

APPENDIX A: NOTICE OF MODIFICATION

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning, I modify the Project Approval referred to in Schedule 1, subject to the conditions in Schedule 2.

Member of Commission

Member of Commission

Member of Commission

Sydney

2016

SCHEDULE 1

The project approval (MP 10_0054) for the Big Island Mining Pty Ltd, granted by the Land & Environment Court of New South Wales on 8 February 2012.

SCHEDULE 2

1. In the List of Definitions:

- Delete the definitions for "Department", "Director General", "Executive Director Mineral Resources", "Minister" and "RTA" and insert the following in alphabetical order:

Department
DPI Water
DRE

EPA
Fisheries NSW
Minister
RMS
Secretary

Secretary Industry

Department of Planning and Environment
Department of Primary Industries - Water
Division of Resources and Energy (within the
Department of Industry)
Environment Protection Authority
Fisheries NSW, within Department of Primary Industries
Minister for Planning, or delegate
Roads and Maritime Services
The Secretary of the Department, or nominee and/or
delegate
The Secretary of NSW Department of Industry, or
equivalent position

- In the definition for "EA", after "dated July 2013, prepared by R.W. Corkery and Co Pty Limited, including the Response to Submissions", insert the following:

; and Environmental Assessment titled *Environmental Assessment for the Dargues Gold Mine, Modification 3, dated July 2015*, prepared by R.W. Corkery and Co Pty Limited, including the Response to Submissions.

- In the definition of "Proponent", delete "or its successors" and insert "or any person who seeks to carry out the development approved under this approval".
 - In the definition of "Response to Submissions", after "dated 15 December 2010", insert "and *Response to Submissions*, dated November 2015."
2. Delete all references to "NOW" and insert "DPI Water".
3. Delete all references to "Executive Director Mineral Resources" and insert "Secretary Industry".
4. Delete all references to "Director General" and insert "Secretary".
5. Replace all references to "OEH" with "EPA", except for references included in Condition 35(a) of schedule 3, Condition 37(a) of schedule 3, Appendix 5 (Statement of Commitments 5.1b) and Appendix 5 (Statement of Commitments 8.3).

6. In condition 2 of Schedule 2, delete all words after “carry out the project” and insert the following:
 - generally in accordance with the EA and statement of commitments; and
 - in accordance with the conditions of this approval.
7. In condition 4 of Schedule 2, delete all words after “in accordance with this approval;” and insert the following:
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this approval; and
 - (c) the implementation of any actions or measures contained in these documents.
8. In condition 5 of Schedule 2:
 - delete “31 August 2018” and insert “30 June 2025”; and
 - delete “as provided in or pursuant to this project approval to the satisfaction of either the Director General or the Executive Director Mineral Resources’ and insert “to the satisfaction of both the Secretary and the Secretary Industry”.
9. In condition 6(b) of Schedule 2, delete “1.2” and insert “1.6”.
10. Delete condition 10 of Schedule 2 and insert the following:

UPDATING & STAGING OF STRATEGIES, PLANS OR PROGRAMS

10. With the approval of the Secretary, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

To ensure these strategies, plans or programs are updated on a regular basis, the Proponent may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Proponent may prepare any revised strategy, plan or program without undertaking consultation with all the parties referred to under the relevant condition of this approval.

Notes:

- *While any strategy, plan or program may be submitted on a progressive basis, the Proponent must ensure that all development being carried out on site is covered by suitable strategies, plans or programs at all times.*
- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

11. In the note to condition 2 of Schedule 3, delete “Environmental Criteria for Road Traffic Noise” and insert “NSW Road Noise Policy”.
12. In condition 21 of Schedule 3, delete all words after “comply with” and insert “section 120 of the POEO Act, unless an EPL authorises otherwise.”
13. Delete condition 24 of Schedule 3 and insert the following:

Tailings Storage Facility

24. The Proponent shall ensure that:
 - (a) the permeability of the tailings storage facility is designed to meet the requirements of the *Environmental Guidelines – Management of Tailings Storage Facilities* (VIC DPI, 2004) and that the permeability of the walls, floor and final capping of the tailings storage facility is designed to be equivalent to 600mm clay of permeability $<1 \times 10^{-8}$ m/s;
 - (b) the design of the tailings storage facility conforms to:
 - DSC3A – Consequence Categories for Dams (Dams Safety Committee of New South Wales); and
 - DSC3F – Tailings Dams (Dams Safety Committee of New South Wales); and
 - (c) the latest rainfall data from both the Majors Creek and Braidwood weather stations is used during the design of the tailings storage facility and that the design is adjusted, as required to meet the requirements of the Dams Safety Committee of New South Wales, based on whichever dataset provides the worst case rainfall scenario.

Note: An alternative permeability standard may be acceptable following completion of an appropriate risk assessment undertaken in accordance with the Environmental Guidelines – Management of Tailings Storage Facilities (VIC DPI, 2004) to the satisfaction of EPA and the Secretary.

14. In condition 25 of Schedule 3, delete "comply with a permeability standard of" and insert "be equivalent to 1000mm clay of permeability <".
15. In condition 25A of Schedule 3, delete the heading "Tailings Storage Facility – Clean Water Diversion".
16. In condition 26 of Schedule 3:
 - in condition 26(a), after "DPI Water", insert "and DPI Fisheries".
 - delete (d) and (e) (with the exception of the note) and insert the following:
 - (d) include detailed design of the Spring Creek heavy vehicle crossing;
 - (e) be targeted to deal with the particular stages of the project that are being implemented; and
 - (f) remain in place for the life of the project, from the commencement of construction until the rehabilitation of the site is complete.
17. After condition 26 of Schedule 3, insert the following:

26A. The Proponent shall revise and submit to the Secretary for approval the Water Management Plan, prior to constructing any of the following project components: eastern waste rock emplacement, tailings dam, waste rock haulage roads or the Spring Creek heavy vehicle crossing.
18. In condition 27 of Schedule 3:
 - After "water management on site", insert "including transfers between all water storage infrastructure (including clean water dams, sediment dams, mine process water storages, underground workings and the tailings storage facility) and relevant design criteria;"
 - After "off-site water discharges", insert "(including uncontrolled discharges from sediment dams)"
 - Delete all words after "reporting procedures;" and insert the following:
 - (b) use the latest rainfall data from both the Majors Creek and Braidwood weather stations; and
 - (c) describe what measures would be implemented to minimise potable water use on site.
19. In condition 28 of Schedule 3, replace dot point (b) with the following and re-number subsequent dot points:
 - (b) identify the size and management of sediment dams for construction and operational stages to satisfy the requirements of Condition 21 of Schedule 3, including an assessment of discharges against NSW water quality objectives for the receiving waters;
 - (c) include a program for undertaking regular auditing of the performance of the erosion and sediment control measures on the site (including audits following major construction milestones and/or rainfall events);
20. After condition 28 of Schedule 3, insert the following:

28A. The auditing program referred to in 28(c) above must:

 - (a) be prepared and undertaken by a suitably qualified and experienced independent expert in surface water management approved by the Secretary;
 - (b) assess the performance of the erosion and sediment control system, including whether it is complying with the Water Management Plan, the EPL or Mining Lease; and
 - (c) include provisions for reporting the outcomes of the audit findings to the Department, EPA and DPI Water and implementing any recommendations made by the independent expert.

The auditing program shall be undertaken during the construction of the eastern waste rock emplacement, tailings dam, waste rock haulage roads and the Spring Creek heavy vehicle crossing and until such time as the expert is satisfied that the erosion and sediment control system is performing effectively and can be maintained during operations, or as otherwise agreed by the Secretary.
21. In condition 30(b) of Schedule 3 after "downstream of the site" insert "including test bores located down-gradient of the tailings storage facility to monitor seepage;".
22. In condition 32 of Schedule 3, in Table 9, replace "235.7" with "265.7" and "272.1" and "302.1".
23. In condition 37(c) of Schedule 3, after "within the project area" insert ", including a program for the recording, salvage and surface collection of sites GT OS1 and GT OS2 prior to disturbance".
24. In condition 51 of Schedule 3:
 - re-number conditions; and
 - in condition 51(c), before "tailings storage facility", insert "upper surface of the" and after "suitably capped", insert "with a suitable material".
25. In Condition 4 of Schedule 5, after the words "to the satisfaction of the Secretary", insert the following:

