Published on: 18 February 2011 Statement No. 857

# STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE *ENVIRONMENTAL PROTECTION ACT 1986)*

JIMBLEBAR IRON ORE PROJECT, 40 KILOMETRES EAST OF NEWMAN, SHIRE OF EAST PILBARA

**Proposal:** The proposal is to extend the existing Wheelarra Hill open pits, develop the South Jimblebar and Hashimoto deposits, and to increase the ore processing capacity by 30 million tonnes per annum (mtpa) to 75 mtpa. Open pit mining will occur above and below ground and will involve dewatering. Excess water will be discharged into the Ophthalmia Dam.

The proposal is further documented in schedule 1 of this statement.

**Proponent:** BHP Billiton Iron Ore Pty Ltd

**Proponent Address:** PO Box 7122, Cloisters Square
PERTH WA 6850

**Assessment Number:** 1847

**Appeal Determination:** Appeal 94 of 2010

**Related Statements:** Ministerial Statement No. 683 and No. 809.

**Report of the Environmental Protection Authority:** Report 1371

The proposal referred to in the above report of the Environmental Protection Authority may be implemented. The implementation of that proposal is subject to the following conditions and procedures:

## 1 Proposal Implementation

1-1 The proponent shall implement the proposal as documented and described in schedule 1 of this statement subject to the conditions and procedures of this statement.

## 2 Proponent Nomination and Contact Details

2-1 The proponent for the time being nominated by the Minister for Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.

2-2 The proponent shall notify the Chief Executive Officer of the Office of the Environmental Protection Authority (CEO) of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.

## 3 Time Limit of Authorisation

3-1 The authorisation to implement the proposal provided for in this statement shall lapse and be void five years after the date of this statement if the proposal to which this statement relates is not substantially commenced.

3-2 The proponent shall provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.

## 4 Compliance Reporting

4-1 The proponent shall prepare and maintain a compliance assessment plan to the satisfaction of the CEO.

4-2 The proponent shall submit to the CEO the compliance assessment plan required by condition 4-1 at least six months prior to the first compliance report required by condition 4-6, or prior to implementation, whichever is sooner.

The compliance assessment plan shall indicate:

1. the frequency of compliance reporting;
2. the approach and timing of compliance assessments;
3. the retention of compliance assessments;
4. the method of reporting of potential non-compliances and corrective actions taken;
5. the table of contents of compliance assessment reports; and
6. public availability of compliance assessment reports.

4-3 The proponent shall assess compliance with conditions in accordance with the compliance assessment plan required by condition 4-1.

4-4 The proponent shall retain reports of all compliance assessments described in the compliance assessment plan required by condition 4-1 and shall make those reports available when requested by the CEO.

4-5 The proponent shall advise the CEO of any potential non-compliance within seven days of that non-compliance being known.

4-6 The proponent shall submit to the CEO the first compliance assessment report fifteen months from the date of issue of this Statement addressing the twelve month period from the date of issue of this Statement and then annually from the date of submission of the first compliance assessment report.

The compliance assessment report shall:

1. be endorsed by the proponent's Managing Director or a person delegated to sign on the Managing Director's behalf;

2. include a statement as to whether the proponent has complied with the conditions;

3. identify all potential non-compliances and describe corrective and preventative actions taken;

4. be made publicly available in accordance with the approved compliance assessment plan; and

5. indicate any proposed changes to the compliance assessment plan required by condition 4-1.

## 5 Conservation of Significant Flora and Fauna

5-1 The proponent shall implement the proposal in accordance with the Significant Species Management Plan provided as Appendix C of *Jimblebar Iron Ore Project Environmental Protection Statement (BHP Billiton, 2010)* or subsequent revisions approved by the CEO. The objective of this Significant Species Management Plan is to minimise adverse impacts to conservation significant species and communities.

5-2 The proponent shall review and revise the Significant Species Management Plan required by condition 5-1, in consultation with the Department of Environment and Conservation at intervals not exceeding five years, to ensure that the mitigation and management techniques remain valid and incorporate any relevant new research.

5-3 The proponent shall make the Significant Species Management Plan required by condition 5-1 publicly available in a manner approved by the CEO.

## 6 Weeds

6-1 The proponent shall ensure that:

1. no new species of weeds (including both declared weeds and environmental weeds) are introduced into the proposal area as a result of the implementation of the proposal;

2. the cover of weeds (including both declared weeds and environmental weeds) within the proposal area does not exceed that existing on comparable, nearby land, determined by condition 6-1 3 which has not been disturbed during implementation of the proposal; and

3. three reference sites on nearby land are chosen in consultation with the Office of the Environmental Protection Authority, on advice from the Department of Environment and Conservation and established within the proposal area and

outside the impact area. The reference sites are to be monitored every two years to determine whether changes in weed cover and type are as a result of project implementation or broader regional changes.

## 7 Trapped Fauna

7-1 The proponent shall ensure that open trenches associated with construction of the excess water pipeline are cleared of trapped fauna by fauna-rescue personnel at least twice daily. Details of all fauna recovered shall be recorded, consistent with condition 7-5. The first daily clearing shall take place no later than three hours after sunrise and shall be repeated between the hours of 3:00 pm and 6:00 pm.

The open trenches shall also be cleared, and fauna details recorded, by fauna-rescue personnel no more than one hour prior to backfilling of trenches.

Note: "fauna-rescue personnel" means employees of the proponent whose responsibility it is to walk the open trench to recover and record fauna found within the trench.

7-2 The fauna-rescue personnel shall obtain the appropriate licenses as required for fauna rescue under the *Wildlife Conservation Act 1950* and be trained in the following:

1. fauna identification, capture and handling (including specially protected fauna and venomous snakes likely to occur in the area);

2. identification of tracks, scats, burrows and nests of conservation-significant species;

3. fauna vouchering (of deceased animals);

4. assessing injured fauna for suitability for release, rehabilitation or euthanasia;

5. familiarity with the ecology of the species which may be encountered in order to be able to appropriately translocate fauna encountered; and

6. performing euthanasia.

7-3 Open trench lengths shall not exceed a length capable of being inspected and cleared by the fauna-clearing personnel within the required times as set out in condition 7-1.

7-4 Ramps providing egress points and/or fauna refuges providing suitable shelter from the sun and predators for trapped fauna are to be placed in the trench at intervals not exceeding 50 metres.

7-5 The proponent shall produce a report on fauna management within the excess water discharge pipeline trench at the completion of pipeline construction. The report shall include the following:

1. details of all fauna inspections;

2. the number and type of fauna cleared from trenches;

3. fauna mortalities; and

4. all actions taken.

The report shall be provided to the CEO and the Department of Environment and Conservation no later than 21 days after the completion of pipeline installation, and shall be made publicly available in a manner approved by the CEO.

## 8 Ethel Gorge Aquifer Stygobiont Community Threatened Ecological Community (TEC)

8-1 The proponent shall monitor the Ethel Gorge Aquifer Stygobiont Community TEC from prior to implementation until 12 months after completion of discharge into the Ophthalmia Dam. This monitoring program shall be designed and carried out to the requirements of the CEO advice of the Department of Environment and Conservation and include:

1. Monitoring of groundwater levels and chemistry, including ionic balance;

2. Monitoring of stygofauna species richness; and

3. Interpretation of the results in relation to influences on stygofauna and their habitat.

8-2 The Proponent shall develop trigger levels for stygofauna species richness and groundwater chemistry for the approval of the CEO on advice of the Department of Environment and Conservation.

8-3 Should the results of monitoring show that trigger levels identified in condition 8-2 have been reached for the stygofauna species richness and/or water chemistry the proponent shall provide a report to the CEO within 21 days of the decline or change being identified which:

1. describes the decline or change;

2. provides information which allows determination of the likely root cause of the decline or change; and

3. if considered likely to be the result of activities undertaken in implementing the proposal, proposes the actions and associated timelines to remediate the decline or change to the requirement of the CEO on advice of the Department of Environment and Conservation.

8-4 The proponent shall, on approval by the CEO implement the actions identified in condition 8-3 3 until the CEO determines that the remedial actions may cease.

8-5 The proponent shall make the results of the monitoring program referred to in condition 8-1, the trigger levels referred to in condition 8-2, and the report referred to in condition 8-3 publicly available in a manner approved by the CEO.

## 9 Stratification and/or Algal Blooms in and Downstream of Ophthalmia Dam

9-1 The proponent shall ensure that the excess water discharge from the Jimblebar Iron Ore Project does not cause algal blooms or stratification in the Ophthalmia Dam as a result of increased salinity.

9-2 The Water Management Plan will be updated to include the assessment methodology for the determination of stratification of the water column and/or algal blooms in Ophthalmia Dam as a result of the excess water discharge from the Jimblebar Iron Ore project. The plan shall:

1. be prepared in consultation with the Office of the Environmental Protection Authority on advice from the Department of Environment and Conservation and the Department of Water;

2. include a model predicting potential stratification impacts;

3. include a monitoring program to validate the predicted stratification; and

4. include details of monitoring frequency and the parameters to be monitored.

9-3 If after a period of 5 years of the implementation of the Water Management Plan, the results support that the excess water discharge has not had a detrimental impact on Ophthalmia Dam, the Water Management Plan will be reviewed in consultation with the Office of the Environmental Protection Authority on advice of the Department of the Environment and Conservation and the Department of Water.

9-4 The proponent shall commence the monitoring required by condition 9-2 prior to ground disturbing activities in order to collect baseline data.

9-5 The proponent shall submit annually the results of monitoring required by condition 9-2 to the CEO as part of the compliance assessment report required by condition 4-6.

