Published on: 31 March 2010 Statement No.829

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

ROY HILL 1 IRON ORE MINING PROJECT STAGE 2, 110 KILOMETRES NORTH OF NEWMAN, SHIRE OF EAST PILBARA

Proposal: The proposal is to mine iron ore from the Stage 2 project area on the southern slopes of the Chichester Range and develop a remote borefield and pipeline.

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

Proponent: Roy Hill Iron Ore Pty Ltd

Proponent Address: 28-42 Ventnor Avenue,
WEST PERTH WA 6005

Assessment Number: 1822

Appeal Determination: Appeal 338 of 2009

Report of the Environmental Protection Authority: Report 1345

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 fifteen 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 fifteen 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 6 months prior to the first compliance report required by condition 4-6 or prior to ground disturbing activity, 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 available when requested by the CEO.

4-5 The proponent shall advise the CEO of any potential non-compliance within 7 days.

4-6 The proponent shall submit a compliance assessment report annually from the date of issue of this Implementation Statement addressing the previous 12 month period or other period as agreed by the CEO. The date of the first Compliance Assessment Report shall be 15 months from the date of this Statement, with each subsequent report 12 months from the date of the previous 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.in the compliance assessment plan required by condition 4-1 and shall make those reports

5 Performance Review and Reporting

5-1 The proponent shall submit to the CEO a Performance Review Report at the conclusion of the first, second, fourth, sixth, eighth and tenth years after the start of implementation and then at five yearly intervals which addresses:

1. the major environmental risks and impacts; the performance objectives, standards and criteria related to these; the success of risk reduction/impact mitigation measures and results of monitoring related to management of the major risks and impacts;

2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable; and

3. improvements gained in environmental management which could be applied to this and other similar projects.

6 Groundwater Dependent Vegetation

6-1 The proponent shall ensure that groundwater abstraction from the Stage 2 mine areas and borefield do not adversely affect vegetation beyond the area identified by the co-ordinates specified in Schedule 2 or Schedule 3 and that drawdown of groundwater does not extend beyond the co-ordinates specified in Schedule 2 or Schedule 3.

6-2 To verify that the requirements of condition 6-1 are met the proponent shall:

1. submit a proposed monitoring program to measure vegetation health to the requirements of the CEO;

2. undertake baseline monitoring of native vegetation health and abundance in the proposal area prior to dewatering;

3. monitor groundwater levels at the boundary of the proposal area and in the locations where riparian and groundwater-dependent vegetation exist; and

4. monitor the health and cover of riparian and groundwater dependent vegetation outside of the area specified by the co-ordinates given in Schedule 2.

6-3 The proponent shall submit annually the results of monitoring required by condition 6-2 to the CEO.

6-4 In the event that monitoring required by condition 6-2 indicates a decline in the health and condition of riparian or groundwater dependent vegetation:

1. the proponent shall report such findings to the CEO within 21 days of the decline being identified;

2. the proponent shall provide evidence which allows determination of the cause of the decline;

3. if determined by the CEO to be a result of activities undertaken in implementing the proposal, the proponent shall submit actions to be taken to remediate the decline within 21 days of the determination being made to the CEO; and

4. the proponent shall implement actions to remediate the decline of riparian or groundwater dependent vegetation upon approval of the CEO on advice of the Department of Environment and Conservation and shall continue until such time the CEO determines that the remedial actions may cease.

6-5 The proponent shall make the monitoring reports required by conditions 6-2 publicly available in a manner approved by the CEO.

7. Fauna

7-1 The proponent shall carry out a fauna survey within the pipeline route within 12 months of the granting of this approval to the satisfaction of the CEO on advice of the Department of Environment and Conservation.

7-2 The final alignment of the pipeline will be subject to the survey required in 7-1 to the satisfaction of the CEO on advice of the Department of Environment and Conservation.

7-3 Should the survey required by 7-1 identify any conservation significant fauna* the alignment of the pipeline should be modified to allow a 50 metre buffer between the location of where the conservation significant fauna* was found or suitable habitat and the pipeline.

* Conservation significant fauna are defined as fauna listed under the *Wildlife Conservation Act 1950*, (WA), *Environment Protection and Biodiversity Conservation Act 1999*, or listed as Priority Fauna by DEC.

7-4 The proponent shall limit the length of open trenches to a maximum length of two and a half kilometres at any time.

7-5 Fauna refuges are to be placed in the trench at intervals not exceeding 50 metres.

7-6 The proponent shall employ at least two "fauna clearing people" to remove fauna from the trench.

7-7 Inspection and clearing of fauna from trenches by fauna clearing people shall occur at least twice daily and not more than half an hour prior to the backfilling of trenches, with the first daily inspection and clearing to be undertaken no later than 3.5 hours after sunrise, and the second inspection and clearing to be undertaken daily between the hours of 3:00 pm and 6:00 pm.

7-8 In the event of rainfall, the proponent shall, following the clearing of fauna from the trench, pump out any pooled water in the open trench (with the exception of groundwater) and discharge it via a mesh (to dissipate energy) to adjacent vegetated areas.

7-9 Within 14 days following completion of the construction of the water pipeline, the proponent shall provide a report on fauna found, both dead and alive, within the pipeline corridor to the CEO.

8 Short-Range Endemic Invertebrate Survey

8-1 The proponent shall carry out a short range endemic invertebrate survey within the borefield and the pipeline route within 12 months of the granting of this approval to the satisfaction of the CEO on advice of the Department of Environment and Conservation.

8-2 The final alignment of the pipeline and development of the borefield will be subject to the surveys required in 8-1 to the satisfaction of the CEO on advice of the Department of Environment and Conservation.

8-3 Should the survey required by 8-1 identify any confirmed or suspected short range endemic invertebrates the alignment of the pipeline and borefield infrastructure shall be modified to allow a 50 metre buffer between the pipeline or borefield infrastructure and the location of the short range endemic invertebrates.

9. Surface Water Flows and Mulga

9-1 The proponent shall ensure that surface water diversion structures do not adversely affect Mulga and riparian vegetation to be retained in the proposal area and that no diversions, other than the following are constructed:

1. those diversions included in Figure 15 of the *Roy Hill 1 Iron Ore Mining Project, Stage 2 Environmental Referral*. Prepared by ENVIRON for Roy Hill Iron Ore Pty Ltd, October 2009; and

2. those diversions required around the evaporation pond to manage surface water flows.

9-2 To verify that the requirements of condition 9-1 are met the proponent shall:

1. submit a proposed monitoring program to measure vegetation health to the requirements of the CEO;

2. undertake baseline monitoring of Mulga and riparian vegetation health and abundance in the proposal area prior to surface water diversions;

3. monitor surface water flows, including areas where Mulga and riparian vegetation exist; and

4. monitor the health and cover of Mulga and riparian vegetation in the proposal area.

This monitoring is to be carried out to the satisfaction of the CEO on advice of the Department of Environment and Conservation, and is to be carried out in such a way that, should a significant decline in health or cover of Mulga or riparian vegetation be detected, it will be possible to determine whether the decline is attributable to the implementation of the proposal or to other causes.

9-3 The proponent shall submit annually the results of monitoring required by condition 9-2 to the CEO.

9-4 In the event that monitoring required by condition 9-2 indicates a decline in the health and condition of the Mulga and riparian vegetation:

1. the proponent shall report such findings to CEO within 21 days of the decline being identified;

2. the proponent shall provide evidence which allows determination of the cause of the decline;

3. if determined by the CEO on advice of the Department of Environment and Conservation to be a result of activities undertaken in implementing the proposal, the proponent shall submit actions to be taken to remediate the decline within 21 days of the determination being made to the CEO; and

4. the proponent shall implement actions to remediate the decline of Mulga and riparian vegetation upon approval of the CEO on advice of the Department of Environment and Conservation and shall continue until such time the CEO determines that the remedial actions may cease.

9-5 The proponent shall make the monitoring reports required by conditions 9-2 publicly available in a manner approved by the CEO.

10. Surface Water and Groundwater Quality

10-1 The proponent shall ensure that run-off and seepage from the waste fines and evaporation pond storage facilities and from salt encapsulation do not cause the quality of groundwater or surface water within or leaving the proposal area to exceed ANZECC/ARMCANZ* trigger values for a slightly to moderately disturbed ecosystem, taking into consideration natural background water quality, so that existing and potential uses, including ecosystem maintenance, are protected.

* Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Water Quality Guidelines for Fresh and Marine Waters* and its updates.

10-2 The proponent shall monitor the quality of surface water and groundwater around the waste fines and evaporation pond storage facilities and locations where salt is encapsulated to ensure that requirements of condition 10-1 are met. This monitoring is to be carried out using methods consistent with Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Guidelines for Water Quality Monitoring and Reporting* (and its updates) and to the satisfaction of the CEO on advice of the Department of Environment and Conservation.

10-3 The proponent shall commence the water quality monitoring required by 10-2 before ground disturbing activities in order to collect baseline data.

10-4 The proponent shall submit annually the results of monitoring required by condition 10-2 to the CEO.

10-5 In the event that monitoring required by condition 10-2 indicates that the requirements of conditions 10-1 are not being met:

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

2. the proponent shall provide evidence which allows determination of the cause of the decline in water quality standards;

3. if determined by the CEO to be a result of activities undertaken in implementing the proposal, the proponent shall submit actions to be taken to remediate the decline in water quality standards within 21 days of the determination being made to the CEO; and

4. the proponent shall implement actions to remediate the decline in water quality standards upon approval of the CEO and shall continue to implement such actions until such time the CEO determines that the remedial actions may cease.