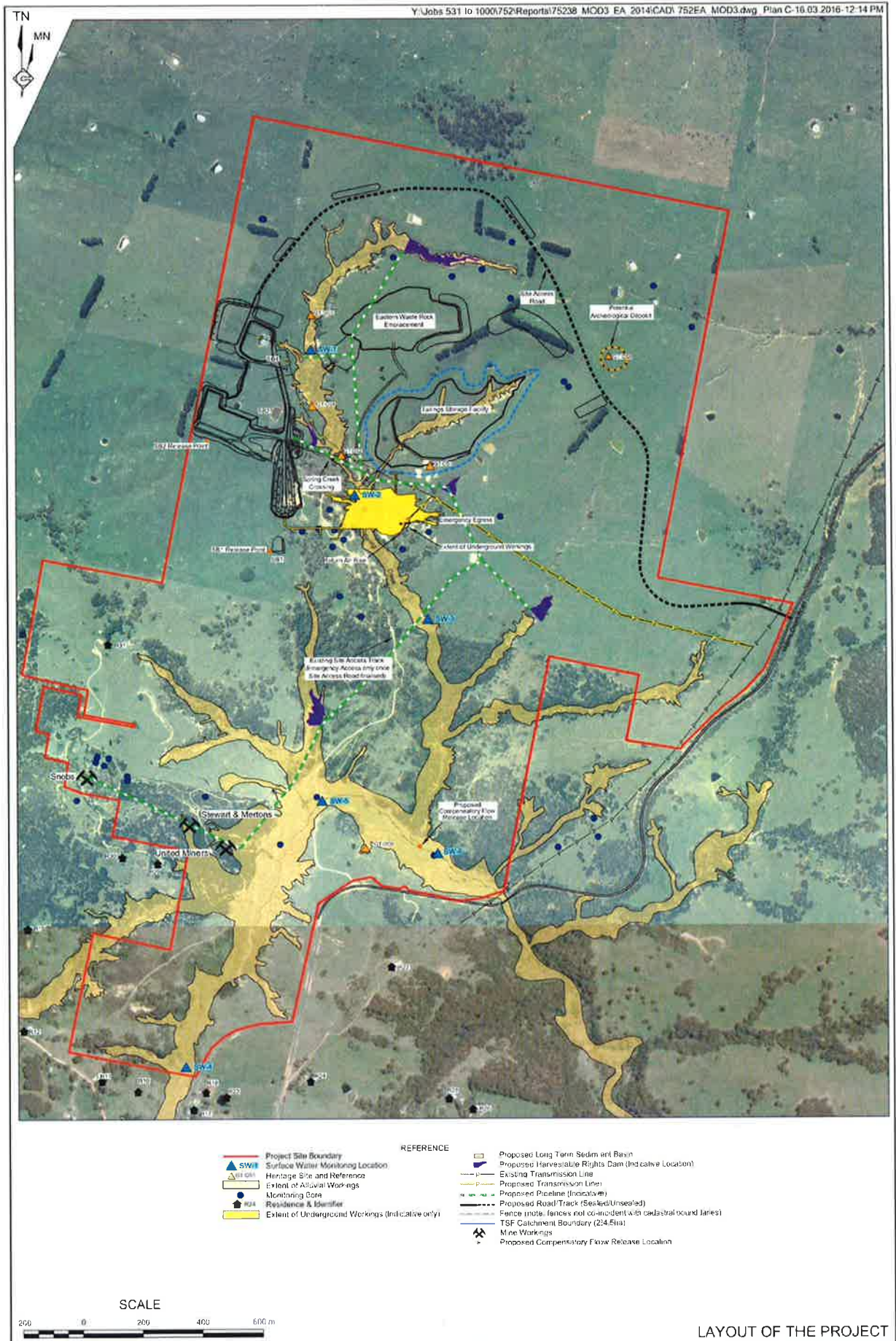
Where this review leads to revisions in any such document, then within 4 weeks of the review, the revised document must be submitted to the Secretary for approval.

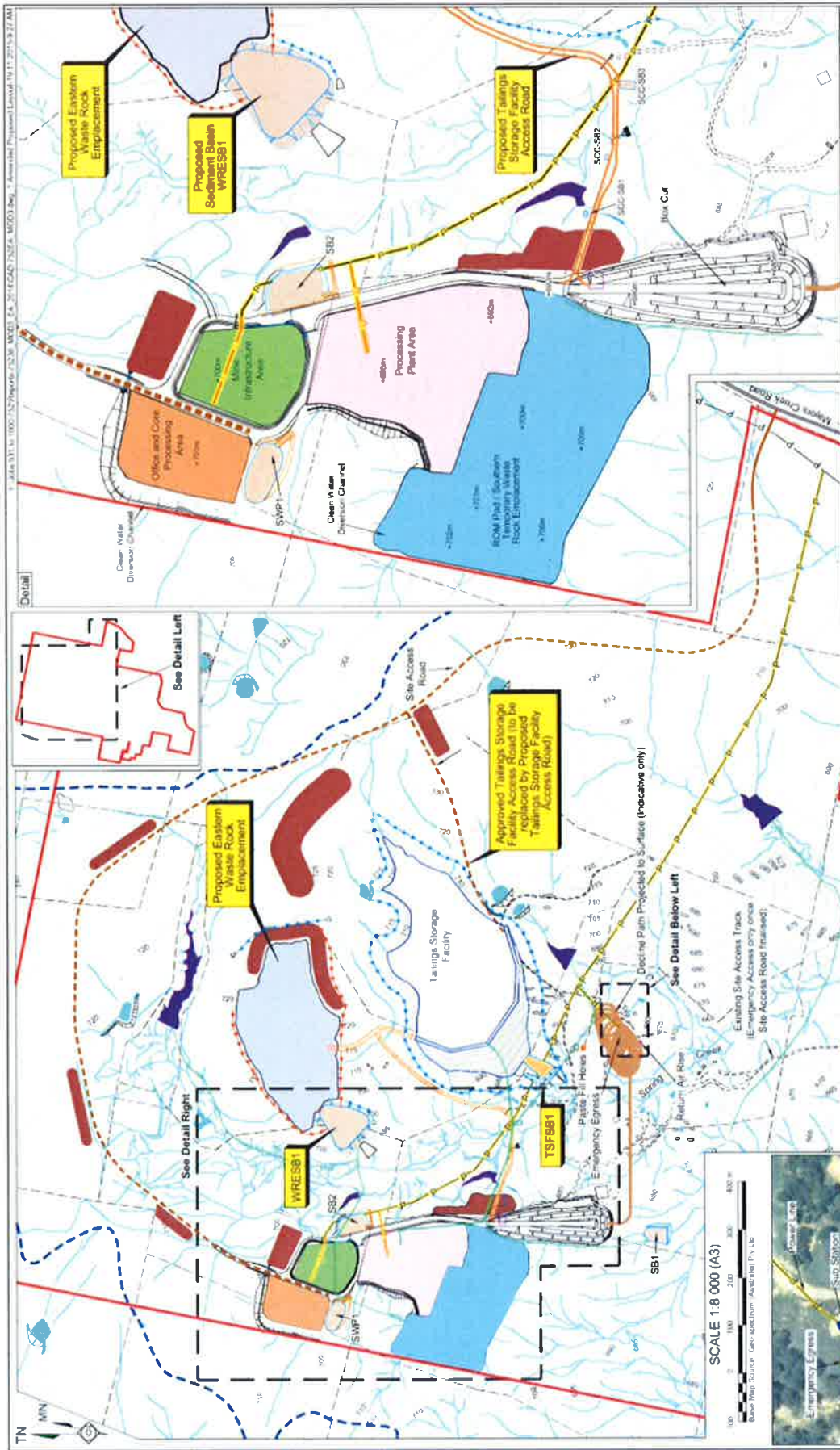
26. In condition 8 of Schedule 5:
- In the first paragraph, delete "One year after operations commence" and insert "Within 3 months of re-commencing construction on the site" and delete "3" and insert "2"; and
 - in the Note, after the words "in any field specified by the", insert "Secretary, including (at least) an independent expert in surface water management."
27. In Appendix 1, replace the Table with the following:

| RWC (2010a) Folio Number | | Revised/Additional Folio Number | | Ownership |
|--------------------------|---------|---------------------------------|---------|---------------------------|
| Lot | DP | Lot | DP | |
| 102 | 755934 | 102 | 1170553 | Dargues Gold Mine Limited |
| 10 | 1127185 | 103 | 1170553 | |
| 2 | 986483 | 105 | 1170553 | |
| 3 | 986483 | 106 | 1170553 | |
| 10 | 1100849 | 104 | 1180508 | |
| 1 | 986483 | 1 | 986483 | |
| 4 | 986483 | 4 | 986483 | |
| 5 | 986483 | 5 | 986483 | |
| P | 755934 | Part 210 | 755934 | |
| | | 104 | 1100849 | Dargues Gold Mine Limited |
| | | 1 | 136801 | |
| | | 2 | 136801 | |
| | | 3 | 755934 | |
| | | 82 | 755934 | |
| | | 83 | 755934 | |
| | | 113 | 755934 | |
| | | 114 | 755934 | |
| | | 143 | 755934 | |
| | | 193 | 755934 | Crown Land |

