Development Application for a Material Change of Use and Operational Works triggered by a planning scheme

Access road upgrade and ongoing maintenance

Centre	**Rio Tinto Projects**		
Effective date	26/02/2016	**Status**	Final
Document number	CAL.01-0000-HH-REP-00013	**Revision number**	2

Contents page

LIST OF TABLES

LIST OF FIGURES

Acronyms

Term	Definition
AHD	Australian Height Datum
ALC	agricultural land classification
ASC	Aurukun Shire Council
ASS	Acid Sulphate Soils
DILGP	Department of Infrastructure, Local Government and Planning
DTMR	Department of Transport and Main Roads
EMCZ	Environmental Management and Conservation Zone
FNQROC	Far North Queensland Region of Councils
H	Horizontal
IDAS	Integrated Development Assessment System
ILUA	Indigenous Land Use Agreement
MCU	Material Change of Use
MSES	Matters of State Environmental Significance
NAK	Ngan Aak-kunch Aboriginal Corporation Registered Native Title Body Corporate
PAA	Priority Agriculture Area
PLA	Priority Living Area
PPE	Personal protective equipment
RNTBC	Registered Native Title Body Corporate
RTA	Rio Tinto Alcan
RTAW	Rio Tinto Alcan Weipa Pty Ltd
SDAP	State Development Assessment Procedures
SEA	Strategic Environmental Area
SP Act	*Sustainable Planning Act 2009*
SP Reg.	*Sustainable Planning Regulation 2009*
SPP	State Planning Policy
V	Vertical
WoNs	Weeds of National Significance

1 Introduction

This development application for the upgrade and maintenance of the access road within Lot 211 on SP241404 has been prepared by RTA Weipa Pty Ltd (RTAW) on behalf of the Ngan Aak-kunch Aboriginal Corporation Registered Native Title Body Corporate (RNTBC) (NAK), the land owner and applicants for this development application. The proposed work will improve the safety of the existing access road within Lot 21 on SP241404.

The access road is located on land owned by the NAK (refer Appendix A). The location of the access road is shown on Figure 1-1. The road is an access road on private property and is not a declared road under the *Land Act 1994* (Qld) (Land Act). There is no intention to change the status of the road as per the Land Act.

The proposed works are in response to an increase in vehicle movements along the road (refer Section 2.3). The works will upgrade to the existing running surface of the road and widen the road at nominated points to provide vehicle passing bays. These works will allow for continued safe use of the access road as the vehicle movements increase.

The intensification of use of the existing road and establishment of passing bays in areas not currently used as a road trigger a development application for a Material Change of Use (MCU) under the Aurukun Shire Council Planning Scheme (the Planning Scheme) (ASC, 2013).

It is acknowledged that the proposed development does not fit within a use definition in the Aurukun Shire Council Planning Scheme (the Planning Scheme) (ASC, 2013). However, the application is impact assessable and the purpose of the description of the proposed development is to allow members of the public to understand the nature of the proposed development, so they can decide whether or not to make a submission about the application. RTAW considers that its description of the proposed development is appropriate, because it clearly and accurately describes what is proposed, being an increase in the use of an existing access road which is currently used by the public. Whether the access road is declared as a road under the Land Act and whether the original use of the access road was established under a development permit are not relevant to the description of the proposed development during the public consultation stage for the proposed development.

Vegetation is required to be cleared to establish the passing bays and to also re-establish the road alignment in areas where regrowth has occurred within the road alignment. Ongoing maintenance will also be undertaken as part of the proposed works. Ongoing maintenance will consist of clearing any encroachment of vegetation into the road alignment and/or vegetation outside the road alignment that poses a health and safety risk to users of the road. Vegetation clearing triggers a development application for operational works under the Planning Scheme and Schedule 3 of the *Sustainable Planning Regulation 2009* (Qld) (SP Reg.).

Access road

No works are proposed for Aurukun Road as part of this application.

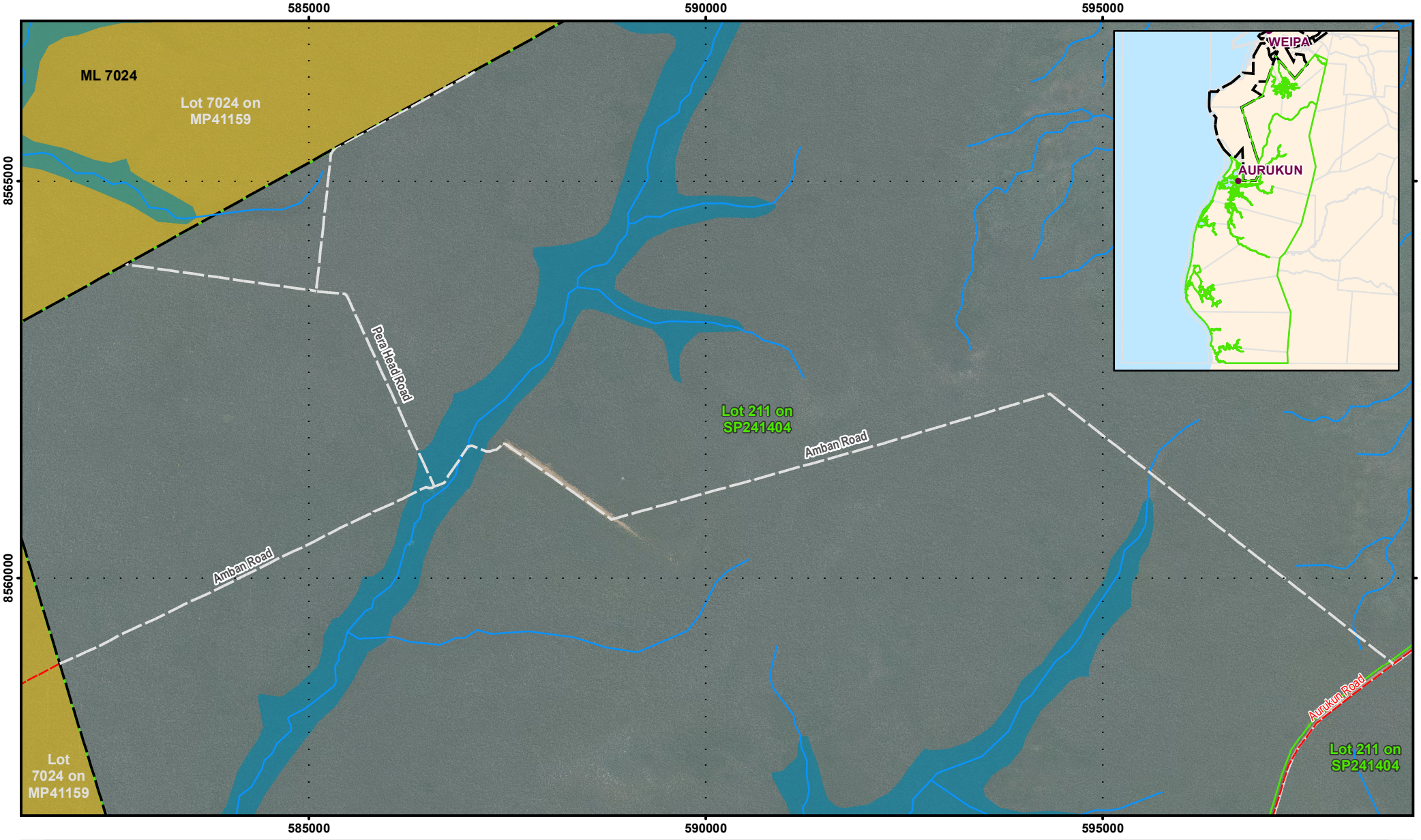
This report provides information to support the MCU and operational works application and demonstrates how the proposed works meet the requirements of the Planning Scheme.

This report details the following aspects:

- Description of the existing access road (Section 2).
- Details of the proposed development (Section 3).
- Physical and ecological characteristics of the locality (Section 4).
- Summary of pre-lodgement discussions (Section 5).
- Statutory planning assessment (Section 6).

The relevant Integrated Development Assessment System (IDAS) forms are included in Appendix B. Mandatory information identified on the IDAS forms have been provided where relevant. Where not relevant (e.g., plans showing the nature, location, number of new on-site car parking bays, landscaping, type of new vehicle cross-over, maximum new vehicular servicing arrangement, retaining walls) this information has not been included as none of these features are proposed as part of the new operational work.

The details of this Development Application are summarised in Table 1-1.



Rio Tinto Alcan

Legend

- Development Area
- Road
- Watercourse
- RTA Mining Lease boundary
- Cadastre
- Lot 211 on SP241404
- Floodplain Assessment Overlay

Local Government Areas

- Aurukun Shire
- Cook Shire

Development Application for MCU and Operational Works

Figure 1.1
Location of Access Road

N

1 0.5 0 1 Km

DatumProjection: GDA 94 MGA Zone 54 Date: 26/02/2016

Table 1-1 Development application summary

Real Property description	Lot 211on SP241404, held in freehold title by the Ngan Aak-Kunch Aboriginal Corporation RNTBC, pursuant to the provisions of the *Aboriginal Land Act 1991*
Owners Consent	The NAK are the owner and applicant.
Site Area	*Lot 211 on SP241404 is 706,400 ha* The area for the MCU and Operational Works is approximately 11.84 ha
Applicant Name	Ngan Aak-kunch Aboriginal Corporation RNTBC (NAK)
Applicant Details	C/- Mr Philippe Savidis, Cape York Land Council 32 Florence Street, CAIRNS QLD 4870
Assessment Manager	In accordance with Schedule 6, Table 1, 1(I) of the SP Regulation, the assessment manager is Aurukun Shire Council.
Relevant Land Use Plan	Aurukun Shire Planning Scheme (ASC, 2013)
Precinct	Environmental Management and Conservation Zone (EMCZ)
Application type	• Material Change of Use triggered under a planning scheme • Operational Works triggered under a planning scheme (clearing of vegetation within the EMCZ) • Operational Works triggered under a planning scheme (earthworks (excavation and filling)
Proposed Use	• Access road (an undefined use under the Planning Scheme)
Level of Assessment	Impact assessment – MCU Code assessment – Operational works
Referral Agencies	• There are no referral agencies for this application. • Works are proposed to be undertaken in watercourses mapped as impact waterways on the spatial data layer Queensland Waterways for Waterway Barrier Works. Works proposed to be undertaken within these watercourses meet the requirements of self-assessable development as per Schedule 3, Part 2, Table 4, Item 2 of the *Sustainable Planning Regulation 2009*. As such, the works will comply with the requirements of *Code for self-assessable development Minor waterway barrier works: Part 4: bed level crossings (code number: WWBW01 April 2013)* (DAFF, 2013). • Clearing of vegetation is not triggered as operational works under Schedule 3, Table 4, Item 1 under the *Sustainable Planning Regulation 1999* as the clearing is necessary for essential management and necessary for routine management, which are purposes stated in Schedule 24, Part 2 of the *Sustainable Planning Regulation 1999*.

2 Existing access road

2.1 Existing condition

The access road is located to the west of Aurukun Road and approximately 40 km north of the township of Aurukun (refer Figure 1-1). The access road is made up of roads known locally as Amban Road and Pera Head Road (hereafter referred to collectively as the access road). The access road connects the subject lot and allotments to the west with Aurukun Road in the east. It also provides access to cultural heritage sites to the west of the subject lot.

From the intersection with Aurukun Road, the access road is approximately 25 km in length. The road is unpaved, single land formation approximately 4 m wide. The width of the road varies along the alignment due to vegetation which has encroached into the alignment. Figure 2-1 shows the typical condition of the existing running surface of the road.

Figure 2-1 Typical condition of the existing running surface

2.2 Existing use

Existing users of the access road include both NAK representatives and other members of the public. The road is also used by a number of exploration and mining companies. Vehicles currently using the road include light passenger vehicles, heavy equipment floats, AB-double combination trucks and triple trailer road trains.

No formal traffic counts of existing vehicle movements have been undertaken for the access road. However, use of the road is generally seasonal, with the highest traffic

volumes during the dry season (April to October) when creek water levels are low and/or ephemeral creeks are dry.

2.3 Future use

The existing vehicle movements on the road are not known; however, it is known that vehicle movements on the road are anticipated to increase as a result of the development of mining and exploration projects in the area. While not all predicted vehicle movements are known, it is estimated that the vehicle movements associated with the RTAW Amrun Project[1] would see up to 1,092 vehicle movements along the access road during the project construction phase (approximately eight months of the dry season). Vehicle movements associated with Amrun Project will decrease as the construction progresses and mining operations commence; however it is estimated up to 314 ongoing vehicle movements during the dry season may still be required. The types of vehicles that use the road are not anticipated to change from those currently using the road.

Should there be further increase in vehicle movements due to the development of other projects in the area, an evaluation of this use and the potential to trigger another MCU will need to be undertaken at that time.

[1] Formally known as the South of Embley Project

3 Details of development

3.1 Development overview

It is proposed to upgrade the road to improve access and continue to provide safe use of the road as vehicle movement increases. Road upgrade activities will include the following activities:

- Clearing vegetation that has encroached into the existing road alignment to provide a 4 m wide running surface along the entire road.
- Clear vegetation adjoining the road to provide passing bays at nominated locations along the road.
- Form road side windrow turn-outs to limit the concentration of overland flow within road alignment.
- Stabilise windrows including outlets and drainage lines.
- Upgrade of the waterway crossings along the road alignment.

Ongoing maintenance of the road will also be undertaken. The on-going maintenance activities include the following activities to be undertaken:

- Maintain the width of the road alignment by removing regrowth within the alignment.
- Remove vegetation outside of the road alignment that poses a potential health and safety risk to road users.
- Repair running surface of the road to a suitable condition for the type of vehicles using the road.
- Carry out dust suppression as required.

3.2 Construction methodology and equipment

The running surface will be inspected after the 2015/16 wet season. The condition of the existing road alignment will be assessed and specific maintenance and upgrade needs identified. Post-wet season maintenance and upgrade works is anticipated to include grading and compacting of the running surface. Any vegetation regrowth within the 4 m running surface will be removed.

Instances of wash-outs and silting of some low lying areas will be repaired. Known locations of silting and wash-outs include the northern end of the Beagle Air Strip and around Coconut Creek (refer Section 3.3.1). The intersection at Beagle Camp is also proposed to be upgraded to provide a safer turning radius for heavy vehicles. This will involve the clearing of regrowth (approximately 1,272 m^2) and grading and compaction of the cleared area to provide a suitable running surface.

Passing bays will also be installed at selected locations along the road alignment. Passing bay locations have been selected based on minimising vegetation clearance and enabling regular opportunities for vehicles to safely pass each other. Each passing bay will be approximately 2 m wide and 100 m long. This will increase the running surface to 6 m wide at each of the passing bays. Thirteen passing bays are proposed along the access road. The location of each passing bay is shown on Figure 3-1 to Figure 3-15.

A typical cross-section of the road and passing bays based on the proposed construction method is shown on Figure 3-16.

Dust suppression and ongoing maintenance of the running surface will be carried out as required.

The construction equipment anticipated to be used for the road upgrade and ongoing maintenance includes the following:

- Excavators
- Dozer
- Graders
- Tipper(s)
- Compactors
- Water carts

Vehicles may be utilising the access whilst works are being performed, therefore, traffic management and advisory signage will be provided by during any upgrade and maintenance activities (refer Section 3.6).

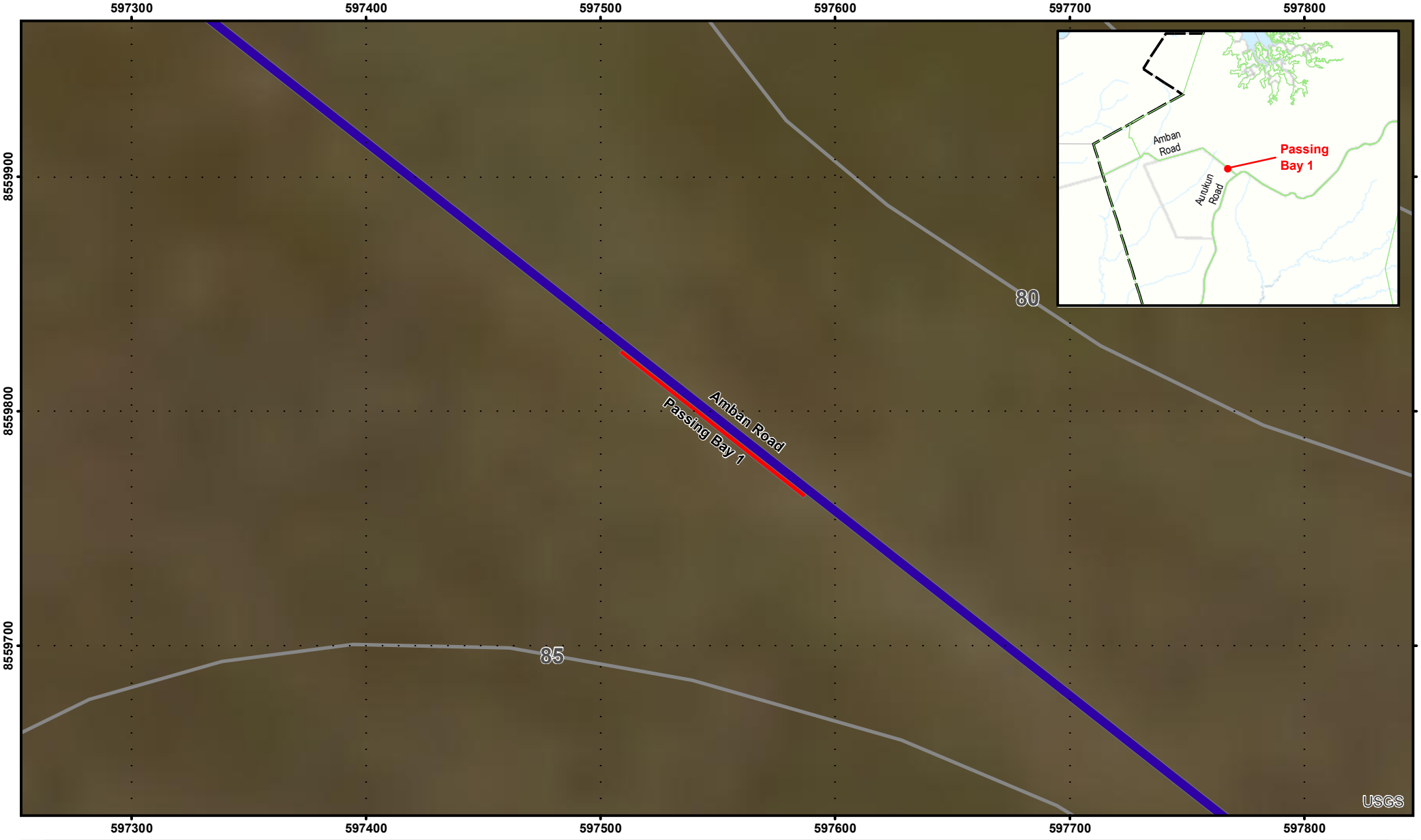
3.3 Watercourse crossings

The access road crosses three watercourses, Coconut Creek, a tributary of Tappelbang Creek and an unnamed tributary of Hey River. These watercourses are mapped as waterways for waterway barrier works by the Queensland government. Works proposed to be undertaken within the watercourses will be discussed with the Department of Agriculture and Fisheries to establish whether this meets the requirements of self-assessable development as per Schedule 3, Part 2, Table 4, Item 2 of the SP Reg. As such, the works will comply with the requirements of *Code for self-assessable development Minor waterway barrier works: Part 4: bed level crossings (code number: WWBW01 April 2013)* (DAFF, 2013).