10-6 The proponent shall make the monitoring reports required by condition 10-2 publicly available in a manner approved by the CEO.

11. Rehabilitation

11-1 The proponent shall undertake rehabilitation to achieve the following outcomes:

1. the waste fines storage facilities and evaporation pond, shall be non-polluting and shall be constructed so that their final shape, stability, surface drainage, resistance to erosion and ability to support local native vegetation are comparable to natural landforms within the local area.

2. the mine pits shall be backfilled to above the pre-mining water table and contoured to blend in with the natural topography.

3. the waste fines storage facilities, evaporation pond and other areas disturbed through implementation of the proposal, shall be progressively rehabilitated with vegetation composed of native plant species of local provenance (as agreed by the CEO in consultation with the Department of Environment and Conservation).

4. the percentage cover of living vegetation in all rehabilitation areas shall be comparable with that of nearby land which has not been disturbed during implementation of the proposal.

5. no new species of weeds (including both declared weeds and environmental weeds) shall be introduced into the area as a result of the implementation of the proposal.

6. the coverage of weeds (including both declared weeds and environmental weeds) within the rehabilitation areas shall not exceed that identified in baseline monitoring undertaken prior to commencement of operations, or exceed that existent on comparable, nearby land which has not been disturbed during implementation of the proposal, whichever is less.

11-2 Rehabilitation activities shall continue until such time as the requirements of condition 11-1 are demonstrated by inspections and reports to be met, for a minimum of five years to the satisfaction of the CEO on advice of the Department of Environment and Conservation and the Department of Mines and Petroleum.

12 Conceptual Closure Strategy

12-1 Prior to commencing ground-disturbing activity, the proponent shall submit a detailed and project-specific Conceptual Closure Strategy to the requirements of the CEO on

advice of the Department of Environment and Conservation and Department of Mines and Petroleum.

12-2 The Conceptual Closure Strategy shall include detailed results of geochemical and geophysical characterisation of materials, in particular the potential for acid drainage, metalliferous drainage, and of the occurrence of dispersive materials and asbestiform minerals. Testing for materials with potential to cause acid and metalliferous drainage shall include static and kinetic testing carried out using techniques and timeframes consistent "Leading Practice Sustainable Development Program for the Mining Industry – Managing Acid and Metalliferous Drainage 2009" (Department of Industry, Tourism and Resources) and "The Global Acid Rock Drainage Guide 2009" (International Network for Acid Prevention).

12-3 The Conceptual Closure Strategy shall provide detailed technical information on proposed management measures to prevent pollution, environmental harm or human health impacts during implementation of the proposal and after mine completion and closure.

12-4 The Conceptual Closure Strategy shall include maps and diagrams showing the proposed placement, dimensions, design and proposed methods of construction and closure of waste disposal facilities and mine pits.

12-5 The Conceptual Closure Strategy shall demonstrate that the waste fines storage facilities and evaporation pond will be located, designed and constructed to ensure that they are non-polluting and so that their final shape, height, stability, surface drainage, resistance to erosion and ability to support native vegetation are comparable to natural landforms in the area.

12-6 The Conceptual Closure Strategy shall provide detailed technical information demonstrating that sufficient quantities of suitable materials are available on site for the implementation and closure (including unplanned or temporary closure) of the proposal.

12-7 The Conceptual Closure Strategy shall include specific practicable procedures to ensure the protection of the environment in the event of unplanned or temporary mine closure.

12-8 The proponent shall implement the proposal consistent with the Conceptual Closure Strategy referred to in conditions 12-1 to 12-7.

13 Final Closure and Decommissioning Plan

13-1 At least 5 years prior to mine completion, the proponent shall prepare and submit a Final Closure and Decommissioning Plan to the requirement 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;

and shall provide detailed technical information on the following:

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

4. decommissioning of all plant and equipment;

5. disposal of waste materials;

6. final rehabilitation of waste fines storage facilities; evaporation pond and other areas;

7. management and monitoring following mine completion; and

8. inventory of all contaminated sites and proposed management.

13-3 The proponent shall close, decommission and rehabilitate the proposal consistent with the approved Final Closure and Decommissioning Plan.

13-4 The proponent shall make the Final Closure and Decommissioning Plan required by 13-1 and 13-2 publicly available in a manner acceptable to the CEO.

Procedures

1. Where a condition states "on advice of the Department of Environment and Conservation", the Department of Environment and Conservation will provide that advice to the Office of the Environmental Protection Authority for the preparation of written notice to the proponent.

2. 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.

Donna Faragher JP MLC
MINISTER FOR ENVIRONMENT; YOUTH

Schedule 1

The Proposal (Assessment No. 1822)

The proposal is to:

- mine iron ore from the Stage 2 project area on the southern slopes of the Chichester Range; and
- construction and operation of a remote borefield, water pipeline and associated infrastructure (pump stations, power and water pipelines).

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

The main characteristics of the proposal are summarised in Table 1 below. A detailed description of the proposal is provided in section 2 of the proposal referral document, (*Roy Hill 1 Iron Ore Mining Project, Stage 2 Referral Document*. Prepared by ENVIRON for Roy Hill Iron Ore Pty Ltd, October 2009).

Table 1 Summary of Key Proposal Characteristics

Element	Description
Mine Life	20 years (Stage 1 and 2) Stage 2 mine 11 to 20 years
Processing Rate	65 Mt/a throughput to produce 55 Mt/a for export
Target Grade	60% Iron (Fe) (average lump or fines) or higher
Mineral Resource	400 Mt bedded Marra Mamba ore, 1 Bt detrital ore
Strip Ratio	4:1 (average overburden to ore ratio)
Area of Disturbance	4,793 ha
Maximum Pit Depth	100 m
Overburden	2,000 Mt
Water Supply	150,000 ML from the remote borefield 48,000 ML from mine dewatering
Mine Dewatering	223,000 ML (Average 61 ML per day)
Saline Dewater for Disposal to evaporation pond	175,000 ML

(a) Abbreviations

Bt	billion tones	ML	megalitre
ha	hectares	Mt	million tonnes
GL	Giga Litre	Mt/a	million tonnes per annum
m	metre		

Figures (attached)

1. Project Location
2. Mine Site and Borefield
3. Mining Stages
4. Proposed Fortescue Marsh Conservation Estate
5. Extent of 2 metre Drawdown – Mining Area
6. Extent of 1 metre Drawdown – Borefield
7. Borefield Layout and Possible Short Range Endemic Habitat