Source: Big Island Mining Pty Ltd (2015)

28. In Appendix 2, replace all Figures with the following:





SCALE 1:4 000

Figure 1
PROPOSED PROJECT SITE LAYOUT - AMENDED

REFERENCE

- Project Site Boundary
- Contour (m AHD) (interval = 5m)
- Contour (m AHD) (interval = 10m)
- Spot height (m AHD)
- Watercourse / Drainage Line
- Sealed Road
- Unsealed Road
- Existing Dam/Water Storage
- Long Term Sediment Basin
- Approved Harvestable Right's Dam (Indicative Location)
- Catchment Boundary
- Existing Transmission Line (Above ground)
- Approved Transmission Line (Above ground)
- Approved Transmission Line (Underground)
- Approved Pipeline (Indicative)
- Approved Road/Track (Sealed/Unsealed)
- Fence (note: fences not coincident with cadastral boundaries)
- Soil Stochastic (Indicative Location)
- Clean Water Diversion Structure
- Indicative location
- Proposed Modified Infrastructure

SCALE 1:8 000 (A3)

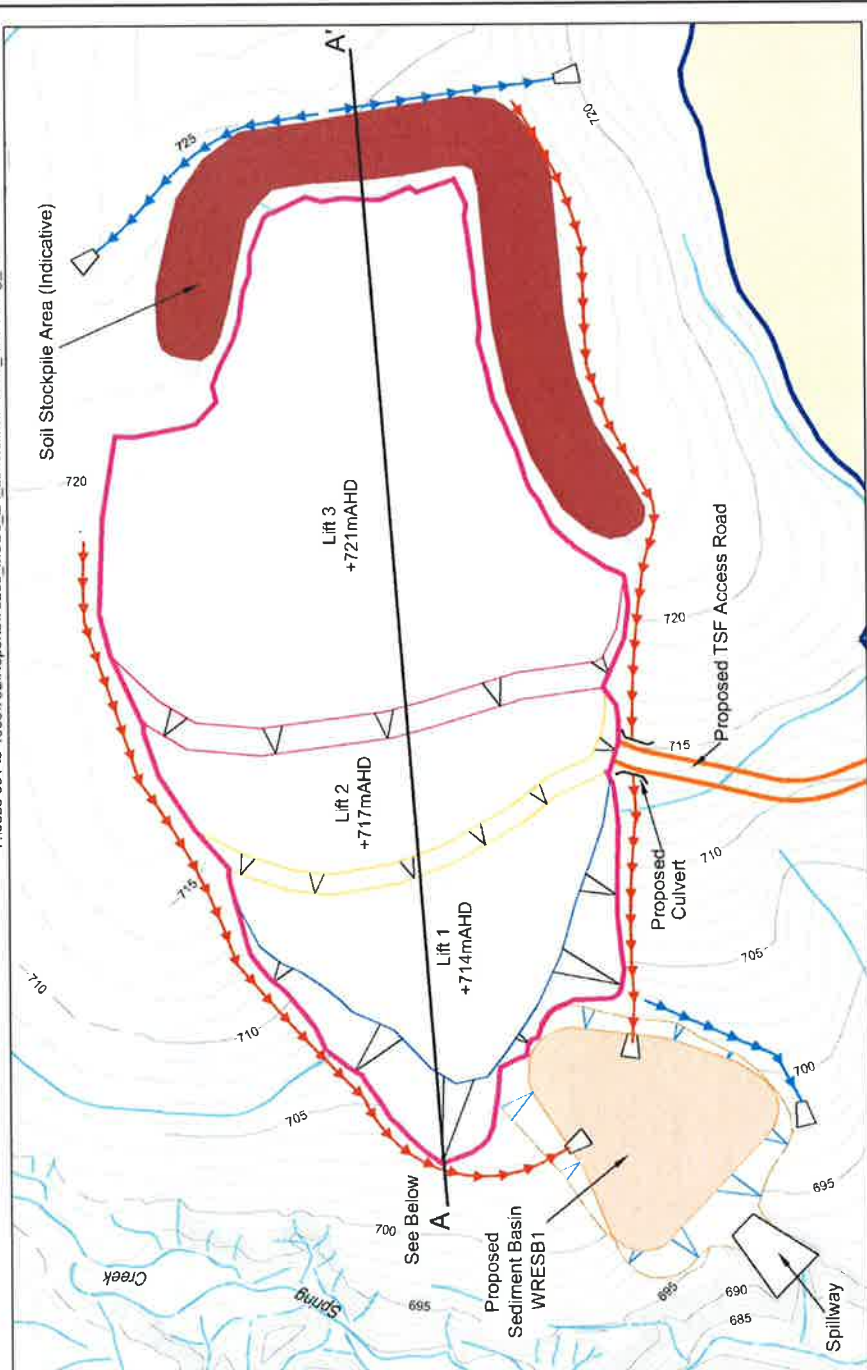
SCALE 0 10 20 30m

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1:4000 (1:1000) (2:2000) (3:3000) (4:4000) (5:5000) (6:6000) (7:7000) (8:8000) (9:9000) (10:10000) (11:11000) (12:12000) (13:13000) (14:14000) (15:15000) (16:16000) (17:17000) (18:18000) (19:19000) (20:20000) (21:21000) (22:22000) (23:23000) (24:24000) (25:25000) (26:26000) (27:27000) (28:28000) (29:29000) (30:30000) (31:31000) (32:32000) (33:33000) (34:34000) (35:35000) (36:36000) (37:37000) (38:38000) (39:39000) (40:40000) (41:41000) (42:42000) (43:43000) (44:44000) (45:45000) (46:46000) (47:47000) (48:48000) (49:49000) (50:50000) (51:51000) (52:52000) (53:53000) (54:54000) (55:55000) (56:56000) (57:57000) (58:58000) (59:59000) (60:60000) (61:61000) (62:62000) (63:63000) (64:64000) (65:65000) (66:66000) (67:67000) (68:68000) (69:69000) (70:70000) (71:71000) (72:72000) (73:73000) (74:74000) (75:75000) (76:76000) (77:77000) (78:78000) (79:79000) (80:80000) (81:81000) (82:82000) (83:83000) (84:84000) (85:85000) (86:86000) (87:87000) (88:88000) (89:89000) (90:90000) (91:91000) (92:92000) (93:93000) (94:94000) (95:95000) (96:96000) (97:97000) (98:98000) (99:99000) (100:100000)



- REFERENCE**
- Waste Rock Emplacement Boundary
 - Contour (m AHD) (Interval = 1m)
 - Contour (m AHD) (Interval = 2m)
 - Watercourse / Drainage Line
 - Clean Water Diversion
 - Dirty Water Diversion
 - Energy Dissipator
 - Section Line (See Below)

PLAN SCALE 1:3 000 (A4)