9-6 In the event that monitoring required by condition 9-2 indicates that the requirements of condition 9-1 are not being met, and are attributable to the water discharge from the Jimblebar Iron Ore Project, the proponent shall:

1. report such findings to the CEO within 21 days of the stratification of the water column or occurrence of algal blooms being identified;

2. provide evidence which allows determination of the root cause of the occurrence of stratification or algal blooms; and

3. if determined to be a result of activities undertaken in implementing the proposal, state the actions and associated timelines proposed to be taken to remediate the stratification or algal blooms,

to the requirements of the CEO on advice of the Department of Environment and Conservation.

9-7 The proponent shall, on approval of the CEO implement the actions identified in condition 9-6 3 and continue to implement such actions until the CEO determines that the remedial actions may cease.

9-8 The proponent shall make the monitoring reports required by condition 9-2 publicly available in a manner approved by the CEO.

## 10 Surface Water Diversions

10-1 The proponent shall implement the proposal in accordance with the Water Management Plan provided as Appendix B of *Jimblebar Iron Ore Project Environmental Protection Statement (BHP Billiton, 2010)* or subsequent revisions, approved by the CEO. The objective of this Water Management Plan is to minimise adverse impacts to the environment from water use and diversions.

10-2 The proponent shall review and revise the Water Management Plan required by condition 10-1, in consultation with the Department of Environment and Conservation and the Department of Water at intervals not exceeding five years, to ensure that the mitigation and management techniques remain valid and incorporate any relevant new research.

10-3 The proponent shall make the Water Management Plan required by condition 10-1 publicly available in a manner approved by the CEO.

## 11 Acid and Metalliferous Drainage

11-1 Prior to ground-disturbing activities the proponent shall provide a report with a detailed risk assessment, using national and international standards, for any potential Acid or Metalliferous Drainage (as defined in section 2.1 of the Managing Acid and Metalliferous Drainage, February 2007 developed by the Australian Government) within the area of the maximum disturbance boundary defined in Figure 2, to the satisfaction of the CEO to identify:

1. the extent of the acidity and metal contamination hazard associated from related mining activities at the area of the proposal; and

2. the potential environmental receptors that could be impacted on exposure to this hazard.

11-2 Prior to the mining of any material with the potential to generate Acid or Metalliferous Drainage, the proponent shall implement long-term prevention, monitoring, contingency and remediation strategies for the management of any potential Acid or Metalliferous Drainage to the satisfaction of the CEO on advice of the Department of Environment and Conservation and the Department of Mines and Petroleum.

11-3 The proponent shall undertake static and kinetic geochemical testing for potential Acid or Metalliferous Drainage as part of the long-term monitoring strategies required by condition 11-2 using national and international standards to the satisfaction of the CEO.

11-4 In the event that monitoring required by condition 11-2 indicates that the requirements of condition 11-1 are not being met, the proponent shall:

1. report such findings to the CEO within 21 days of the decline in water quality being identified;

2. provide evidence which allows determination of the root cause of the decline in water quality; and

3. if determined to be a result of activities undertaken in implementing the proposal, state the actions and associated timelines proposed to be taken to remediate the water quality.

11-5 The proponent shall, on approval of the CEO, implement the actions identified in 11-4 3 and continue to implement such actions until the CEO determines that the remedial actions may cease.

11-6 The proponent shall make the monitoring reports required by condition 11-2 publicly available in a manner approved by the CEO.

11-7 The proponent shall report the results and assessment of efficacy of the long-term prevention, monitoring, contingency and remediation strategies required by condition 11-2 as part of the compliance assessment report required by condition 4-6 to the CEO.

Note: The national and international standards are the *Managing Acid and Metalliferous Drainage*, February 2007 developed by the Australian Government, Department of Industry Tourism and Resources, the *Global Acid and Metalliferous Drainage (GARD) Guide*, December 2008, developed by the International Network for Acid Prevention (INAP) and the Australian and New Zealand Environment Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Water Guidelines for Fresh and Marine Waters and its updates*.

## 12 Rehabilitation

12-1 The proponent shall undertake progressive rehabilitation over the life of the proposal to achieve the following outcomes:

1. The Overburden Storage Areas (OSAs) shall be non-polluting and shall be constructed so that their stability, surface drainage, resistance to erosion and ability to support local native vegetation are similar to undisturbed natural analogue landforms as demonstrated by Ecosystem Function Analysis or other methodology acceptable to the CEO;

2. OSAs and other areas disturbed through implementation of the proposal (excluding mine pits), shall be progressively rehabilitated with vegetation composed of native plant species of local provenance;

3. The percentage cover and species diversity of living self sustaining native vegetation in all rehabilitation areas shall be comparable to that of undisturbed natural analogue sites as demonstrated by Ecosystem Function Analysis or other methodology acceptable to the CEO; and

4. Weed management for the rehabilitation areas shall be carried out as per condition 6.

Note: The methodology for Ecosystem Function Analysis is set out in Tongway DJ and Hindley 2004 *Landscape Function Analysis – Procedures for Monitoring and Assessing Landscapes*, Commonwealth Scientific and Industrial Research Organisation Sustainable Ecosystems, Canberra.

12-2 The proponent shall provide rehabilitation completion criteria for the approval of the CEO on advice of the Department of Environment and Conservation within five years of implementation of the proposal.

12-3 Rehabilitation activities shall continue until such time as the requirements of conditions 12-1 and 12-2 are demonstrated by inspections and reports to be met, for a minimum of five years following mine completion to the satisfaction of the CEO, on advice of the Department of Mines and Petroleum.

**13 Final Closure and Decommissioning Plan**

13-1 At least five years prior to mine completion, the proponent shall prepare and submit a Final Closure and Decommissioning Plan to the requirements of the CEO, on advice of the Department of Environment and Conservation and Department of Mines and Petroleum.

13-2 The Final Closure and Decommissioning Plan shall be prepared consistent with:

1. ANZMEC/MCA 2000, *Strategic Framework for Mine Closure Planning*; and

2. Department of Industry Tourism and Resources 2006 *Mine Closure and Completion* (Leading Practice Sustainable Development Program for the Mining Industry), Commonwealth Government, Canberra.

13-3 The Final Closure and Decommissioning Plan shall provide detailed technical information on the following:

1. final closure of all areas disturbed through implementation of the proposal so that they are safe, stable and non-polluting;

2. decommissioning of all plant and equipment;

3. disposal of waste materials;

4. final rehabilitation of Overburden Storage Areas (OSAs); and other areas (outside the mine pit(s));

5. management and monitoring following mine completion;

6. inventory of all contaminated sites and proposed management;

7. a detailed review of the findings of the South Jimblebar Pit Infill and Mine Closure Evaluation, including an assessment of whether leaving the South Jimblebar pits open post-closure may result in significant post-closure impacts on the beneficial use of groundwater resources and/or other relevant environmental values in the project area and surrounds; and

8. If the results of the evaluation referred to in condition 13-3 7 indicates that the beneficial use and relevant environmental values may be significantly impacted, the Final Closure and Decommissioning Plan shall document how the South Jimblebar pits concerned will be rehabilitated and closed with backfilling to a least two metres above the premining water table.

13-4 The proponent shall monitor the quality of water in the Wheelarra Hill, South Jimblebar and Hashimoto pit voids for a period of 20 years following closure. This

monitoring program shall be carried out to the requirements of the CEO on advice of the Department of Environment and Conservation.

13-5 The proponent shall develop trigger levels for pit lake water chemistry for approval by the CEO on advice of the Department of Environment and Conservation.

13-6 Should the results of monitoring show that trigger levels have been reached for the water quality the proponent shall provide a report to the CEO within 21 days of the results being identified that:

1. describes the water quality;

2. provides information which allows determination of the likely root cause of the exceedance of trigger levels; and

3. states the actions and associated timelines proposed to remediate water quality in the pit lake/s.

13-7 The proponent shall, on approval of the CEO, and on advice of the Department of Environment and Conservation implement the actions identified in condition 13-6 3 and continue to implement such actions until the CEO determines that the remedial actions may cease.

13-8 The proponent shall make the results of the monitoring program referred to in condition 13-4, the trigger levels referred to in condition 13-5, and the report referred to in condition 13-6 publicly available in a manner approved by the CEO.

13-9 The proponent shall close, decommission and rehabilitate the proposal in accordance with the Final Closure and Decommissioning Plan.

13-10 The proponent shall make the Final Closure and Decommissioning Plan required by condition 13-1 publicly available in a manner approved by the CEO.

**Notes**

1. Where a condition states “on advice of the Office of the Environmental Protection Authority”, the Office of the Environmental Protection Authority will provide that advice to the proponent.

2. The Office of the Environmental Protection Authority may seek advice from other agencies or organisations, as required.

3. The Minister for Environment will determine any dispute between the proponent and the Office of the Environmental Protection Authority over the fulfilment of the requirements of the conditions.

4. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

**HON BILL MARMION MLA**
**MINISTER FOR ENVIRONMENT; WATER**

**Schedule 1**

## The Proposal (Assessment No. 1847)

The proposal is to:

- extend the existing Wheelarra Hill open pits;
- develop the South Jimblebar and Hashimoto deposits;
- extend the existing overland ore conveyor;
- construct and operate two new primary crushing facilities;
- upgrade the approved ore crushing, screening, transfer and train facilities to increase the ore processing capacity by 30 million tonnes per annum to 75 million tonnes per annum;
- construct and operate a water pipeline to discharge excess water to Ophthalmia Dam;
- upgrade the Jimblebar Borefield, and use water from mine dewatering to meet the raw and potable water demand for the project;
- construct and operate mine service infrastructure, administration, workshop and storage areas; and
- progressively construct haul roads and light vehicle access roads.