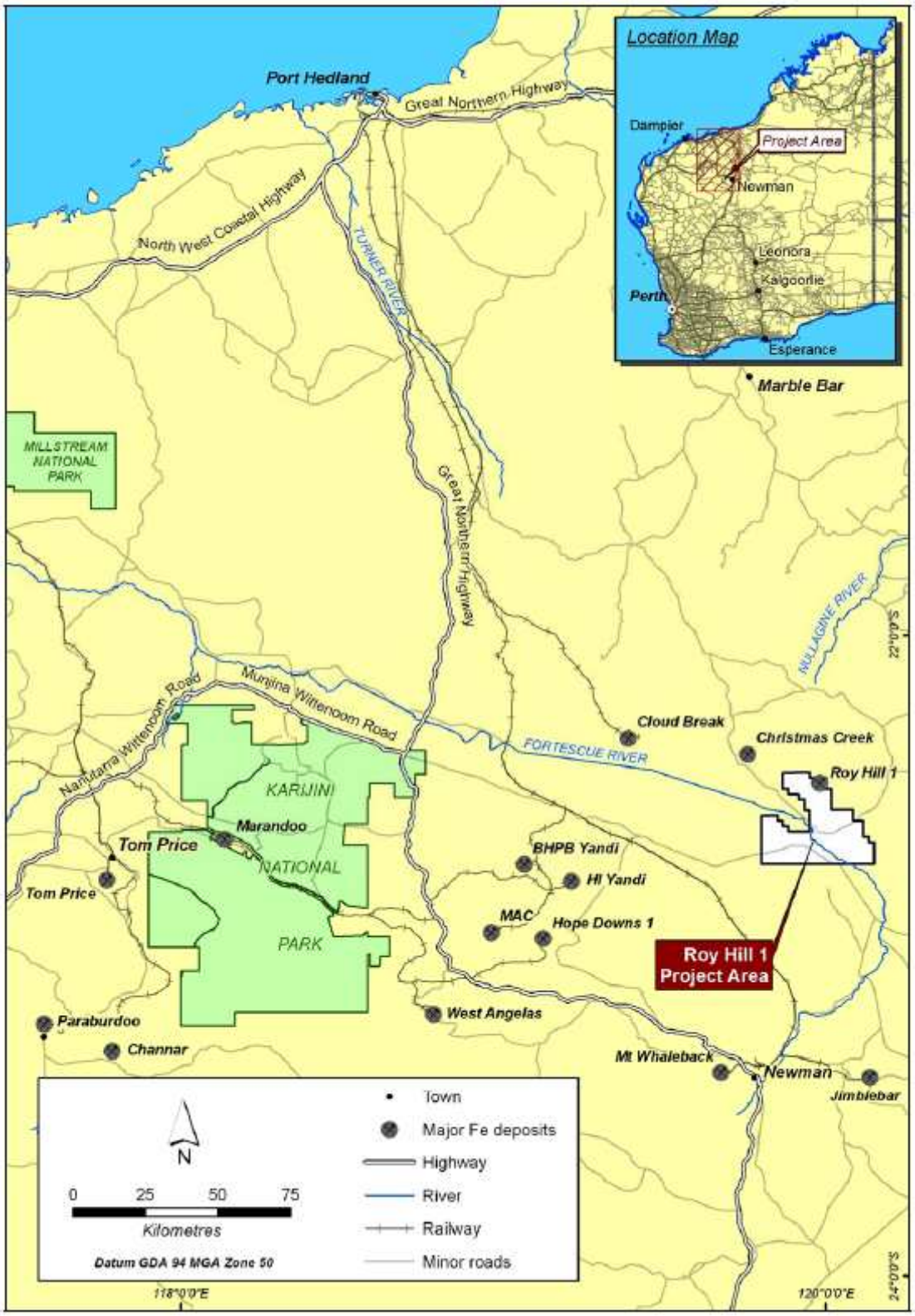

Figure 1 Project Location

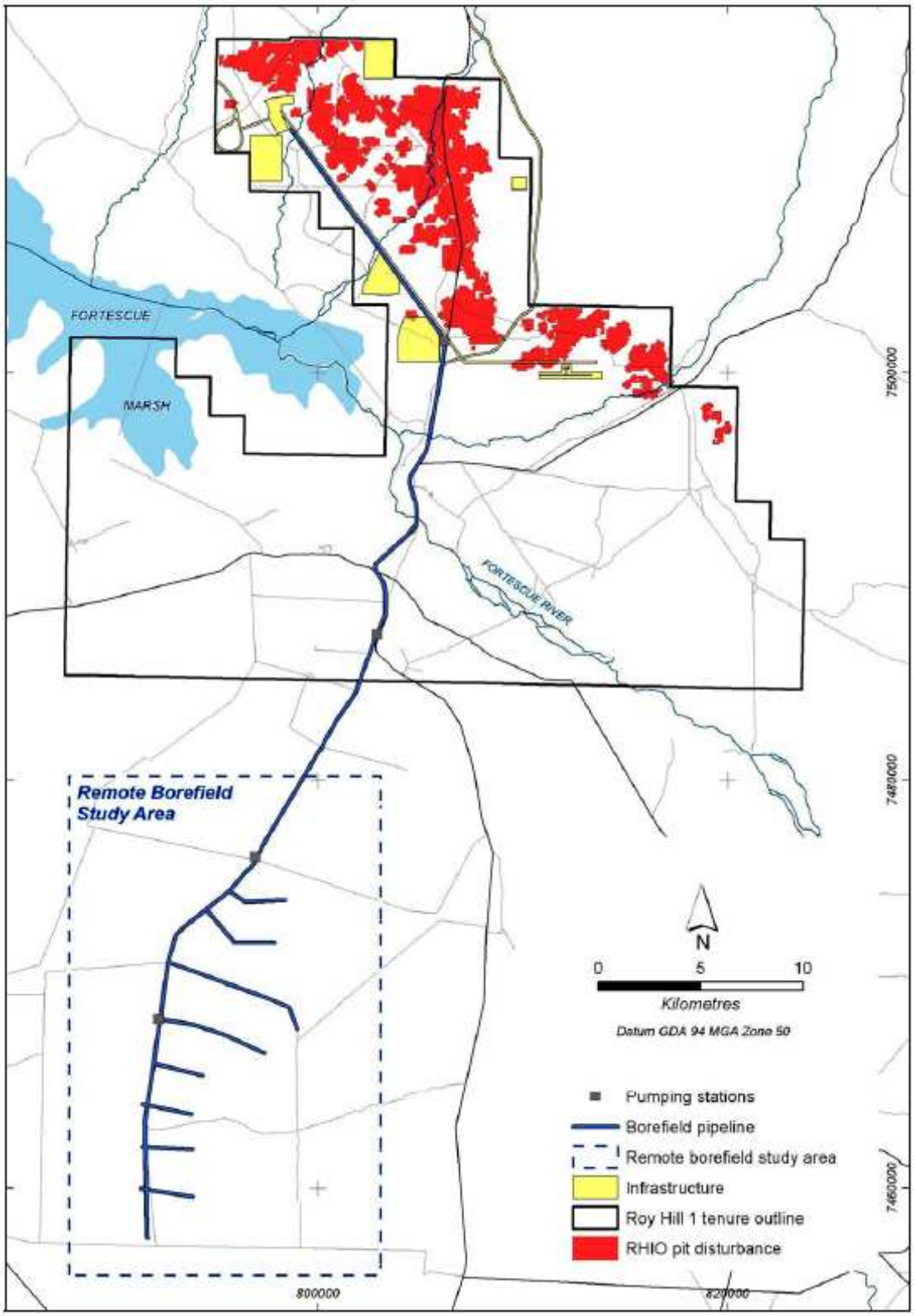

Figure 2 Mine Site and Borefield

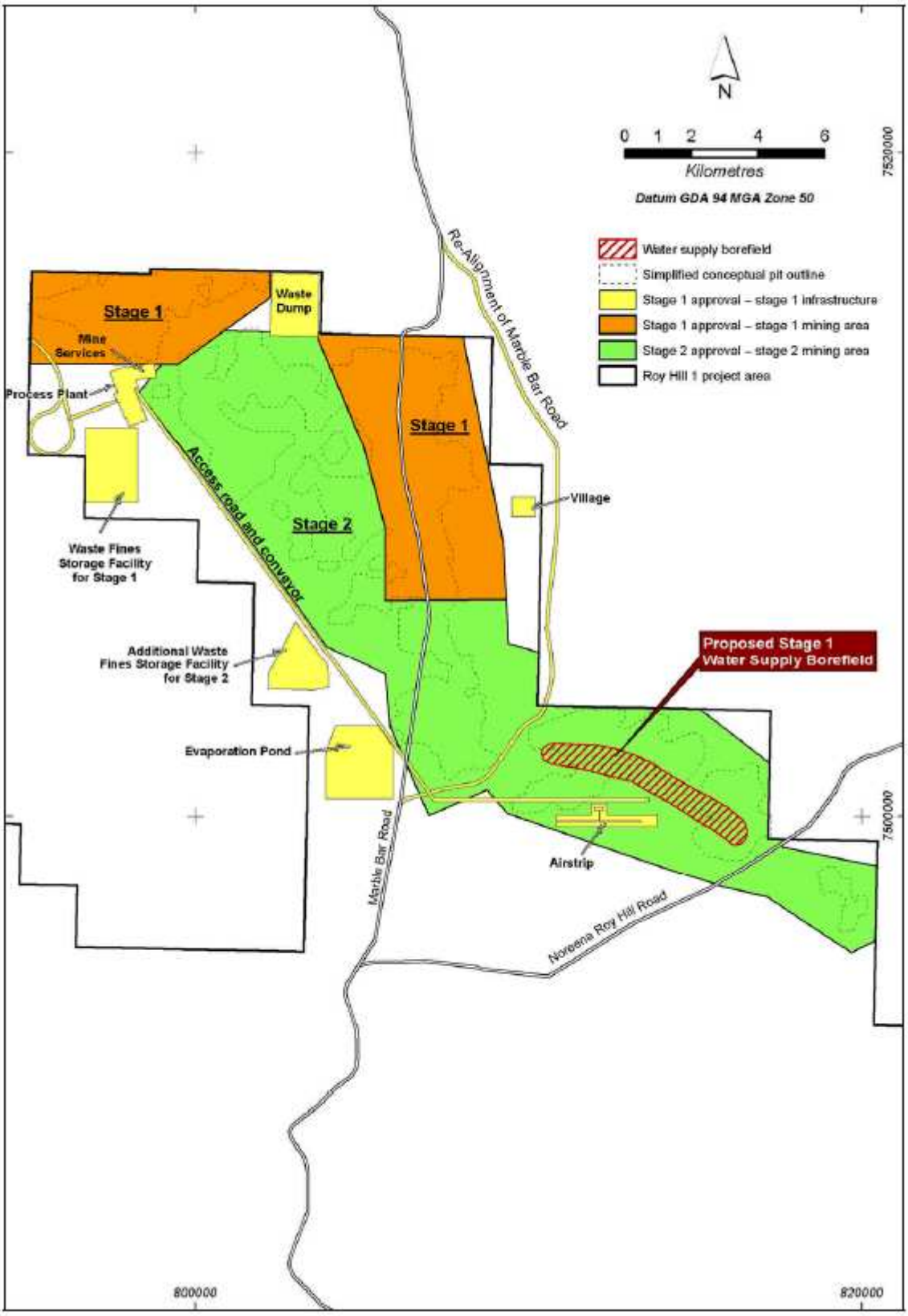

Figure 3 Mining Stages

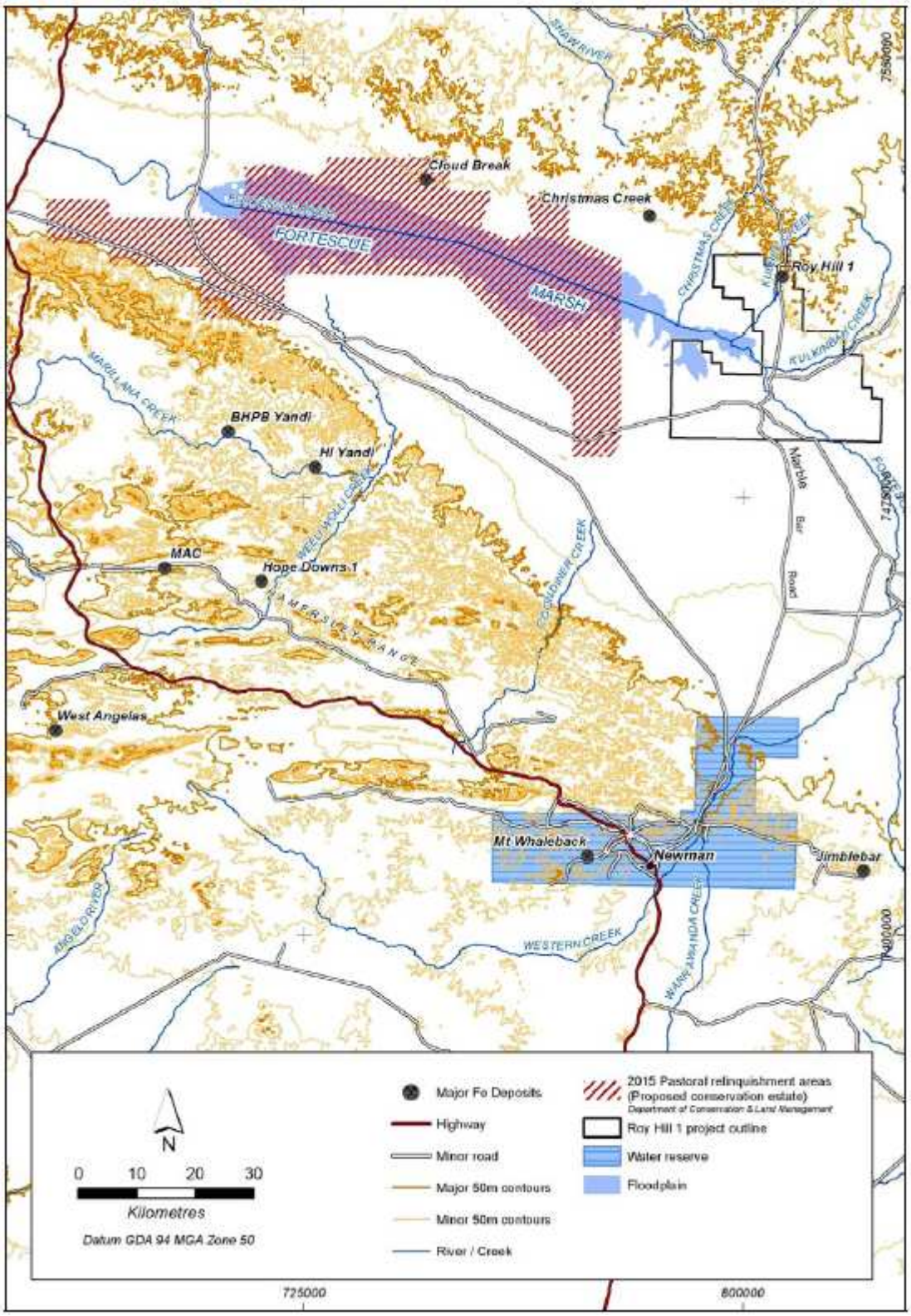

Figure 4 Proposed Fortescue Marsh Conservation Estate

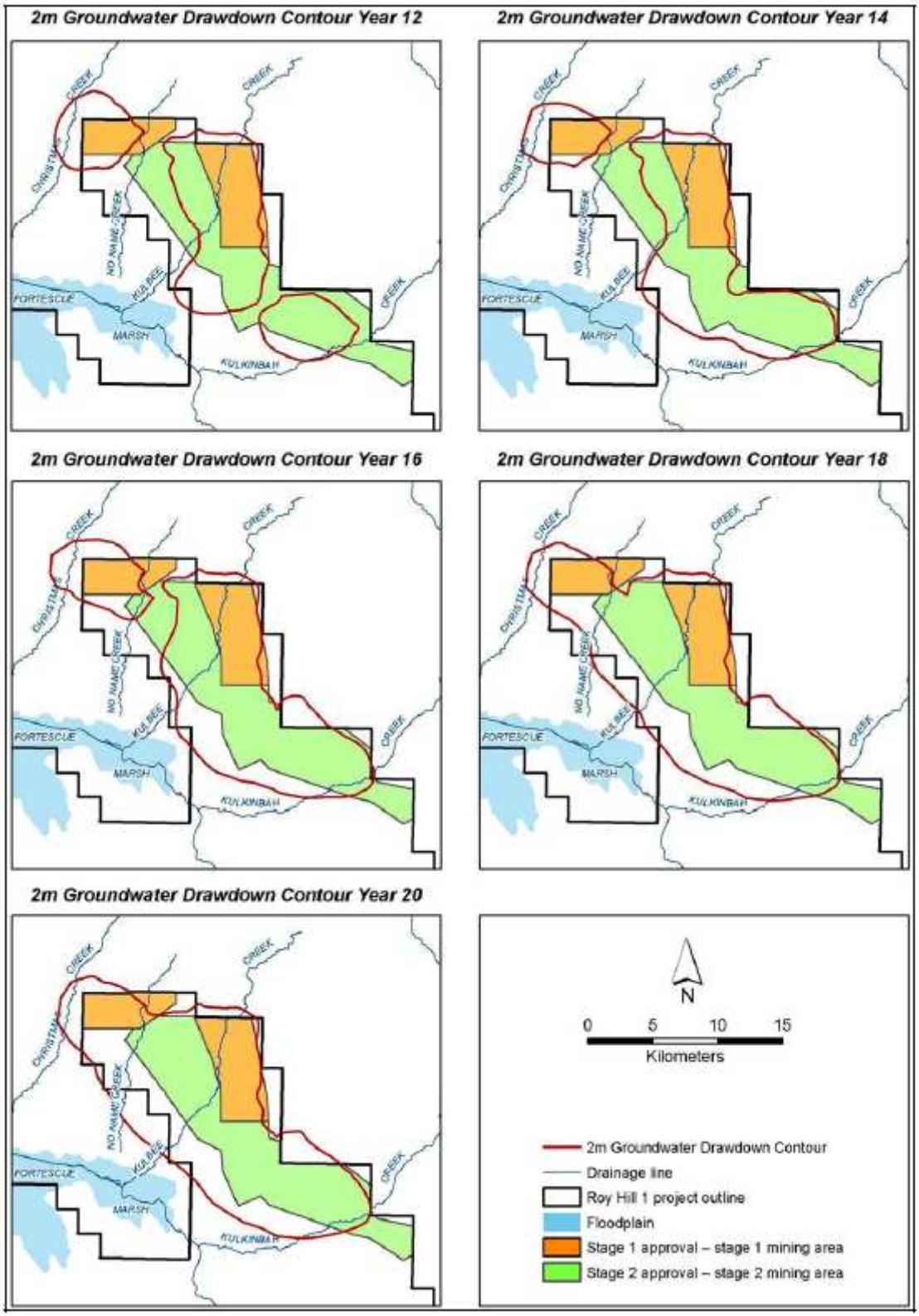

Figure 5 Extent of 2 metre Drawdown – Mining Area

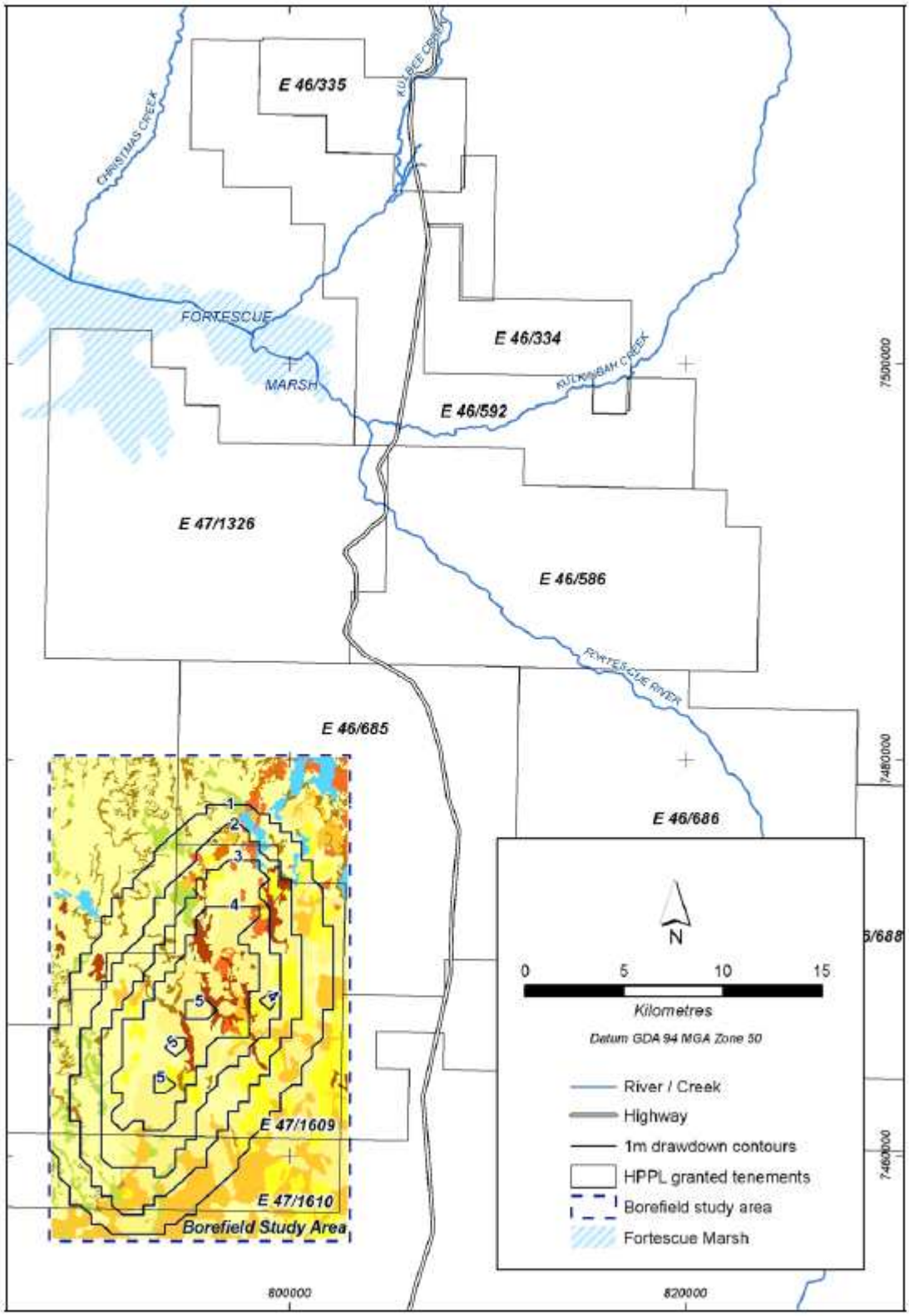

Figure 6 Extent of 1 metre Drawdown - Borefield

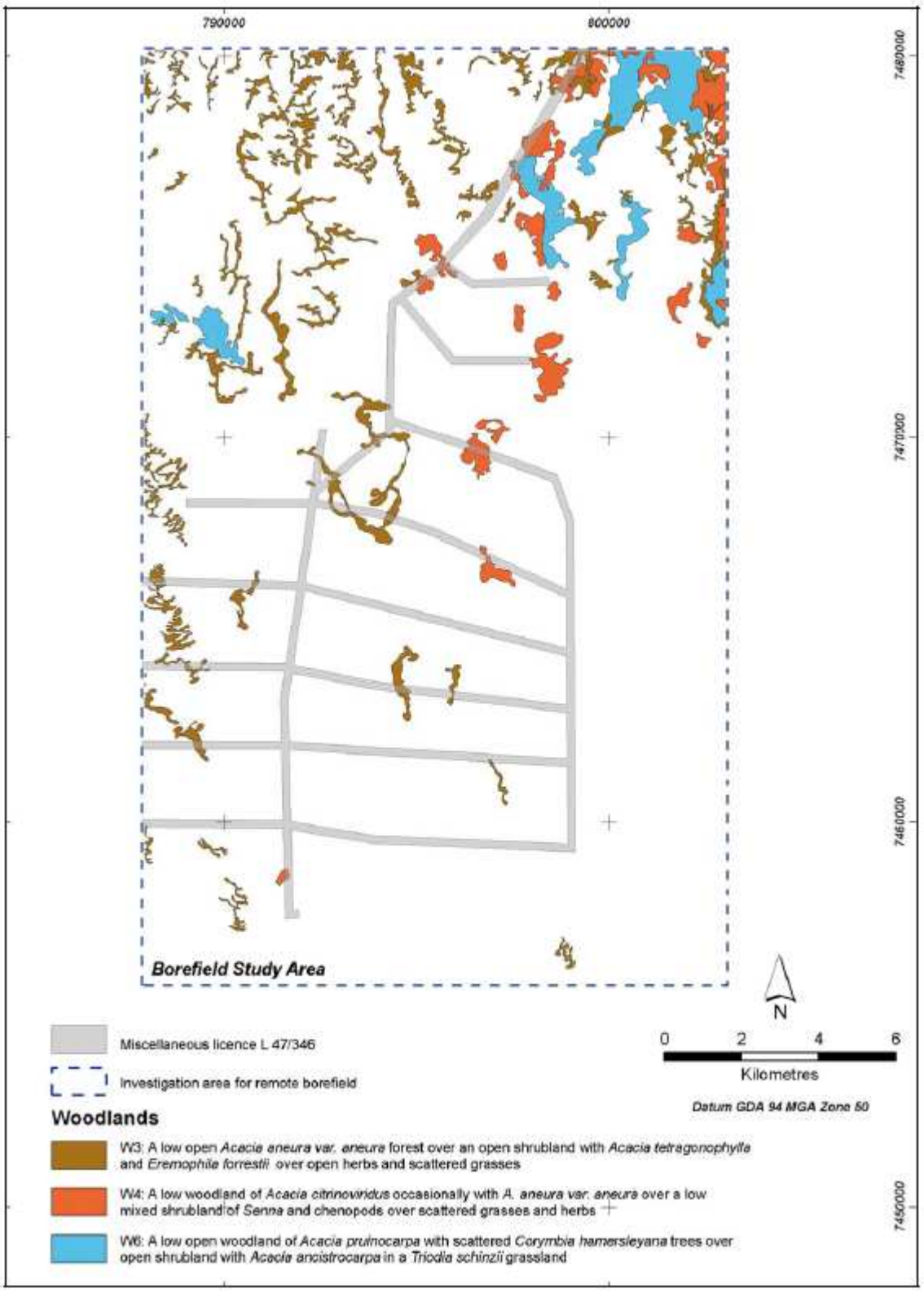

Figure 7 Borefield Layout and Possible Short Range Endemic Habitat

Schedule 2

MGA co-ordinates for the 2 metre groundwater drawdown contours at 20 years.

Coordinate System GDA 1994 MGA Zone 50

Easting	Northing
815985	7498371
816336	7498495
816652	7498679
816922	7498920
817098	7499185
817195	7499480
817218	7499818
817171	7500156
817033	7500527
816676	7501282
816419	7501616
815996	7502096
815730	7502456
814996	7503032
814635	7503452
814189	7503794
813069	7504471
812565	7504866
812262	7505186
811996	7505594
811826	7505707
811493	7505759
810654	7505694
810347	7505602
810167	7505470
809996	7505274
809663	7505651
809140	7506023
808937	7506269
808871	7506478
808890	7506812
808946	7507262
808908	7507476
808687	7507879
808514	7508172
808454	7508371
808469	7508585

Easting	Northing
808768	7509371
808818	7509702
808750	7511041
808663	7511484
808414	7512260
808399	7512586
808567	7513610
808566	7513964
808482	7514281
808359	7514449
807897	7514771
807305	7515122
806996	7515226
806560	7515239
805884	7515195
804480	7515296
804283	7515371
804090	7515489
803996	7515512
803912	7515491
803286	7515027
802996	7514908
802672	7514883
801996	7514903