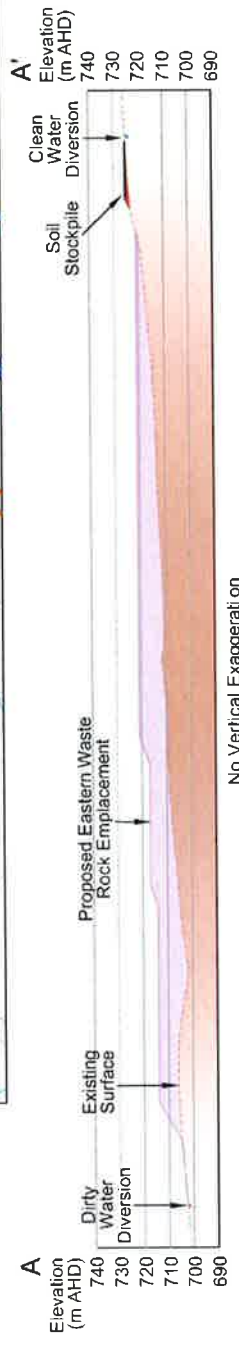


Figure 5
INDICATIVE LAYOUT OF THE
EASTERN WASTE ROCK EMPLOYMENT

Source: Big Island Mining Pty Ltd

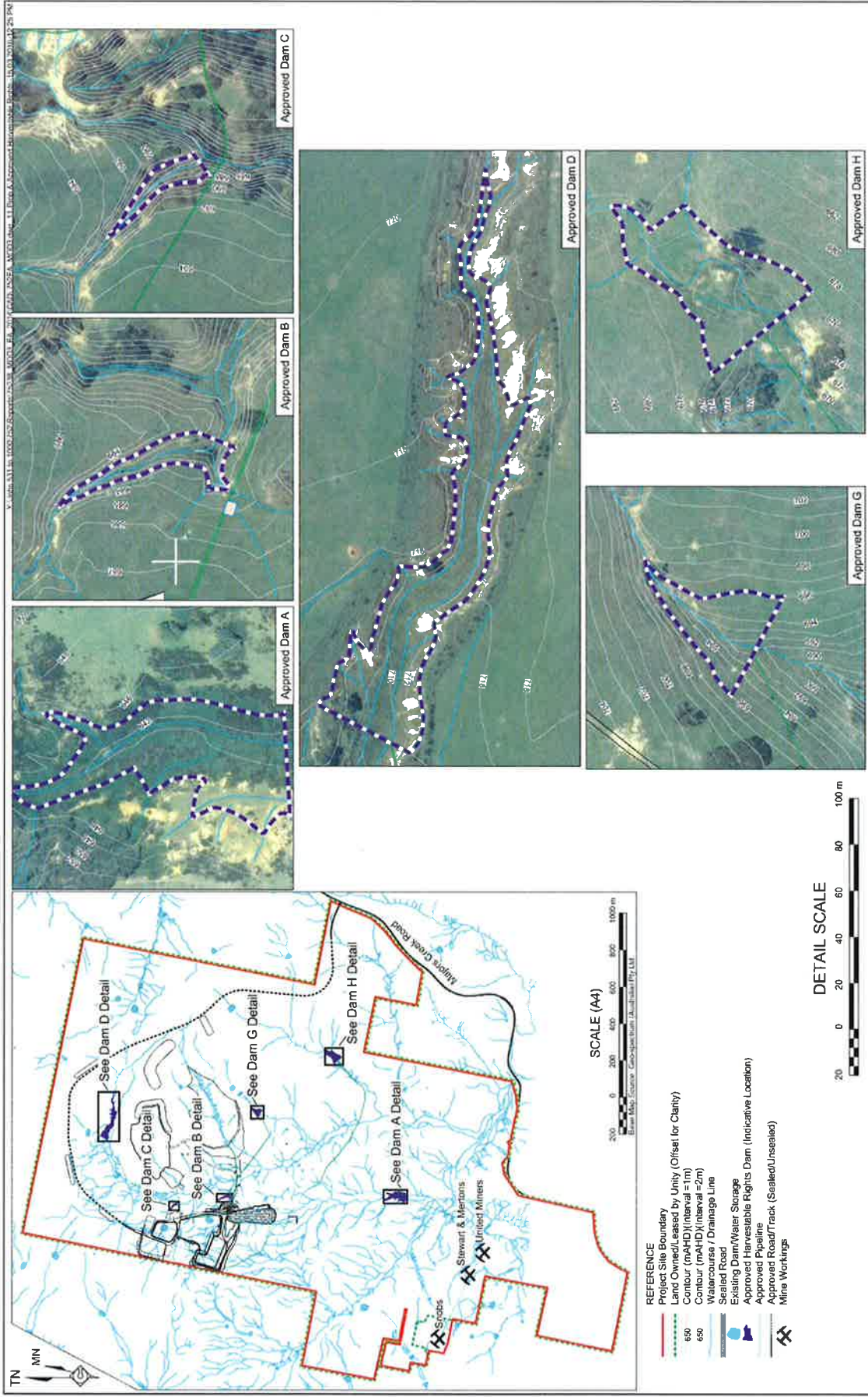
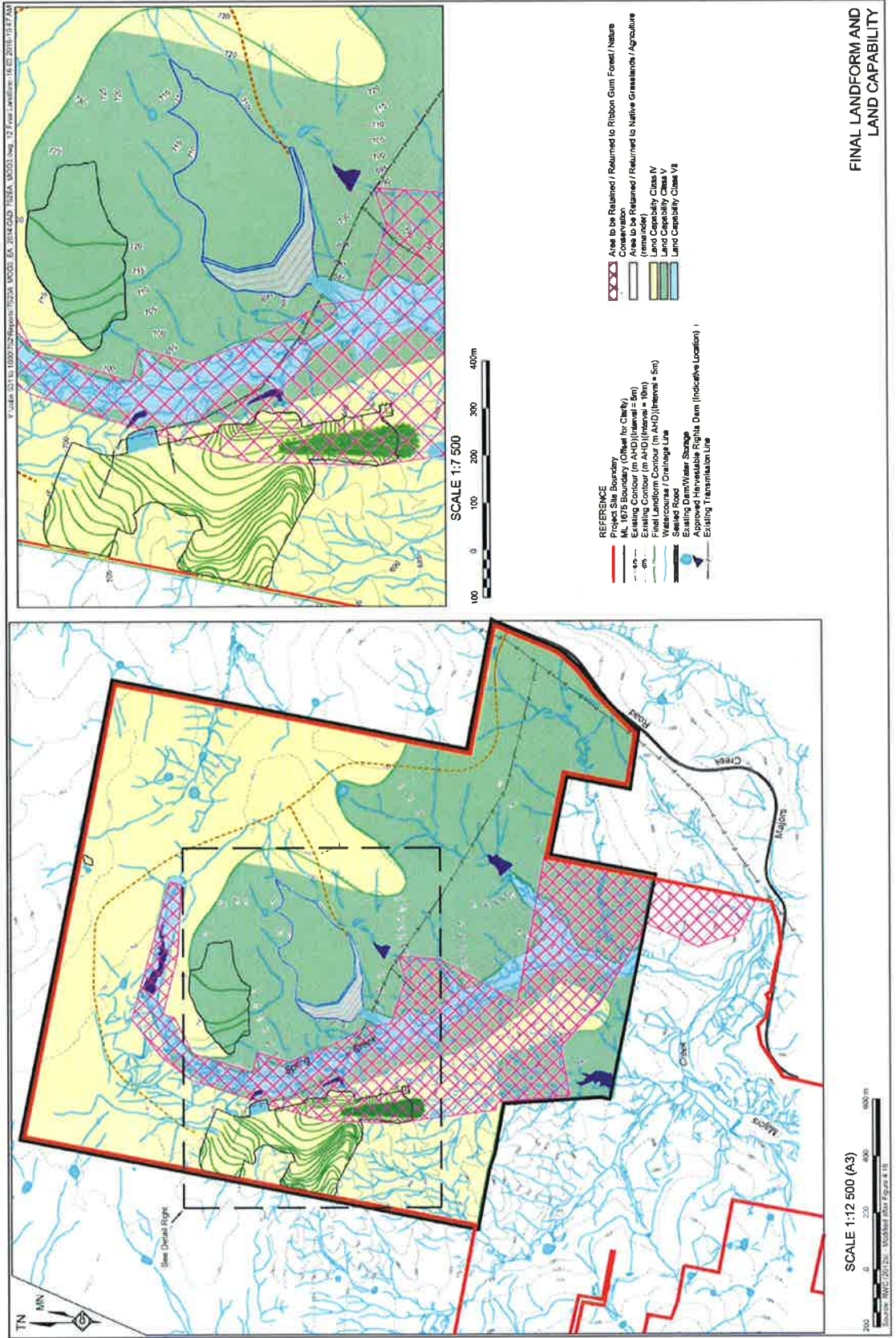