The locations of the various project components are shown in Figures 2, 3 and 4.

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in section 3 of the project referral document, *Jimblebar Iron Ore Project Environmental Protection Statement*, prepared by BHP Billiton Iron Ore Pty Ltd, Perth, Western Australia (July 2010).

**Table 1: Summary of Key Proposal Characteristics**

| Element | Description |
|---|---|
| Life of mine | • Mining and processing up to 2037. |
| Ore processing rate | • Up to 30 million tonnes per annum. |
| Total production | • Up to 450 million tonnes. |
| Total overburden | • Not more than 1,225 million tonnes. |
| Overburden storage areas | • Continued placement in existing approved out of pit Overburden Storage Areas (OSAs) at the Wheelarra Hill mine and placement in additional out of pit OSAs adjacent to the Wheelarra Hill, South Jimblebar and Hashimoto deposit pits; and<br>• Infill dumping in mined out pits. |
| Land disturbance area | • Not more than 2,042 hectares within the 7,880 hectare project maximum disturbance boundary and not more than 14 hectares outside the maximum disturbance boundary for the pipeline. The maximum disturbance boundary is defined in Schedule 2. |

**Table 1: Summary of Key Proposal Characteristics (cont'd)**

| Element | Description |
|---|---|
| Mine dewatering | Mine dewatering from the following pits:<br>• Wheelarra Hill (W1/2, W3 East and W5/6 pit extensions);<br>• Hashimoto (H1 West, H1 East, H2, H3 and H4); and<br>• South Jimblebar (JS West, JS Central and JS East). |
| Water supply source | • Continued groundwater abstraction from the Jimblebar borefield and dewatering operations to supply raw and potable water; and<br>• Installation of new and/or replacement bores in the Jimblebar borefield as required. |
| Water supply network | • Construction of pipeline extensions and continued distribution through the existing water supply system; and<br>• Construction of a 45 mega litre per day pipeline within existing disturbance corridors to convey excess dewatering discharge to the Ophthalmia Dam. |
| Water demand | • Up to 10.2 mega litres per day. |
| Power supply | • Construction and operation of a 132 kV overhead transmission power line to supply power from the Newman power station; and<br>• Continued use of the existing 66 kV overhead transmission power line. |
| Off-site transport of ore | • Use of existing Wheelarra Hill mine rail loading facilities to transport ore to the Newman Hub or Port Hedland for blending prior to shipping. |

**Figures (attached)**

1. Project location
2. Project overview at full development
3. Project location including pipeline
4. Planned infrastructure locations
5. Vegetation associations within the Jimblebar lease and surrounds
6. Predicted groundwater drawdown
7. Planned surface water flow paths