A description of the proposed works within the watercourses is described in the following sections.

3.3.1 Coconut Creek crossing

Works within Coconut Creek will improve the condition of the existing crossing. The existing crossing during flow and non-flow conditions is shown in Figure 3-17 and Figure 3-18. The bed level crossing consists of concrete slabs with some surrounding rock protection.



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

RioTinto

Development Application for MCU and Operational Works

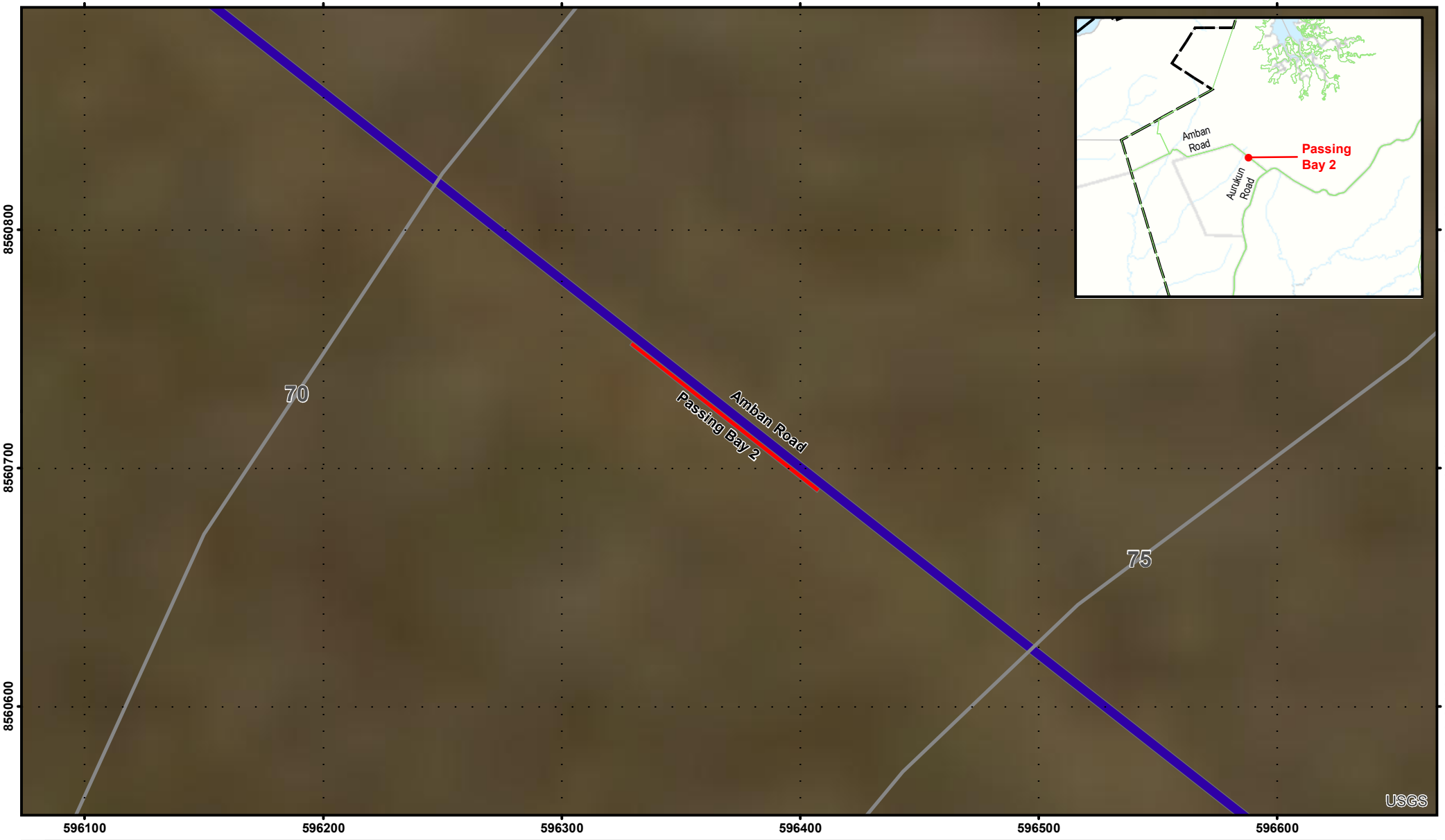
Figure 3.1

Passing Bay 1 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

RioTinto

Development Application for MCU and Operational Works

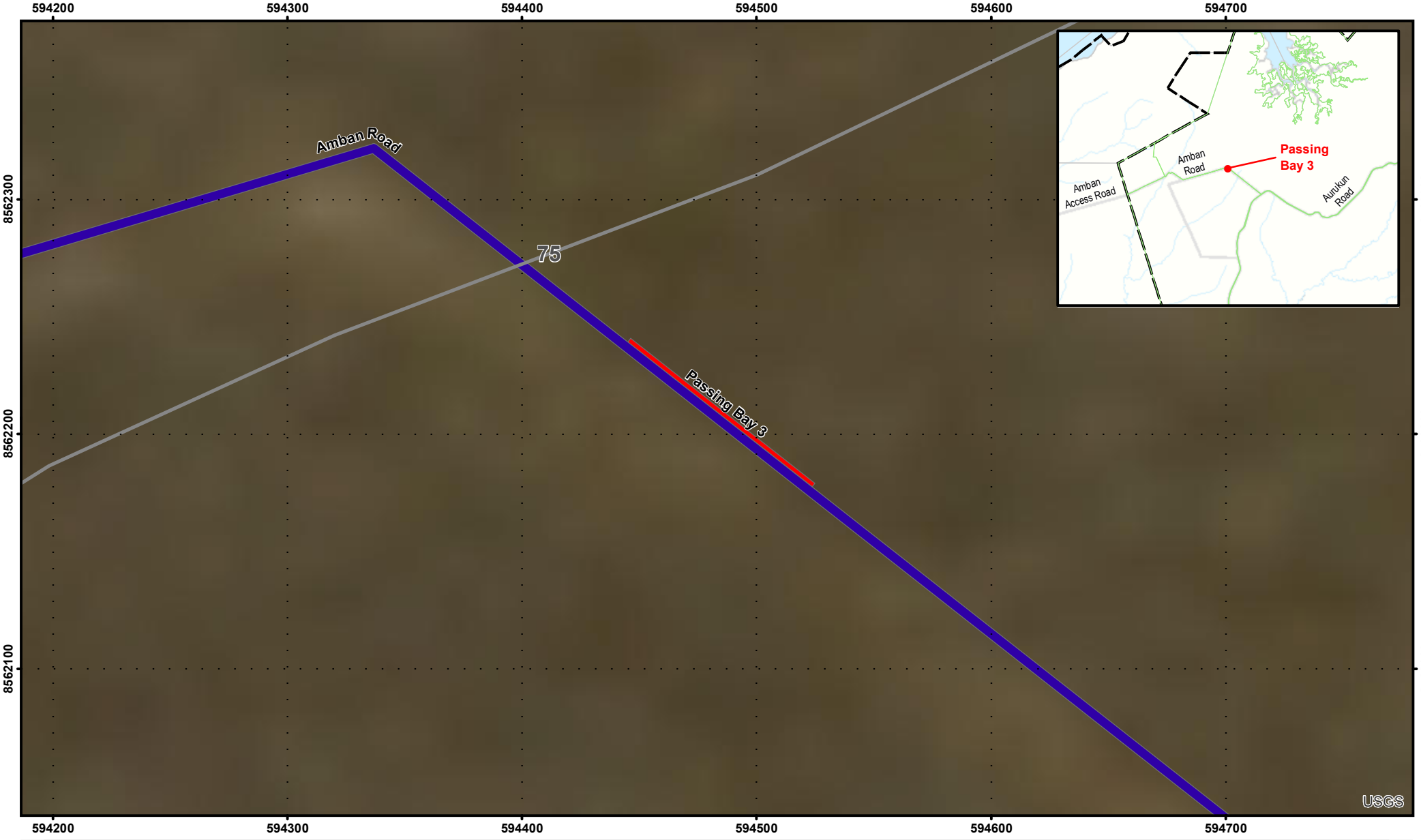
Figure 3.2

Passing Bay 2 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

RioTinto

Development Application for MCU and Operational Works

Figure 3.3

Passing Bay 3 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016

Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse

RioTinto

Development Application for MCU and Operational Works

Figure 3.4

Passing Bay 4 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016

RioTinto

Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

Development Application for MCU and Operational Works

Figure 3.5

Passing Bay 5 Development Area

N

25 12.5 0 25 50 Meters

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016

RioTinto

Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse

Development Application for MCU and Operational Works

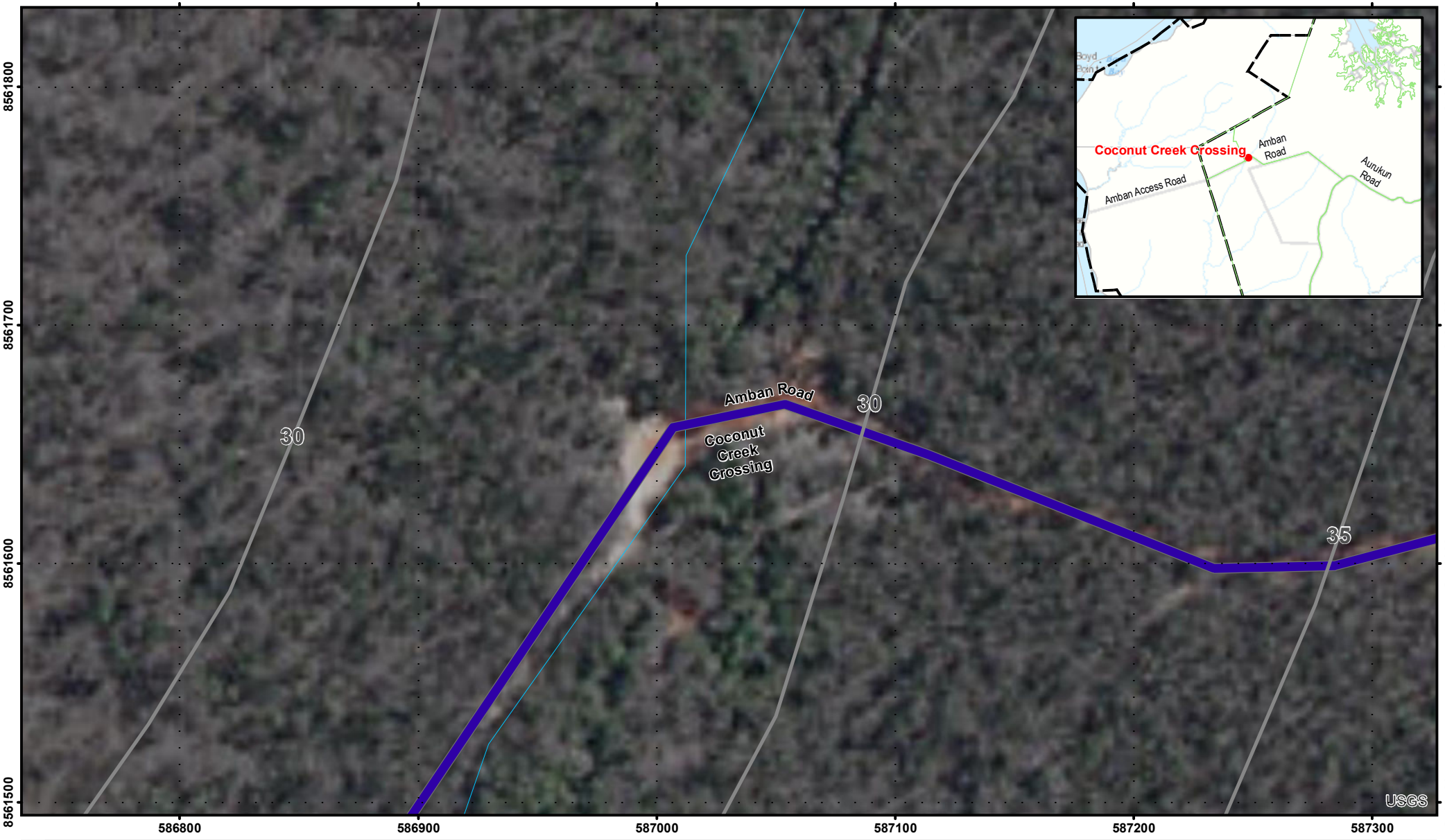
Figure 3.6

Passing Bay 6 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



RioTinto

Legend

Development Area

- Access Track (4m wide)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

Development Application for MCU and Operational Works

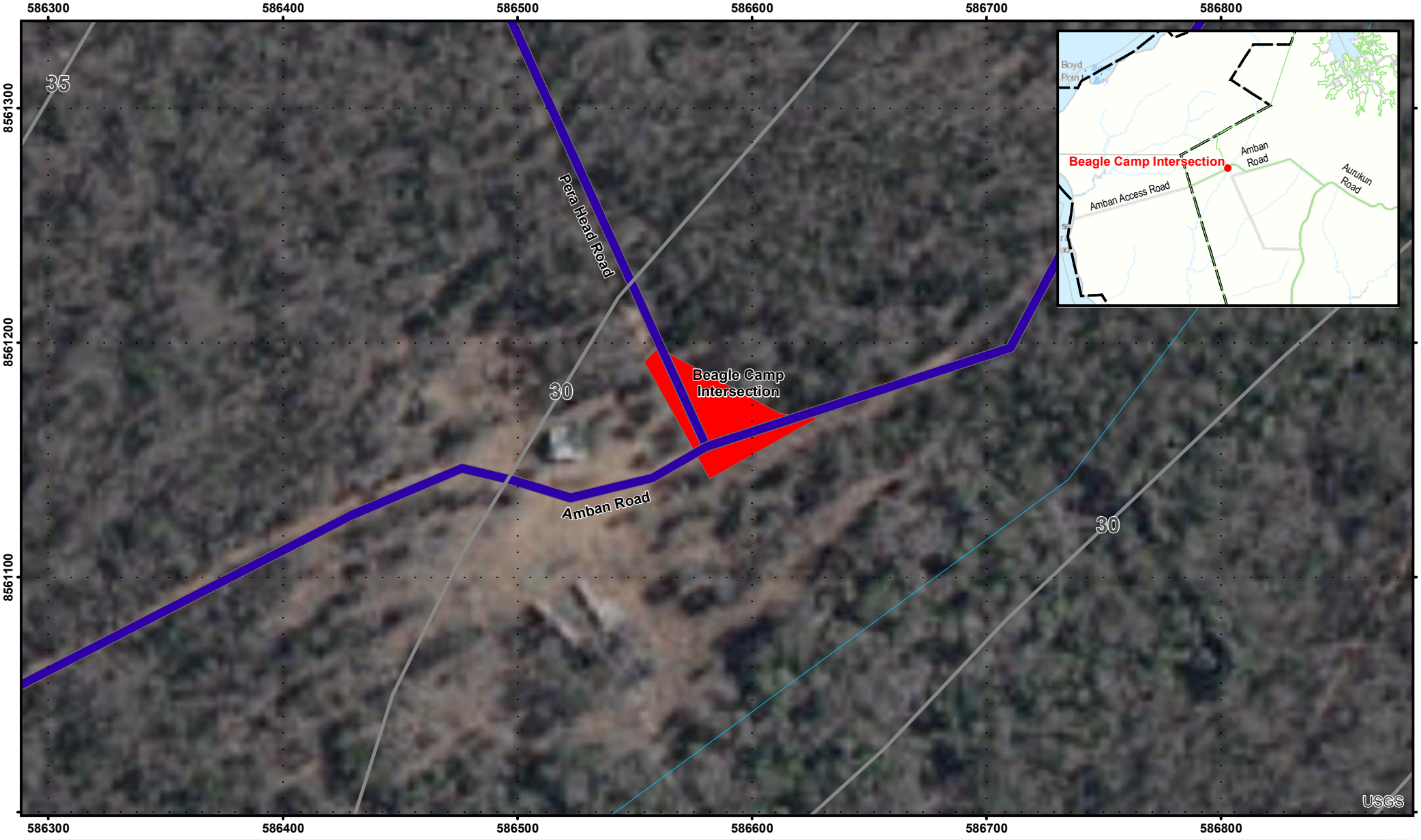
Figure 3.7

Coconut Creek Crossing Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Beagle Camp Intersection (1272 m²)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