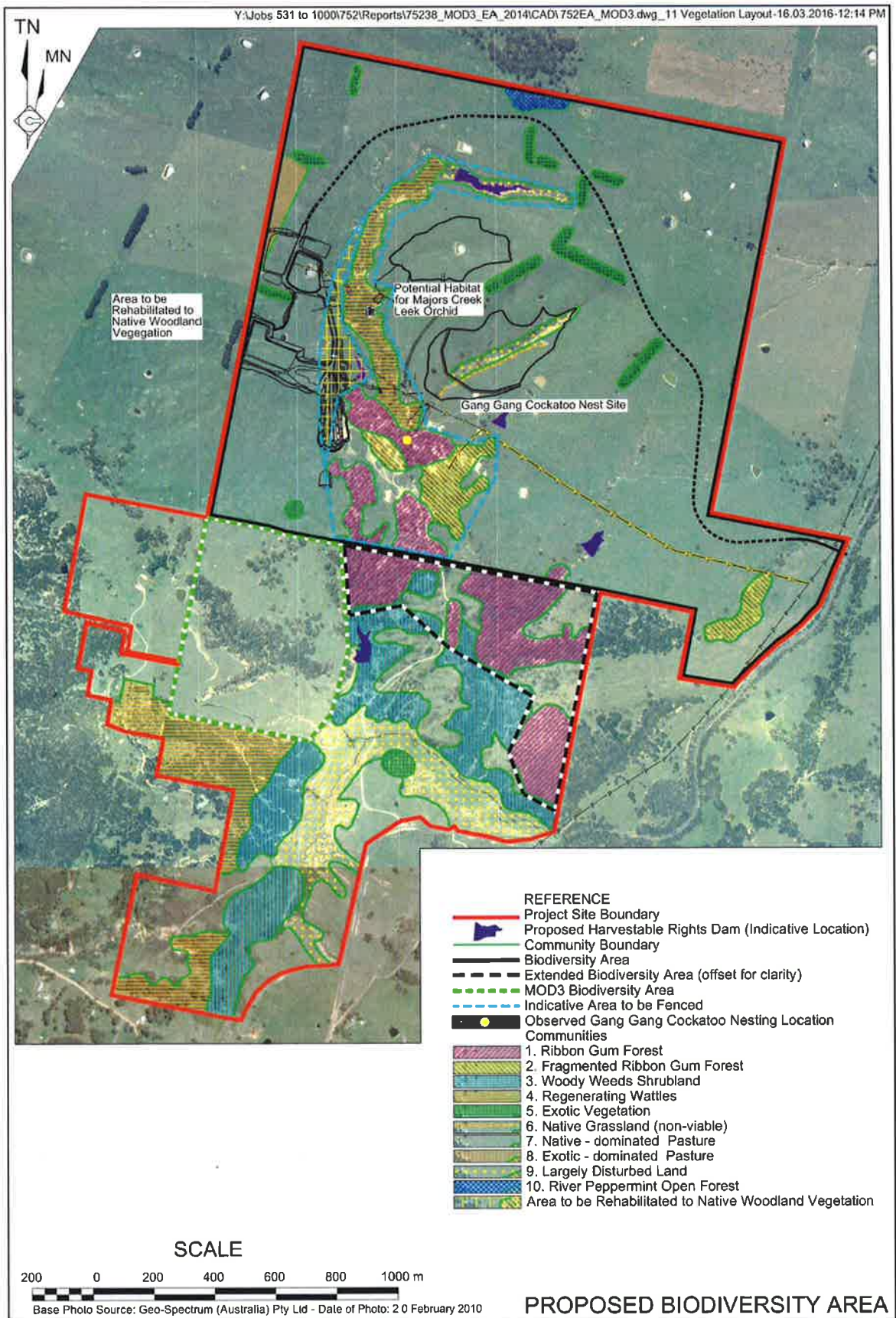
Figure 4
INDICATIVE LAYOUT OF THE APPROVED
HARVESTABLE RIGHTS DAMS

Note: Dams E & F are no longer proposed

29. In Appendix 3, replace the Figure with the following:



30. In Appendix 4, replace the Figure with the following:



31. Delete Appendix 5 and replace with the following:

| Desired Outcome | Commitment | Timing |
|---|---|---|
| 2 AREA OF ACTIVITIES | | |
| All approved activities are undertaken generally in the location(s) nominated on the figures shown in Sections 2 and 4. | 4.1 Mark, and where appropriate, survey the boundaries of the areas of proposed disturbance. | Prior to the commencement of the relevant activity. |
| 4 NOISE AND BLASTING | | |
| Noise generated by operational activities does not exceed EPA nominated criteria nor significantly impacts on neighbouring landowners and/or residents. | Site Establishment Noise Controls | |
| | 4.2 Maintain the on-site road network to limit body noise from empty trucks travelling on internal roads. | Continuous during site establishment operations. |
| | 4.3 Maintain an open dialogue with the surrounding community and neighbours to ensure any concerns over noise or vibration are addressed. | |
| | Operational Noise Controls | |
| | 4.4 Place and operate the crusher within an enclosure engineered to achieve a noise reduction of at least 12dB. | Prior to and continuous during mining operations. |
| | 4.5 Ensure that the grinding circuit is rubber lined. | |
| 4.6 Place and operate the ventilation fan at least 10m below ground level rather than at the surface. The interim ventilation fan would be placed within the deepest section of the box cut until the final fan is commissioned. The interim fan may be retained as a backup ventilation system in the event of failure of the final fan. | | |
| 4.9a Ensure that Frequency Modulated Reversing Alarms are fitted to all mobile equipment that require such alarms. | Continuous during the life of the Project | |
| All activities are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents. | 4.11 Ensure, where practicable, that all Project employees and contractors enter and exit the Project Site in a courteous manner and without causing undue traffic noise. | Continuous during transportation operations. |

| Desired Outcome | Commitment | Timing | | | | | | | | | | | | | | | | |
|--|---|---|---------------------------------|--------------|--|---------------------|--------------------|----|----|----|----|---|--------------------------------|-----------------------------|-----|----|----|---|
| 4 NOISE AND BLASTING (Cont'd) | | | | | | | | | | | | | | | | | | |
| <p>All activities are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.</p> | <p>Other Noise and Vibration Controls</p> <p>4.14 Ensure that equipment with lower sound power levels is used in preference to more noisy equipment.</p> <p>4.15 Maintain an open dialogue with the surrounding community and neighbours to ensure any concerns over noise or vibration are addressed.</p> <p>4.16 Ensure that the noise generated by the project does not exceed the criteria below on more than 25% of land within the Majors Creek State Conservation Area.</p> <table border="1" data-bbox="491 775 1058 880"> <thead> <tr> <th rowspan="2"><i>Day LAeq (15min)</i></th> <th rowspan="2"><i>Evening LAeq (15min)</i></th> <th colspan="2"><i>Night</i></th> </tr> <tr> <th><i>LAeq (15min)</i></th> <th><i>LA1 (1 min)</i></th> </tr> </thead> <tbody> <tr> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> </tbody> </table> <p>Note: Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy</p> <p>4.17 Ensure that the blasting on site does not cause exceedances of the criteria in the table below.</p> <table border="1" data-bbox="491 1120 1058 1225"> <thead> <tr> <th><i>Airblast overpressure (dB(Lin Peak))</i></th> <th><i>Ground vibration (mm/s)</i></th> <th><i>Allowable exceedance</i></th> </tr> </thead> <tbody> <tr> <td>120</td> <td>10</td> <td>0%</td> </tr> </tbody> </table> <p>Note: All blasts are to be designed by a suitably qualified and experienced blasting engineer.</p> | <i>Day LAeq (15min)</i> | <i>Evening LAeq (15min)</i> | <i>Night</i> | | <i>LAeq (15min)</i> | <i>LA1 (1 min)</i> | 35 | 35 | 35 | 45 | <i>Airblast overpressure (dB(Lin Peak))</i> | <i>Ground vibration (mm/s)</i> | <i>Allowable exceedance</i> | 120 | 10 | 0% | <p>Continuous during mining operations.</p> |
| <i>Day LAeq (15min)</i> | <i>Evening LAeq (15min)</i> | | | <i>Night</i> | | | | | | | | | | | | | | |
| | | <i>LAeq (15min)</i> | <i>LA1 (1 min)</i> | | | | | | | | | | | | | | | |
| 35 | 35 | 35 | 45 | | | | | | | | | | | | | | | |
| <i>Airblast overpressure (dB(Lin Peak))</i> | <i>Ground vibration (mm/s)</i> | <i>Allowable exceedance</i> | | | | | | | | | | | | | | | | |
| 120 | 10 | 0% | | | | | | | | | | | | | | | | |
| 5 ECOLOGY | | | | | | | | | | | | | | | | | | |
| <p>Management of disturbance within the Project Site to minimise impact on fauna of conservation value.</p> | <p>5.1 Ensure that, with the exception of the Return Air Rise, Fresh Air Rise and associated infrastructure, no ground disturbing activities are undertaken within areas of identified Ribbon Gum Forest and Fragmented Ribbon Gum Forest.</p> <p>5.1a Implement reasonable and feasible measures to ensure that fauna, including birds, do not enter the Tailings Storage Facility and monitor the facility for such use.</p> <p>5.1b Conduct annual late winter surveys for the presence of active Little Eagle nests within the project site for the life of the Project. In the event that one or more nests are identified, prepare and implement an appropriate management plan in consultation with OEH.</p> | <p>Continuous during the life of the project.</p> | | | | | | | | | | | | | | | | |