801562	7514795
801117	7514661
800739	7514626
800360	7514682
800146	7514779
799996	7514935
799853	7515371
799730	7515535
799366	7515777
799079	7515964
798882	7516196
798824	7516371
797853	7516909
797106	7517123
796884	7517121
796553	7517243
795996	7517591
795751	7517639
795490	7517619

Easting	Northing
794204	7517190
793491	7516186
793373	7515819
793351	7515527
793070	7514210
793405	7513659
793817	7513080
794231	7512447
794468	7512243
794917	7511965
795142	7511734
795488	7511289
795886	7510898
795996	7510718
796172	7510054
796398	7509558
796809	7508944
797207	7508371
797654	7507371
798425	7506371
799320	7505371
799820	7504979
800759	7504306
801529	7503704
802230	7503239
803136	7502427
803756	7501914
804065	7501562
804729	7500628
805084	7500250
805582	7499930
806176	7499567
806900	7499060
807485	7498782
808832	7498336
809891	7497762
810210	7497674
811885	7497564
812664	7497572
813442	7497680
814887	7497986
815985	7498371

Schedule 3

MGA co-ordinates for the 1 metre groundwater drawdown contours in the borefield.

Coordinate System GDA 1994 MGA Zone 50

Easting	Northing
800619	7464568
800619	7464098
800619	7463627
800087	7463627
799555	7463157
799555	7462686
799555	7462216
799022	7462216
799022	7461746
798490	7461275
797958	7460805
797958	7460334
797426	7459864
797426	7459393
796894	7458923
796362	7458453
795830	7457982
795298	7457512
795298	7457041
794766	7457041
794234	7456571
793702	7456571
793702	7456101
793170	7456101
792638	7456101
792106	7456101
791574	7456101
791042	7456101
790510	7456571
789978	7456571
789978	7457041
789446	7457512
788913	7457512
788913	7457982
788913	7458453
788381	7458923
788381	7459393

Easting	Northing
788381	7459864
787849	7460334