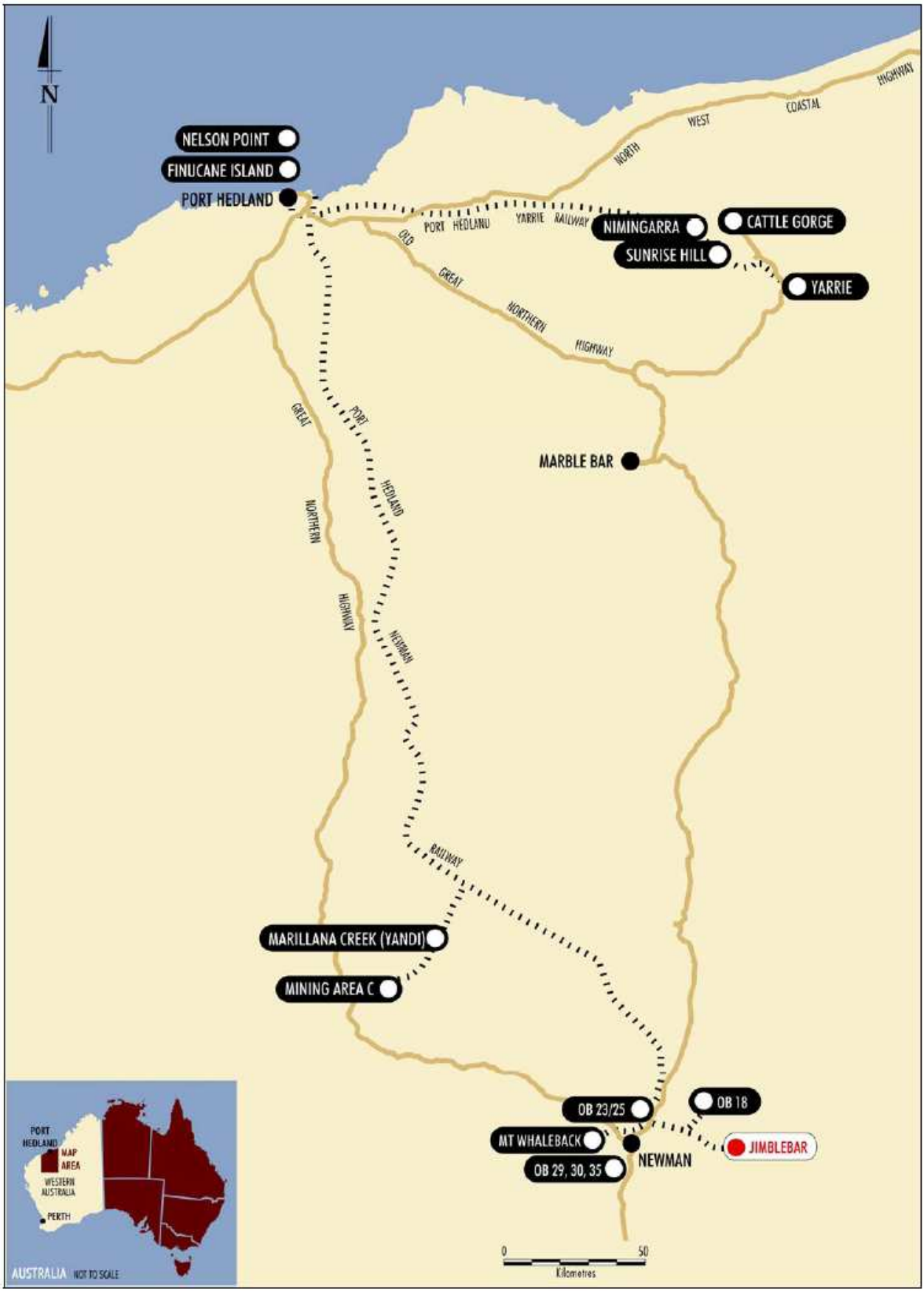


**Figure 1: Project location**

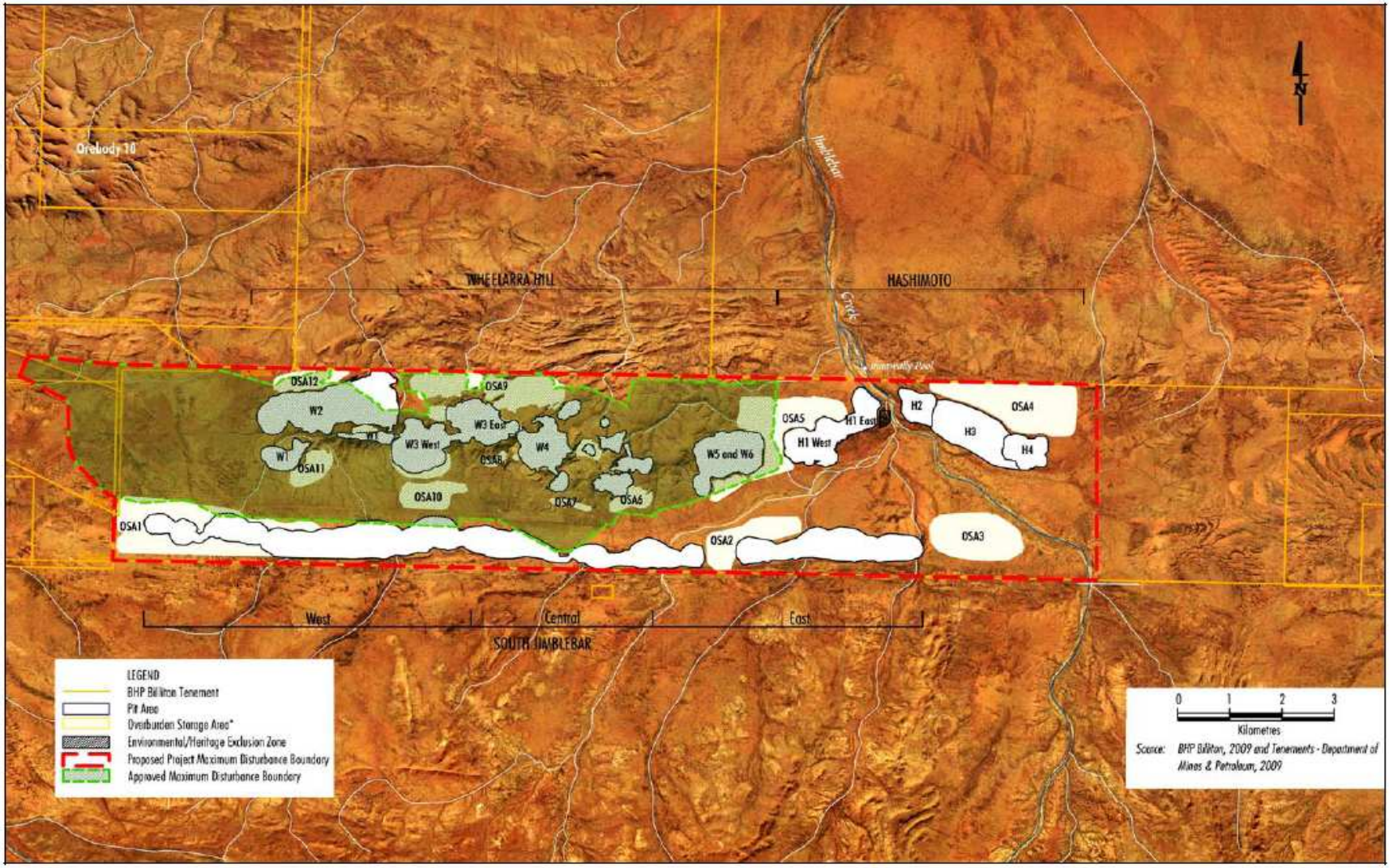


**Figure 2: Project overview at full development**

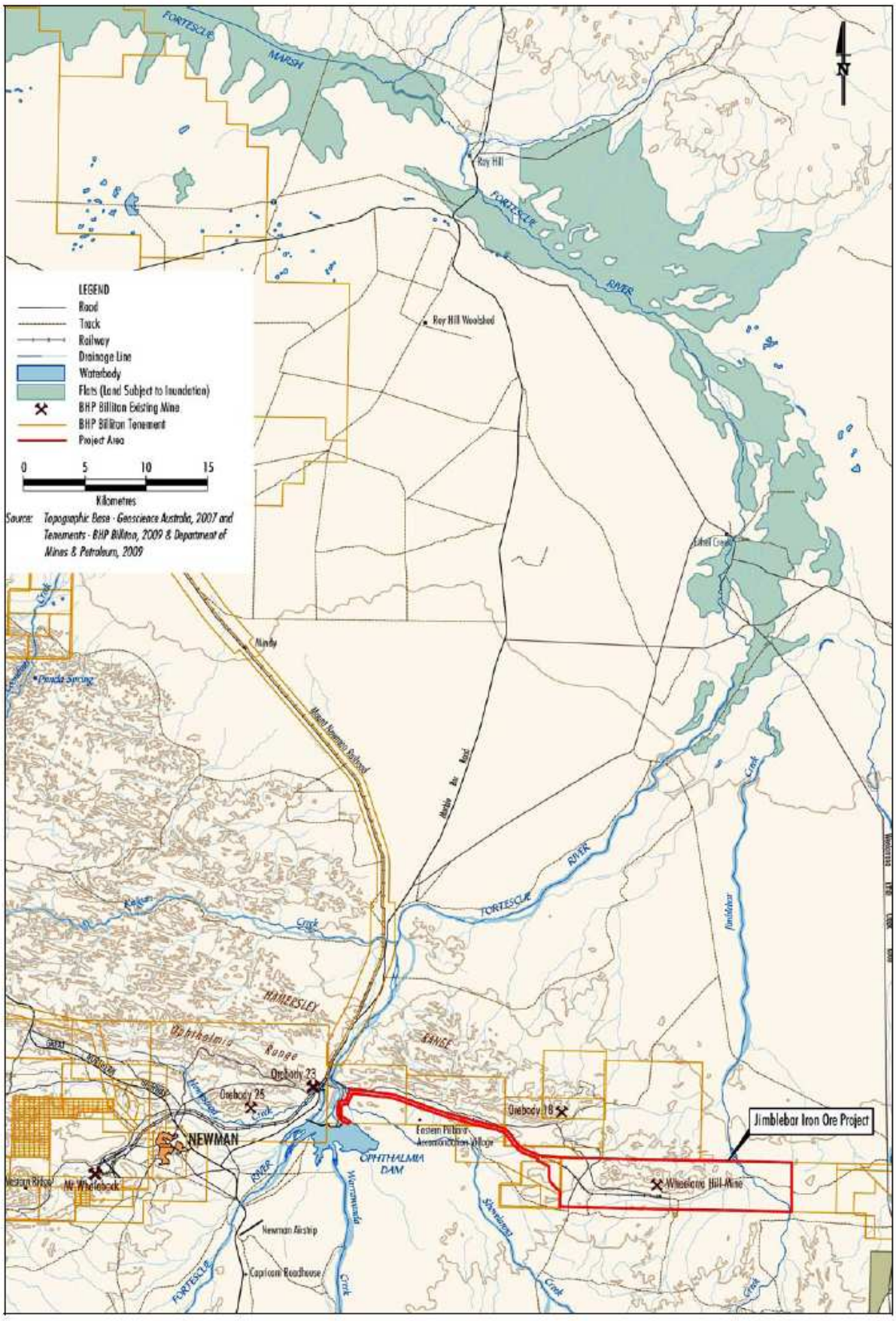


**Figure 3: Project location including pipeline**


**Figure 4: Planned infrastructure locations**

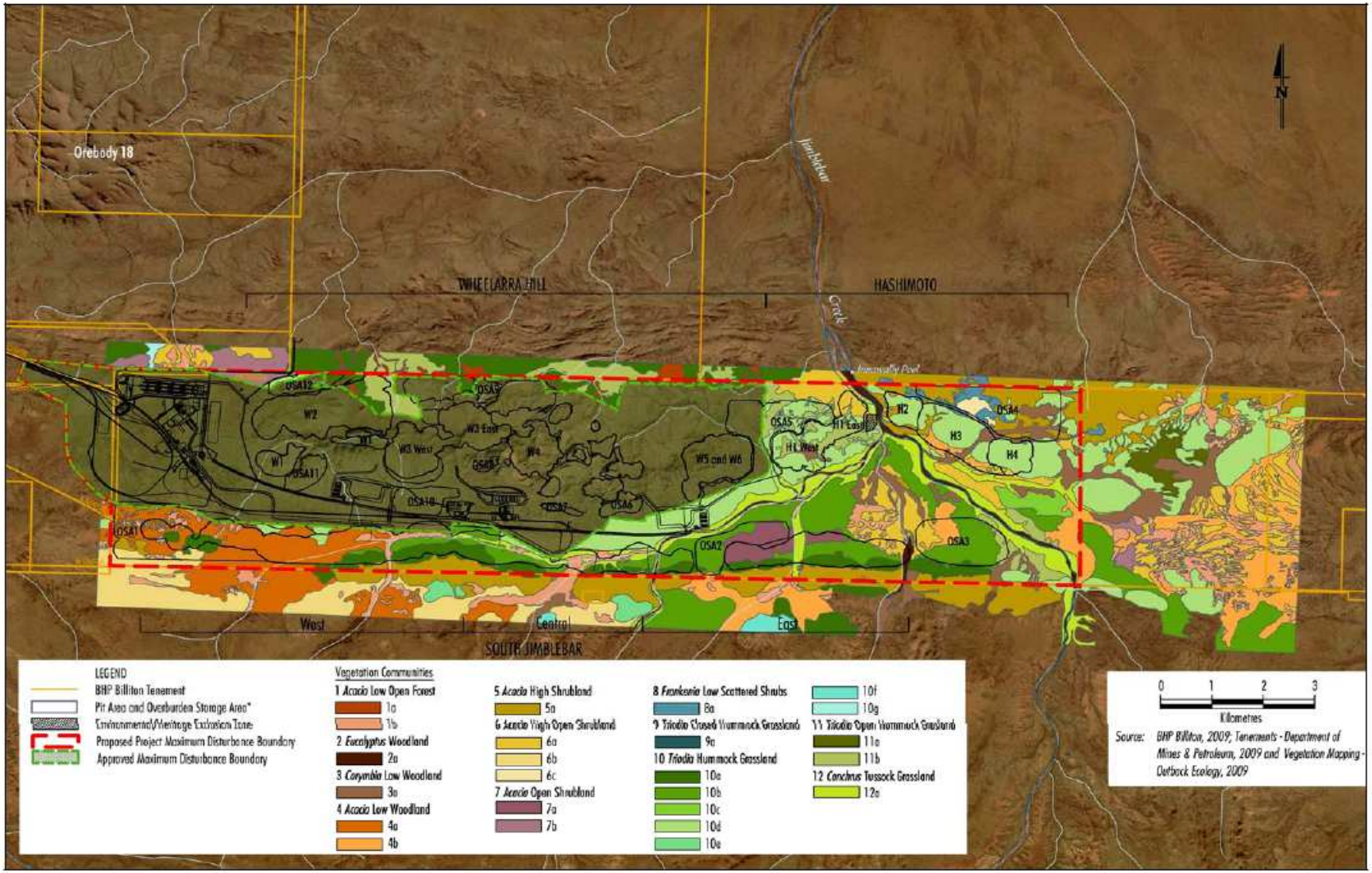


**Figure 5: Vegetation associations within the Jimblebar lease and surrounds**

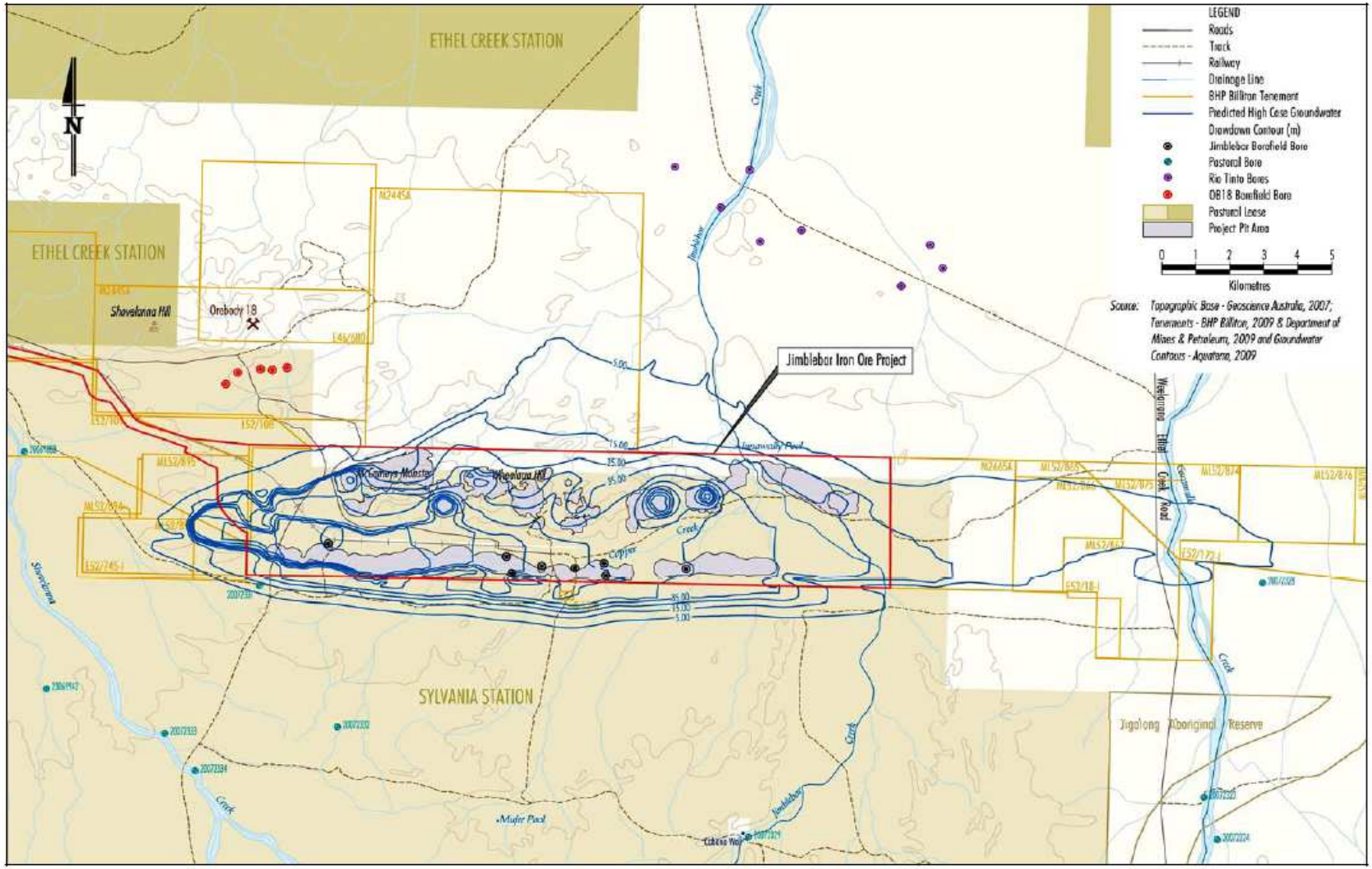


**Figure 6: Predicted groundwater drawdown**

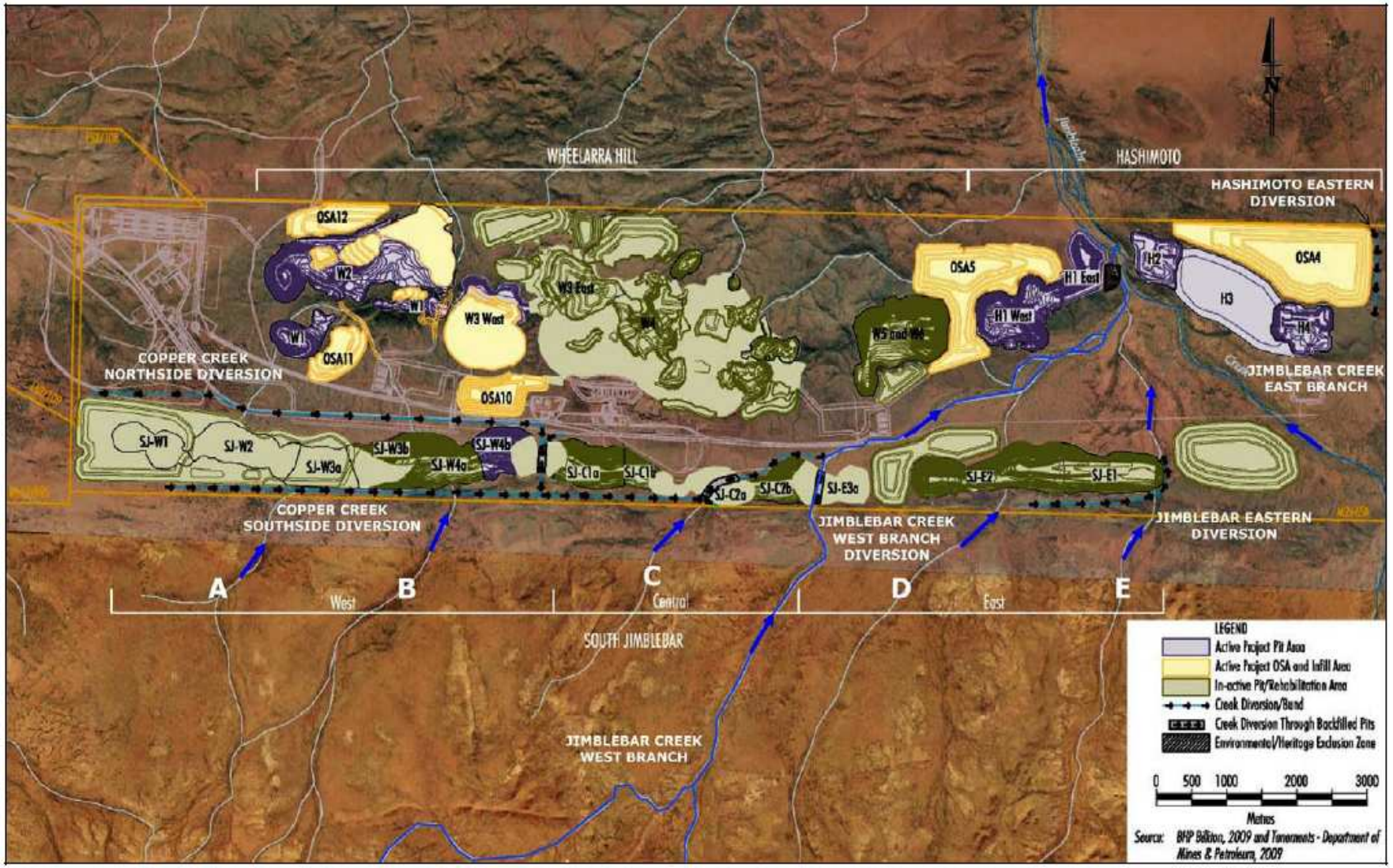


**Figure 7: Planned surface water flow paths**

**Schedule 2**

**Maximum Disturbance Boundary**
**Coordinate Projection: GDA 94 MGA Zone 50**

| ID | X | Y |
|---|---|---|
| 1 | 809856.207 | 7413009.051 |
| 2 | 809967.239 | 7413280.773 |
| 3 | 810331.656 | 7413242.942 |
| 4 | 811680.354 | 7413103.041 |
| 5 | 812804.880 | 7413078.872 |
| 6 | 813395.000 | 7413065.715 |
| 7 | 813759.184 | 7413054.145 |
| 8 | 815215.175 | 7413029.016 |
| 9 | 820873.026 | 7412908.214 |
| 10 | 830533.509 | 7412694.996 |
| 11 | 830526.754 | 7408670.103 |
| 12 | 811596.130 | 7409077.476 |
| 13 | 811623.768 | 7410379.722 |
| 14 | 811610.945 | 7410384.736 |
| 15 | 811566.408 | 7410404.156 |
| 16 | 811533.006 | 7410420.729 |
| 17 | 811509.334 | 7410433.536 |
| 18 | 811459.889 | 7410463.636 |
| 19 | 811410.252 | 7410498.771 |
| 20 | 811352.035 | 7410547.265 |
| 21 | 811279.756 | 7410621.348 |
| 22 | 811168.483 | 7410746.820 |
| 23 | 810954.276 | 7410988.673 |
| 24 | 810895.681 | 7411066.009 |
| 25 | 810855.652 | 7411131.621 |