| Desired Outcome | Commitment | Timing |
|---|--|--|
| 5 ECOLOGY (Cont'd) | | |
| Maintenance and improvement of the biodiversity value of the Project Site and surrounding areas. | 5.2 Avoid the use of phosphate-based fertiliser in pasture areas to encourage the regeneration of native grasses. | Continuous during the life of the Biodiversity Strategy. |
| | 5.3 Manage grazing operations, including stocking rates and fencing, in a manner to sustain and facilitate the spread of native grass species. | |
| | 5.4 Fence all areas of Ribbon Gum Forest and Fragmented Ribbon Gum Forest to exclude stock. | |
| | 5.4a Manage all areas of Ribbon Gum Forest and Fragmented Ribbon Gum Forest to maintain to improve biodiversity values. | |
| | 5.5 Ensure that areas of habitat suitable for the Majors Creek Leek Orchid are appropriately identified and fenced with a 20m buffer and access restricted. Ensure no disturbance occurs within the fenced areas. | |
| | 5.6 Prepare a management plan to ensure that Common Wombat are not harmed during establishment of the tailings storage facility. This plan may include the following. <ul style="list-style-type: none"> – Mark all wombat burrows prior to the commencement of ground disturbing activities. – Commence ground disturbing activities on the upper slopes of creek banks a few days before disturbing the identified hollows to allow individual wombats time to vacate their burrows at night when equipment is not operating. – Inspect all burrows to ensure that common wombats have vacated the proposed area of disturbance. – Any remaining wombats would be relocated in consultation with a suitably qualified and experienced wildlife carer, fauna ecologist and/or local wombat expert. | |
| 5.8 Ensure that dead fallen and standing timber are not removed or disturbed to preserve fauna habitat. | | |

| Desired Outcome | Commitment | Timing |
|---|---|---|
| 5 ECOLOGY (Cont'd) | | |
| Maintenance and improvement of the biodiversity value of the Project Site and surrounding areas. (Cont'd) | <p>5.9a Identify and implement an offsite biodiversity strategy that would:</p> <ul style="list-style-type: none"> - ensure the protection and enhancement of a minimum of 35.5ha of Tableland Basalt Forest in similar condition to that community within the project site; - include a Biodiversity Offset Area within the vicinity of the project site but outside the area of predicted groundwater drawdown; - be implemented in perpetuity; and - be described in the Biodiversity Management Plan for the project, as amended. <p>Alternatively, ensure that funding to an equivalent amount that would have been required under the abovementioned offsite Biodiversity Offset Strategy is made available in perpetuity for the management of Tableland Basalt Forest matters in the vicinity of the project site.</p> | Within 12 months of the commencement of construction. |
| | <p>5.9b Extend the offset strategy to be implemented under conditions 32 and 33 in schedule 3 of the Project Approval as follows:</p> <ul style="list-style-type: none"> - the extended biodiversity offset area will be as described in the following table and as shown in Appendix 4; - those portions of the approved Biodiversity Areas identified in Appendix 4 (Combined Biodiversity Offset Area) as either Ribbon Gum Forest or Fragmented Ribbon Gum Forest, or any area within the Combined Biodiversity Offset Area where it is appropriate to re-establish the Endangered Ecological Community Tableland Basalt Forest, will be managed in a manner that would ensure the regeneration of that community; and - the remainder of the Combined Biodiversity Area, where appropriate, will be managed in a manner that would ensure the regeneration of native grassland which is consistent with the Natural Temperate Grassland EEC. | Continuous during the life of the Project. |

| Desired Outcome | Commitment | Timing | | | | | | | | | | |
|---|---|---|-----------|--------------------|---------|-----------------------|--------|----------------------------|------|--------------|-------------|--|
| 5 ECOLOGY (Cont'd) | | | | | | | | | | | | |
| Maintenance and improvement of the biodiversity value of the Project Site and surrounding areas. (Cont'd) | <p style="text-align: center;"><i>Table: Extended Biodiversity Offset Area</i></p> <table border="1" data-bbox="480 327 1046 488"> <thead> <tr> <th data-bbox="480 327 847 360">Community Type</th> <th data-bbox="847 327 1046 360">Area (ha)</th> </tr> </thead> <tbody> <tr> <td data-bbox="480 360 847 394">Ribbon Gum Forest*</td> <td data-bbox="847 360 1046 394">17.8 ha</td> </tr> <tr> <td data-bbox="480 394 847 427">Woody Weeds Shrubland</td> <td data-bbox="847 394 1046 427">2.3 ha</td> </tr> <tr> <td data-bbox="480 427 847 461">Native – dominated pasture</td> <td data-bbox="847 427 1046 461">8 ha</td> </tr> <tr> <td data-bbox="480 461 847 488">TOTAL</td> <td data-bbox="847 461 1046 488">28.1</td> </tr> </tbody> </table> <p data-bbox="480 495 1046 551">* Listed as an EEC under the Threatened Species Conservation Act, 1995</p> | Community Type | Area (ha) | Ribbon Gum Forest* | 17.8 ha | Woody Weeds Shrubland | 2.3 ha | Native – dominated pasture | 8 ha | TOTAL | 28.1 | Continuous during the life of the Project. |
| | Community Type | Area (ha) | | | | | | | | | | |
| Ribbon Gum Forest* | 17.8 ha | | | | | | | | | | | |
| Woody Weeds Shrubland | 2.3 ha | | | | | | | | | | | |
| Native – dominated pasture | 8 ha | | | | | | | | | | | |
| TOTAL | 28.1 | | | | | | | | | | | |
| | <p data-bbox="472 607 1054 734">5.10 Prepare a Biodiversity Management Plan in consultation with the relevant government agencies and the community consultative committee. That plan would:</p> <ul style="list-style-type: none"> <li data-bbox="552 763 1054 891">– specify biodiversity-related actions to be undertaken during the life of the Project and for several years after the site has been decommissioned; <li data-bbox="552 898 1054 931">– incorporate the above commitments; <li data-bbox="552 943 1054 1122">– include a program to determine the condition of Araluen Scarp Grassy Forest EEC adjacent to Majors Creek within the Majors Creek State Conservation Area, including ongoing monitoring; <li data-bbox="552 1133 1054 1323">– include a program to identify any groundwater dependent (phreatophytic) vegetation within and outside the zone of groundwater drawdown, including an assessment of soil moisture; <li data-bbox="552 1335 1054 1697">– specify that the required monitoring of phreatophytic vegetation should include pre-dawn measurement of water potential and transpiration by means of porometry at a series of measurement sites across the drawdown cone (not limited to the project site, but at 2 metres at the outermost). Monitoring to include monitoring of bore depth and rainfall, at least 4 times a year in August, November, January and March; <li data-bbox="552 1709 1054 1895">– include a program to identify and monitor stygofauna within and surrounding the project site, including a program to collate onsite baseline data utilising the existing groundwater monitoring network; | Within 12 months of the commencement of construction. | | | | | | | | | | |

| Desired Outcome | Commitment | Timing |
|---|---|--|
| 5 ECOLOGY (Cont'd) | | |
| Maintenance and improvement of the biodiversity value of the Project Site and surrounding areas. (Cont'd) | <ul style="list-style-type: none"> – describe management of the proposed biodiversity area(s); – require the collection, appropriate storage and recording of native seed within the project site to supply amelioration and rehabilitation activities; – describe the proposed revegetation and amelioration program, including identification of areas to be revegetated/ameliorated and the species to be used; and – involve, where practicable, local community groups in management of biodiversity with in the Project Site. | Within 12 months of the commencement of construction. |
| | 5.11 Construct the proposed water pipelines in a manner that would not disturb any Ribbon Gum Forest nor any vegetation over 3m height. | During pipeline construction. |
| | 5.13 Ensure that all in-ground infrastructure in the vicinity of living native trees that comprise a component of the Ribbon Gum Forest or Fragmented Ribbon Gum Forest are installed in accordance with AS4970-2009 – Protection of Trees on Development Sites. In particular, ensure that such infrastructure is installed outside any Tree Protection Zone established by the standard. | During construction of in-ground infrastructure. |
| 6 GROUNDWATER | | |
| Compensate for anticipated reduced groundwater discharges to surface water. | 6.3 Release water sourced primarily from the harvestable rights dams at the rates identified in Table 4.20 of the <i>Environmental Assessment</i> into Majors Creek at the confluence of Majors and Spring Creeks. These environmental discharges are to continue from the commencement of mining operations until the loss of baseflow is negligible, as determined under condition 22 in schedule 3 of the Project Approval. | From commencement of mining operations until the loss of baseflow is negligible, as determined under condition 22 in schedule 3 of the Project Approval. |
| | 6.4a Ensure that water extracted from the historic workings is used for mining-related and compensatory release purposes only. Any release of water from the historic workings for the purpose of compensatory release will comply with the trigger levels identified in the protocol referred to in condition 31(a) in schedule 3 of the Project Approval that is required to be contained in the Surface and Ground Water Response Plan. | Continuous during the Life of the Project. |

| Desired Outcome | Commitment | Timing |
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| 6 GROUNDWATER (Cont'd) | | |
| Confirm the accuracy of the groundwater model and anticipated impacts. | 6.4d Undertake, in consultation with NOW, a pump test to confirm the assumed hydrological parameters used in the groundwater model. The pump test should be in the vicinity of the mine where the fracture density and hydraulic conductivity is likely to be high. | As soon as practicable and during the life of the Project. |
| | 6.4e Undertake a review of the numerical groundwater model, including: <ul style="list-style-type: none"> - further detailed baseline data inputs, as required by the conditions of the approval; - a statistical comparison of the Braidwood and Majors Creek rainfall data to determine the significance of choice of input; - rain fall data from the weather station within the project site (if determined to be relevant); - pumping tests of relevant bores; - a comprehensive sensitivity and uncertainty analysis of groundwater model outputs; - measurement of baseflow in Majors and Spring Creeks; and - investigation of the water quality arising from the mine backfilling including modelling of dissolution associated with changes in hydrology, groundwater flow and the nature of the aquifer matrix. <p>In the event that the actual impacts are significantly greater than those presented in AGE (2010), then the Proponent would consult with NOW in relation the revised modelling results and would develop appropriate management and mitigation measures to address those impacts</p> | Prior to commencement of mining operations and every two years following commencement of those operations. |
| Minimisation of groundwater contamination. | 6.5 Store all hydrocarbon and chemical products within a bunded area complying with the relevant Australian Standard. | Continuous during the life of the Project. |
| | 6.6 Refuel all equipment within designated, sealed areas of the Project Site, where practicable. | |

| Desired Outcome | Commitment | Timing |
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| 6 GROUNDWATER (Cont'd) | | |
| Minimisation of groundwater contamination. (Cont'd) | 6.7 Undertake all maintenance works involving hydrocarbons, where practicable, within designated areas of the Project Site such as the maintenance workshop. | Continuous during the life of the Project. |
| | 6.8 Direct all water from wash-down areas and workshops to oil/water separators and containment systems. | |
| | 6.11 Ensure that the upper surface of the proposed Tailings Storage Facility is capped with a suitable clay or artificial liner in consultation with the relevant government agency. | During rehabilitation operations. |
| | 6.12 Cap the tailings storage facility during final shaping and rehabilitation to minimise the potential for infiltration of surface water into the facility. The nature of the cap is to be determined in consultation with the relevant government agencies during preparation of the <i>Rehabilitation Management Plan</i> . | During final rehabilitation. |
| Ensure that the properties of the paste are appropriately understood and managed. | 6.13 Undertake further testing of the tailings material to confirm the results of test work undertaken prior to the commencement of mining operations and the proposed paste fill operational, management and mitigation measures. | Following commencement of processing operations and prior to the commencement of paste fill operations. |
| 7 SURFACE WATER | | |
| Minimise the volume of water required to be used for mining-related purposes. | 7.2 Ensure that the site access road is treated using chemical dust suppressants or similar to ensure that regular watering is not required. | Continuous during the life of the Project. |
| Prevention of contamination of surface waters. | Water Quality Measures | |
| | 7.19 Ensure that no low grade ore material is used to construct the ROM Pad or is stored in areas where potentially low-pH leachate may flow to natural drainage. | Continuous during the life of the Project. |
| 7.20 Ensure waste rock material to be used during site establishment operations is tested for acid generation potential and any potentially acid generating material is appropriately managed. | | |

| Desired Outcome | Commitment | Timing |
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| 7 SURFACE WATER (Cont'd) | | |
| Prevention of contamination of surface waters. | 7.21 Ensure that all water with the potential to contain processing reagents, hydrocarbons, other chemicals or lowered pH is contained within a bunded Contaminated Water Management Area and that all surface waters within the that area retained and pumped to the Process Water Tank for use within the processing plant. | Continuous during the life of the Project. |
| 8 ABORIGINAL HERITAGE | | |
| Site activities are undertaken without impacting upon any Aboriginal heritage items. | <p>8.3 If items of suspected Aboriginal heritage significance are identified throughout the life of the Project, the following procedures would be implemented.</p> <ul style="list-style-type: none"> – Step 1 – No further earth disturbing works would be undertaken in the vicinity of the suspected item of Aboriginal heritage significance. – Step 2 – A buffer of 20m x 20m would be established around the suspected item of Aboriginal heritage significance. No unauthorised entry or earth disturbance would be allowed with this buffer zone until the area has been assessed. – Step 3 – A qualified archaeologist or the OEH would be contacted to make an assessment of the discovery and prepare an assessment report, including recommended mitigation measures. The draft report would then be provided to representatives of the local Aboriginal community (including registered Aboriginal stakeholders identified during the preparation of the EA and subsequently) by way of consultation in accordance with the requirements of Stage 4 of <i>Aboriginal cultural heritage consultation requirements for proponents – April 2010</i> (or subsequent versions). | Continuous during the life of the Project. |
| | 8.4a Consult with the local Aboriginal community representatives in relation to sites or items of actual or suspected Aboriginal heritage significance and ways in which the Proponent and community can work co-operatively for the benefit of both. | |

| Desired Outcome | Commitment | Timing |
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| 10 TRAFFIC AND TRANSPORTATION | | |
| Achieve safe and efficient transport operations. | 10.6 Establish a speed limit of 40km/hr on the site access road for heavy vehicles, 60km/hr for light vehicles and 20km/hr for all vehicles in the operational sections of the Project Site. | During site establishment operations. |
| | 10.8 Develop and enforce a Code of Conduct for all drivers for all heavy vehicles that travel to and from the Project Site regularly. The Code of Conduct would stipulate safe driving practices must be maintained at all times. The code would also include specific requirements for practices to be adopted during periods of fog, such use of headlights / fog lights and adopting vehicle speeds appropriate to the conditions as required, as well as limiting noisy driving practices in the vicinity of residences. | |
| 12 VISUAL AMENITY | | |
| Limit the visibility of operational areas from nearby residences and Majors Creek Road. | 12.3 Continuation of the existing tree planting program to limit views of the Project Site from areas to the southwest, south and southeast of the Project Site. | During progressive rehabilitation operations. |
| | 12.4 Construction of the processing plant and other infrastructure within the Project Site from non-reflective, neutral-coloured material. | During site establishment operations. |
| | 12.6 Consider any reasonable request by a potentially affected resident for assistance to create a visual screen adjacent to their residence through planting of fast growing vegetation and/or landscaping where such a screen would effectively reduce the visual impact of the Proponent's activities during the life of the Project. | Continuous during the life of the Project. |
| 13 SOILS AND LAND CAPABILITY | | |
| Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion. | 13.1 Strip soil materials to the depths identified in Table 2.2 of the <i>Environmental Assessment</i> . | During site establishment operations. |
| | 13.2 Strip soil materials only when they are moderately moist to preserve soil structure. | |
| | 13.3 Stockpile topsoil and subsoil materials separately. | |
| | 13.4 Construct soil stockpiles as low, flat, elongated mounds on slopes of less than 1:10 (V:H). Topsoil stockpiles would be less than 2m high and subsoil stockpiles would be less than 3m high. | |

| Desired Outcome | Commitment | Timing |
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| 13 SOILS AND LAND CAPABILITY (Cont'd) | | |
| Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion. (Cont'd) | 13.5 Ensure that soil stockpiles and rehabilitated areas achieve a 70% vegetative cover within 10 days of formation. This may be achieved through use of recycled organic material. | During site establishment operations. |
| Maximising the potential for successful rehabilitation of disturbed sections of the Project Site. | 13.6 Place soil material in areas to be rehabilitated in the same stratigraphic order in which they were removed. Topsoils of one soil landscape unit may be mixed with topsoils soils of the other landscape unit. Similarly, subsoils of one soil landscape unit may be mixed with subsoils soils of the other landscape unit. | During rehabilitation operations. |
| 14 SOCIO-ECONOMIC | | |
| Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site. | 14.1 Engage each of the communities surrounding the Project Site in regular dialogue in relation to the proposed and ongoing operation of the Project and maintain an "open door" policy for any member of those communities who wishes to discuss any aspect of the Project. | Prior to, during and following the life of the Project. |
| | 14.2 Proactively and regularly consult with those residents most likely to be adversely impacted by the Project, particularly those within the Majors Creek and Araluen Communities. | |
| | 14.3 Continue to support community organisations, groups and events, as appropriate, and review any request by a community organisation for support or assistance throughout the life of the Project. Particular emphasis would be placed on providing support to those organisations, groups or events that service the communities in Majors Creek, Araluen or Braidwood. | |
| | 14.4 Form and maintain a Community Consultative Committee (CCC), including representative members of the community, Palerang Council and one representative from Eurobodalla Shire Council. It is noted that the Proponent has previously consulted with the Majors Creek Community Liaison Committee. The Proponent would continue to do so, either as part of the CCC or separately | |

| Desired Outcome | Commitment | Timing |
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| 14 SOCIO-ECONOMIC (Cont'd) | | |
| <p>Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site. (Cont'd)</p> | <p>14.6 Advertise and maintain a community Information line 1800 732 002.</p> | <p>Prior to, during and following the life of the Project.</p> |
| | <p>14.7 Give preference when engaging new employees, where practicable, to candidates who are part of the Majors Creek, Araluen or Braidwood communities over candidates with equivalent experience and qualifications based elsewhere and ensure that the mining and other contractors do so as well.</p> | |
| | <p>14.8 Encourage the involvement of the local Aboriginal community in the workforce.</p> | |
| | <p>14.9 Encourage and support participation of locally based employees and contractors in appropriate training or education programs that would provide skills and qualifications that may be of use to encourage and further develop economic activity within the surrounding communities following completion of the Project.</p> | |
| | <p>14.10 Give preference, where practicable, to suppliers of equipment, services or consumables located within the Palerang LGA.</p> | |
| | <p>14.11 Assist community members and others, as appropriate, to establish complimentary businesses within the Palerang LGA where those businesses would provide a benefit to the community through increased economic activity or development.</p> | |
| | <p>14.12 Assist Palerang Council to promote and encourage economic development that would continue beyond the life of the Project.</p> | |
| | <p>14.13 Ensure that infrastructure and services installed for the Project, including the electricity transmission facilities, road improvements and water supply bores, remain available for alternative uses during and/or following completion of the Project.</p> | |
| | <p>14.14 Encourage and support, in consultation with the local community, the provision of services to the community. These may include health, education, transportation and other services.</p> | |
| | <p>14.16 Ensure that the land capability of those sections of the final landform to be used for agricultural purposes is similar to the current land capability.</p> | |

| Desired Outcome | Commitment | Timing |
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| 15 ENVIRONMENTAL MONITORING | | |
| Ongoing monitoring and reporting of Project-related environmental impacts. | <p>15.7 Monthly monitoring in the laboratory of groundwater in the bores, exploration holes and workings identified in Table 4.21 of the <i>Environmental Assessment</i> for the following parameters.</p> <ul style="list-style-type: none"> – Alkalinity. – Major cations and anions. – Nutrients – (ammonia, nitrate, nitrite). – Metals – (iron, lead, chromium, cadmium, zinc, arsenic, copper and nickel). <p>Collection of those samples for laboratory analysis will reasonably coincide with the surface monitoring as described in commitment 15.12.</p> | Prior to, during and following the life of the Project until relevant government agencies agree that further monitoring is not required. |
| | <p>15.11A The monitoring program to be prepared as part of the Groundwater Monitoring Program pursuant to condition 30(d) in schedule 3 of the approval is to be a monitoring program during the life of the project and until the conclusion of rehabilitation, where appropriate.</p> | During the life of the project and until the conclusion of rehabilitation, where appropriate. |
| | <p>Surface Water</p> <p>15.12 Undertake monthly surface water monitoring at the following locations (Figure 4.3 of the EA).</p> <ul style="list-style-type: none"> – Location 1 – Majors Creek upstream of the confluence of Spring & Major's Creek. – Location 2 – Majors Creek downstream of the confluence of Spring & Major's Creek. – Location 3 – downstream of the tailings storage facility. It is noted that this sampling location would be incorporated into the Tailings Management Plan. – Location 4 – Spring Creek downstream of main Project infrastructure and sediment basin outlets. – At a range of locations downstream of the Majors Creek State Conservation Area. – Discharge point for the compensatory flows (sampling to be undertaken initially daily for the first three months of the program, with the frequency to be increased in consultation with the relevant government agency after that period). | Prior to, during and following the life of the Project. |

| Desired Outcome | Commitment | Timing |
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| 15 ENVIRONMENTAL MONITORING (Cont'd) | | |
| Ongoing monitoring and reporting of Project-related environmental impacts. (Cont'd) | 15.12A The monitoring program to be prepared as part of the Surface Water Monitoring Program pursuant to condition 29(d) in schedule 3 of the approval is to include a program to monitor pH and electrical conductivity, in real time, from at least three locations, including locations within and downstream of the tailings storage facility. | Prior to, during and following the life of the Project. |
| | 15.12B Install two gauging stations on Majors Creek, one upstream and one downstream of the confluence with Spring Creek, capable of continuous measurement of stream flow. | |
| | 15.12C The Water Management Plan should include provision for: <ul style="list-style-type: none"> - the installation of a V-notch weir on Spring Creek downstream of the mine and below the confluence with a major gully coming in from the east (approximate coordinates 749275E, 6064175N (MGA, Zone 56)); - the investigation of the hydrogeology of the tailings storage facility and the installation of monitoring bores around the tailings storage facility; - the installation of a monitoring bore to the south-east where the sensitivity analysis indicates a possible extension of the 1m drawdown contour (approximate coordinates: depending on landholder approval – 750900E, 6064100N (MGA, Zone 56), or alternative location within the project site – 750350E, 6064550N (MGA, Zone 56)); - the installation of monitoring bores DRWB 09 and DRWB 10; - the installation of a pair of bores adjacent to Spring Creek at the mapped intersection of the dominant lineament (fault) trending south east towards and along Majors Creek (approximate coordinates 749350E, 6064175N (MGA, Zone 56)). | Within 12 months of the commencement of construction. |

| Desired Outcome | Commitment | Timing |
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| 15 ENVIRONMENTAL MONITORING (Cont'd) | | |
| Ongoing monitoring and reporting of Project-related environmental impacts. (Cont'd) | <p>15.13A The monitoring program to be prepared as part of the Surface Water Monitoring Program pursuant to condition 29(d) in schedule 3 of the approval is to be a monitoring program during the life of the project and until the conclusion of rehabilitation, where appropriate.</p> | <p>During the life of the project and until the conclusion of rehabilitation, where appropriate.</p> |
| | <p>Notification</p> <p>15.13B The protocol for the investigation, notification and mitigation of any exceedances of the surface water, stream health and groundwater assessment criteria, which is to be included in the Surface and Ground Water Response Plan (condition 31(b) in schedule 3 of the approval), is to include provision for the notification of ESC of any such exceedances within 7 days of the exceedance being detected, and subsequently, once an appropriate response has been identified with the relevant government agencies, any other water user downstream of the Project Site who registers their interest to be notified.</p> <p>Water Management Plan (incorporating Surface Water Monitoring Program, Groundwater Monitoring Program and Surface and Ground Water Response Plan)</p> | <p>Prior to, during and following the life of the Project.</p> |
| | <p>15.13C The objectives of the abovementioned programs and plans which are required under the approval, are to generally include, but are not limited to:</p> <ul style="list-style-type: none"> • ensuring that the disposal of material in the tailings storage facility, and management of that facility, does not cause material harm to the environment; • taking all necessary measures to protect the quality of the water, as drinking water, for existing downstream users, including the water supply for the Eurobodalla Shire; and • implementing appropriate monitoring and response measures to ensure that action is taken to promptly mitigate any adverse impacts of the project on surface water and groundwater so that drinking water of acceptable quality continues to be available to downstream users, including Eurobodalla Shire. | |

| Desired Outcome | Commitment | Timing |
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| 15 ENVIRONMENTAL MONITORING (Cont'd) | | |
| Ongoing monitoring and reporting of Project-related environmental impacts. (Cont'd) | <p>Eurobodalla Shire Council</p> <p>15.14A The Proponent shall pay Eurobodalla Shire Council the following contribution each calendar year:</p> <ul style="list-style-type: none"> • the reasonable costs, up to a maximum of \$10,000, of Eurobodalla Shire Council engaging its own expert to: <ul style="list-style-type: none"> – undertake a review of the Water Management Plan required under the approval; and – undertake a peer review of the Annual Review carried out by the Proponent pursuant to condition 3 in Schedule 5 of the approval. <p>As part of these reviews undertaken by Eurobodalla Shire Council's expert, the Proponent will provide that expert with reasonable access to the tailings storage facility.</p> <p>A copy of the draft report produced by Eurobodalla Shire Council's expert pursuant to each of the abovementioned reviews must be made available to the Proponent for its review and comment prior to the report being finalised by Eurobodalla Shire Council's expert.</p> <p>This contribution must be indexed according to the CPI at the time of each payment.</p> <p>15.14B The surface water quality criteria to be included in the Surface Water Monitoring Program pursuant to condition 29(c) in schedule 3 of the approval is to take into account, among other things, that the surface water sources are located within the drinking water catchment for the Eurobodalla Shire.</p> | During active mining operations and until the completion of rehabilitation operations. |
| 17 OTHER | | |
| Insurance. | <p>17.1 The Proponent shall effect and maintain a public liability insurance policy to the amount of \$60,000,000.</p> <p>The policy maintained under this commitment must name Eurobodalla Shire Council as an interested party and a beneficiary to the policy to the extent of the acts or omissions of the Proponent, for the purposes of s48 of the Insurance Contracts Act 1984 (Cth).</p> | During active processing operations until the completion of rehabilitation operations. |