787849	7460805
787849	7461275
787849	7461746
787849	7462216
787849	7462686
787849	7463157
787849	7463627
787849	7464098
787849	7464568
787849	7465038
787849	7465509
787849	7465979
787849	7466450
788381	7466450
788381	7466920
788381	7467391
788381	7467861
788913	7467861
788913	7468331
788913	7468802
788913	7469272
789446	7469272
789446	7469743
789446	7470213
789978	7470213
789978	7470683
790510	7471154
790510	7471624
790510	7472095
791042	7472095
791042	7472565
791042	7473036
791574	7473036
791574	7473506
792106	7473506
792106	7473976
792638	7474447
793170	7474917
793170	7475388
793702	7475858
794234	7476329

Easting	Northing
794766	7476799
795298	7477269
795830	7477269
795830	7477740
796362	7477740
796894	7477740
797426	7477740
797958	7477740
798490	7477269
799022	7477269
799022	7476799
799555	7476799
799555	7476329
800087	7476329
800087	7475858
800619	7475858
800619	7475388
800619	7474917
801151	7474917
801151	7474447
801151	7473976
801683	7473506
801683	7473036
801683	7472565
801683	7472095
801683	7471624
802215	7471624
802215	7471154
802215	7470683
802215	7470213
802215	7469743
802215	7469272
802215	7468802
802215	7468331
802215	7467861
802215	7467391
801683	7467391
801683	7466920
801683	7466450
801683	7465979
801151	7465509
801151	7465038
800619	7464568

Attachment 1 to Ministerial Statement 829

Change to Proposal

Proposal: Roy Hill 1 Iron Ore Mining Project Stage 2, 110 kilometres north of Newman, Shire of East Pilbara

Proponent: Roy Hill Iron Ore Pty Ltd

Change: Change to mining schedule, location of key infrastructure, groundwater drawdown figure and coordinates (this attachment replaces Figure 2, Figure 3 and Figure 5 of Schedule 1).

Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
Mine Life	20 years (Stage 1 and 2) Stage 2 mine 11 to 20 years	**20 years (Stage 1 and 2)**
Processing Rate	65 Mt/a throughput to produce 55Mt/a ore for export	**Up to** 65 Mt/a throughput to produce 55Mt/a ore for export
Target Grade	60% Iron (Fe) (average lump or fines) or higher	60% Iron (Fe) (average lump or fines) or higher
Mineral Resource	400 Mt bedded Marra Mamba ore, 1 Bt detrital ore	**Up to** 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore
Strip Ratio	4:1 (average overburden to ore ratio)	4:1 (average overburden to ore ratio)
Area of Disturbance	4,793 ha	**Up to** 4,793 ha
Maximum Pit Depth	100 m	100 m **nominal**
Overburden	2,000 Mt	**Up to** 2,000 Mt
Water Supply	150,000 ML from the remote borefield 48,000 ML from mine dewatering	150,000 ML from the remote borefield 48,000 ML from mine dewatering
Mine Dewatering	223,000 ML (Average 61 ML per day)	223,000 ML (Average 61 ML per day)
Saline Dewater for Disposal	175,000 ML	175,000 ML

(a) Abbreviations

Bt	billion tonnes	ML	megalitre
ha	hectares	Mt	million tonnes
GL	gigalitre	Mt/a	million tonnes per annum
m	metre		

Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

List of Figures:

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 3 February 2012

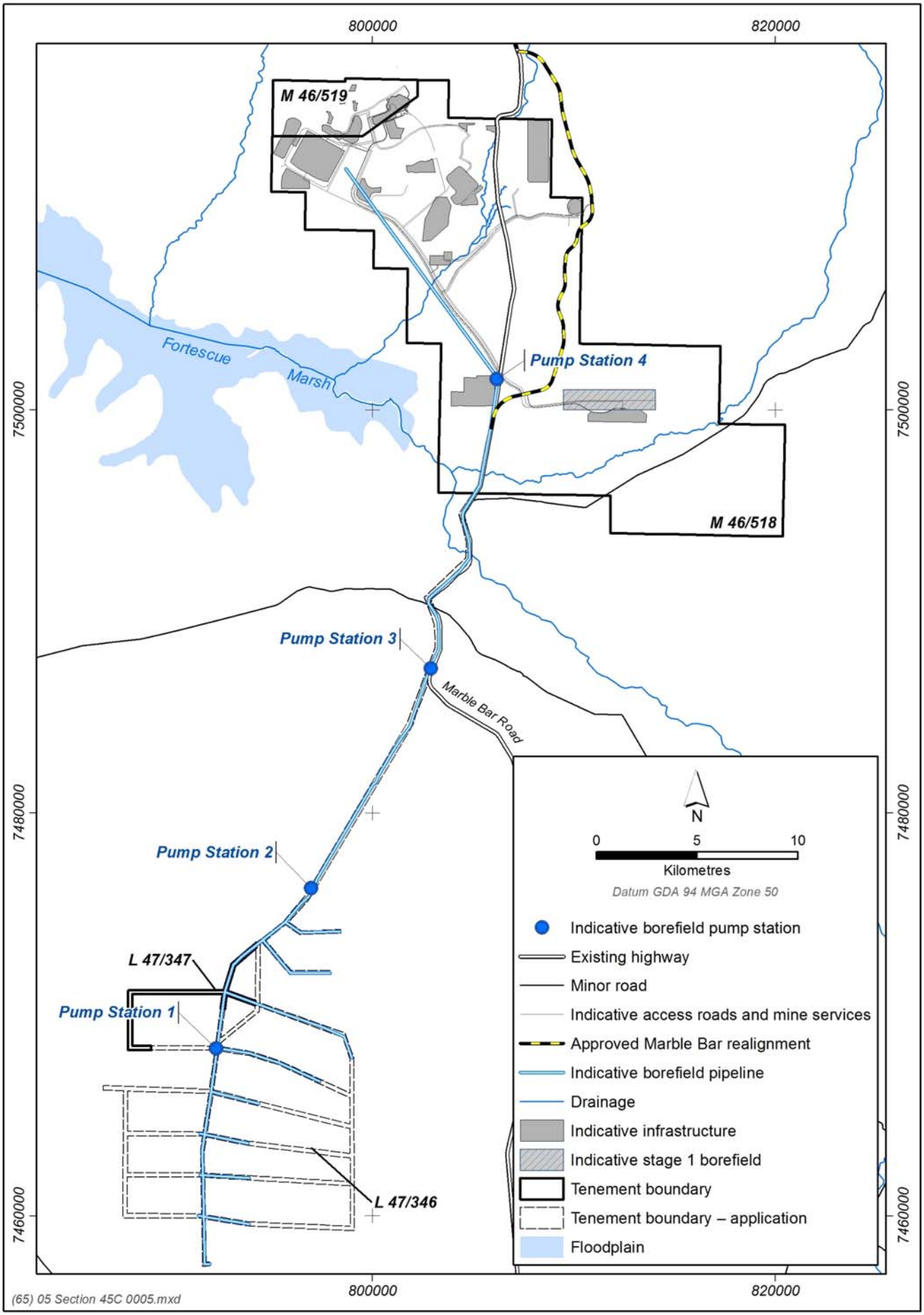

Figure 8: Mine site and borefield general area

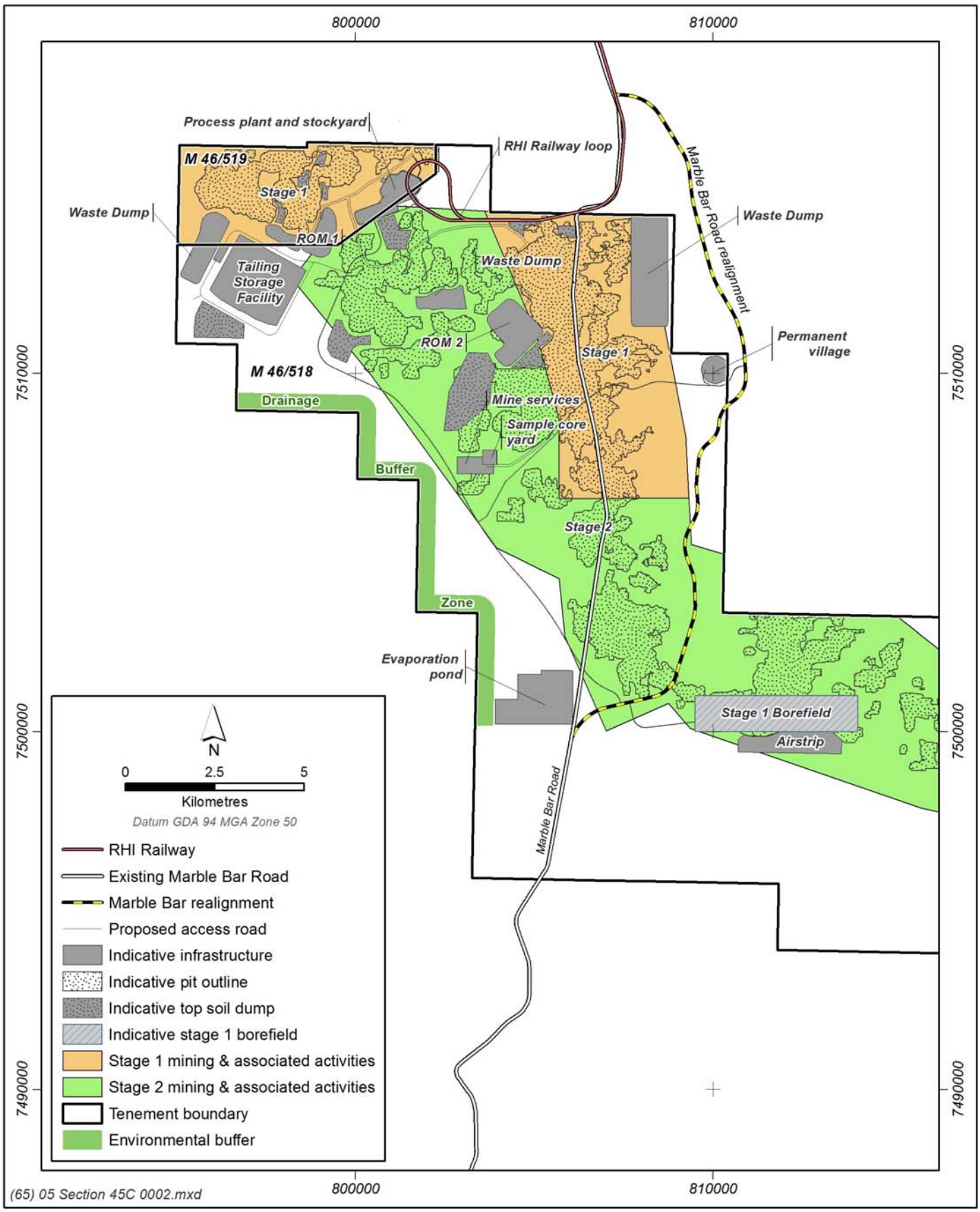

Figure 9: Mining stages and indicative infrastructure layout

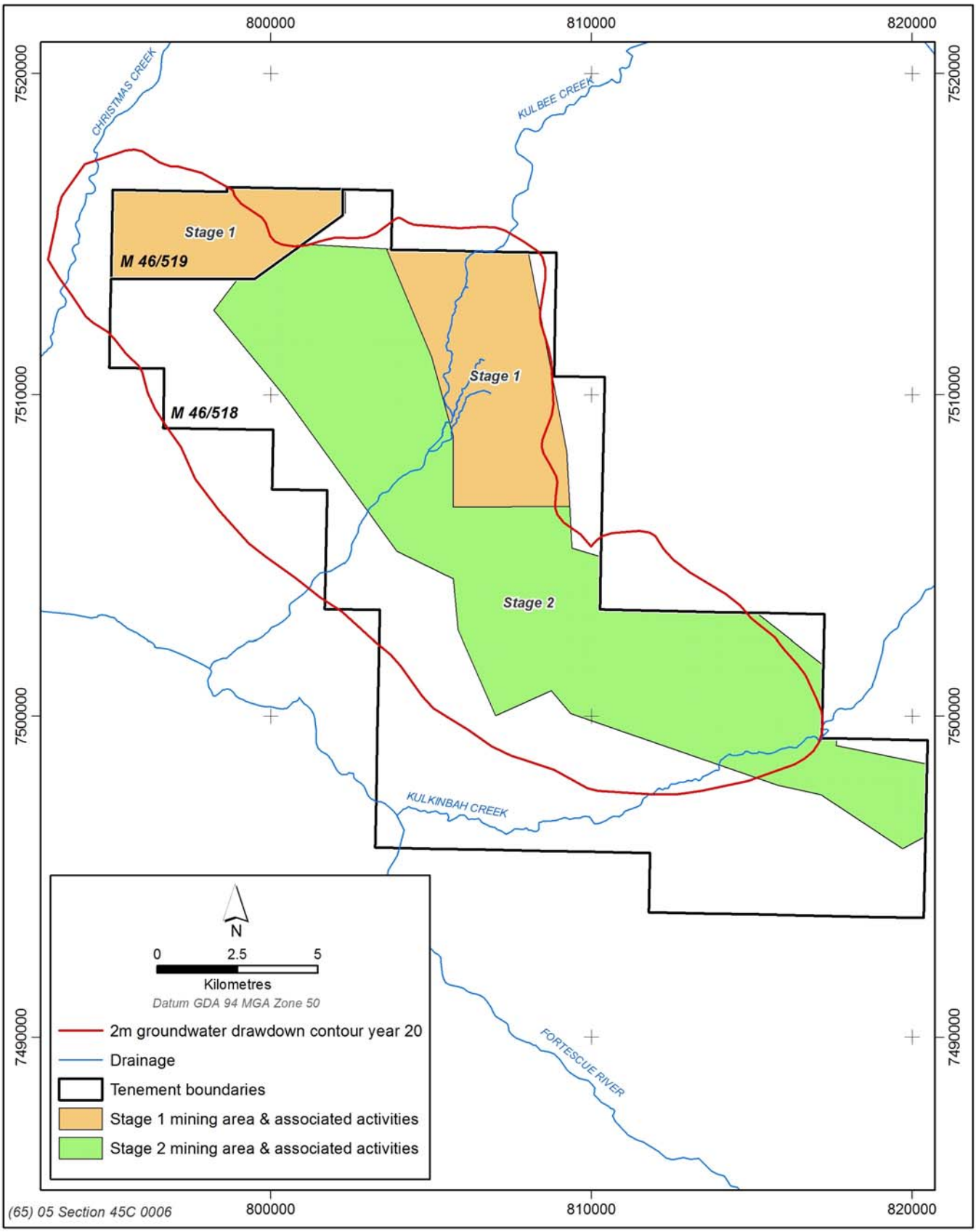

Figure 10: Maximum extent of 2 metre groundwater drawdown

Attachment 2 to Ministerial Statement 829

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

This Attachment replaces Table 1 in Schedule 1 and the Key Characteristics Table in Attachment 1 of Ministerial Statement 829

Changes:

- Change to mine dewatering volume and rate
- Change to description of saline water disposal to include use for dust suppression
- Minor changes to units of measurement (volume)

Table 1: Summary of the Proposal

Proposal Title	Roy Hill 1 Iron Ore Mining Project Stage 2
Proponent	Roy Hill Iron Ore Pty Ltd
Short Description	• Mining of iron ore from the Stage 2 project area on the southern slopes of the Chichester Range. • Construction and operation of a remote borefield, water pipeline and associated infrastructure (pump stations, power and water pipelines).

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

Element	Location	Previously Authorised Extent	Authorised Extent
Mine Life		20 years (Stage 1 and Stage 2)	20 years (Stage 1 and Stage 2)
Processing Rate		Up to 65 Mt/a throughput to produce 55Mt/a ore for export	Up to 65 Mt/a throughput to produce 55Mt/a ore for export
Target Grade		60% Iron (Fe) (average lump or fines) or higher	60% Iron (Fe) (average lump or fines) or higher
Mineral Resource		Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore	Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore
Strip Ratio		4:1 (average overburden to ore ratio)	4:1 (average overburden to ore ratio)
Area of Disturbance	Within the Stage 2 Proposal Area as shown in Figure 9	Up to 4,793 ha	Up to 4,793 ha
Maximum Pit Depth		100 m nominal	100 m nominal
Overburden		Up to 2,000 Mt	Up to 2,000 Mt

Element	Location	Previously Authorised Extent	Authorised Extent
Water Supply		150,000 ML from the remote borefield 48,000 ML from mine dewatering	**150 GL** from the remote borefield **48 GL** from mine dewatering
Mine Dewatering		223,000 ML (Average 61 ML per day)	**286 GL total for Stage 1 and Stage 2**
Dewatered Saline Groundwater to be disposed of to Evaporation Ponds		175,000 ML	**Up to 198 GL for Stage 1 and Stage 2**
Dewatered Saline Groundwater to be used for dust suppression			**Up to 3.7 GL/a for Stage 1 and Stage 2**

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

Table 3: Abbreviations

Abbreviation	Term	Abbreviation	Term
Bt	billion tonnes	m	metres
GL	gigalitre	ML	megalitres
GL/a	gigalitres per annum	ML/a	megalitres per annum
ha	hectare	Mt	million tonnes
km	kilometre	Mt/a	million tonnes per annum

[signed 11 February 2016]

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Attachment 3 to Ministerial Statement 829

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

This Attachment replaces Table 1 in Schedule 1, the Key Characteristics Table in Attachment 1, Table 2 in Attachment 2, and Inserts Figure 11.

Changes:

- Change to allow for an increase in mine dewatering volumes and Managed Aquifer Recharge reinjection of surplus dewatered groundwater for a trial period of two (2) years.

Table 1: Summary of the Proposal

Proposal Title	Roy Hill 1 Iron Ore Mining Project Stage 2
Proponent	Roy Hill Iron Ore Pty Ltd
Short Description	• Mining of iron ore from the Stage 2 project area on the southern slopes of the Chichester Range. • Construction and operation of a remote borefield, water pipeline and associated infrastructure (pump stations, power and water pipelines).

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

Element	Location	Previously Authorised Extent	Authorised Extent
Mine Life		20 years (Stage 1 and Stage 2)	20 years (Stage 1 and Stage 2)
Processing Rate		Up to 65 Mt/a throughput to produce 55Mt/a ore for export	Up to 65 Mt/a throughput to produce 55Mt/a ore for export
Target Grade		60% Iron (Fe) (average lump or fines) or higher	60% Iron (Fe) (average lump or fines) or higher
Mineral Resource		Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore	Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore
Strip Ratio		4:1 (average overburden to ore ratio)	4:1 (average overburden to ore ratio)
Area of Disturbance	Within the Stage 2 Proposal Area as shown in Figure 9	Up to 4,793 ha	Up to 4,793 ha
Maximum Pit Depth		100 m nominal	100 m nominal
Overburden		Up to 2,000 Mt	Up to 2,000 Mt

Element	Location	Previously Authorised Extent	Authorised Extent
Water Supply		150 GL from the remote borefield 48 GL from mine dewatering	150 GL from the remote borefield 48 GL from mine dewatering
Mine Dewatering		286 GL total for Stage 1 and Stage 2	**Up to 396 GL total for Stage 1 and Stage 2**
Dewatered Saline Groundwater to be disposed of to Evaporation Ponds		Up to 198 GL for Stage 1 and Stage 2	**Up to 36 GL total for Stage 1 and Stage 2**
Dewatered Saline Groundwater to be used for dust suppression		Up to 3.7 GL/a for Stage 1 and Stage 2	Up to 3.7 GL/a for Stage 1 and Stage 2
Dewatered Saline Groundwater (up to – 30,000MG/L TDS) and RO Plant reject water to be disposed to recharge basins and/or reinjection bores	**Figure 11**	**New element**	**Up to 55 GL per annum for a period of up to 2 years.**

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

Table 3: Abbreviations

Abbreviation	Term	Abbreviation	Term
Bt	billion tonnes	m	metres
GL	gigalitre	ML	megalitres
GL/a	gigalitres per annum	ML/a	megalitres per annum
ha	hectare	Mt	million tonnes
km	kilometre	Mt/a	million tonnes per annum