| 26 | 810823.290 | 7411196.741 |
| 27 | 810808.539 | 7411231.937 |
| 28 | 810790.273 | 7411282.957 |
| 29 | 810767.440 | 7411368.791 |
| 30 | 810756.087 | 7411434.585 |
| 31 | 810748.948 | 7411524.372 |
| 32 | 810745.036 | 7411749.793 |
| 33 | 810735.409 | 7412337.688 |
| 34 | 810733.820 | 7412365.253 |
| 35 | 810731.208 | 7412372.911 |
| 36 | 810727.378 | 7412379.525 |
| 37 | 810718.671 | 7412387.705 |
| 38 | 810700.344 | 7412396.806 |
| 39 | 810468.402 | 7412506.643 |

**Maximum Disturbance Boundary**
**Coordinate Projection: GDA 94 MGA Zone 50 (cont'd)**

| ID | X | Y |
|---|---|---|
| 40 | 810308.223 | 7412597.736 |
| 41 | 810050.721 | 7412747.171 |
| 42 | 809996.660 | 7412778.177 |
| 43 | 809906.477 | 7412812.897 |
| 44 | 809794.460 | 7412857.419 |
| 45 | 809967.239 | 7413280.773 |
| 46 | 809856.207 | 7413009.051 |

Attachment 1 to Ministerial Statement 857

Change to proposal approved under section 45C of the
*Environmental Protection Act 1986*

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This Attachment replaces Schedule 1 and Schedule 2 of Ministerial Statement 857

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**Proposal: Jimblebar Iron Ore Project, 40 Kilometres East of Newman, Shire of East Pilbara**

**Proponent: BHP Billiton Iron Ore Pty Ltd**

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**Changes:**

- Increase land disturbance from 2,042 hectares to 2,300 hectares and increase development envelope from 7,880 hectares to 8,183 hectares.
- Remove power supply as not a key proposal characteristic.