RioTinto

Development Application for MCU and Operational Works

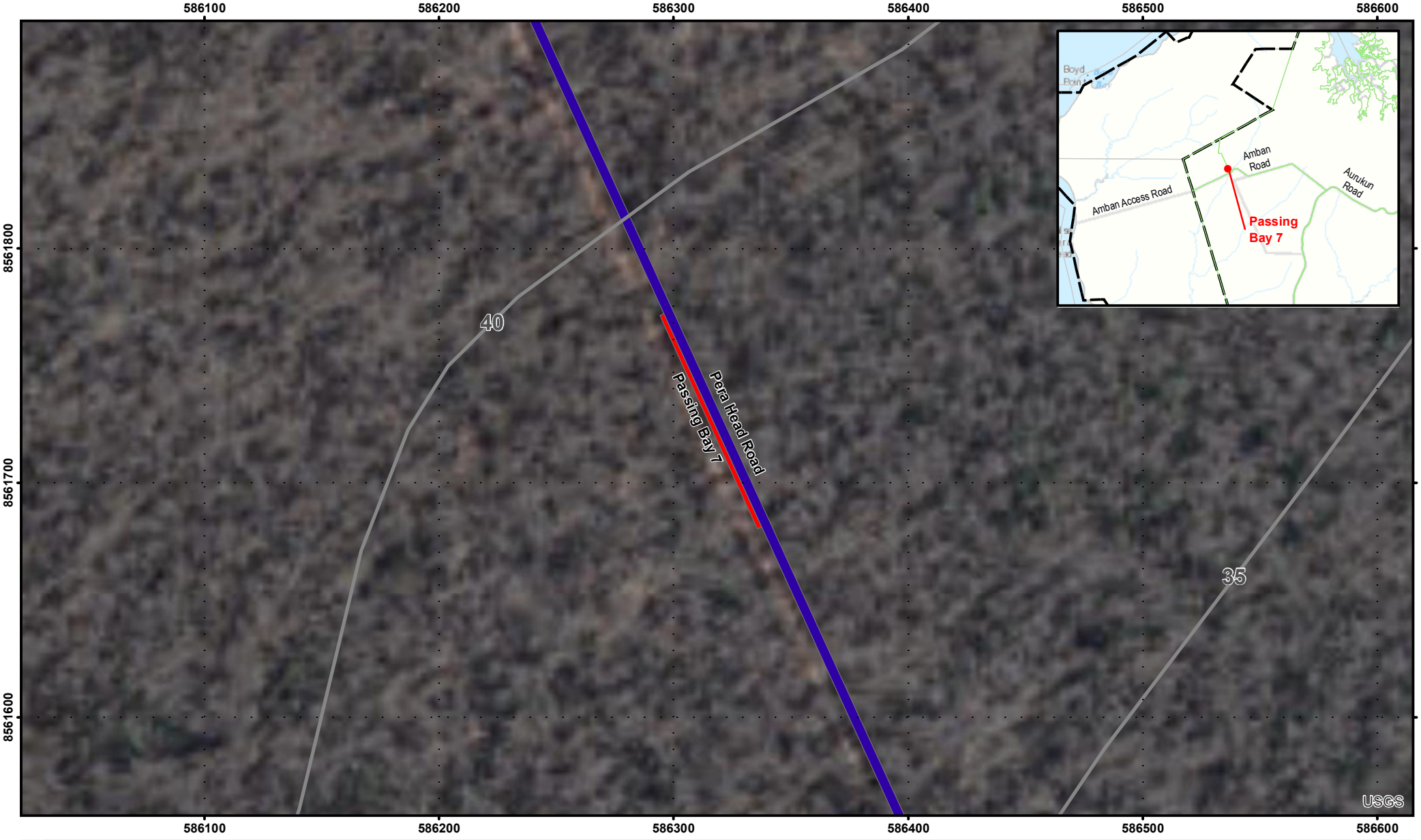
Figure 3.8

Beagle Camp Intersection Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



RioTinto

Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

Development Application for MCU and Operational Works

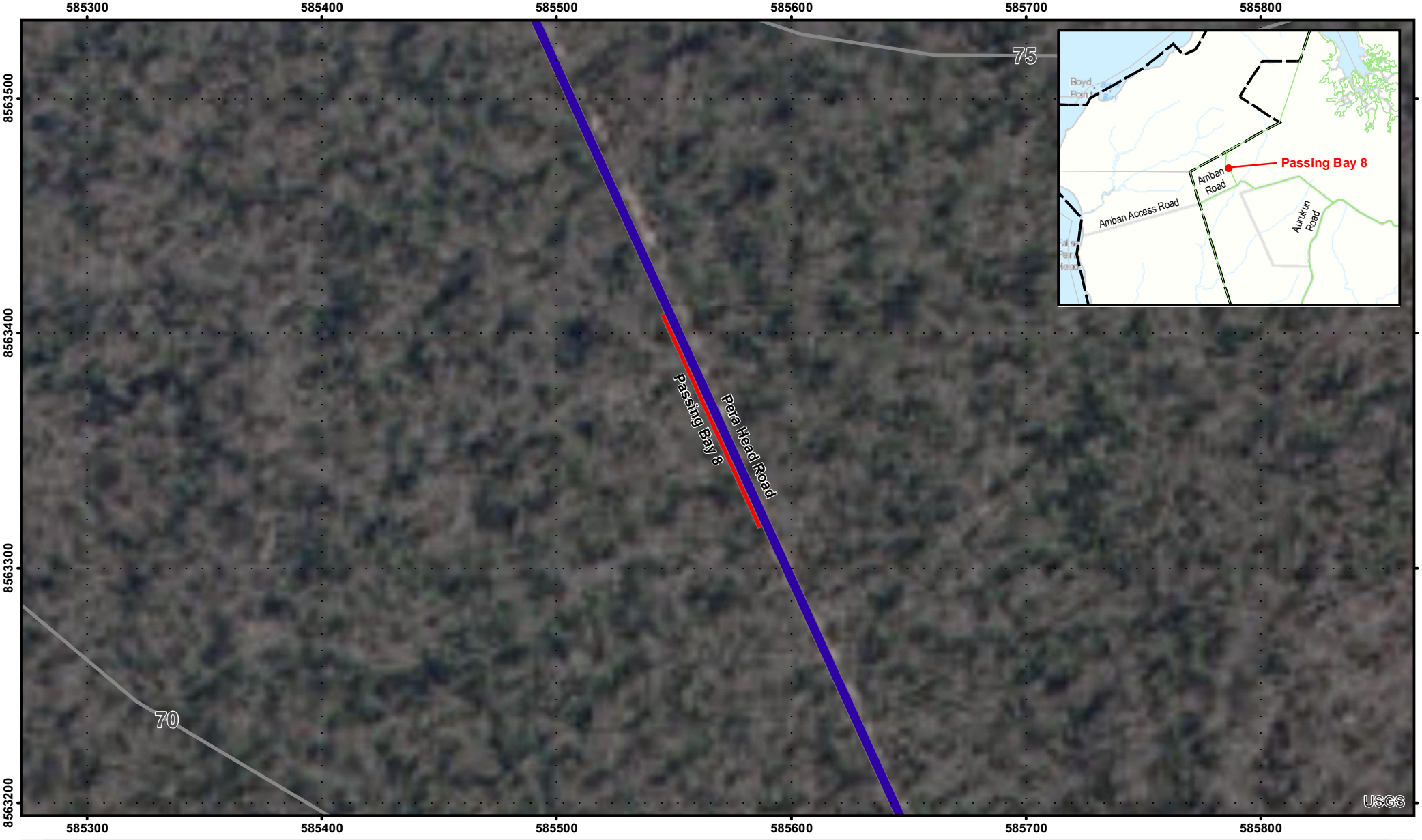
Figure 3.9

Passing Bay 7 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

RioTinto

Development Application for MCU and Operational Works

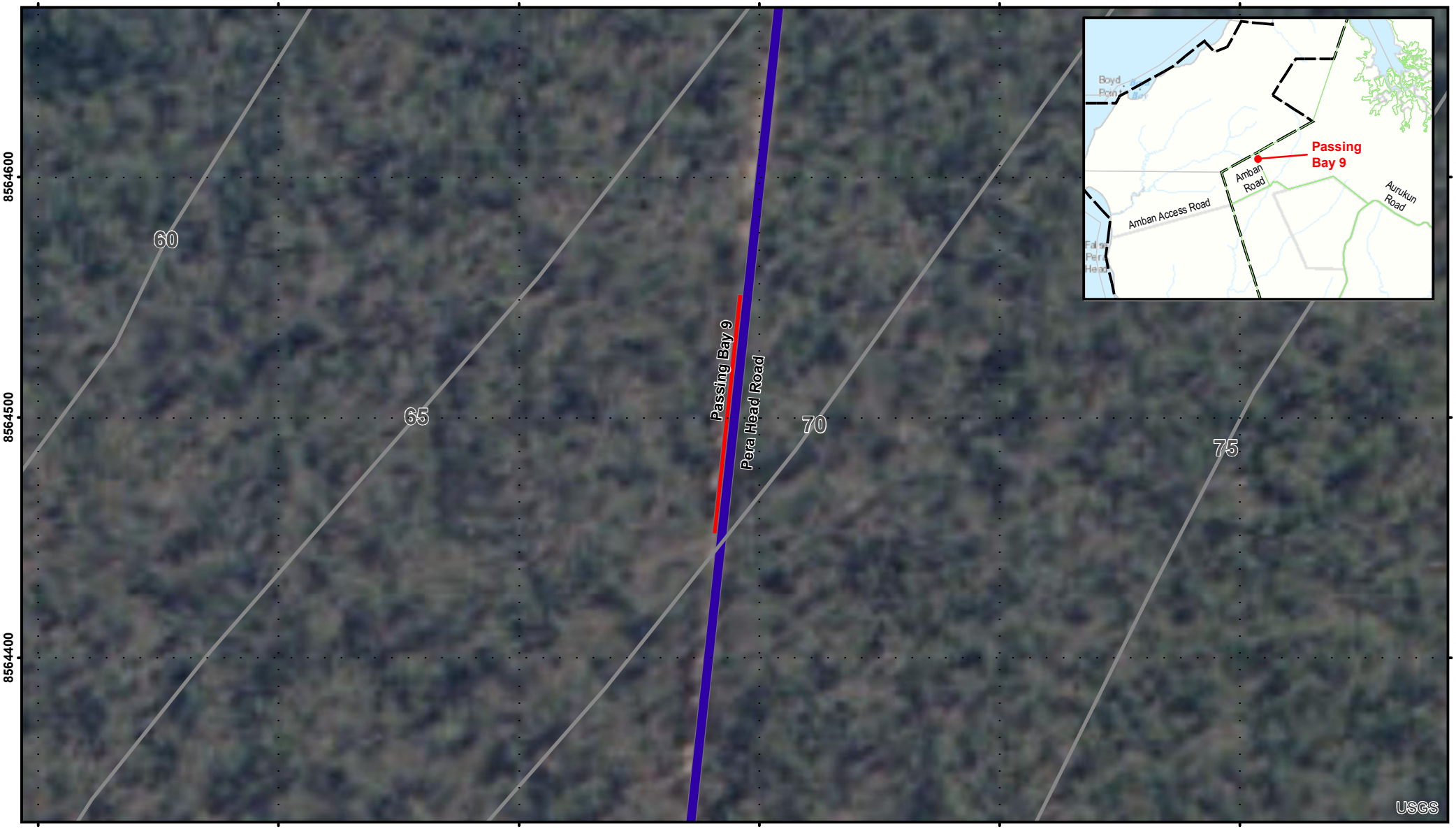
Figure 3.10

Passing Bay 8 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



RioTinto

Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

Development Application for MCU and Operational Works

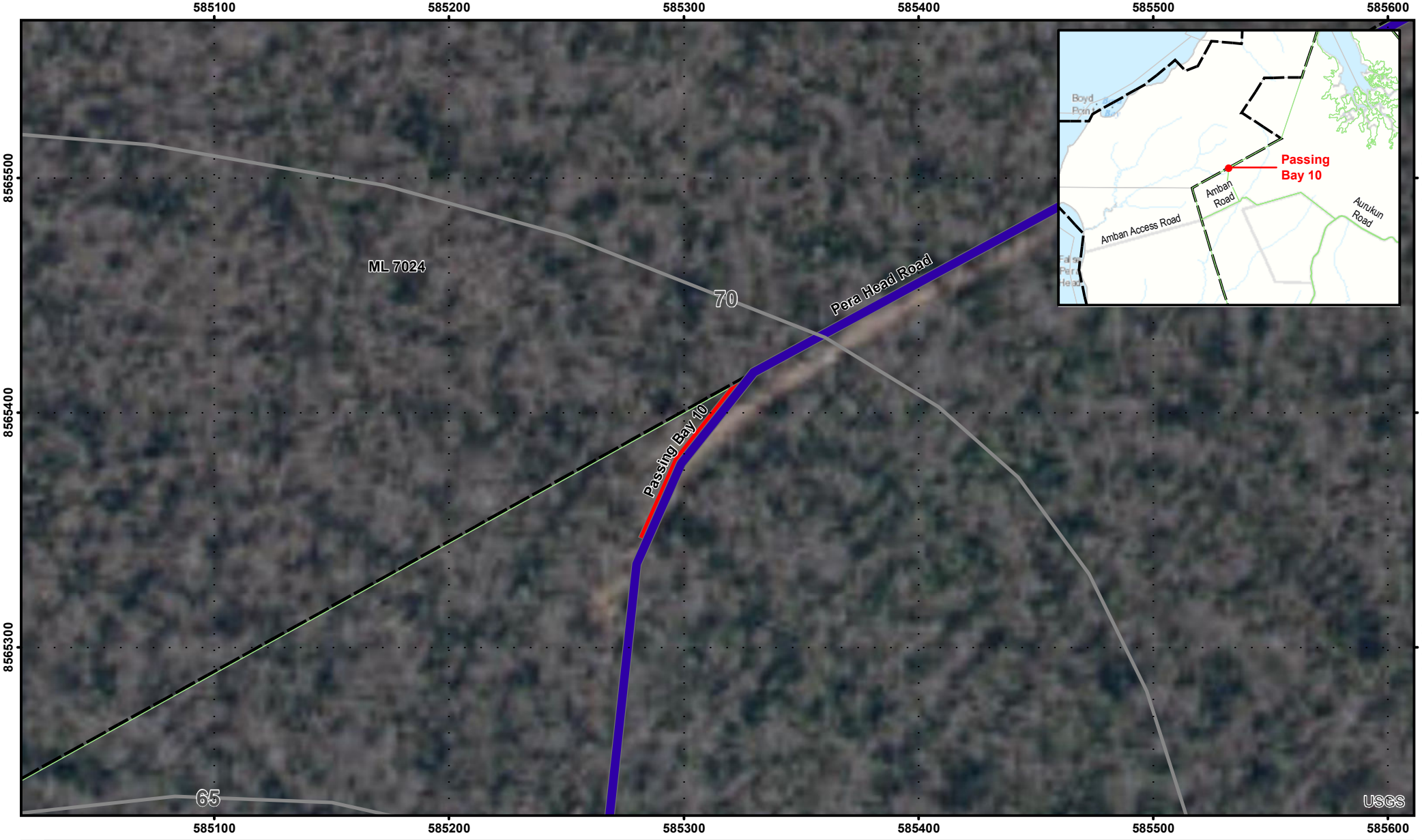
Figure 3.11

Passing Bay 9 Development Area

N

25 12.5 0 25 50 Meters

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- RTA Mining Lease boundary
- Cadastre
- Watercourse
- 5m Contours (mAHD)