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: _____

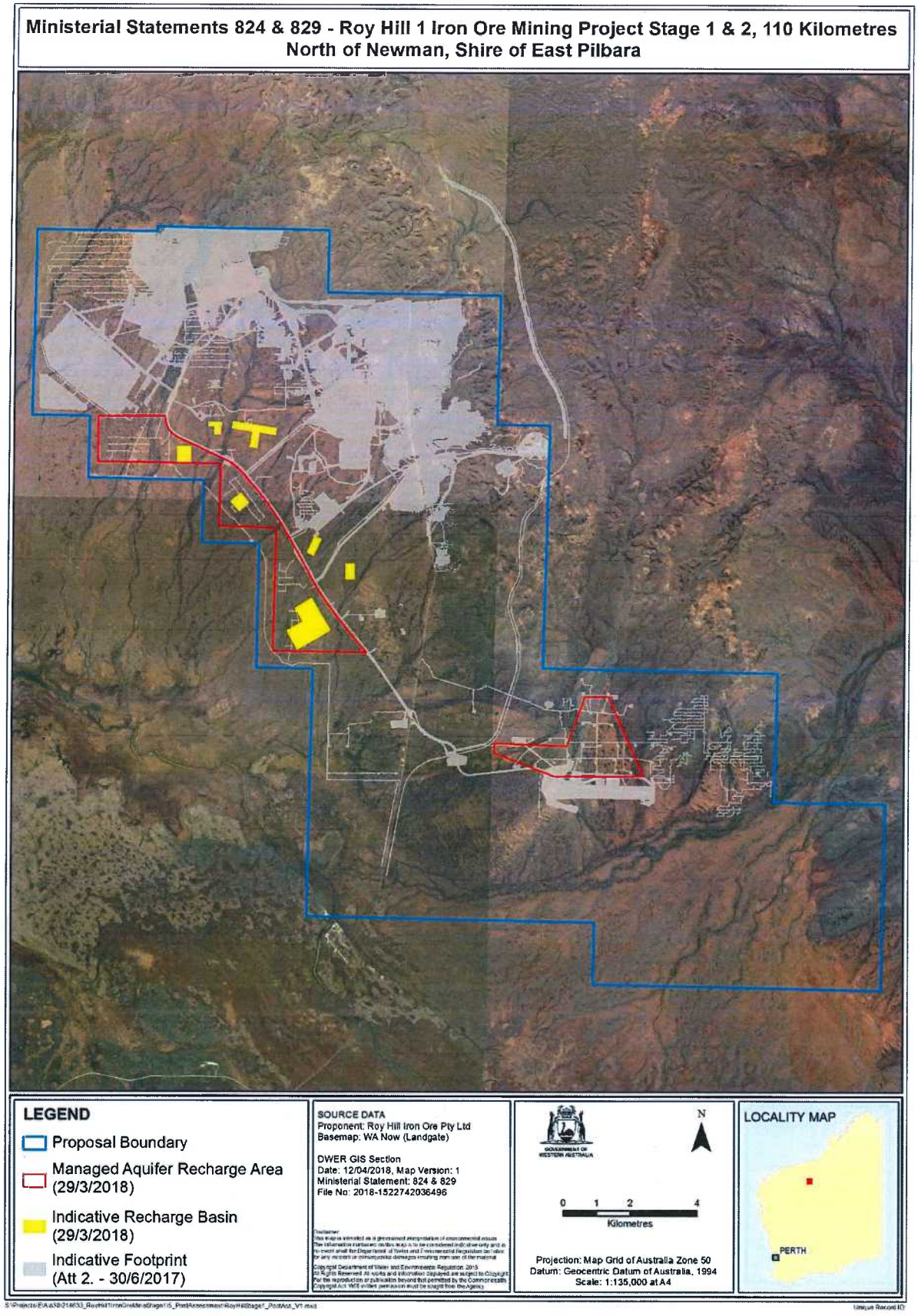

Figure 11: Managed Aquifer Recharge Area and Indicative Recharge Basins

Attachment 4 to Ministerial Statement 829

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

This Attachment replaces Table 1 in Schedule 1, the Key Characteristics Table in Attachment 1, Table 2 in Attachment 2, Table 1 and Table 2 in Attachment 3.

Changes:

- Removal of processing rate.

Table 1: Summary of the Proposal

Proposal Title	Roy Hill 1 Iron Ore Mining Project Stage 2
Short Description	• Mining of Iron Ore from the Stage 2 project area on the southern slopes of the Chichester Range. • Construction and operation of a remote borefield, water pipeline and associated infrastructure (pump stations, power and water pipelines).

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

Element	Location	Previously Authorised Extent	Authorised Extent
Mine Life		20 years (Stage 1 and Stage 2)	20 years (Stage 1 and Stage 2)
Processing Rate		Up to 65 Mt/a throughput to produce 55 Mt/a ore for export	**Removed as regulated under Part V of the Environmental Protection Act 1986.**
Target Grade		60% Iron (Fe) (average lump or fines) or higher	60% Iron (Fe) (average lump or fines) or higher
Mineral Resource		Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore	Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore
Strip Ratio		4:1 (average overburden to ore ratio)	4:1 (average overburden to ore ratio)
Area of disturbance	Within the Stage 2 Proposal Area as shown in Figure 9	Up to 4,793 ha	Up to 4,793 ha
Maximum Pit Depth		100 m nominal	100 m nominal
Overburden		Up to 2,000 Mt	Up to 2,000 Mt
Water Supply		150 GL from the remote borefield 48 GL from mine dewatering	150 GL from the remote borefield 48 GL from mine dewatering

Element	Location	Previously Authorised Extent	Authorised Extent
Mine Dewatering		Up to 396 GL total for Stage 1 and Stage 2	Up to 396 GL total for Stage 1 and Stage 2
Dewatered Saline Groundwater to be disposed of to Evaporation Ponds		Up to 36 GL total for Stage 1 and Stage 2	Up to 36 GL total for Stage 1 and Stage 2
Dewatered Saline Groundwater to be used for dust suppression		Up to 3.7 GL/a for Stage 1 and Stage 2	Up to 3.7 GL/a for Stage 1 and Stage 2
Dewatered Saline Groundwater (up to –30,000MG/L TDS) and RO Plant reject water to be disposed to recharge basins and/or reinjection bores	Figure 11	Up 55 GL per annum for a period of up to 2 years	Up 55 GL per annum for a period of up to 2 years

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

Table 3: Abbreviations

Abbreviation	Term	Abbreviation	Term
Bt	Billion tonnes	m	metres
GL	gigalitre	ML	megalitres
GL/a	Gigalitres per annum	ML/a	megalitres per annum
ha	hectare	Mt	million tonnes
km	kilometre	Mt/a	million tonnes per annum

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: _____

Attachment 5 to Ministerial Statement 829

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

This Attachment replaces Table 1 in Schedule 1, the Key Characteristics Table in Attachment 1, Table 2 in Attachment 2, Table 1 and Table 2 in Attachment 3, Table 1 and Table 2 in Attachment 4

Changes:

- Up to three year extension of the current two year reinjection trial disposing of surplus water resulting from mine dewatering, reject water from reverse osmosis plant and decant from Tailings Storage Facilities (TSF), with salinity up to 30,000 mg/L TDS, into recharge basins and/or reinjection bores within the mine tenement

Table 1: Summary of the Proposal

Proposal Title	Roy Hill 1 Iron Ore Mining Project Stage 2
Proponent	Roy Hill Iron Ore Pty Ltd
Short Description	• Mining of iron ore from the Stage 2 project area on the southern slopes of the Chichester Range. • Construction and operation of a remote borefield, water pipeline and associated infrastructure (pump stations, power and water pipelines).

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

Element	Location	Previously Authorised Extent	Authorised Extent
Mine Life		20 years (Stage 1 and Stage 2)	20 years (Stage 1 and Stage 2)
Target Grade		60% Iron (Fe) (average lump or fines) or higher	60% Iron (Fe) (average lump or fines) or higher
Mineral Resource		Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore	Up to 400 Mt bedded Marra Mamba ore, 1 Bt detrital ore
Strip Ratio		4:1 (average overburden to ore ratio)	4:1 (average overburden to ore ratio)
Area of Disturbance	Within the Stage 2 Proposal Area as shown in Figure 9	Up to 4,793 ha	Up to 4,793 ha
Maximum Pit Depth		100 m nominal	100 m nominal
Overburden		Up to 2,000 Mt	Up to 2,000 Mt

Element	Location	Previously Authorised Extent	Authorised Extent
Water Supply		150 GL from the remote borefield 48 GL from mine dewatering	150 GL from the remote borefield 48 GL from mine dewatering
Mine Dewatering		Up to 396 GL total for Stage 1 and Stage 2	Up to 396 GL total for Stage 1 and Stage 2
Dewatered Saline Groundwater to be disposed of to Evaporation Ponds		Up to 36 GL total for Stage 1 and Stage 2	Up to 36 GL total for Stage 1 and Stage 2
Dewatered Saline Groundwater to be used for dust suppression		Up to 3.7 GL/a for Stage 1 and Stage 2	Up to 3.7 GL/a for Stage 1 and Stage 2
Dewatered Saline Groundwater (up to –30,000MG/L TDS), Reverse Osmosis Plant reject water and Tailing Storage Facility Decant to be disposed to recharge basins and/or reinjection bores	Figure 11	Up to 55 GL per annum for a period of up to 2 years.	Up to 55 GL per annum for an **additional period of up to 3 years (total trial of 5 years)**

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

Table 3: Abbreviations

Abbreviation	Term	Abbreviation	Term
Bt	billion tonnes	ML	megalitres
GL	gigalitre	ML/a	megalitres per annum
GL/a	gigalitres per annum	MG/L	milligrams per litre
ha	hectare	Mt	million tonnes
m	metres		

Signed 30 September 2020

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority