

**APPENDIX D**

**Addendum to Noise Impact Assessment**



Inspired People.  
Dedicated Team.  
Quality Outcomes.

Our Ref: 4158C\_R11\_SRQ\_NIA\_Addendum\_Letter\_Final

26 March 2023

Justin Meleo  
Director – Planning & Development  
Australian Resources Development Group Pty Ltd

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Dear Justin

## **RE: Stone Ridge Quarry Addendum – NIA**

Australian Resource Development Group Pty Limited (ARDG) is seeking to develop a new hard rock quarry, known as Stone Ridge Quarry (the Project), located within Wallaroo State Forest at Balickera NSW, approximately 30 km north of Newcastle.

This addendum letter addressing potential noise impacts is supplementary to the previously prepared Umwelt report, *Stone Ridge Quarry Noise Impact Assessment, Final*, dated May 2023 (EIS NIA).

This letter has been prepared to address refinements to the conceptual quarry layout. There are no other proposed changes (i.e. quarry life, production limits, extraction method and equipment, truck numbers, site access and hours of operation will remain the same).

### **1.0 Conceptual Quarry Development Plans**

The conceptual quarry layout has been refined to remove the North Pit, associated sediment basin 2 and access roads, while also revising the stage plans associated with the Main Pit. The proposed amendment would result in a reduction in the overall Project disturbance footprint from 79.02 ha to 68.09 ha, a reduction of 10.93 ha (14 %), while optimising extraction of available resources from within this reduced footprint. The proposed amendment does not propose any change to the total resource extraction or any other aspect of the Project.

For comparison, the quarry plans for Stage 0, 1, 5 and 9 of the EIS and proposed amendment are shown in **Appendix A**.

**Umwelt (Australia)  
Pty Limited**

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## 2.0 Noise Assessment

Receiver noise levels attributed to the proposed amendment are expected remain the same or be lower than that predicted in the EIS NIA. This is due to:

- Equipment is primarily remaining in the same location, so noise sources would not be moving any closer to the nearest receivers and the removal of the North Pit and increased setback from Receivers and Italia Road in the south and west will increase the distance to the most affected receivers.
- The Reduced Level (RL) of the processing area in Stages 0 to 5 will remain unchanged however processing facilities will be located lower than originally assessed and within the pit itself in later stages. The effect of the location of processing facilities within the pit increases the level of shielding provided by pit walls (discussed further below).
- Although the quarry bench widths are increasing, the quarry bench heights will remain the same, so the acoustic shielding provided for extraction equipment and haul trucks will be similar. Any changes to the stockpile heights and positioning would have no impact, as the stockpiles were not included as noise barriers in the EIS NIA noise model. The location of processing and stockpiling areas within the pit itself in later stages will increase the shielding effect provided by the pit walls and should result in lower levels of noise impacts at nearby receivers in all directions relative to the project design assessed in the EIS NIA.
- EIS NIA daytime period noise levels were predicted to comply with the criteria at all receivers. Noise levels were predicted to be more than 6 dB(A) below the criteria, except at R14, R16, R17, R18 and R21. All of these receivers are located to the west of the quarry along Italia Road with exposure to equipment operating at the North Pit. Given the North Pit does not form part of the proposed amendment, noise levels are expected to be lower at these receivers than predicted in the EIS NIA.
- Note, the EIS NIA evening and shoulder period noise levels were predicted to be at least 12 dB(A) below the criteria at all receivers.
- There is no change to proposed road haulage arrangements and therefore no change to traffic noise predictions.

Moreover, as specified in Section 7 of the EIS NIA, ARDG has committed to an extensive compliance and validation monitoring program. This will ensure that noise emissions associated with the proposed amendment will be monitored and managed appropriately to meet relevant criteria.