**Table 1: Summary of the Proposal**

| | |
|---|---|
| Proposal Title | Jimblebar Iron Ore Project, 40 Kilometres East of Newman, Hire of East Pilbara |
| Short Description | The proposal is to extend the existing Wheelarra Hill open pits, develop the South Jimblebar and Hashimoto deposits, and to increase the ore processing capacity by 30 million tonnes per annum (mtpa) to 75 mtpa. Open pit mining will occur above and below groundwater and will involve dewatering. Excess water will be discharged via a water pipeline into the Ophthalmia Dam. |

**Table 2: Location and authorised extent of physical and operational elements**

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| Life of Mine | Mining and processing up to 2037 | Mining and processing up to 2037 |
| Ore processing rate | Up to 30 Million tonnes per year | Up to 30 Million tonnes per year |
| Total production | Up to 450 Million tonnes | Up to 450 Million tonnes |
| Total overburden | Not more than 1,225 million tonnes | Not more than 1,225 million tonnes |
| Overburden storage areas | • Continued placement in existing approved out of pit Overburden Storage Areas (OSAs) at the Wheelarra Hill mine and placement in additional out of pit OSAs adjacent to the Wheelarra Hill, South Jimblebar and Hashimoto deposit pits; and<br>• Infill dumping in mined out pits. | • Continued placement in existing approved out of pit Overburden Storage Areas (OSAs) at the Wheelarra Hill mine and placement in additional out of pit OSAs adjacent to the Wheelarra Hill, South Jimblebar and Hashimoto deposit pits; and<br>• Infill dumping in mined out pits. |

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| Land disturbance area | Not more than 2,042 hectares within the 7,880 hectare project maximum disturbance boundary and not more than 14 hectares outside the maximum disturbance boundary for the pipeline. The maximum disturbance boundary is defined in Schedule 2. | Not more than **2,300** hectares within the **8,183** hectare **development envelope as defined in Table 4** and not more than 14 hectares outside the **development envelope** for the pipeline.<br><br>**The total 2,300 hectares disturbance allowed within the development envelope is divided as follows:**<br>• **Not more than 258 hectares within Area A (being 303 hectares) as defined in Table 5; and**<br>• **Not more than 2,042 hectares within Area B (being 7,880 hectares) as defined in Table 6.** |
| Mine dewatering | Mine dewatering from the following pits:<br>• Wheelarra Hill (W1/2, W3 East and W5/6 pit extensions);<br>• Hashimotos (H1 West, H1 East, H2, H3 and H4); and<br>• South Jimblebar (JS West, JS Central and JS East). | Mine dewatering from the following pits:<br>• Wheelarra Hill (W1/2, W3 East and W5/6 pit extensions);<br>• Hashimotos (H1 West, H1 East, H2, H3 and H4); and<br>• South Jimblebar (JS West, JS Central and JS East). |
| Water supply source | • Continued groundwater abstraction from the Jimblebar borefield and dewatering operations to supply raw and potable water; and<br>• Installation of new and/or replacement bores in Jimblebar borefield as required. | • Continued groundwater abstraction from the Jimblebar borefield and dewatering operations to supply raw and potable water; and<br>• Installation of new and/or replacement bores in Jimblebar borefield as required. |
| Water supply network | • Construction of pipeline extensions and continued distribution through the existing water supply system; and<br>• Construction of a 45 mega litre per day pipeline within existing disturbance corridors to convey excess dewatering discharge to the Ophthalmia Dam. | • Construction of pipeline extensions and continued distribution through the existing water supply system; and<br>• Construction of a 45 mega litre per day pipeline within existing disturbance corridors to convey excess dewatering discharge to the Ophthalmia Dam. |
| Water demand | Up to 10.2 mega litres per day | Up to 10.2 mega litres per day |
| Power supply | • Construction and operation of a 132 kV overhead transmission power line to supply power from the Newman power station; and<br>• Continued use of the existing 66 kV overhead transmission line. | **Removed as not a key proposal characteristic** |

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| Off-site transport of ore | Use of the existing Wheelarra Hill mine rail loading facilities to transport ore to Newman Hub or Port Hedland for blending prior to shipping. | Use of the existing Wheelarra Hill mine rail loading facilities to transport ore to Newman Hub or Port Hedland for blending prior to shipping. |

Note: Text in **bold** in Table 2 indicates a change to the proposal.

**Table 3: Definitions**

| Term or Phrase | Definition |
|---|---|
| Maximum Disturbance Boundary | For the purpose of Condition 11-1, maximum disturbance boundary means Area B as defined in Table 5. |

**Table 4: Coordinates of Development Envelope (GDA94 MGA Zone 50)**

| Coordinate No. | Easting | Northing |
|---|---|---|
| 1 | 817033 | 7412990 |
| 2 | 817071 | 7413941 |
| 3 | 820332 | 7413811 |
| **4** | **820336** | **7412920** |
| **5** | **820802** | **7412910** |
| **6** | **820873** | **7412908** |
| **7** | **824683** | **7412824** |
| 8 | 830534 | 7412695 |
| 9 | 830531 | 7411478 |
| 10 | 830530 | 7410367 |
| 11 | 830530 | 7410363 |
| 12 | 830527 | 7408670 |
| 13 | 828629 | 7408711 |
| 14 | 824121 | 7408808 |
| 15 | 824079 | 7408809 |
| 16 | 819659 | 7408904 |
| 17 | 819608 | 7408905 |
| 18 | 815037 | 7409003 |
| 19 | 814991 | 7409004 |
| 20 | 811596 | 7409077 |
| 21 | 811621 | 7410266 |
| 22 | 811624 | 7410380 |
| 23 | 811611 | 7410385 |
| 24 | 811566 | 7410404 |
| 25 | 811533 | 7410421 |
| 26 | 811509 | 7410434 |
| 27 | 811460 | 7410464 |
| 28 | 811410 | 7410499 |
| 29 | 811352 | 7410547 |
| 30 | 811280 | 7410621 |
| 31 | 811168 | 7410747 |
| 32 | 810954 | 7410989 |
| 33 | 810896 | 7411066 |

| Coordinate No. | Easting | Northing |
|---|---|---|
| 34 | 810856 | 7411132 |
| 35 | 810823 | 7411197 |
| 36 | 810809 | 7411232 |
| 37 | 810790 | 7411283 |
| 38 | 810767 | 7411369 |
| 39 | 810756 | 7411435 |
| 40 | 810749 | 7411524 |
| 41 | 810745 | 7411750 |
| 42 | 810738 | 7412170 |
| 43 | 810737 | 7412229 |
| 44 | 810735 | 7412338 |
| 45 | 810734 | 7412365 |
| 46 | 810731 | 7412373 |
| 47 | 810727 | 7412380 |
| 48 | 810719 | 7412388 |
| 49 | 810700 | 7412397 |
| 50 | 810468 | 7412507 |
| 51 | 810404 | 7412543 |
| 52 | 810308 | 7412598 |
| 53 | 810051 | 7412747 |
| 54 | 809997 | 7412778 |
| 55 | 809906 | 7412813 |
| 56 | 809794 | 7412857 |
| 57 | 809856 | 7413009 |
| 58 | 809967 | 7413281 |
| 59 | 810332 | 7413243 |
| 60 | 811022 | 7413171 |
| 61 | 811680 | 7413103 |
| 62 | 812784 | 7413079 |
| 63 | 812805 | 7413079 |
| 64 | 813084 | 7413073 |
| 65 | 813395 | 7413066 |
| 66 | 813759 | 7413054 |
| 67 | 814667 | 7413038 |
| 68 | 815215 | 7413029 |

Note: Text in **bold** in Table 6 indicates coordinates of Area A.

**Table 5: Coordinates of Area A (GDA94 MGA Zone 50)**

| Coordinate No. | Easting | Northing |
|---|---|---|
| 1 | 820336 | 7412920 |
| 2 | 817033 | 7412990 |
| 3 | 817071 | 7413941 |
| 4 | 820332 | 7413811 |

**Table 6: Coordinates of Area B (GDA94 MGA Zone 50)**

| Coordinate No. | Easting | Northing |
|---|---|---|
| 1 | 817033 | 7412990 |
| 2 | 817071 | 7413941 |
| 3 | 820332 | 7413811 |
| 4 | 830534 | 7412695 |
| 5 | 830531 | 7411478 |
| 6 | 830530 | 7410367 |
| 7 | 830530 | 7410363 |
| 8 | 830527 | 7408670 |
| 9 | 828629 | 7408711 |
| 10 | 824121 | 7408808 |
| 11 | 824079 | 7408809 |
| 12 | 819659 | 7408904 |
| 13 | 819608 | 7408905 |
| 14 | 815037 | 7409003 |
| 15 | 814991 | 7409004 |
| 16 | 811596 | 7409077 |
| 17 | 811621 | 7410266 |
| 18 | 811624 | 7410380 |
| 19 | 811611 | 7410385 |
| 20 | 811566 | 7410404 |
| 21 | 811533 | 7410421 |
| 22 | 811509 | 7410434 |
| 23 | 811460 | 7410464 |
| 24 | 811410 | 7410499 |
| 25 | 811352 | 7410547 |
| 26 | 811280 | 7410621 |
| 27 | 811168 | 7410747 |
| 28 | 810954 | 7410989 |
| 29 | 810896 | 7411066 |
| 30 | 810856 | 7411132 |
| 31 | 810823 | 7411197 |
| 32 | 810809 | 7411232 |
| 33 | 810790 | 7411283 |
| 34 | 810767 | 7411369 |
| 35 | 810756 | 7411435 |
| 36 | 810749 | 7411524 |
| 37 | 810745 | 7411750 |
| 38 | 810738 | 7412170 |
| 39 | 810737 | 7412229 |
| 40 | 810735 | 7412338 |
| 41 | 810734 | 7412365 |
| 42 | 810731 | 7412373 |
| 43 | 810727 | 7412380 |
| 44 | 810719 | 7412388 |
| 45 | 810700 | 7412397 |
| 46 | 810468 | 7412507 |
| 47 | 810404 | 7412543 |

| Coordinate No. | Easting | Northing |
|---|---|---|
| 48 | 810308 | 7412598 |
| 49 | 810051 | 7412747 |
| 50 | 809997 | 7412778 |
| 51 | 809906 | 7412813 |
| 52 | 809794 | 7412857 |
| 53 | 809856 | 7413009 |
| 54 | 809967 | 7413281 |
| 55 | 810332 | 7413243 |
| 56 | 811022 | 7413171 |
| 57 | 811680 | 7413103 |
| 58 | 812784 | 7413079 |
| 59 | 812805 | 7413079 |
| 60 | 813084 | 7413073 |
| 61 | 813395 | 7413066 |
| 62 | 813759 | 7413054 |
| 63 | 814667 | 7413038 |
| 64 | 815215 | 7413029 |

**Figures (attached)**

Figure 1: Development Envelope
Figure 2: Area A and Area B

[Signed 22 October 2015]

**Dr Paul Vogel**
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: _____

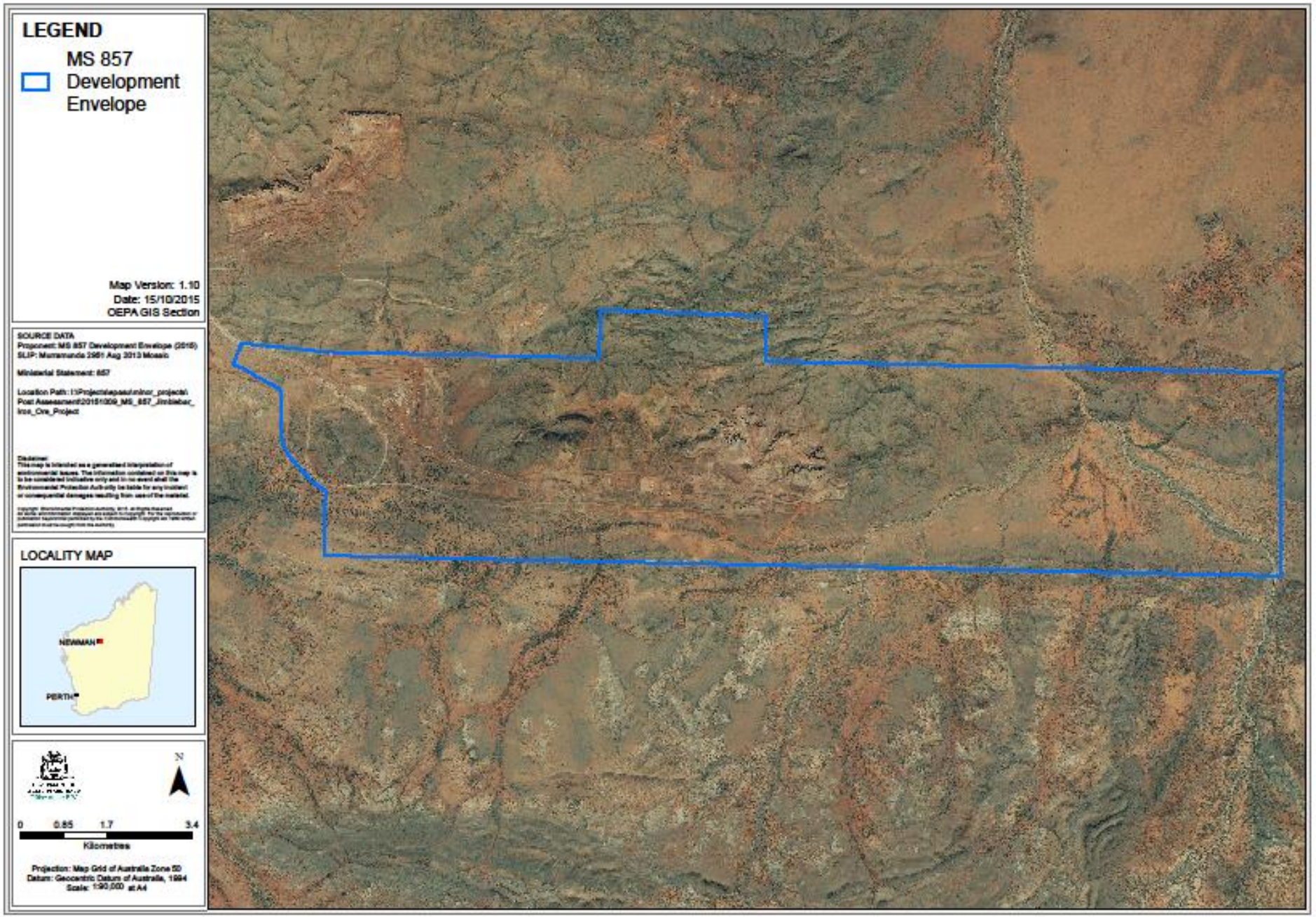


**Figure 1: Development Envelope**

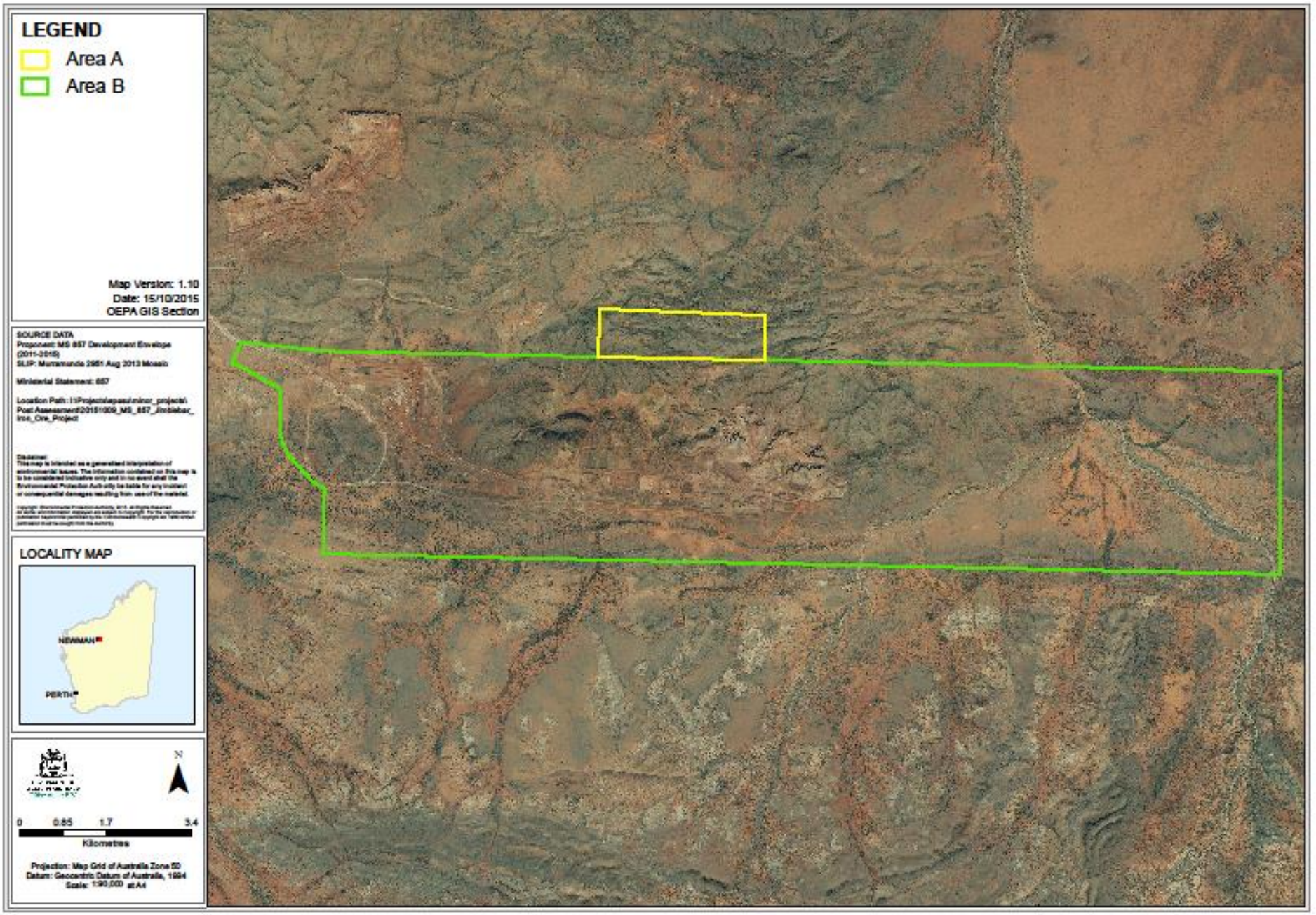


**Figure 2: Area A and Area B**

Attachment 2 to Ministerial Statement 857

Change to proposal approved under section 45C of the
*Environmental Protection Act 1986*

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This Attachment replaces Schedule 1, Schedule 2, and Attachment 1 of Ministerial Statement 857.

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**Proposal: Jimblebar Iron Ore Project, 40 kilometres East of Newman, Shire of East Pilbara**

**Proponent: BHP Billiton Iron Ore Pty Ltd**

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**Changes:**

- Increase to the Development Envelope from 8,183 ha to 8,324 ha.

**Table 1: Summary of the Proposal**

| | |
|---|---|
| Proposal Title | Jimblebar Iron Ore Project, 40 kilometres East of Newman, Shire of East Pilbara |
| Short Description | **The proposal is to extend the existing Wheelarra Hill open pits, develop the South Jimblebar and Hashimoto deposits, and to increase the ore processing capacity. Open pit mining will occur above and below groundwater and will involve dewatering. Surplus water will be discharged via a pipeline into the Ophthalmia Dam.** |

**Table 2: Location and authorised extent of physical and operational elements**

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| Life of Mine | Mining and processing up to 2037 | Mining and processing up to 2037 |
| Ore processing rate | Up to 30 million tonnes per year | Up to 30 million tonnes per year |
| Total production | Up to 450 million tonnes | Up to 450 million tonnes |
| Total overburden | Not more than 1,225 million tonnes | Not more than 1,225 million tonnes |
| Overburden storage areas (OSAs) | • Continued placement in existing out of pit OSAs at the Wheelarra Hill mine and placement in additional out of pit OSAs adjacent to the Weelarra Hill, South Jimblebar and Hashimoto deposit pits; and<br>• Infill dumping in mined out pits. | • Continued placement in existing out of pit OSAs at the Wheelarra Hill mine and placement in additional out of pit OSAs adjacent to the Weelarra Hill, South Jimblebar and Hashimoto deposit pits; and<br>• Infill dumping in mined out pits. |

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| **Mine and associated infrastructure** land disturbance area | Not more than 2,300 ha within the 8,183 ha Development Envelope as defined in Table 4 and not more than 14 ha outside the Development Envelope for the pipeline.<br>The total 2,300 ha disturbance allowed within the Development Envelope is divided as follows:<br>• Not more than 258 ha within Area A (being 303 ha) as defined in Table 5; and<br>• Not more than 2,042 ha within Area B (being 7,880 ha) as defined in Table 6). | **Not more than 2,300 ha within the 8,324 ha Development Envelope and not more than 14 ha outside the Development Envelope for the pipeline.** |
| Mine dewatering | Mine dewatering from the following pits:<br>• Wheelarra Hill (W1/2). W3 East and W5/6 pit extensions);<br>• Hashimotos (H1 West, H1 East, H2, H3, and H4); and<br>• South Jimblebar (JS West, JS Central, and JS East). | Mine dewatering from the following pits:<br>• Wheelarra Hill (W1/2). W3 East and W5/6 pit extensions);<br>• Hashimotos (H1 West, H1 East, H2, H3, and H4); and<br>• South Jimblebar (JS West, JS Central, and JS East). |
| Water supply source | • Continued groundwater abstraction from the Jimblebar borefield and dewatering operations to supply raw and potable water; and<br>• Installation of new and/or replacement bores in Jimblebar borefield as required. | • Continued groundwater abstraction from the Jimblebar borefield and dewatering operations to supply raw and potable water; and<br>• Installation of new and/or replacement bores in Jimblebar borefield as required. |
| Water supply network | • Construction of pipeline extensions and continued distribution through the existing water supply system; and<br>• Construction of a 45 ML/day pipeline within existing disturbance corridors to convey excess dewatering discharge to Ophthalmia Dam. | • Construction of pipeline extensions and continued distribution through the existing water supply system; and<br>• Construction of a 45 ML/day pipeline within existing disturbance corridors to convey excess dewatering discharge to Ophthalmia Dam. |

| Element | Previously Authorised Extent | Authorised Extent |
|---|---|---|
| Water demand | Up to 10.2 ML/day | Up to 10.2 ML/day |
| Off-site transport of ore | Use of the existing Wheelarra Hill mine rail loading facilities to transport ore to Newman Hub or Port Hedland for blending prior to shipping. | Use of the existing Wheelarra Hill mine rail loading facilities to transport ore to Newman Hub or Port Hedland for blending prior to shipping. |

Note: Text in **bold** in Table 2 indicates a change to the proposal.

**Table 3: Abbreviations**

| Abbreviation | Term |
|---|---|
| ha | hectare |
| ML | megalitre |
| Mtpa | Million tonnes per annum |
| OSA | Overburden Storage Area |

**Figures (attached)**

Figure 1 Jimblebar Iron Ore Project Development Envelope (Maximum Disturbance Boundary) (this Figure replaces Figure 2 of Schedule 1 for the purposes of Condition 11).

[Signed 9 November 2018]

**Dr Tom Hatton**
CHAIRMAN
Environmental Protection Authority
under delegated authority

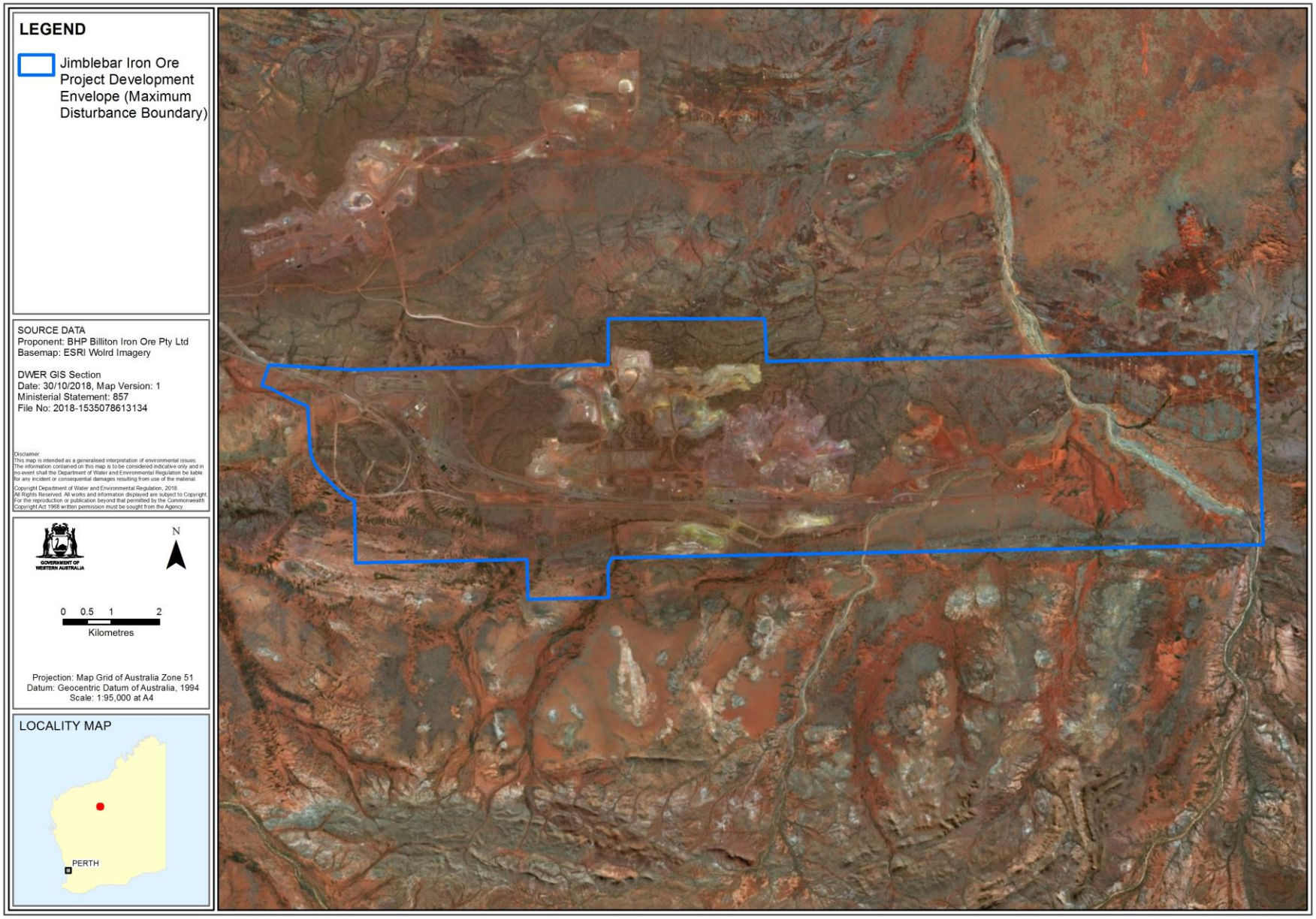


Figure 1. Jimblebar Iron Ore Project Development Envelope (Maximum Disturbance Boundary).