RioTinto

Development Application for MCU and Operational Works

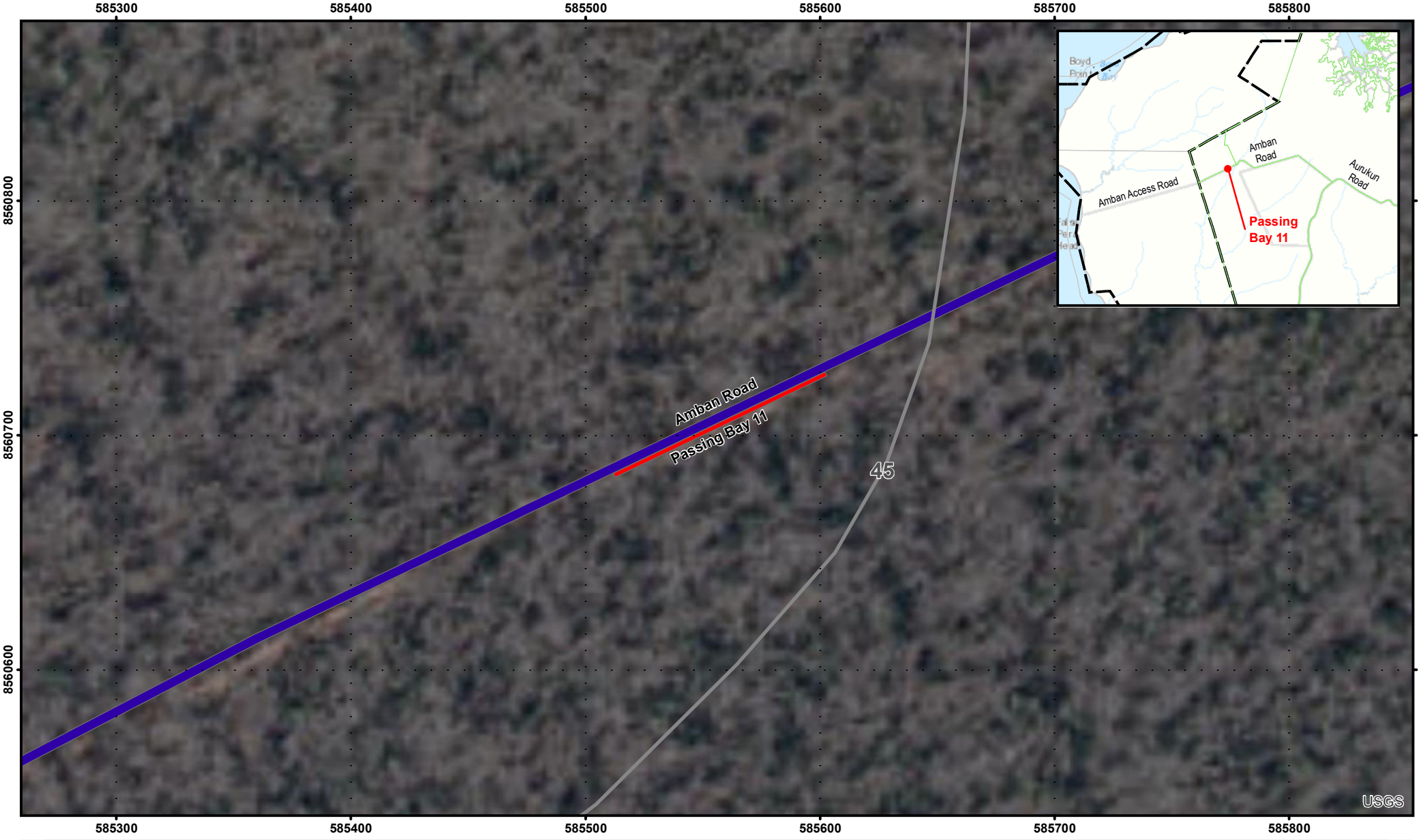
Figure 3.12

Passing Bay 10 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

Development Application for MCU and Operational Works

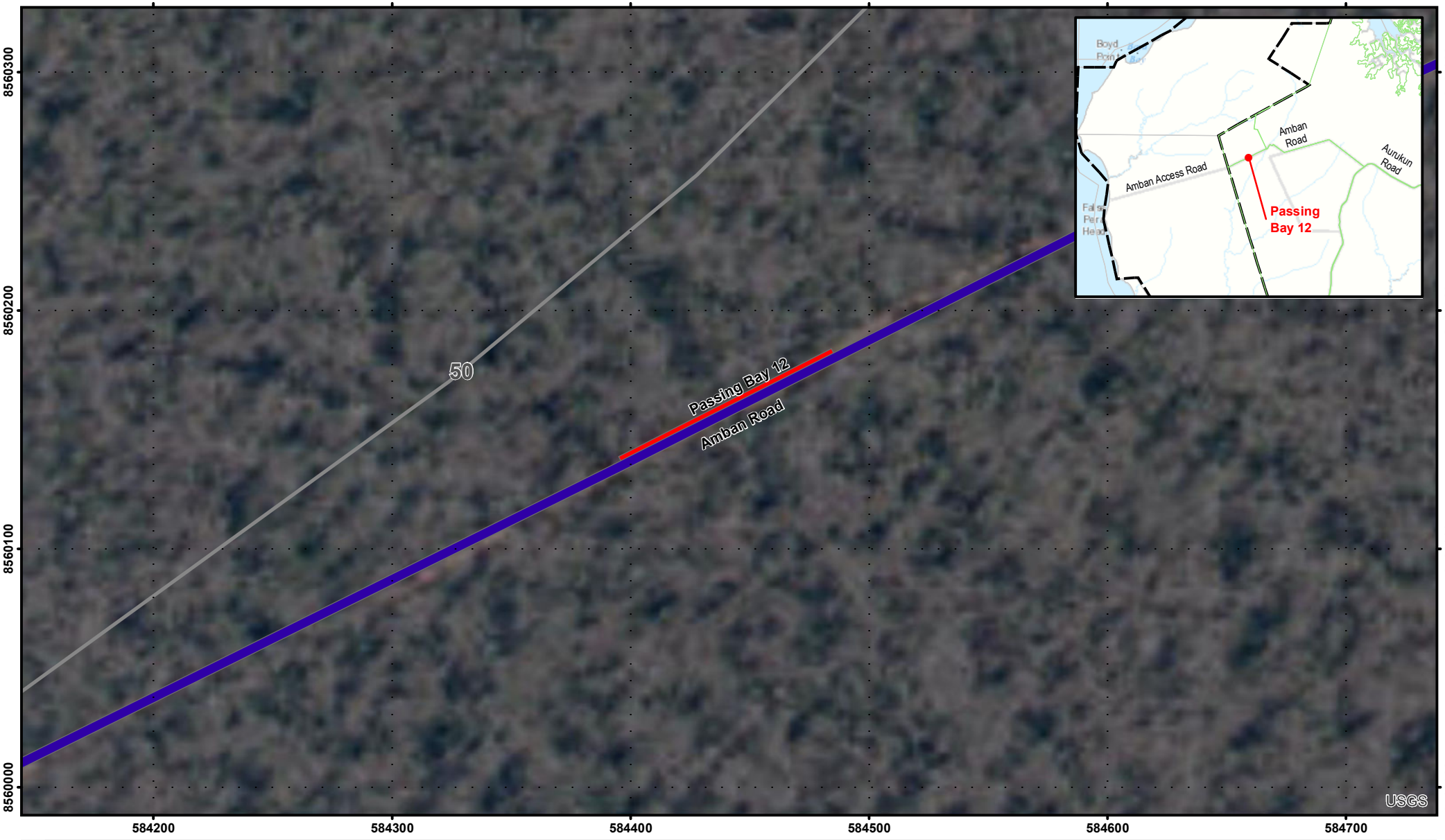
Figure 3.13

Passing Bay 11 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

Development Application for MCU and Operational Works

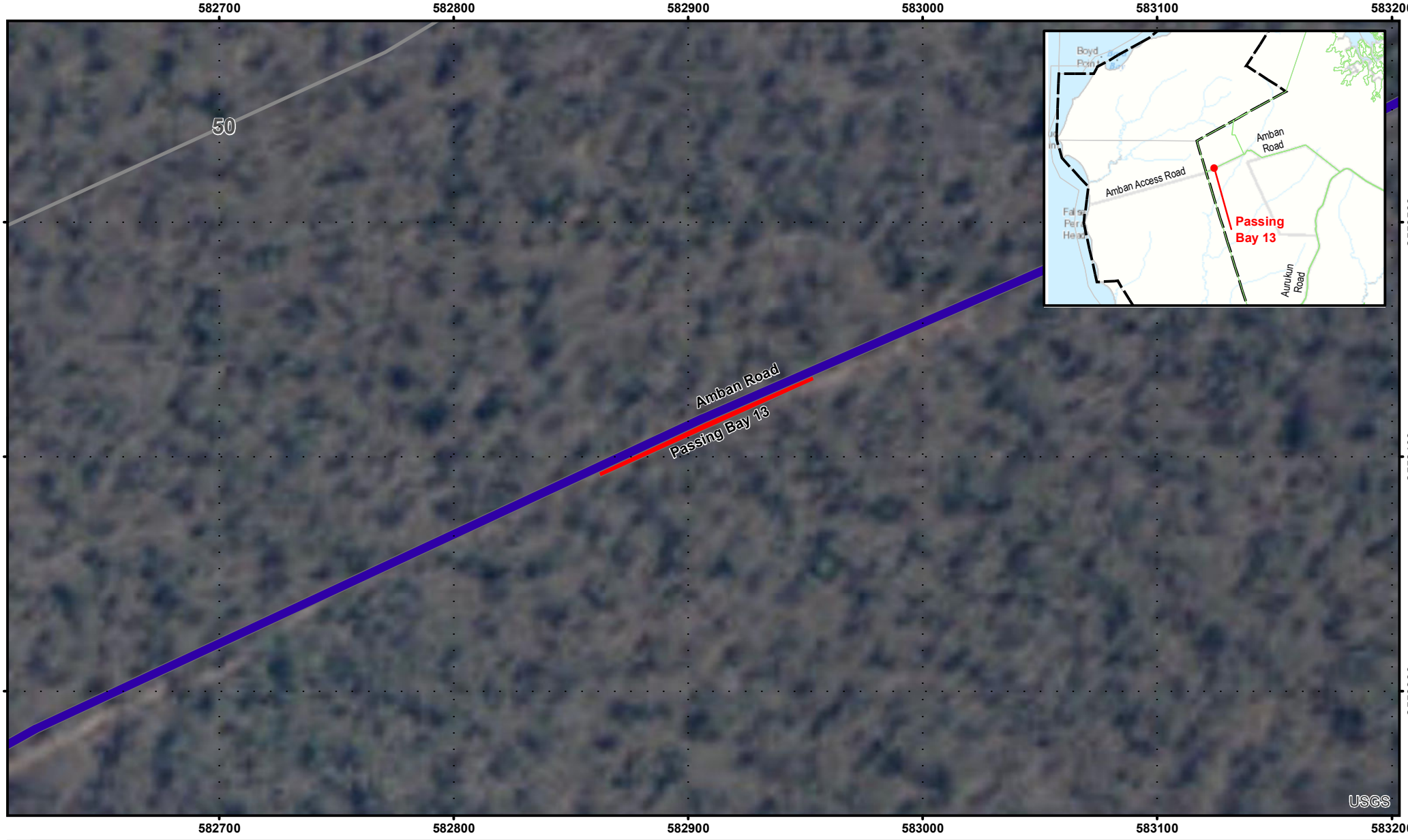
Figure 3.14

Passing Bay 12 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016



Legend

Development Area

- Access Track (4m wide)
- Passing Bay (100m x 2m)
- Lot 211 On SP241404
- Cadastre
- Watercourse
- 5m Contours (mAHD)

RioTinto

Development Application for MCU and Operational Works

Figure 3.15

Passing Bay 13 Development Area

25 12.5 0 25 50 Meters

N

DatumProjection: GDA 94 MGA Zone 54 Date: 24/02/2016

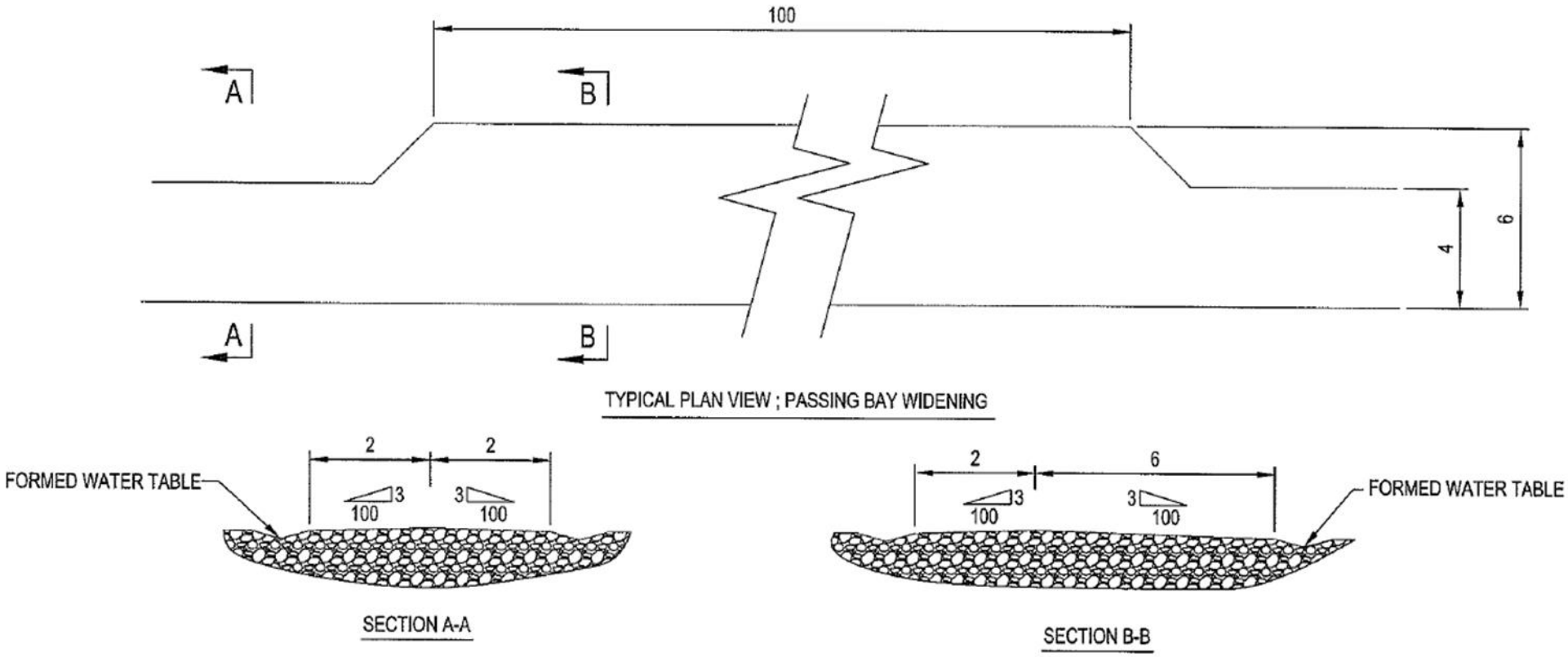


Figure 3-16 Typical cross-section of the road and passing bays

Figure 3-17 Coconut Creek crossing during flow

Figure 3-18 Coconut Creek crossing during non-flow conditions

Activities to be undertaken as part of the upgrade include the following:

- Remove a 1,500 mm wide by 200 mm depth of the existing creek bed material both upstream and downstream of the existing concrete sleepers both upstream and downstream ends.
- The excavated material will be, where possible, spread evenly within the bed and banks of the watercourse downstream of the crossing so that it does not interfere with the flow of water (as per the riverine protection permit exemption requirement (DNRM, 2014)). Where this is not possible, waste material will be re-spread and compacted into the track alignment surface2.
- If the edges of the concrete sleepers are washed away during the wet season and the bed level is deeper than 200 mm then no excavation will be required within the watercourse.
- Importation of approximately 24 m^3 clean rock between 100 mm to 150 mm.
- Imported rock will be placed on the upstream and downstream excavated edges of the concrete sleepers to match the height of the top of the sleepers and the invert level of the existing creek bed alignment.

[2] Excavated material is considered to be waste material and will not be used to make commercial gain or top up any fill material that may be used for the road upgrade.

The proposed works are shown on Figure 3-19.

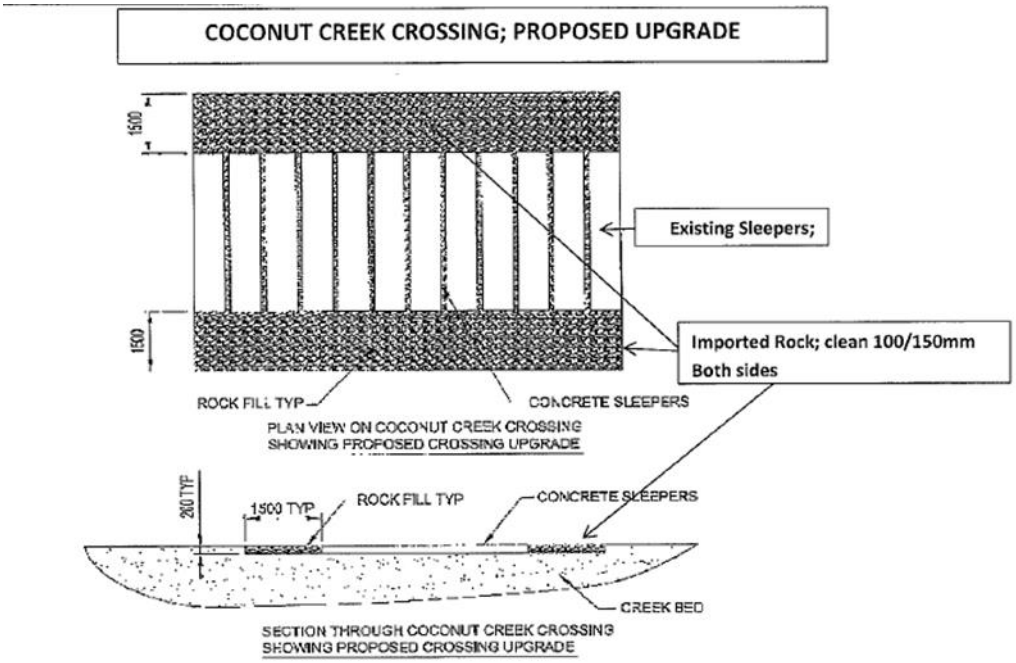


Figure 3-19 Coconut Creek crossing proposed upgrade

3.3.2 Other watercourse crossings

Two other ephemeral watercourses are crossed by the access road (Figure 3-20 and Figure 3-21). Some maintenance may be required to be undertaken within these watercourses. While these watercourses are dry during the dry season, the running surface is known to significantly degrade into ‘bull dust’ type conditions once vehicle usage recommences post-wet season.

Access road

Figure 3-20 Unnamed tributary of Hey River

Figure 3-21 Tributary of Tappelbang Creek

It is proposed that the track will be graded through these watercourses; however, if the running surface is not improved, the area that is failing will be graded out and/or excavated and fill placed within the excavated area. Specific areas that will require excavation and filling will only be known at the time of construction, but will be restricted to within the development area.

Material excavated from the watercourses would be, where possible, spread evenly within the bed and banks of the watercourses downstream of the crossings so that it does not interfere with the flow of water (as per the riverine protection permit exemption requirement (DNRM, 2014)). Where this is not possible, waste material will be re-spread and compacted into the track alignment surface[3]. If required, it is estimated that approximately 20 m^3 would be excavated from the watercourses. The quantity of fill is estimated to be required is 25 m^3 (to account for compaction factors). Excavation and filling within the watercourse is not proposed to change the existing contours at the crossing point.