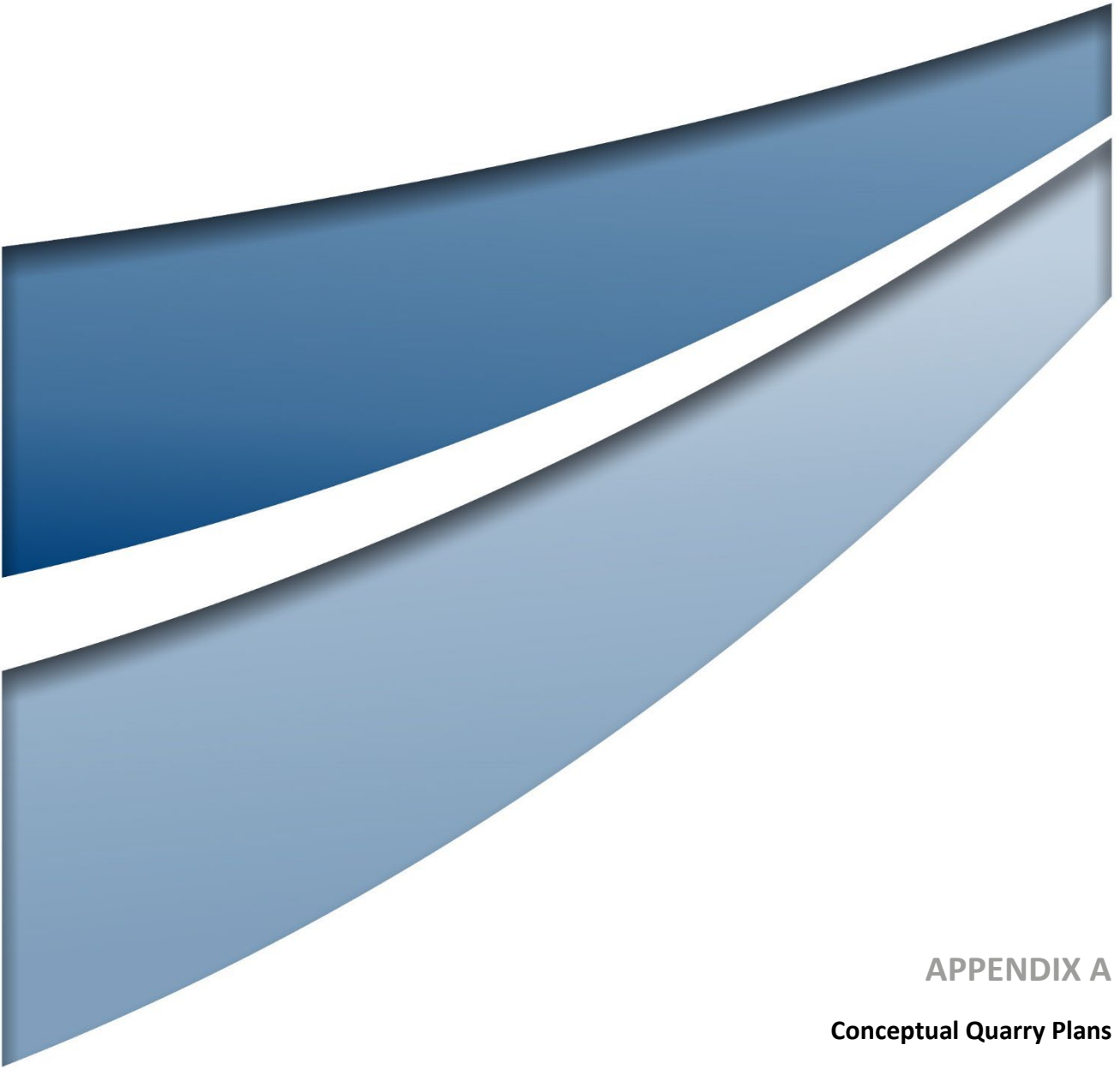
We trust this information meets with your current requirements. Please do not hesitate to contact the undersigned on 1300 793 267 should you require clarification or further information.

