource estimates.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported. 	The recoveries for each metal are based on available metallurgical test work. It is assumed that sulphide ore will be treated by conventional froth flotation to produce a bulk Ag-Pb-Zn concentrate. Gold may also be recovered by gravity concentration.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<p>It is proposed that all process residue and waste rock disposal will take place on site in purpose built and licensed facilities.</p> <p>All waste rock and process residue disposal will be done in a responsible manner and in accordance with any mining license conditions.</p>
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. 	<p>Dry bulk density is measured on-site using an immersion in water method (Archimedes principle) on selected core intervals for nominal 10cm samples. The Bowdens database contains 7,076 of these measurements in 254 drill holes. There are also a number of density measurements derived from weighing trays of core – this information confirms the immersion method results.</p> <p>Samples are weighed before and after oven drying overnight at 110°C to determine dry weight and moisture content.</p>
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<p>The classification scheme is based on the estimation search pass for Ag; Pass 1 = Measured, Pass 2 = Indicated and Pass 3 = Inferred. Pass 4 is not classified as part of the Mineral Resource Estimate but could be considered as a potential Exploration Target.</p> <p>This scheme is considered to take appropriate account of all relevant factors, including the relative confidence in tonnage and grade estimates, confidence in the continuity of geology and metal values, and the quality, quantity and distribution of the data.</p> <p>The classification appropriately reflects the Competent Person's view of the deposit.</p>
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	This Mineral Resource Estimate has been reviewed by SVL and HSC personnel and no material issues were identified.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<p>The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated JORC Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the estimator's experience with a number of similar deposits elsewhere. The main factor that affects the relative accuracy and confidence of the Mineral Resource estimate is drill hole spacing, because there are no strong geological controls on the primary mineralisation.</p> <p>The estimates are local, in the sense that they are localised to model blocks of a size considered appropriate for local grade estimation. The tonnages relevant to technical and economic analysis are those classified as Measured and Indicated Mineral Resources.</p> <p>No production data is available because this deposit has not been previously mined.</p>

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	<ul style="list-style-type: none"> The Mineral Resource estimate that this reserve is based upon has been compiled by H&S Consultants Pty Ltd, using data supplied by Bowdens Silver. The models produced incorporated all mineralisation in the Bowden deposit that has been generated prior to July 2024 Silver and Gold were estimated by recoverable multiple indicator kriging (MIK) into 25 x 25 x 5.0m panels. These estimates were then localised by discretising the metal distribution into sub-blocks with the dimensions of the selective mining unit (SMU) of 12.5 x 12.5 x 2.5m. All other attributes were estimated by OK into sub-blocks, including Pb, Zn, S, Cu, As, Cd, Sb, Mn, Fe and dry bulk density. The Mineral Resources reported are inclusive of the Ore Reserves.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Andrew Hutson of Resolve Mining Services Plus (Competent Person) visited the site between 3rd and 4th July 2024. The site visit included viewing all areas selected for development including the mining and processing areas plus the waste dump and tailings storage locations. Additionally, meetings were undertaken with technical staff and management.
Study status	<ul style="list-style-type: none"> The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have 	<ul style="list-style-type: none"> The Ore Reserve estimate was based on the Optimised Feasibility Study (ODFS) for the Project on data built from the approvals processes and updated from the 2018 Definitive Feasibility Study (DFS). Financial modelling completed to support this Ore Reserve estimate is based on the ODFS and this modelling shows that the Ore Reserve is economically viable at metal prices supported by consensus long term price scenarios

Criteria	JORC Code explanation	Commentary
	<i>been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i>	<ul style="list-style-type: none"> It should be noted the economic analysis does not include revenue from the Inferred resource.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> Ore cut-off values are based on NSR values where the reporting NSR is defined as the net value A\$ value per tonne of ore after consideration of all costs (mining, process, general and administration, product delivery), metallurgical recoveries, sustaining capital, concentrate metal payabilities and treatment charges, transport costs and royalties. The NSR cut-off applied for the definition of ore and waste within the production plan is A\$30/t.
Mining factors or assumptions	<ul style="list-style-type: none"> The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	<ul style="list-style-type: none"> The MIK modelling process accounts for any internal dilution within the orebody. No provision for edge dilution has been applied to the MIK modelling, and 100% mining recovery is applied. The mined tonnage and diluted grade is based on the block model size, with excavator based open pit mining, and equipment size appropriate minimum mining widths applied. Pit optimisations utilising the Lerchs-Grossmann algorithm with industry standard software were undertaken. This optimisation utilised the Mineral Resource model together with cost, revenue, and geotechnical inputs. The resultant pit shells were used to develop detailed pit designs with due consideration of geotechnical, geometric, and access constraints. These pit designs were used as the basis for production scheduling and economic evaluation. The mining method is conventional open pit whereby excavation, loading and hauling will be executed by 200t excavators matched to 100t trucks after drilling and blasting the majority of the ore and waste Mine roads are designed to be suitable for the largest equipment travelling along routes typically 25m wide for dual lane traffic. The geotechnical parameters have been applied based on geotechnical studies. During the above process, Inferred Mineral Resources were excluded from mine schedules and economic valuations utilised to validate the economic viability of the Ore Reserves
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	<ul style="list-style-type: none"> Conventional crush and grind to p80 106µm followed by bulk flotation with regrind, cleaner and recleaner stages producing a single concentrate. Grinding and flotation testwork has been based on a variety of representative samples across the ore body and optimised to market conditions. Specific recovery curves have been developed for each geochemical domain. Deleterious elements have been estimated and factored into revenue calculations. Two bulk samples sites have been blasted and 12 tons of material subject to pulverization and detailed chemical characterizations this work agrees with other assays from drilling.

Criteria	JORC Code explanation	Commentary
Environmental	<ul style="list-style-type: none"> The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported. 	<ul style="list-style-type: none"> Detailed Waste Rock classification has been undertaken and verification programs are being prepared for regulatory approval.
Infrastructure	<ul style="list-style-type: none"> The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	<ul style="list-style-type: none"> The company has either title or lease agreements for the land on which all proposed infrastructure is situated. All other infrastructure and resources are in existence or have been appropriately planned for.
Costs	<ul style="list-style-type: none"> The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	<ul style="list-style-type: none"> Mining operating costs have been developed utilising an owner-mining model and generated from first-principles. Equipment manufacturers supplied the underlying cost information which was verified by mining contractor estimates. All costs and prices have been based in Australian dollars. Where a USD conversion is required, a factor of 0.70 has been applied.
Revenue factors	<ul style="list-style-type: none"> The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	<ul style="list-style-type: none"> Detailed feed grades were derived from the mine plan. Financial assumptions, including metal prices, exchange rates and NSR elements, treatment costs and transport, freight, and insurance costs were derived from Bowden corporate financial and economic assumptions. These economic assumptions are generally derived from relevant industry references such as analyst forecasts and industry commercial terms for similar products Assumed 100% ore mining recovery of the diluted Resource Model. Revenue assumptions are based on long-term metal pricings of: <ul style="list-style-type: none"> Silver = US\$29.00/oz Lead = US\$1.05/lb Zinc = US\$1.35/lb
Market assessment	<ul style="list-style-type: none"> The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. 	<ul style="list-style-type: none"> Silver is the primary commodity of the project and has experience ongoing demand increases associated with the growth of renewable energy industries. Demand is currently exceeding supply and is expected to continue to do so for the near future. No offtake agreements have been entered into. Marketing and smelting terms have been estimated from information provided by relevant entities.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	
Economic	<ul style="list-style-type: none"> The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	<ul style="list-style-type: none"> An overarching financial model of the Bowdens project, prepared by Silver Mines, using mining inputs prepared by Resolve, and other inputs consistent with the Ore Reserve estimate, indicates the project is economically viable with a positive NPV. Sensitivity of the Bowdens Project to changes in the key drivers of silver price, mining cost, processing cost and geotechnical pit slope were carried out, and showed the project NPV to be most sensitive to significant changes in sales price.
Social	<ul style="list-style-type: none"> The status of agreements with key stakeholders and matters leading to social licence to operate. 	<ul style="list-style-type: none"> Silver Mines continues to negotiate a range of commitments with private landowners through the Land Access Agreement process and also through acquisition of freehold property.
Other	<ul style="list-style-type: none"> To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: <ul style="list-style-type: none"> Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	<ul style="list-style-type: none"> It is expected all necessary approvals and licenses will be forthcoming when applied for progressively over the next phase of the project.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	<ul style="list-style-type: none"> Ore Reserves reported here are classified as both Proved and Probable as they are derived from Measured and Indicated Mineral Resources in accordance with the JORC Code (2012). The Competent Person is satisfied that the stated Ore Reserve classification reflects the outcome of technical and economic studies.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Ore Reserve estimates. 	<ul style="list-style-type: none"> External audits of Ore Reserve Estimate have not been undertaken. The Mineral Reserve estimate, mine design, scheduling, and mining cost model has been subject to internal peer review processes by Resolve Mining Solutions. No material flaws have been identified.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. 	<ul style="list-style-type: none"> Reporting of the project Ore Reserve considers; <ul style="list-style-type: none"> the Mineral Resources compliant with the JORC Code 2012 Edition, the conversion of these resources into an Ore Reserves, and the costed mining plan capable of delivering ore from a mine production schedule

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i> <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> Dilution of the Mineral Resource model and an allowance for ore loss was included in the Ore Reserve estimate. All the Mineral Resources intersected by the open pit mine designs classified as Measured and Indicated Resource has been converted to Proved and Probable Ore Reserves after consideration of all mining, metallurgical, social, environmental, statutory and financial aspects of the Project. The mine planning and scheduling assumptions are based on current industry practice, which are seen as globally correct at this level of study. The project team has estimated the cost estimates and financial evaluation with specialist consultants and team members, which are considered sufficient to support this level of study. The accuracy of the cost estimate is +/-15%. Ore Reserve is most sensitive to unfavourable changes in factors that influence revenue. These include mining dilution and ore loss, processing recovery, and silver price. Processing recovery has been based upon included feed grades and metallurgical testwork. Mining dilution and ore loss have been tested to within industry benchmarks for global values.