3.4 Fill material

Parts of the access road, in addition to the two ephemeral watercourses, are known to deteriorate to bull dust type conditions as vehicle movements increase post-wet season. These areas will be selectively filled to improve the running surface. Specific areas that will require excavation and filling will only be known at the time of construction, but will be restricted to within the development area.

Wherever possible, fill material will be sourced from material arising from the access road upgrade and maintenance works. Should there be areas which require a more selective fill material or where there is insufficient material from upgrade and maintenance activities, fill material will be sourced from the adjoining RTAW mining lease and transported to the required area. Filling will be restricted to returning the road to improve the running surface, it is not proposed to change the existing contours of the road.

3.5 Construction and maintenance water sources

Water required for dust suppression and other activities associated with the upgrade and maintenance of the access track will be the responsibility of the entity engaged to undertake the works and is not subject to this development application. All necessary permits and/or exemptions will be the responsibility of this entity and will be required to be in place prior to the commencement of works. However, it is envisaged that water required for dust suppression will be sourced from either Coconut Creek or from RTAW's water sources.

3.6 Access and traffic management strategies

A Traffic Management Plan will be implemented during the upgrade and maintenance works that ensures safe and controlled operation of the road during the works period. The

[3] Excavated material is considered to be waste material and will not be used to make commercial gain or top up any fill material that may be used for the road upgrade.

minimum controls and expectations likely to be implemented through the Traffic Management Plan include a full suite of signage to be placed at strategic points along the site access route, beginning at the intersection with Aurukun Road and the access road. This signage is likely to include:

- Authority required to access and who authority is to be obtained from.
- Restrictions of entry; permits, conditions of entry, date and time restrictions.
- Project information, personal protective equipment (PPE) requirements, directions, site speed limits.
- Construction works being undertaken.
- Communications advice and or availability.
- Passing bay locations advice, road condition notices

3.7 Extension to currency period for development approval

Although it is currently envisioned works could commence in 2016, these works are associated with the increased traffic volumes associated with the construction phase of the Project. Therefore it is requested that the proposed development is conditioned with a currency period of five years from the day the approval takes effect for the development to substantially start before the approval lapses.

4 Physical and ecological characteristics

Information physical and ecological characteristics of the access road are discussed in the following sections.

4.1 Topography

The access road is relatively flat, with the majority of the alignment below 1% (or 1V in 100H). Generally, the elevation of the road varies between 30 m and 57 m, with the lowest elevation being approximately 27 m and the highest elevation approximately 90 m. Between 3.7 km and 3.9 km from Aurukun the slope increases to 2% (or 1V in 50H). The slope increases to 3% (or 1V in 33H) between approximately 4.4 km and 5.7 km from Aurukun road.

4.2 Land quality

4.2.1 Soils

The access road is shown on the State Planning Policy (SPP) plan making interactive mapping as agricultural land classification (ALC) as Class A and Class B. The access road is an existing use in this area and while the passing bays will increase the disturbance area of the road at these locations. Additional disturbance area for the new passing bays and Beagle Camp intersection is 3,903 m^2 of the 706,400 ha allotment. The proposed works are therefore is not considered to limit the opportunity or otherwise alienate land from agricultural development within the allotment.

The Atlas of Australian Acid Sulfate Soils (ASS) (CSIRO, 2015) maps the area of the access road as having an extremely low probability of ASS occurrence (i.e., defined as 6% to 70% chance of occurrence). The access road is located above 20 m Australian Height Datum (AHD) (refer Section 4.1) and excavation associated with the works will not extend below 20 m AHD. The risk of disturbing ASS as a result of these works is considered to be low.

4.2.2 Contaminated land

Lot 211 on SP 241404 has been formed from a subdivision of a historical lot (Lot 1 on SC211), which is included on the Environmental Management Register (refer to search results in Appendix C). The site has been subject to notifiable activities or hazardous contaminants as a result of an operating commercial service station and a landfill. The inclusion of Lot 211 on the Environmental Management Register will not result in any additional development approval requirements.

The lot is not included on the contaminated land register.

4.3 Flora and fauna

A field survey was conducted in October 2012 and included fauna and flora survey activity along the access road. A subsequent assessment of trees that have the potential to pose a risk to road users was undertaken in April 2015 and a ground inspection in October 2015. Amban Road was also assessed for weeds in June 2013. The full flora

and fauna assessment is provided in Appendix D. A summary of the findings is provided in the following sections.

4.3.1 Communities, ecosystems and populations

No threatened communities, ecosystems or populations listed under State or Commonwealth legislation occur along or adjacent to the access tracks.

4.3.2 Flora

The majority of the access road is mapped as regulated vegetation, Category B. There is a small area of non-remnant (Category X) vegetation at the Beagle air strip. The Category B is mapped as comprising of the following not of concern regional ecosystems:

- RE 3.5.2 – *Eucalyptus tetrodonta* and *Corymbia nesophila* tall woodland on deeply weathered plateaus and remnants.
- RE 3.3.9 – *Lophostemon suaveolens* open forest on streamlines, swamps and alluvial terraces.
- RE 3.5.22c – *Corymbia clarksoniana* +/- *Erythrophleum chlorostachys* +/- *Corymbia* spp. woodland on plains.
- RE3.7.3/3.5.7x2a – *Eucalyptus cullenii* +/- *E. tetrodonta* woodland on erosional escarpments and plains.

Three regional ecosystems were identified during the surveys. These were RE 3.5.2, RE 3.3.9 and RE 3.5.22c. The flora community observed during the flora and fauna survey within the three regional ecosystems was typical of that occurring in these ecosystems throughout the Weipa region. Key species recorded during the survey indicative of the regional ecosystems present is provided in Appendix D.

No threatened flora species were located along the access tracks and there is a very low likelihood that any threatened flora occurs in areas to be disturbed.

A small number of environmental weed species are known to occur in a few locations along the tracks in very low densities. None of these species are declared plants in Queensland or listed as Weeds of National Significance (WoNS). The main area of weed occurrence is the Beagle Camp area. Environmental weed species include:

- grader grass (*Themeda quadrivalvis*)
- stylo (*Stylosanthes* sp.)
- hyptis (*Hyptis suaveolens*)
- rattlepod (*Crotalaria* sp.)
- spinyhead sida (*Sida acuta*).

A single plant of gamba grass (*Andropogon gayanus*), a WoNS, was located during the 2013 weed survey. The plant was located along the Amban Road section of the access road. The plant was removed and no additional plants were identified in the area during the 2015 survey.

Access road

4.3.3 Proposed vegetation clearing

The majority of the access road is mapped as regulated vegetation, Category B. There is a small area of non-remnant (Category X) vegetation at the Beagle air strip. Clearing of vegetation is not triggered as operational works under Schedule 3, Table 4, Item 1 under the SP Reg. as the clearing is for the following:

- Schedule 24, Part 2, Item 2(c): For freehold land, clearing vegetation that is
  - necessary for essential management;
- Schedule 24, Part 2, Item 2(f): For freehold land, clearing vegetation that is
  - necessary for routine management in an area of the land and the vegetation is:
    (i) regulated regrowth vegetation; or,
    (ii) a least concern regional ecosystem shown on the regulated vegetation management map or a PMAV as a category B area.

However, the Planning Scheme makes any clearing of vegetation within the Environmental Management and Conservation Zone triggers an operational works approval.

It is proposed to clear vegetation that has encroached into the existing access road alignment and also in areas required to provide passing bays and improve the safety of Beagle Camp intersection. The estimated area to be cleared is as follows:

- Approximately 0.6 ha of Category B vegetation outside of the existing access road.
- The area of the existing access road is approximately 10.5 ha. While currently shown on regulated vegetation management mapping as Category B, the existing access road corridor is cleared and proposed clearing will be restricted to vegetation that has encroached into the existing road corridor.

These areas are shown on Figure 4-1. All of the regional ecosystems mapped within the Category B area are of least concern. The largest regional ecosystem to be cleared is *Eucalyptus tetrodonta* and *Corymbia nesophila* tall woodland on deeply weathered plateaus and remnants. This regional ecosystem is considered to be the most widespread ecosystem in the bioregion.

While regulated vegetation mapping shows that the access road is covered by regulated remnant vegetation, the passing bays have been located, wherever possible, to minimise the disturbance of remnant vegetation by locating them in areas of regrowth beside the existing road alignment. As previously discussed, the access road is an existing road that has had some regrowth within the alignment, but the alignment does not have any remnant vegetation occurring within the alignment.

4.3.4 Fauna

No threatened fauna were located along the access road. Targeted surveys for the northern quoll (*Dasyurus hallucatus*), red goshawk (*Erythrotriorchis radiates*) and masked owl (*Tyto novaehollandiae*) did not located any species during the survey period. However, the red goshawk (*Erythrotriorchis radiates*) and palm cockatoo (*Probosciger*

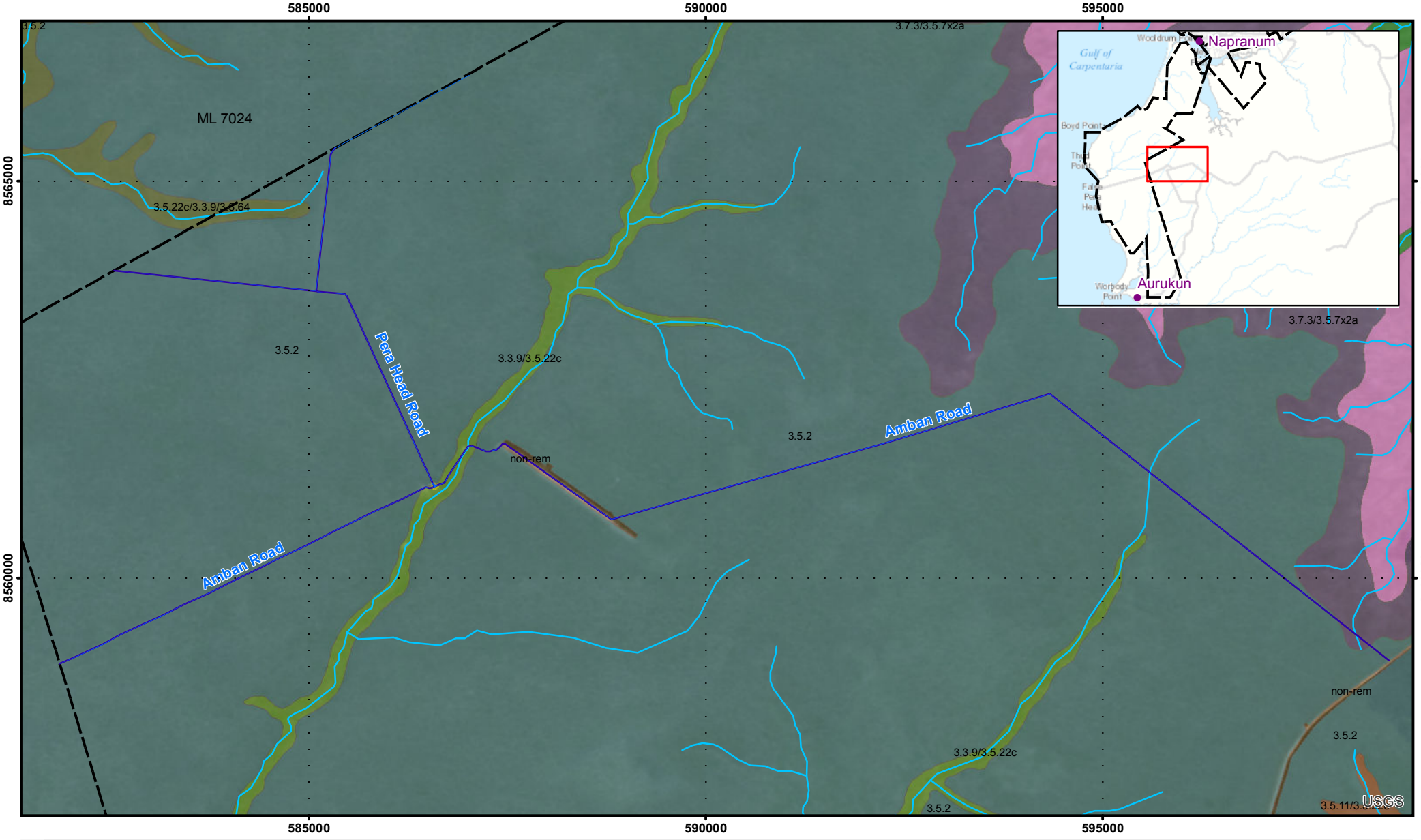
aterrimus) have been recorded from the Amrun Project area. These species are highly mobile and utilise a range of habitats within their home range, as such, these species may visit areas in the vicinity of the access road. There were no signs of active or inactive nests or hollows for the species along the access road.

The habitat along the access road does not represent especially significant or higher quality habitat for these species than similar habitats in surrounding areas.

A number of introduced species are known to inhabit the study area. Cat (*Felis catus*) and feral pig (*Sus scrofa*) have been recorded along the access road during ecological surveys. Feral cattle (*Bos* spp.), feral horses (*Equus caballus*) and dingo (*Canis lupis dingo*) are also considered likely to occur along the access track.

4.4 Cultural Heritage

There are no non-Indigenous sites on the Queensland Heritage Register within the proposed development area. An Indigenous cultural heritage investigation has not been undertaken of the alignment. All works will however, be undertaken in accordance with an Indigenous Land Use Agreement (ILUA) between NAK and RTAW.



Legend

- Development Area
- Road
- Matter of State Environmental Significance (vegetation intersecting a watercourse)
- RTA Mining Lease boundary
- Cadastre

Regional Ecosystem

- 3.3.9/3.5.22c
- 3.5.10
- 3.5.11/3.5.22c
- 3.5.2
- 3.5.22c/3.3.9
- 3.5.22c/3.3.9/3.3.64
- 3.5.7x2a/3.5.22c/3.3.49b
- 3.7.3/3.5.7x2a
- non-rem

Development Application for MCU and Operational Works

Figure 4.1
Regional Ecosystems

1 0.5 0 1 Km

N

DatumProjection: GDA 94 MGA Zone 54 Date: 4/12/2015

5 Pre-lodgement Discussions

A pre-lodgement meeting was undertaken with a number of State government departments on 17 December 2015. Representatives from the following department were present at the meeting:

- Department of Infrastructure, Local Government and Planning (DILGP)
- Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP)
- Department of Natural Resources (DNRM)

The propose development and operational works was discussed and potential State development riggers and/or exemptions identified. This discussion included the triggers for vegetation clearing. DNRM advised that the proposal is exempt from requiring a development permit for vegetation clearing under the SP Reg. as per Schedule 24, Part 2, Item 2(c) and (f) (refer Section 4.3.3). On the basis that the road is used by the public and the work is for the safety of the road users of the road, DILGP advised that it is of the view that the exemptions identified by DNRM are appropriate to the situation described. Consequently, the State Assessment and Referral Agency will not be triggered for this application.

Representatives from the Department of Agriculture and Fisheries (DAF) did not attend the pre-lodgement meeting; however, consultation in relation to the proposed Coconut Creek crossing design and the self-assessable development requirements is ongoing.

6 Statutory planning assessment

This section provides an assessment of the proposed MCU and operational works for upgrade and maintenance of the access road, which will include the clearing of vegetation which is assessable development under the Planning Scheme (ASC 2013).

6.1 Aurukun Shire Planning Scheme 2013

The Planning Scheme provides a framework for managing land use and development within the Aurukun Shire. The planning scheme establishes a strategic approach to land management framework that recognises the traditional connections of the people to the land, and the aspirations of the local community to protect its resources and customs for future generations. To achieve this, the current planning scheme supports land uses which directly benefit the local community, and discourages those land uses which are inconsistent with the community's vision (ASC 2013).

The proposed development is located within the EMCZ. The Planning Scheme identifies that the purpose of the EMCZ is to provide for the protection and maintenance of areas identified as supporting significant biological diversity and ecological integrity. The scheme identifies that development within this zone should demonstrate that it is located outside areas that have significant biological or ecological values or that are impacted by natural hazards.

The Planning Scheme makes the level of assessment for MCU for the access impact assessable against the entire planning scheme. As previously discussed, operational work that is the clearing of vegetation is code assessable development in the EMCZ. Excavation and filling is also code assessable development within the EMCZ.

Response to the assessment criteria relevant to this development application are provided in the following tables:

- Environmental management and conservation code in Table 6-1.
- Works services and infrastructure code in Table 6-2.
- Natural hazards and environmental protection overlay codes in Table 6-3.

Response column key:
☑ Achieved
P/S Performance solution
N/A Not applicable

Table 6-1 Response to the environmental management and conservation zone code

Performance Outcomes	Acceptable Outcomes	Response	Comment
Table 6.2.2.3.1: Environmental management and conservation zone code – for self-assessable and assessable development			
PO1 Land use Land remains in a natural state. Low intensity development is permitted only where there is a demonstrated need to locate outside of the Township Zone, and where the use does not detrimentally affect the environmental values of the area.	**AO1.1** Development within the zone is limited to: (a) outstations and low impact (b) agricultural activities; (c) essential community infrastructure.	☑	Complies with AO1.1 – The access road is an existing use within the allotment. The proposed development will improve the safe use of the existing access road as vehicle movements on the road increases. While not designated community infrastructure under the SP Act, the access road provides an important link for the NAK and other community members to access areas to the west of the allotment and connects these areas to Aurukun Road. The proposed use will not detrimentally affect the environmental values of the area.
PO2 Design Development demonstrates consideration to the unique cultural and environmental character of the area, having regard to avoiding environmental damage, and maximising the use of sustainable practices	**AO2.1** Development is self-sufficient and incorporates or facilitates sustainable practices through measures to: (d) improve energy efficiency; (e) promote water conservation and (f) reuse; (g) reduce waste; and (h) minimise environmental damage.	☑	Complies AO2.1 – The proposed development will improve the continued safe access and use of the existing access road. While clearing is required to provide passing bays, passing bays have been located to minimise the amount of clearing required. Provision of dedicated passing bays will also reduce the potential of 'ad hoc' track widening along the route.
PO3 Cultural heritage and special places Special places and cultural heritage sites are recognised and protected from the impacts of development. Note – an applicant is advised to contact Councils Land and Sea Officer to determine the location of cultural heritage sites and special places of significance.	**AO3.1** An agreement or management plan is prepared in consultation with council and the registered cultural heritage body which includes documented construction and recovery procedures to ensure the protection of cultural heritage and special places.	☑	Complies with AO3.1 – The NAK are the Traditional Owners of the land and the proponent of this application. Clearing associated with the proposed development will be undertaken in consultation with the NAK. A Cultural Heritage Management Plan has been prepared in consultation with the NAK for the Amrun Project. This Cultural Heritage Management Plan can be used to also cover works along the access road.
PO4 Waterways and wetlands Where new uses or works occur adjacent to wetlands or waterways there are no significant adverse effects on:	**AO4.1** Development is setback at least 200 m from a wetland or waterway identified on the Queensland Government SPP interactive mapping system.	☑	Complies with AO4.1 – The proposed development is not located within 200 m from a wetland or waterway identified on the Queensland Government SPP interactive mapping system. The closest mapped Matter of State Environmental Significance (wetland) is approximately 13 km south east of

Performance Outcomes	Acceptable Outcomes	Response	Comment
(i) water quality; (j) aquatic or terrestrial habitat; (k) ecological processes and (l) biodiversity values; and (m) landscape quality			the intersection of Aurukun Road and the access road.
PO5 Landslide hazard Development is located and designed to avoid areas subject to landslide or, to mitigate against the risk of landslide.	**AO5.1** Buildings and structures are not constructed on land with a slope of 15% or greater.	N/A	Not applicable – The proposed development does not include the construction of any structures. The general slope of the alignment is 1%, increasing to 2% and 3% in some locations. No slopes 15% or greater occur within the alignment.

Table 6-2 Response to works, services and infrastructure code

Performance Outcomes	Acceptable Outcomes	Response	Comment
Table 9.9.4.2.3.1 Works, services and infrastructure code – for self-assessable and assessable development			
PO1 Water supply Premises are provided with an adequate, safe and reliable supply of water.	**AO1.1** Premises within the Township Zone are connected to councils water supply; OR	N/A	Not applicable – the proposed development is for road works to improve the safety for road users and ongoing maintenance of the road. As described in Section 3.5, water required for dust suppression and other activities associated with the upgrade and maintenance of the access track will be sourced from either Coconut Creek or from RTAW's water sources.
	AO1.2 Where not connected to council's water supply, the development is provided with an adequate supply of water in accordance with the '*Far North Queensland Region of Councils (FNQROC) Design Guidelines and Standard Specifications*'.		
PO2 Wastewater Wastewater treatment and disposal facilities are provided appropriate for the level of demand generated, protects public health and avoids environmental harm. Note – development applications may be required to be supported by a Wastewater Management Plan to demonstrate compliance with this performance outcome. The Wastewater Management Plan must prepared by a suitably qualified person and consider: (a) local climatic, drainage and groundwater (b) conditions; (c) water quality objectives; and (d) best practice environmental management.	**AO2.1** Premises within the Township Zone are connected to councils reticulated sewerage network; OR	N/A	Not applicable – the proposed development is for road works to improve the safety for road users and ongoing maintenance of the road. Temporary, transportable ablution facilities will be provided during upgrade works, but these will be removed once upgrade works are complete. Wastewater will not be produced as a result of the development.
	AO2.2 Premises have an on-site wastewater disposal system designed in accordance with the '*Far North Queensland Region of Councils (FNQROC) Design Guidelines and Standard Specifications*'.		
PO3 Electricity Premises have an adequate supply of electricity.	**AO3.1** Premises within the Township Zone are connected to an electricity network.	N/A	Not applicable – the proposed development is for road works to improve the safety for road users and ongoing maintenance of the road. This development does not include the construction of a premises within the Township Zone

Performance Outcomes	Acceptable Outcomes	Response	Comment
			and does not require the supply of electricity.
PO4 Stormwater Land is provided with internal and external drainage facilities of an appropriate standard to minimise stormwater runoff and ponding, and to reduce impacts on receiving waters.	**AO4.1** Stormwater drainage is designed to comply with NPM1.8 of the *Queensland Development Code and the Urban Stormwater Quality Planning Guidelines 2010*.	P/S	Complies with PO4 – The road will be constructed with windrow turn-outs to limit the concentration of overland flow within road alignment. The road will remain unpaved. Typical construction of the road and drainage is shown on Figure 3-16.
PO5 Stormwater management Development is reflective of local drainage patterns and land use constraints (such as soil type, landscape features, nutrient hazardous areas, acid sulfate soil) and incorporates measures to minimise the transfer of contaminants to groundwater and waterways. Editor's note – a stormwater quality management plan prepared in accordance with the *Urban Stormwater Quality Planning Guidelines 2010* may be required to demonstrate compliance with this specific outcome.	**AO5.1** Development is located outside of an overland flow path.	☑	Complies with AO5.1 – The proposed development will not result in the collection or change in overland flow. Drainage design for the road is to limit the concentration of overland flow within the road alignment and direct flow away from the road and to overland flow paths.
PO6 Waste management Business and industry activities provide appropriate refuse container storage areas which are: (a) screened from public view (b) b) of adequate size for the use; (c) in a position that is conveniently (d) accessible for collection; (e) kept in a clean state at all times.	**AO6.1** No acceptable outcome is identified.	P/S	Complies with PO6 – during construction of the road waste will be collected and disposed of at designated, approved locations. Waste will generally be restricted to putrescible waste. Construction waste is considered to be negligible. On-going maintenance of the road will require clearing of regrowth within the road corridor and removal of vegetation and trees adjoining the road alignment that pose a safety hazard for road users. Waste generated during maintenance activities is anticipated to be negligible and will also be collected and disposed of at designated, approved waste location.
PO7 Road design Roads are designed to create a	**AO7.1** Road design complies with the requirements of the *FNQROC Regional Development Manual*.	P/S	Complies with PO7 – The proposed works seek to improve the safety for road users as vehicle movements increase.

Performance Outcomes	Acceptable Outcomes	Response	Comment
continuous connection to community destinations and encourage safe walking and cycling through the separation of active and motorised transport where possible.			Road design aims to increase safety and minimise environmental harm. The existing road design will remain unchanged. Proposed upgrade works are anticipated to include grading and compacting the existing running surface. The new passing bays will be constructed to the same standard as the existing road. Typical construction of the road, passing bay and drainage is shown on Figure 3-16.
PO8 Vehicle access Vehicle access and manoeuvring space is provided to a standard which is appropriate for the use, and for the type of vehicles associated with the use.	**AO8.1** Development within the Township Zone is provided with at least one driveway access.	P/S	Complies with PO8 – The proposed development will improve safe access and use of the existing access road. Works include the installation of passing bays at designated locations along the existing track. The passing bays and road upgrade works has been based on the current vehicles types that use the road.
PO9 Essential infrastructure Essential infrastructure items and works are protected from adverse impacts of operational works.	**AO9.1** No solution specified.	N/A	Not applicable – Proposed development does not compromise essential infrastructure as defined in the Planning Scheme.
PO10 Erosion and sediment control Effective control measures are put in place to ensure that construction activities do not cause or increase erosion.	**AO10.1** Development provides a sediment and erosion control management plan, developed in accordance with local conditions and following recommendations from a suitably qualified person. Editor's note – The *Urban Stormwater Quality Planning Guidelines 2010* provides relevant criteria for the development of sediment and erosion control management plans.	☑	Complies with PO10 – Works will be undertaken in accordance with a sediment and erosion control management plan, prepared by a suitably qualified person.
PO11 Environmental protection Development does not result in the contamination of land or water, and avoids risk to people and property.	**AO11.1** Development does not occur on sites of contaminated land.	☑	Complies with AO11.1 – Details in relation to contaminated land is provided in Section 4.2.2.
	AO11.2 Development does not involve the laydown or storage of hazardous or contaminated materials.	☑	Complies with AO11.2 – The proposed development does not involve the storage or laydown of hazardous or contaminated materials.
PO12 Noise Noise generated from filling, excavation or construction activities does not	**AO12.1** Construction activities are carried out only between the hours of 6.30 am-6.30 pm, Monday to Saturday, and do not occur on Sundays or public	☑	Complies with AO12.1 – Construction activities associated with the road upgrade will occur between the hours of 6.30 am to 6.30 pm, Monday to Saturday.

Performance Outcomes	Acceptable Outcomes	Response	Comment
adversely impact on the amenity of people living in the community.	holidays.		
PO13 Dust The construction phase of the development prevents or mitigates the release of dust particles which have the potential to cause environmental nuisance to sensitive receptors.	**AO13.1** Areas of exposed fill, excavation and unsealed accesses on the site are watered regularly (particularly during periods of high or constant wind) to reduce the generation of dust.	☑	Complies with AO13.1 – Dust suppression will be undertaken as required during upgrade, maintenance and use of the road. Material excavated along the road alignment will be re-graded and compacted back into the track alignment. No stockpiling of excavated material is proposed. As described in Section 3.4, wherever possible, fill material will be sourced from material arising from the access road upgrade and maintenance works. Should there be areas which require a more selective fill material or where there is insufficient material from upgrade and maintenance activities, fill material will be sourced from the adjoining Amrun mining lease and transported to the area as required. Fill material will not be stockpiled.
PO14 Weed and pest management Development avoids the introduction, establishment and spread of weed or pest species. Note – an applicant may be required to demonstrate consideration to any applicable local pest management plan in meeting this specific outcome.	**AO14.1** No acceptable outcome is identified.	P/S	Complies with PO14 – Weeds and pests will be managed under an Environmental Management Plan for the works. Measures will include the use of clean machinery to undertake the works and use of clean fill.
Additional assessment criteria for specified land uses – vegetation clearing			
PO17 Areas of environmental significance Vegetation disturbance or other impacts on matters of state environmental significance identified in the Queensland Government SPP interactive mapping system is avoided, or where disturbance cannot be avoided, the loss or decrease	**AO17.1** Vegetation clearing does not occur within the Environmental Management and Conservation Zone.	P/S	Complies with PO17 – Vegetation disturbance will occur as a result of this development. Approximately 0.6 ha is proposed to be cleared to provide passing bays and intersection upgrade at Beagle Camp. Passing bays have been located, wherever possible, in areas of regrowth and restricted to the minimum required to maintain safe access and use of the existing access road. An ecological assessment is provided in Appendix D.

Performance Outcomes	Acceptable Outcomes	Response	Comment
of values is minimised by: (a) minimising the total footprint within which works or activities are contained; (b) avoiding further fragmentation of areas of environmental significance and strengthening linkages where possible; (c) utilising areas of lesser importance in terms of biodiversity values so that areas of higher value are conserved. Note – vegetation clearing on land within the Environmental Management and Conservation Zone may be required to submit an ecological assessment report to identify the ecological values, components and process within the area which may be impacted by the development to demonstrate compliance with this performance outcome.			
PO18 Ecological values Vegetation clearing does not impact adversely on ecological or landscape values.	**AO18.1** Vegetation is retained within 200 m of a wetland or the high bank of a permanent waterway identified on the Queensland Government SPP interactive mapping system.	P/S	Complies with PO18 – The proposed development is not located within 200 m from a wetland or waterway identified on the Queensland Government SPP interactive mapping system. The closest mapped Matter of State Environmental Significance (wetland) is approximately 13 km south east of the intersection of Aurukun Road and the access road. Works pass through three watercourses. These watercourses are identified on SPP interactive mapping as Matter of State Environmental Significance (vegetation intersecting a watercourse) (refer Figure 4-1). These watercourses are also mapped as impact waterways on the spatial data layer Queensland Waterways for Waterway Barrier Works. The proposed development is to upgrade and maintain an existing road that currently passes through these watercourses. Any vegetation proposed to be cleared within

Performance Outcomes	Acceptable Outcomes	Response	Comment
			the high bank of the watercourses will be restricted to instances of regrowth within the existing alignment and/or removal of individual trees that may pose a health and safety risk to road users.
	AO18.2 Vegetation is retained on land with slopes of more than 1 in 6.	N/A	Not applicable – The proposed development does not include the construction of any structures. The general slope of the alignment is 1%, increasing to 2% and 3% in some locations. No slopes 15% or greater occur within the alignment.
PO19 Vegetation of cultural heritage significance Vegetation identified as having cultural heritage significance is protected from the impacts of development. Note – an applicant is advised to contact Councils Land and Sea Officer to determine the location of cultural heritage sites and special places of significance.	**AO19.1** Vegetation identified as a special cultural heritage feature is retained.	☑	Complies with AO19.1 – Vegetation clearance will be undertaken in consultation with the NAK, who are also the applicant for this development application. Cultural heritage survey of areas to be cleared will be part of the ILUA.
	AO19.2 Operational works (including filling or excavation) are designed to protect the ecological integrity of vegetation identified as having cultural heritage significance.	☑	Complies with AO19.1 – Operational works (including excavation or filling) will be undertaken in consultation with the NAK, who are also the applicant for this development application. Cultural heritage survey of areas to be cleared will be part of the ILUA.
Additional assessment criteria for specified land uses – excavation and filling			
PO20 Water quality Filling and excavation activities are designed to protect the environmental values of receiving waters.	**AO20.1** Filling and excavation or vegetation clearing does not occur within 200 m of a wetland or waterway within the Environmental Management and Conservation Zone, and 50 m within the Township Zone.	P/S	Complies with PO20 – The proposed development is not located within 200 m from a wetland or waterway identified on the Queensland Government SPP interactive mapping system. Works pass through three watercourses. These watercourses located within the EMCZ. The proposed development is to upgrade and maintain an existing road that currently passes through these watercourses. Any vegetation proposed to be cleared within the high bank of the watercourses will be restricted to instances of regrowth within the existing alignment and/or removal of individual trees that may pose a health and safety risk to road users.

Performance Outcomes	Acceptable Outcomes	Response	Comment
PO21 Safety Filling and excavation do not result in the instability of a site or adjacent land.	**AO21.1** Filling and excavation is no greater than 1.5 m in height or depth.	☑	Complies with AO21.1 – Excavation and/or filling will not occur to heights or depths greater than 1.5 m. The estimated maximum excavation and filling depth is 200 mm within Coconut Creek (refer Section 3.3.1).
	AO21.2 Development does not cause ponding on the site or nearby land.	☑	Complies with AO21.2 – Road side windrow turn-outs to limit the concentration of overland flow within road alignment will be formed at regular intervals to minimise the risk of ponding within the road alignment.
	AO21.3 Development does not result in an increase in flow of water from the site to any other land or watercourse.	☑	Complies with AO21.3 – Overland flow will be redirected away from the road alignment via windrow turn-outs. It is considered unlikely that overland flow redirected from the road alignment will result in an increase in flow of water from the site to other land or redirect flow to different watercourses.
PO22 Acid sulfate soils Protect the built environment and ensure the natural environment and community health is not harmed by the production of acid leachate resulting from disturbance of potential and/or actual acid sulfate soil.	**AO22.1** Development does not: (a) involve excavating or removing sand, soil and/or sediment located below 5 m AHD; (b) permanently or temporarily extract groundwater that results in the aeration of previously saturated acid sulfate soils; (c) involve filling that results in: a. actual acid sulfate soils being moved below the water table; b. previously saturated acid sulphate soils being aerated. OR	N/A	Not applicable – The proposed development does not extend below 20 m AHD.
	AO21.2 Where disturbance of acid sulphate soils cannot be avoided, development will: (a) neutralise existing acidity and prevent the generation of acid and metal contaminants; (b) prevent the release of surface or groundwater flows containing acid and metal contaminants into the environment. Note—where development is proposed on land below 20 m AHD		

Performance Outcomes	Acceptable Outcomes	Response	Comment
	the applicant may be required to provide results of an on-site acid sulfate soil investigation and an acid sulfate soil management plan to demonstrate compliance with the acceptable outcomes.		

Table 6-3 Response to overlay codes

Performance Outcomes	Acceptable Outcomes	Response	Comment
Table 8.2.1.3.1 Natural Hazards Overlay Code – for self-assessable and assessable development			
PO1 Protection of health and safety Development siting and layout responds to the potential for flooding, bushfire and coastal hazards and maintains personal safety at all times.	**AO1.1** New buildings and structures are not located on land subject to bushfire hazard identified on the Queensland Government SPP interactive mapping system unless they: (a) are sited in areas of lowest bushfire hazard within the lot; (b) achieve a building setback from vegetation identified as bushfire hazard of 1.5 times the predominant mature canopy tree height, or 10 m in height whichever is the greater; (c) have access to an adequate on site water supply for firefighting purposes.	N/A	Not applicable – No new buildings or structures are proposed as part of this development application.
	AO1.2 New buildings and structures are not located on land identified as a flood hazard area on Overlay Map OM-004-01 or OM-004-02 unless they are: (a) located on the highest part of the site to minimise entrance of flood waters; OR (b) elevated to ensure they are above (c) 5 m AHD; (d) provided with clear and direct access routes from the site.	N/A	Not applicable – No new buildings or structures are proposed as part of this development application.
	AO1.3 Land identified as being subject to coastal hazards on Overlay Map OM-003-01 or OM-003-02 remains undeveloped, unless the development is for one of the following: (a) coastal dependent development; (b) temporary or readily relocatable; (c) structures for safety and recreational purposes; OR (d) re-development that does not increase the risk to people and property from exposure to coastal	N/A	Not applicable – The existing access road does not pass through any areas shown on Overlay Map OM-003-01 or OM-003-02 as being subject to coastal hazard.

Performance Outcomes	Acceptable Outcomes	Response	Comment
	hazards.		
	AO1.4 Re-development of existing buildings or structures within a coastal hazard area identified on OM-003-01 or OM-003-02, or an increase in the intensity of development, may only occur where it can be demonstrated that the development will not compromise coastal management objectives to: (a) protect scenic amenity; (b) maintain public access to the foreshore for cultural recreational activities; (c) maintain and protect the barge landing and access road; (d) maintain and protect community facilities in close proximity to the foreshore such as the cemetery.	N/A	Not applicable – The proposed development does not involve the re-development of existing buildings or structures.
PO2 Resilient design Development for essential infrastructure is resilient to natural hazard events by: (a) ensuring siting, design and construction account for the potential risk of natural hazards; (b) essential infrastructure is able to function effectively during and immediately after natural hazard events; and (c) development maintains the safety of people and property.	**AO2.1** Essential infrastructure is not located in a natural hazard area identified on Overlay Map OM-003-01, OM-003-02, OM-004-01 or OM-004-02, or on mapping from the Queensland Government SPP interactive mapping system.	N/A	Not applicable – The proposed development does not involved essential infrastructure, as defined under the Planning Scheme.
PO3 Coastal Management Coastal and estuarine systems are preserved and protected from the impacts of development.	**AO3.1** No acceptable outcome is identified.	N/A	Not applicable – The access road is not located in the coastal zone or within estuarine systems.
PO4 Flood storage and management Development within a flood hazard area	**AO4.1** Development within a flood hazard area on Overlay Map OM-004-1 and OM-004-2 does not result in: (a) a net increase in filling greater than 50 m^3;	☑	Complies with AO4.1 – The development will not result in a net increase in filling greater than 50 m^3. Filling proposed to be undertaken in Coconut Creek is less than 50 m^3 and is to

Performance Outcomes	Acceptable Outcomes	Response	Comment
directly, indirectly, and cumulatively avoids any increase in water flow velocity or flood level, and does not increase the potential for flood damage either on site or on other properties.	(b) any reductions of on-site flood storage capacity and contain within the subject site any changes to depth/duration/velocity of flood waters; (c) does not change flood characteristics outside the subject site in ways that result in a. loss of flood storage; b. loss of/changes to flow paths; c. acceleration or retardation of flows.		repair existing filling in the watercourse, as such is not an increase in filling (refer Section 3.3.1).
PO5 Hazardous materials The manufacture or storage of hazardous materials is located outside of a flood hazard area and/or bushfire hazard area.	**AO5.1** No acceptable outcome is identified.	N/A	Not applicable – The proposed development does not involve the manufacture or storage of hazardous materials.
Table 8.2.2.3.1 Environmental Protection Overlay Code - for self-assessable and assessable development			
PO1 Amenity Development maintains the biodiversity and visual amenity of the natural environment.	**AO1.1** No acceptable outcome is identified.	P/S	Complies with PO1 – The proposed development maintains the biodiversity and visual amenity of the natural environment. Clearing of vegetation associated with the maintenance of the access road has been minimised to the lowest reasonable area to maintain safe use of the road. Individual trees will be removed along the access road on an on-going basis only where they have the potential to pose a safety risk to traffic travelling along the road.
PO2 Matters of state environmental significance Vegetation disturbance or other impacts on matters of state environmental significance shown on the Queensland Government SPP interactive mapping system.is avoided; or where disturbance cannot be avoided the loss or decrease of values is minimised by: (a) minimising the total footprint within which activities, buildings, structures, driveways and other	**AO2.1** Development is set back a minimum of 30 m from vegetation mapped as a matter of state environmental significance on the Queensland Government SPP interactive mapping system. Note – development on land within the Environmental Management and Conservation Zone may be required to submit an ecological assessment report to identify the ecological values, components and process within the area which may be impacted by the development.	☑	Complies with AO2.1 – While the access road is located within an area mapped as regulated vegetation Category B, this vegetation is not mapped as a matter of state environmental significance (MSES) on the Queensland Government SPP interactive mapping. The three watercourses that are crossed by the access road are mapped as MSES (vegetation intersecting a watercourse) (refer Figure 4-1). The proposed development is to upgrade and maintain an existing road that currently passes through these watercourses. Any vegetation proposed to be cleared within the area mapped as MSES (vegetation intersecting a

Performance Outcomes	Acceptable Outcomes	Response	Comment
works or activities are contained; and (b) avoiding further fragmentation of areas of environmental significance and strengthening natural linkages; (c) ensuring development is setback a sufficient distance from vegetation identified as a matter of state environmental significance to avoid adverse impacts; and (d) utilising areas of lesser biodiversity significance so that areas of higher value are conserved.			watercourse) will be restricted to instances of regrowth within the existing alignment and/or removal of individual trees that may pose a health and safety risk to road users.
PO3 Biodiversity and habitat protection Development ensures habitat areas which support critical ecological processes for threatened flora and fauna species (such as feeding, breeding or roosting) are retained, maintained, and protected. Note – development on land within the Environmental Management and Conservation Zone may be required to submit an ecological assessment report to identify the ecological values, components and process within the area which may be impacted by the development to demonstrate compliance with this performance outcome.	**AO3.1** No acceptable outcome is identified.	P/S	Complies with PO3 – Clearing associated with the works will be restricted to: • regrowth within the existing road alignment; • vegetation located within the 13 proposed new passing bays and Beagle Camp intersection; • removal of individual trees outside of the road alignment that pose a potential risk to health and safety along the road on an ongoing basis. Detail of the proposed clearing is provided in Section 4.3.3. Approximately 0.6 ha of additional clearing is required for the passing bays and Beagle Camp intersection. Wherever possible passing bays have been located within areas of non-remnant vegetation to minimise the vegetation clearing. An assessment of the vegetation to be cleared is provided in Appendix D.

Performance Outcomes	Acceptable Outcomes	Response	Comment
PO4 Wetlands Where new uses or works occur adjacent to wetlands there are no significant adverse effects on: (a) water quality; (b) ecological and biodiversity values; (c) landscape quality.	**AO4.1** Development is setback at least 200 m from a wetland or waterway within the Environmental Management and Conservation Zone, and 50 m within the Township Zone. Note – wetlands are identified on the Queensland Government SPP interactive mapping system.	☑	Complies with AO4.1 – The proposed development is not located within 200 m from a wetland or waterway identified on the Queensland Government SPP interactive mapping system.

6.2 Sustainable Planning Act 2009

The SP Act manages the process for development, the effect of development on the environment and coordinates the integration of local, regional and state planning in Queensland. The SP Reg. provides the operational detail of SP Act and indicates the statutory guidelines for development. Schedule 3 of the SP Reg. outlines development that is considered assessable under the SP Act. This proposed development does not trigger any assessable development under Schedule 3 (refer Table 1-1 and Section 4.3.3).

This application has been prepared to provide information in accordance with Section 313 of the SP Act, and the following matters have been assessed:

- The relevant State Development Assessment Provisions (SDAP) modules
- The Cape York Regional Plan
- The State Planning Policy

The State Development Assessment Provisions (SDAP) contain the matters the chief executive administering the SP Act may have regard to when assessing a Development Application as either an assessment manager or a referral agency. The SDAPs contain State Codes in which Development Applications must consider when a particular State matter is triggered by a development assessable under the IDAS. This application does not trigger development assessable under the IDAS.

6.2.1 Cape York Regional Plan

The Cape York Regional Plan (the Regional Plan) covers a large proportion of the Cape York Peninsula. The Regional Plan allocates some areas of land to the regional land use categories of Strategic Environmental Areas (SEAs) and National Parks and also identifies Priority Agricultural Areas (PAAs) and Priority Living Area (PLAs). SEAs, PAAs and PLAs are areas of regional interest for the purposes of the *Regional Planning Interests Act 2014*. The Regional Plan also sets out a number of regional policies to provide direction about how the state's interests in land use planning and development should be achieved in Cape York. The regional policies are addressed in Table 6-4.

Table 6-4 Cape York Regional Plan

Regional Policy	Comment
1. Provide for economic opportunities and appropriate development by facilitating opportunities for land uses that contribute to diverse economic and employment opportunities in the region.	Upgrade and maintenance of the access road assists to facilitate development in the vicinity of the subject allotment, including the SoE which will contribute to the economic future of the region through providing employment opportunities in the Aurukun and Weipa area.
2. Safeguard areas of significant biological diversity and ecological function by protecting the: a) integrity of the Steve Irwin Wildlife Reserve from incompatible activities b) ecological integrity of Strategic Environmental Areas from incompatible	The proposed development is not located within the Steve Irwin Wildlife Reserve or a SEA identified within the Regional Plan.

development.	
3. Planning schemes provide for potential recreation and commercial development opportunities that complement and contributes to the community value of national parks	N/A
4. Protect Priority Agricultural Land Uses within Priority Agricultural Areas.	The proposed development is not located within a Priority Agricultural Area (PAA) identified within the Regional Plan.
5. Maximise opportunities for co-existence of resource and agricultural land uses in Priority Agricultural Areas.	The proposed development is not located within a PAA identified within the Regional Plan.
6. Safeguard the areas required for the growth of towns through establishment of Priority Living Areas	The proposed development is not located within a Priority Living Area (PLA).
7. Provide for resource activities to locate within a Priority Living Area only where it meets the communities' expectations as determined by the relevant local government.	N/A

6.2.2 Queensland State Planning Policy

The SPP defines the Queensland's Government's policies about matters of state interest in land use planning and development. The minister has identified that the Planning Scheme reflects the following SPP which are relevant to the proposed development:

- Agriculture
- Biodiversity
- Water quality
- Natural hazards

Response to the performance outcomes and acceptable outcomes detailed in Table 6-1, Table 6-2 and Table 6-3 are considered to address the requirements of the SPP.

7 Conclusion

This Development Application seeks a Development Permit for a Material Change of Use (MCU) and Operational Works triggered by a planning scheme. The proposed development will continue to provide safe access and use of the access road for the NAK and a number of other road users. The proposal meets the performance outcomes of the Planning Scheme, either through meeting the acceptable solutions or providing alternative outcome that deliver the performance outcomes.

It is recommended that this Development Application for the upgrade and ongoing maintenance of the access be approved by ASC.

8 References

ASC (Aurukun Shire Council) 2013, *Aurukun Shire Planning Scheme*, October, Accessed online 27 October 2015: http://www.aurukun.qld.gov.au/wp-content/uploads/2012/08/Aurukun-Planning-Scheme_QPP3_Final-For-Adoption-Commencement.pdf, Queensland.

DAFF (Department of Agriculture, Fisheries and Forestry) 2013, *Code for self-assessable development Minor waterway barrier works: Part 4: bed level crossings (code number: WWBW01 April 2013)*, April, Department of Agriculture, Fisheries and Forestry, Queensland.

DNRM (Department of Natural Resources and Mines) 2014, *Riverine protection permit exemption requirements: WSS/2013/726*, version 1.01, DNRM, Queensland.

CSIRO, 2015, *ASS stuff national mapping*, Accessed on 11 November at: http://www.asris.csiro.au/mapping/viewer.htm

Appendix A Certificate of Title

CURRENT TITLE SEARCH
DEPT OF NATURAL RESOURCES AND MINES, QUEENSLAND

Request No: 22217801
Search Date: 11/11/2015 18:59 Title Reference: 50925478
Date Created: 01/10/2013

Previous Title: 40066955

REGISTERED OWNER

Dealing No: 715341200 01/10/2013

NGAN AAK-KUNCH ABORIGINAL CORPORATION RNTBC
TRUSTEE
FOR THE NATIVE TITLE HOLDERS OF THE LAND, THE WIK AND WIK WAY PEOPLES, AND UNDER THE ABORIGINAL LAND ACT 1991

ESTATE AND LAND

Estate in Fee Simple

LOT 39	SURVEY PLAN 239441	
	County of PERA	Parish of ROSMEAD
	Local Government: AURUKUN	
LOT 40	SURVEY PLAN 239441	
	County of PERA	Parish of ROSMEAD
	Local Government: AURUKUN	
LOT 211	SURVEY PLAN 241404	
	County of PERA	Parish of ALBATROSS
	County of LUKIN	Parish of COLERIDGE
	County of KENDALL	Parish of DORMER
	County of KENDALL	Parish of DUNLEATH
	County of KENDALL	Parish of EBURY
	County of PERA	Parish of EMBLEY
	County of KENDALL	Parish of ERSKINE
	County of KENDALL	Parish of FIELD
	County of PERA	Parish of GASPARD
	County of KENDALL	Parish of GASTON
	County of KENDALL	Parish of KEERWEER
	County of PERA	Parish of KOKIALAH
	County of PERA	Parish of RENDEL
	County of PERA	Parish of ROMILLY
	County of PERA	Parish of ROSMEAD
	County of PERA	Parish of ROSSMORE
	County of PERA	Parish of SACKVILLE
	County of PERA	Parish of SEATON
	County of PERA	Parish of STANMORE
	County of PERA	Parish of URQUHART
	County of KENDALL	Parish of VENTRIS
	County of WEIPA	Parish of WEIPA
	Local Government: AURUKUN	
LOT 213	SURVEY PLAN 241407	
	County of PERA	Parish of ROSMEAD
	County of PERA	Parish of URQUHART
	Local Government: AURUKUN	

CURRENT TITLE SEARCH
DEPT OF NATURAL RESOURCES AND MINES, QUEENSLAND

Request No: 22217801
Search Date: 11/11/2015 18:59 Title Reference: 50925478
Date Created: 01/10/2013

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
   Deed of Grant No. 40066955 (Lot 39 on SP 239441)
   (Lot 40 on SP 239441)
   (Lot 211 on SP 241404)
   (Lot 213 on SP 241407)

2. NOTING No 715341199 01/10/2013 at 10:00
   IN ACCORDANCE WITH SECTION (44) OF THE ABORIGINAL LAND ACT 1991 THIS DEED OF GRANT TAKES EFFECT AS FROM 11:10AM ON THE 18TH SEPTEMBER 2013

ADMINISTRATIVE ADVICES

Dealing	Type	Lodgement Date	Status
713004652	VEG NOTICE VEGETATION MANAGEMENT ACT 1999	19/01/2010 15:53	CURRENT
713412322	NT DETERM NATIVE TITLE ACT 1993 (CTH)	17/08/2010 14:33	CURRENT

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

Requested By: D-ENQ INFOTRACK PTY LIMITED

Appendix B IDAS Forms and Owners Consent

IDAS form 1—Application details

(*Sustainable Planning Act 2009* version 4.2 effective 3 August 2015)

This form must be used for **ALL** development applications.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete this form (*IDAS form 1—Application details)*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form and any other IDAS form relevant to your application must be used for development applications relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

PLEASE NOTE: This form is not required to accompany requests for compliance assessment.

Mandatory requirements

Applicant details (Note: the applicant is the person responsible for making the application and need not be the owner of the land. The applicant is responsible for ensuring the information provided on all IDAS application forms is correct. Any development permit or preliminary approval that may be issued as a consequence of this application will be issued to the applicant.)

Name/s (individual or company name in full)	**Ngan Aak-kunch Aboriginal Corporation RNTBC**
For companies, contact name	**Philippe Savidis**

Postal address

Cape York Land Council			
32 Florence Street			
Suburb	Cairns		
State	Qld	Postcode	4870
Country	Australia		

Contact phone number	(07) 4053 9222
Mobile number (non-mandatory requirement)	
Fax number (non-mandatory requirement)	

Email address (non-mandatory requirement)	
	@
Applicant's reference number (non-mandatory requirement)	

1. What is the nature of the development proposed and what type of approval is being sought?

Table A—Aspect 1 of the application (If there are additional aspects to the application please list in Table B—Aspect 2.)

a) What is the nature of the development? (Please only tick one box.)

☒ Material change of use ☐ Reconfiguring a lot ☐ Building work ☐ Operational work

b) What is the approval type? (Please only tick one box.)

☐ Preliminary approval under s241 of SPA ☐ Preliminary approval under s241 and s242 of SPA ☒ Development permit

c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

Intensification of use on existing access road and establishing new road areas due to the creation of passing bays at nominated locations along the existing access road. Works required to continue to provide safe access and use of the road as vehicle movements increase.

d) What is the level of assessment? (Please only tick one box.)

☒ Impact assessment ☐ Code assessment

Table B—Aspect 2 of the application (If there are additional aspects to the application please list in Table C—Additional aspects of the application.)

a) What is the nature of development? (Please only tick one box.)

☐ Material change of use ☐ Reconfiguring a lot ☐ Building work ☒ Operational work

b) What is the approval type? (Please only tick one box.)

☐ Preliminary approval under s241 of SPA ☐ Preliminary approval under s241 and s242 of SPA ☒ Development permit

c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

Maintenance activities along the existing road include clearing vegetation that has encroached into the existing road alignment and removal of vegetation within and outside of the existing road alignment that may pose a health and safety risk to road users. Upgrade activities include clearing of vegetation outside the existing road alignment to provide passing bays at nominated locations.

d) What is the level of assessment?

☐ Impact assessment ☒ Code assessment

Table C—Additional aspects of the application (If there are additional aspects to the application please list in a separate table on an extra page and attach to this form.)

☐ Refer attached schedule ☒ Not required

2. Location of the premises (Complete Table D and/or Table E as applicable. Identify each lot in a separate row.)

Table D—Street address and lot on plan for the premises or street address and lot on plan for the land adjoining or adjacent to the premises (Note: this table is to be used for applications involving taking or interfering with water.) (Attach a separate schedule if there is insufficient space in this table.)

☒ Street address **and** lot on plan (All lots must be listed.)