Yours sincerely

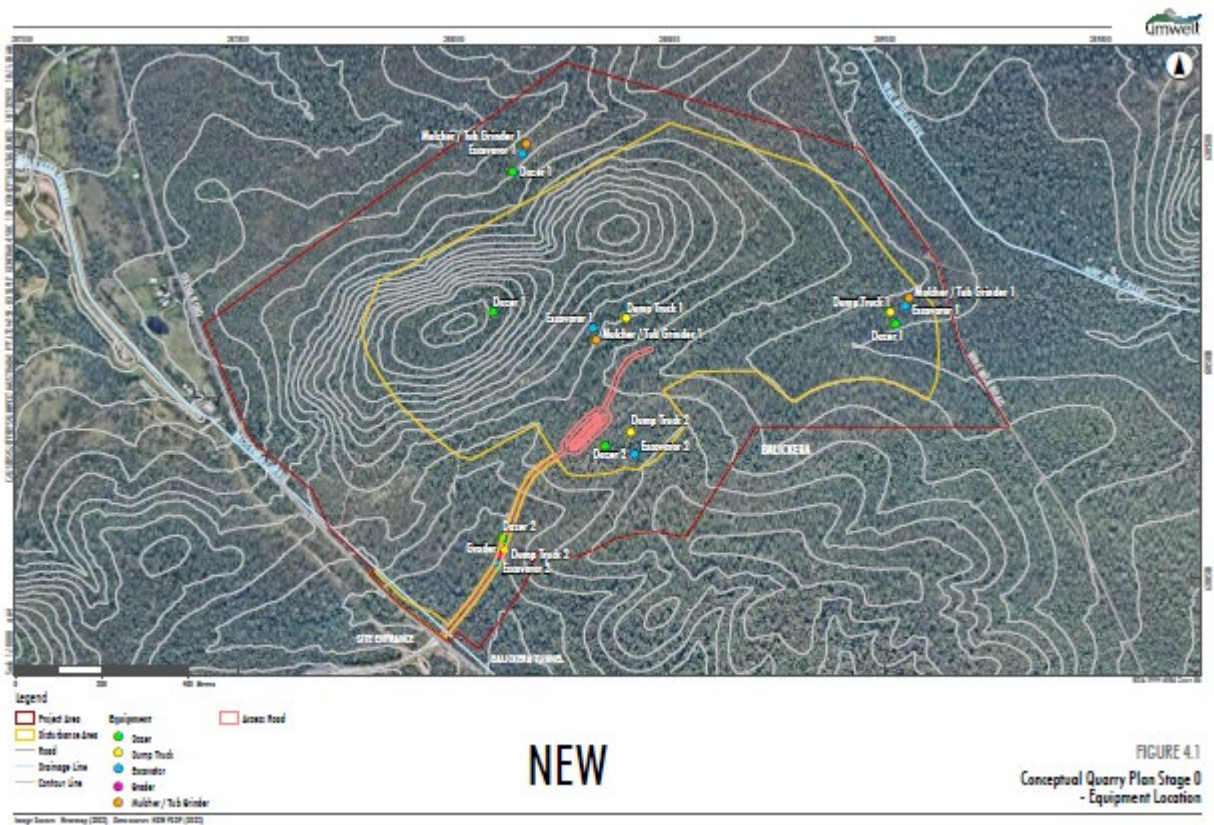
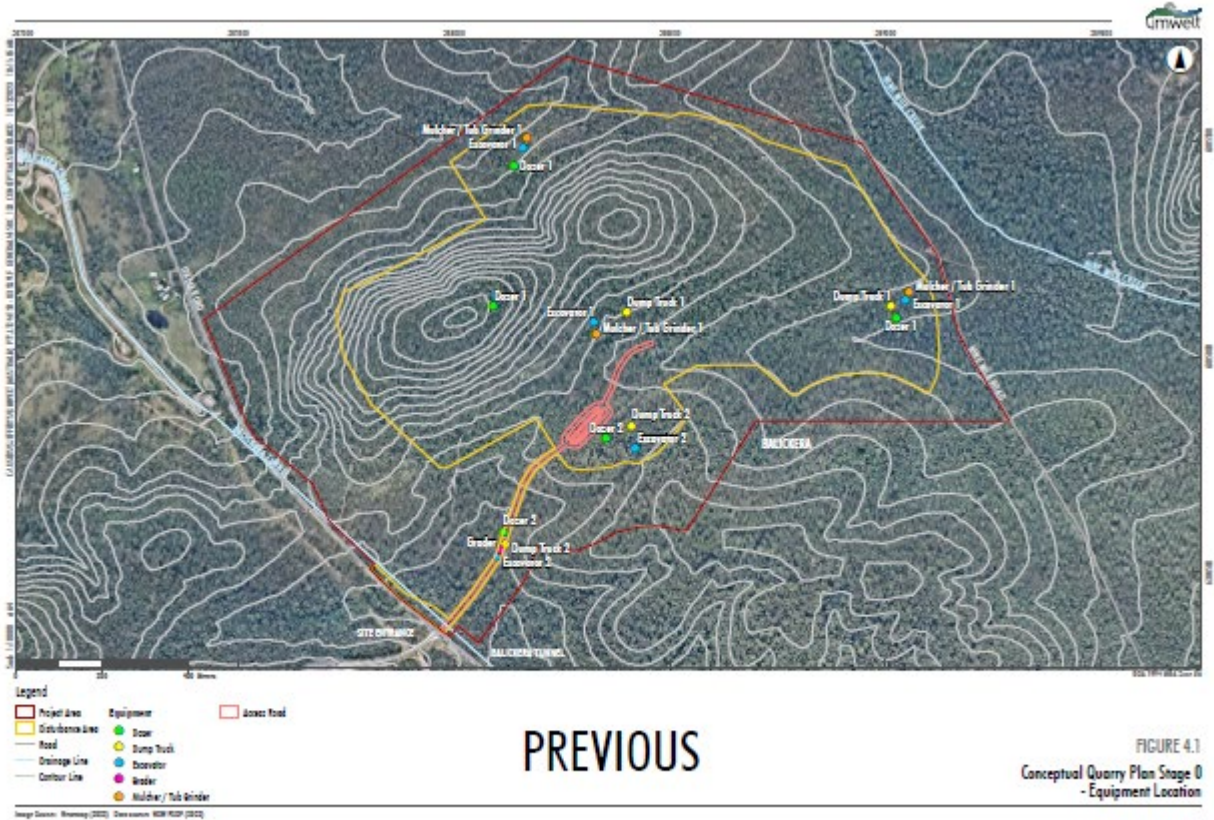


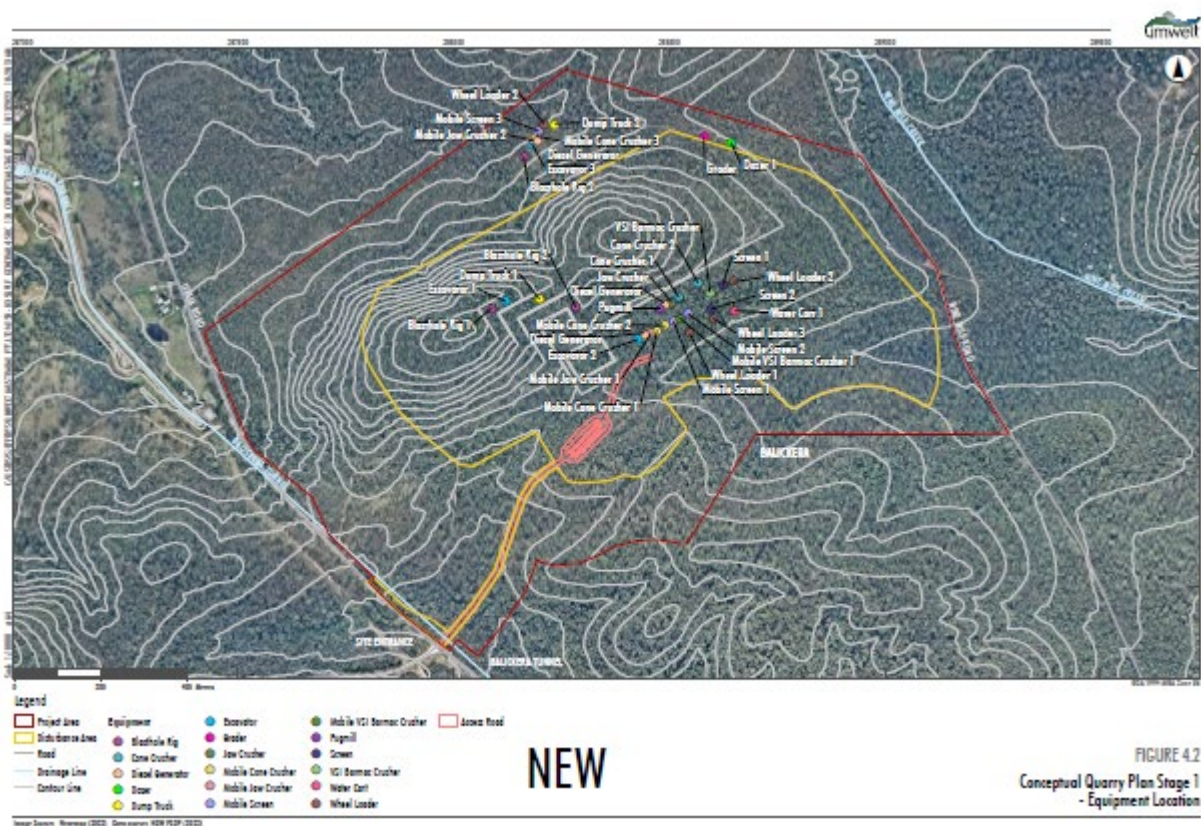
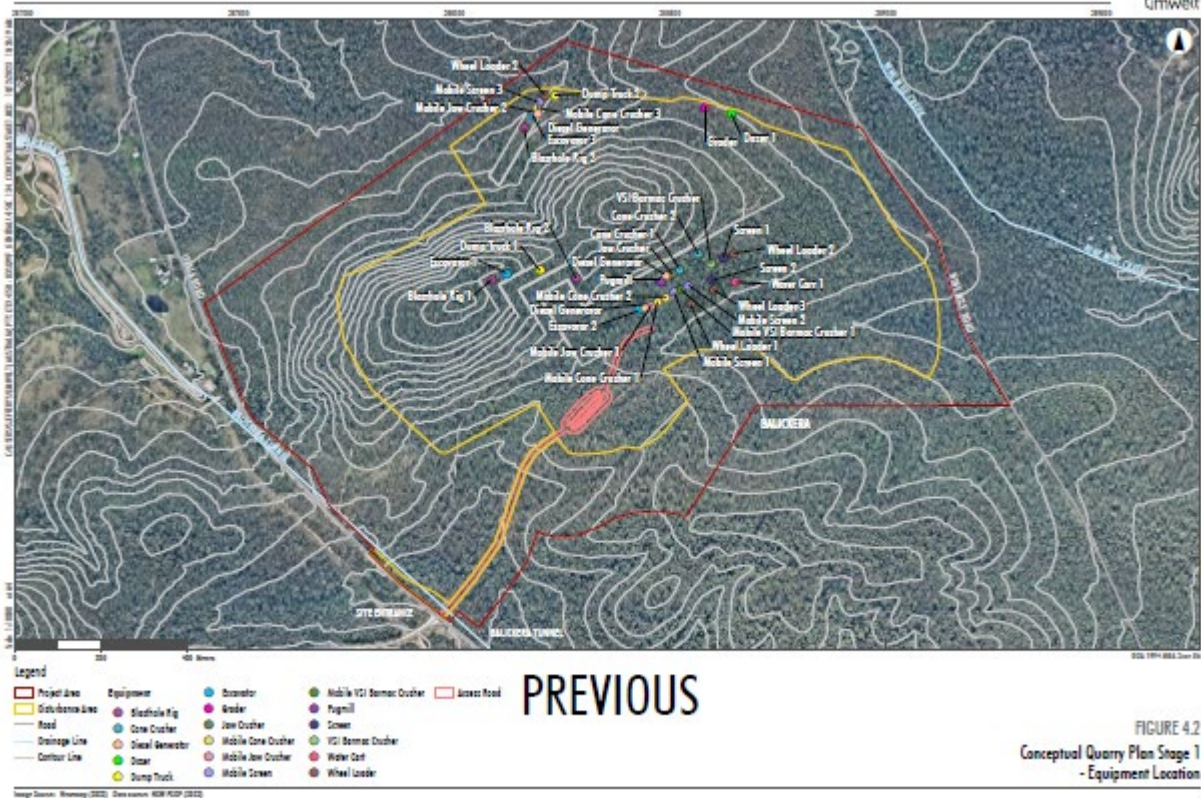
**Ben Carlyle**  
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**APPENDIX A**  
**Conceptual Quarry Plans**





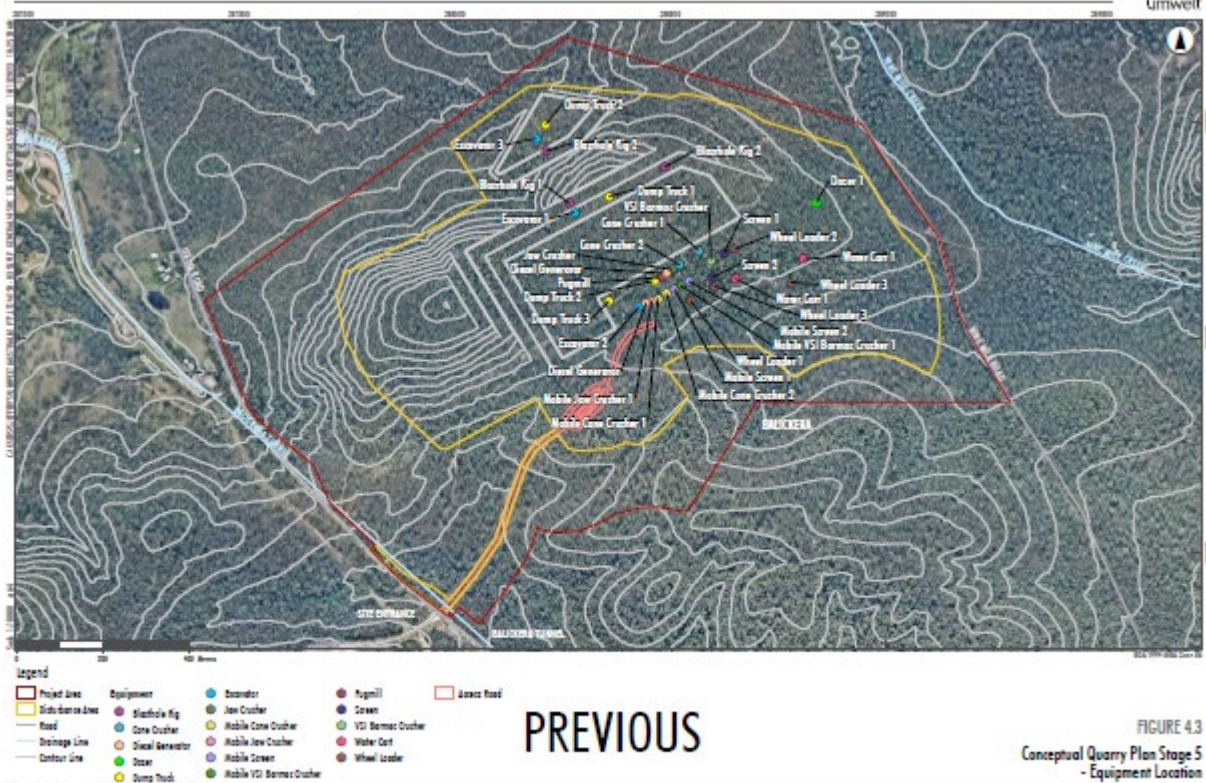


FIGURE 4.3  
Conceptual Quarry Plan Stage 5  
- Equipment Location

Image Source: BingSat (2022), Data source: IGN PIGN (2022)

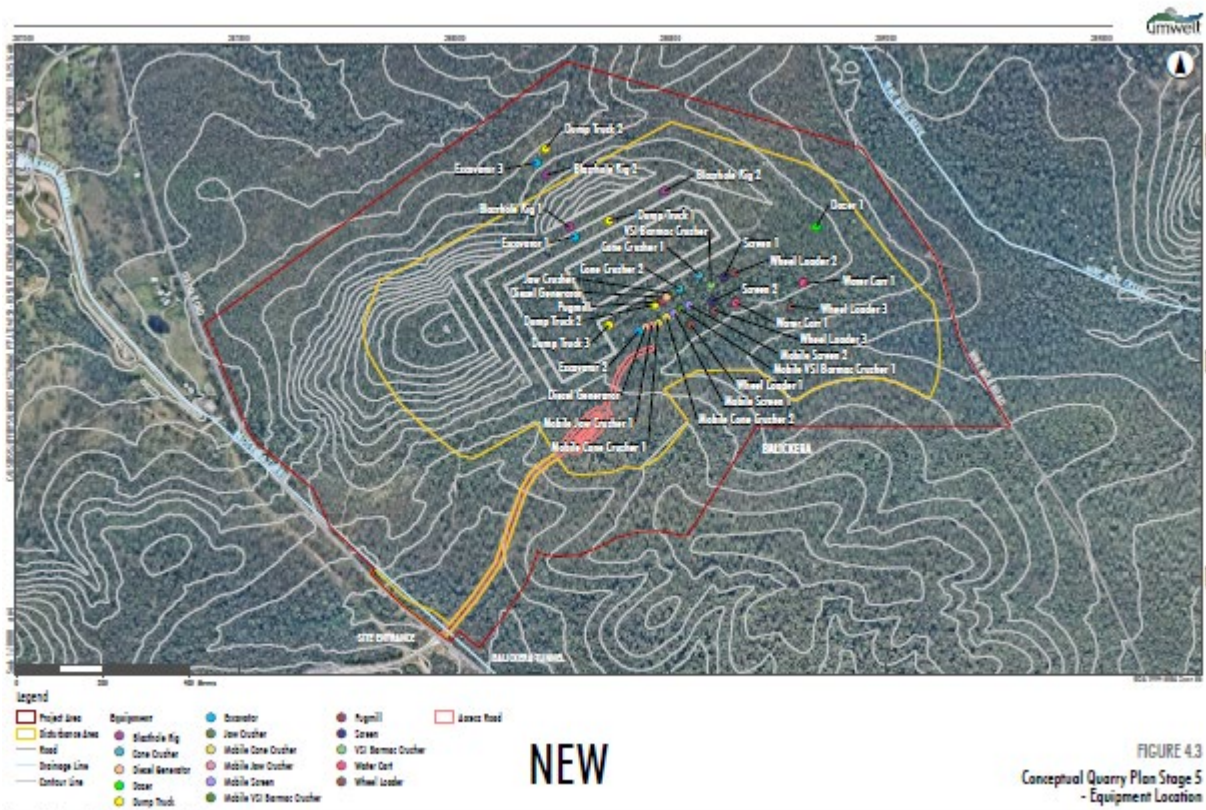


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Image Source: BingSat (2022), Data source: IGN PIGN (2022)