☐ Street address **and** lot on plan for the land adjoining or adjacent to the premises (Appropriate for development in water but adjoining or adjacent to land, e.g. jetty, pontoon. All lots must be listed.)

Street address					**Lot on plan description**		**Local government area** (e.g. Logan, Cairns)
Lot	Unit no.	Street no.	Street name and official suburb/ locality name	Post-code	Lot no.	Plan type and plan no.	
i)			Aurukun Road		211	SP241404	Aurukun Shire Council
ii)							
iii)							

Planning scheme details (If the premises involves multiple zones, clearly identify the relevant zone/s for each lot in a separate row in the below table. Non-mandatory)

Lot	Applicable zone / precinct	Applicable local plan / precinct	Applicable overlay/s
i)	Environmental Management and Conservation Zone	Aurukun Shire Council Planning Scheme	Flood hazard overlay
ii)			
iii)			

Table E—Premises coordinates (Appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay.) (Attach a separate schedule if there is insufficient space in this table.)

Coordinates (Note: place each set of coordinates in a separate row)				**Zone reference**	**Datum**	**Local government area (if applicable)**
Easting	Northing	Latitude	Longitude			
					☐ GDA94 ☐ WGS84 ☐ other	

3. Total area of the premises on which the development is proposed (indicate square metres)

Total area of the existing access road and proposed passing bays is 118,377 m^2

4. Current use/s of the premises (e.g. vacant land, house, apartment building, cane farm etc.)

Existing access road (114,474 m^2) is used as a road. Proposed new passing bays (13,903 m^2) is currently vacant land.

5. Are there any current approvals (e.g. a preliminary approval) associated with this application? (Non-mandatory requirement)

☒ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

6. Is owner's consent required for this application? (Refer to notes at the end of this form for more information.)

☐ No

☒ Yes—complete either Table F, Table G or Table H as applicable

Table F	
Name of owner/s of the land	
I/We, the above-mentioned owner/s of the land, consent to the making of this application.	
Signature of owner/s of the land	
Date	

Table G	
Name of owner/s of the land	
☐ The owner's written consent is attached or will be provided separately to the assessment manager.	

Table H	
Name of owner/s of the land	**Ngan Aak-kunch Aboriginal Corporation RNTBC**
☒ By making this application, I, the applicant, declare that the owner has given written consent to the making of the application.	

7. Identify if any of the following apply to the premises (Tick applicable box/es.)

☒ Adjacent to a water body, watercourse or aquifer (e.g. creek, river, lake, canal)—complete Table I

☐ On strategic port land under the *Transport Infrastructure Act 1994*—complete Table J

☐ In a tidal water area—complete Table K

☐ On Brisbane core port land under the *Transport Infrastructure Act 1994* (No table requires completion.)

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* (no table requires completion)

☒ Listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* (no table requires completion)

Table I
Name of water body, watercourse or aquifer
Coconut Creek, Tributary of Tappelbang Creek and Unnamed tributary of Hey River

Table J	
Lot on plan description for strategic port land	Port authority for the lot

Table K	
Name of local government for the tidal area (if applicable)	Port authority for the tidal area (if applicable)

8. Are there any existing easements on the premises? (e.g. for vehicular access, electricity, overland flow, water etc)

☒ No ☐ Yes—ensure the type, location and dimension of each easement is included in the plans submitted

9. Does the proposal include new building work or operational work on the premises? (Including any services)

☐ No ☒ Yes—ensure the nature, location and dimension of proposed works are included in plans submitted

10. Is the payment of a portable long service leave levy applicable to this application? (Refer to notes at the end of this form for more information.)

☐ No—go to question 12 ☒ Yes

11. Has the portable long service leave levy been paid? (Refer to notes at the end of this form for more information.)

☒ No

☐ Yes—complete Table L and submit with this application the yellow local government/private certifier's copy of the receipted QLeave form

Table L		
Amount paid	Date paid (dd/mm/yy)	QLeave project number (6 digit number starting with A, B, E, L or P)

12. Has the local government agreed to apply a superseded planning scheme to this application under section 96 of the *Sustainable Planning Act 2009*?

☒ No

☐ Yes—please provide details below

Name of local government	Date of written notice given by local government (dd/mm/yy)	Reference number of written notice given by local government (if applicable)

13. List below all of the forms and supporting information that accompany this application (Include all IDAS forms, checklists, mandatory supporting information etc. that will be submitted as part of this application)

Description of attachment or title of attachment	Method of lodgement to assessment manager
IDAS form 5 – Material Change of Use assessable against a planning scheme	Electronic
IDAS form 6 – Building or operational work assessable against a planning scheme	Electronic

14. Applicant's declaration

☒ By making this application, I declare that all information in this application is true and correct (Note: it is unlawful to provide false or misleading information)

Notes for completing this form

- Section 261 of the *Sustainable Planning Act 2009* prescribes when an application is a properly-made application. Note, the assessment manager has discretion to accept an application as properly made despite any non-compliance with the requirement to provide mandatory supporting information under section 260(1)(c) of the *Sustainable Planning Act 2009*

Applicant details

- Where the applicant is not a natural person, ensure the applicant entity is a real legal entity.

Question 1

- Schedule 3 of the Sustainable Planning Regulation 2009 identifies assessable development and the type of assessment. Where schedule 3 identifies assessable development as "various aspects of development" the applicant must identify each aspect of the development on Tables A, B and C respectively and as required.

Question 6

- Section 263 of the *Sustainable Planning Act 2009* sets out when the consent of the owner of the land is required for an application. Section 260(1)(e) of the *Sustainable Planning Act 2009* provides that if the owner's consent is required under section 263, then an application must contain, or be accompanied by, the written consent of the owner, or include a declaration by the applicant that the owner has given written consent to the making of the application. If a development application relates to a state resource, the application is not required to be supported by evidence of an allocation or entitlement to a state resource. However, where the state is the owner of the subject land, the written consent of the state, as landowner, may be required. Allocation or entitlement to the state resource is a separate process and will need to be obtained before development commences.

Question 7

- If the premises is listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* it may be necessary to seek compliance assessment. Schedule 18 of the Sustainable Planning Regulation 2009 identifies where compliance assessment is required.

Question 11

- The *Building and Construction Industry (Portable Long Service Leave) Act 1991* prescribes when the portable long service leave levy is payable.
- The portable long service leave levy amount and other prescribed percentages and rates for calculating the levy are prescribed in the Building and Construction Industry (Portable Long Service Leave) Regulation 2002.

Question 12

- The portable long service leave levy need not be paid when the application is made, but the *Building and Construction Industry (Portable Long Service Leave) Act 1991* requires the levy to be paid before a development permit is issued.
- Building and construction industry notification and payment forms are available from any Queensland post office or agency, on request from QLeave, or can be completed on the QLeave website at www.qleave.qld.gov.au. For further information contact QLeave on 1800 803 481 or visit www.qleave.qld.gov.au.

Privacy—The information collected in this form will be used by the Department of Infrastructure, Local Government and Planning (DILGP), assessment manager, referral agency and/or building certifier in accordance with the processing and assessment of your application. Your personal details should not be disclosed for a purpose outside of the IDAS process or the provisions about public access to planning and development information in the *Sustainable Planning Act 2009*, except where required by legislation (including the *Right to Information Act 2009*) or as required by Parliament. This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

OFFICE USE ONLY

Date received		Reference numbers	

NOTIFICATION OF ENGAGEMENT OF A PRIVATE CERTIFIER

To _____ Council. I have been engaged as the private certifier for the building work referred to in this application

Date of engagement	Name	BSA Certification license number	Building classification/s

QLEAVE NOTIFICATION AND PAYMENT (For completion by assessment manager or private certifier if applicable.)

Description of the work	QLeave project number	Amount paid ($)	Date paid	Date receipted form sighted by assessment manager	Name of officer who sighted the form

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 5—Material change of use assessable against a planning scheme

(*Sustainable Planning Act 2009* version 3.1 effective 3 August 2015)

This form must be used for development applications for a material change of use assessable against a planning scheme.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form must also be used for material change of use on strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* that requires assessment against the land use plan for that land. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

Mandatory requirements

1. Describe the proposed use. (Note: this is to provide additional detail to the information provided in question 1 of *IDAS form 1—Application details*. Attach a separate schedule if there is insufficient space in this table.)

General explanation of the proposed use	Planning scheme definition (include each definition in a new row) (non-mandatory)	No. of dwelling units (if applicable) or gross floor area (if applicable)	Days and hours of operation (if applicable)	No. of employees (if applicable)
Road	Not defined	N/A	N/A	N/A

2. Are there any current approvals associated with the proposed material change of use? (e.g. a preliminary approval.)

☒ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

3. Does the proposed use involve the following? (Tick all applicable boxes.)

The reuse of existing buildings on the premises	☒ No	☐ Yes
New building work on the premises	☒ No	☐ Yes
The reuse of existing operational work on the premises	☒ No	☐ Yes
New operational work on the premises	☐ No	☒ Yes

Mandatory supporting information

4. Confirm that the following mandatory supporting information accompanies this application

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
All applications		
A site plan drawn to an appropriate scale (1:100, 1:200 or 1:500 are **recommended** scales) which shows the following: • the location and site area of the land to which the application relates (*relevant land*) • the north point • the boundaries of the relevant land • any road frontages of the relevant land, including the name of the road • the location and use of any existing or proposed buildings or structures on the relevant land (note: where extensive demolition or new buildings are proposed, two separate plans [an existing site plan and proposed site plan] may be appropriate) • any existing or proposed easements on the relevant land and their function • the location and use of buildings on land adjoining the relevant land • all vehicle access points and any existing or proposed car parking areas on the relevant land. Car parking spaces for persons with disabilities and any service vehicle access and parking should be clearly marked • for any new building on the relevant land, the location of refuse storage • the location of any proposed retaining walls on the relevant land and their height • the location of any proposed landscaping on the relevant land • the location of any stormwater detention on the relevant land.	☒ Confirmed	
A statement about how the proposed development addresses the local government's planning scheme and any other planning instruments or documents relevant to the application.	☒ Confirmed	
A statement about the intensity and scale of the proposed use (e.g. number of visitors, number of seats, capacity of storage area etc.).	☒ Confirmed	
Information that states: • the existing or proposed floor area, site cover, maximum number of storeys and maximum height above natural ground level for existing or new buildings (e.g. information regarding existing buildings but not being reused) • the existing or proposed number of on-site car parking bays, type of vehicle cross-over (for non-residential uses) and vehicular servicing arrangement (for non-residential uses).	☐ Confirmed ☒ Not applicable	

A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	☒ Confirmed ☐ Not applicable	
When the application involves the reuse of existing buildings		
Plans showing the size, location, existing floor area, existing site cover, existing maximum number of storeys and existing maximum height above natural ground level of the buildings to be reused.	☐ Confirmed ☒ Not applicable	
When the application involves new building work (including extensions)		
Floor plans drawn to an appropriate scale (1:50, 1:100 or 1:200 are **recommended** scales) which show the following: • the north point • the intended use of each area on the floor plan (for commercial, industrial or mixed use developments only) • the room layout (for residential development only) with all rooms clearly labelled • the existing and the proposed built form (for extensions only) • the gross floor area of each proposed floor area.	☐ Confirmed	
Elevations drawn to an appropriate scale (1:100, 1:200 or 1:500 are **recommended** scales) which show plans of all building elevations and facades, clearly labelled to identify orientation (e.g. north elevation)	☐ Confirmed	
Plans showing the size, location, proposed site cover, proposed maximum number of storeys, and proposed maximum height above natural ground level of the proposed new building work.	☐ Confirmed ☒ Not applicable	
When the application involves reuse of other existing work		
Plans showing the nature, location, number of on-site car parking bays, existing area of landscaping, existing type of vehicular cross-over (non-residential uses), and existing type of vehicular servicing arrangement (non-residential uses) of the work to be reused.	☐ Confirmed ☒ Not applicable	
When the application involves new operational work		
Plans showing the nature, location, number of new on-site car parking bays, proposed area of new landscaping, proposed type of new vehicle cross-over (non-residential uses), proposed maximum new vehicular servicing arrangement (non-residential uses) of the proposed new operational work.	☒ Confirmed ☐ Not applicable	

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

OFFICE USE ONLY

Date received		Reference numbers	

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 6—Building or operational work assessable against a planning scheme

(*Sustainable Planning Act 2009* version 3.1 effective 3 August 2015)

This form must be used for development applications for building work or operational work assessable against a planning scheme.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form must be used for building work or operational work relating on strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* that requires assessment against the land use plan for that land. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

Mandatory requirements

1. What is the nature of the work that requires assessment against a planning scheme? (Tick all applicable boxes.)

☐ Building work—complete Table A ☒ Operational work—complete Table B

Table A

a) What is the nature of the building work (e.g. building, repairing, altering, underpinning, moving or demolishing a building)?

b) Are there any current approvals associated with this application? (e.g. material change of use.)

☐ No ☐ Yes— provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

Table B

a) What is the nature of the operational work? (Tick all applicable boxes.)

- ☐ Road works
- ☐ Stormwater
- ☐ Water infrastructure
- ☐ Drainage works
- ☒ Earthworks
- ☐ Sewerage infrastructure
- ☐ Landscaping
- ☐ Signage
- ☒ Clearing vegetation under the planning scheme
- ☐ Other—provide details

b) Is the operational work necessary to facilitate the creation of new lots? (E.g. subdivision.)

☒ No ☐ Yes—specify the number of lots being created

c) Are there any current approvals associated with this application? (E.g. material change of use.)

☒ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

2. What is the dollar value of the proposed building work? (Inc GST, materials and labour.)	**$N/A**

3. What is the dollar value of the proposed operational work? (Inc GST, materials and labour.)	**$270,000**

Mandatory supporting information

4. Confirm that the following mandatory supporting information accompanies this application

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
All applications involving building work or operational work		
A site plan drawn to an appropriate scale (1:100, 1:200 or 1:500 are recommended scales) which shows the following: • the location and site area of the land to which the application relates (*relevant land*) • the north point • the boundaries of the relevant land • the allotment layout showing existing lots, any proposed lots (including the dimensions of those lots), existing or proposed road reserves, building envelopes and existing or proposed open space (note: numbering is required for all lots) • any existing or proposed easements on the relevant land and their function • any access limitation strips • all existing and proposed roads and access points on the relevant land.	☒ Confirmed	

A statement about how the proposed development addresses the local government's planning schemes and any other planning documents relevant to the application.	☒ Confirmed	
A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	☒ Confirmed ☐ Not applicable	
Applications for building work (including extensions and demolition that is assessable development)		
Floor plans drawn to an appropriate scale (1:50, 1:100 or 1:200 are recommended scales) which show the following: • the north point • the intended use of each area on the floor plan (for commercial, industrial or mixed use developments only) • the room layout (for residential development only) with all rooms clearly labelled • the existing and the proposed built form (for extensions only) • the gross floor area of each proposed floor area.	☐ Confirmed ☒ Not applicable	
Elevations drawn to an appropriate scale (1:100, 1:200 or 1:500 are recommended scales) which show plans of all building elevations and facades, clearly labelled to identify orientation (e.g. north elevation).	☐ Confirmed ☒ Not applicable	
Plans showing the size, location, proposed site cover, proposed maximum number of storeys, and proposed maximum height above natural ground level of the proposed new building work.	☐ Confirmed ☒ Not applicable	
Plans showing the extent of any demolition that is assessable development.	☐ Confirmed ☒ Not applicable	
Applications for operational work involving earthworks (filling and excavating)		
Drawings showing: • existing and proposed contours • areas to be cut and filled • the location and level of any permanent survey marks or reference stations used as datum for the works • the location of any proposed retaining walls on the relevant land and their height • the defined flood level (if applicable) • the fill level (if applicable).	☒ Confirmed ☐ Not applicable	
Applications for operational work involving roadworks		
Drawings showing: • existing and proposed contours • the centreline or construction line showing chainages, bearings, offsets if the construction line is not the centreline of the road and all intersection points • information for each curve including tangent point chainages and offsets, curve radii, arc length, tangent length, superelevation (if applicable) and curve widening (if applicable) • kerb lines including kerb radii (where not parallel to centreline) and tangent point changes (where not parallel to centreline) • edge of pavement where kerb is not constructed • position and extent of channelisation • location and details of all traffic signs, guideposts, guardrail and other street furniture • pavement markings including details on raised pavement markers	☐ Confirmed ☒ Not applicable	

• catchpit, manhole and pipeline locations • drainage details (if applicable) • cross road drainage culverts (if applicable) • concrete footpaths and cycle paths • location and details for access points, ramps and invert crossings • changes in surfacing material.		
Applications for operational work involving stormwater drainage		
Drawings showing: • existing and proposed contours • drainage locations, diameters and class of pipe, open drains and easements • manhole location, chainage and offset or coordinates and inlet and outlet invert levels • inlet pit locations, chainage and offset or coordinates and invert and kerb levels.	☐ Confirmed ☒ Not applicable	
Applications for operational work involving water reticulation		
Drawings showing: • kerb lines or edge of pavement where kerb is not constructed • location and levels of other utility services where affected by water reticulation works • pipe diameter, type of pipe and pipe alignment • water main alignments • water supply pump station details (if applicable) • minor reservoir details (if applicable) • conduits • location of valves and fire hydrants • location of house connections (if applicable) • location of bench marks and reference pegs.	☐ Confirmed ☒ Not applicable	
Applications for operational work involving sewerage reticulation		
Drawings showing: • location of all existing and proposed services • location of all existing and proposed sewer lines and manhole locations • location of all house connection branches • kerb lines or edge of pavement where kerb is not constructed • chainages • design sewer invert levels • design top of manhole levels • type of manhole and manhole cover • pipe diameter, type of pipe and pipe alignment • location of house connections (if applicable) • sewer pump station details (if applicable).	☐ Confirmed ☒ Not applicable	
Applications for operational work involving street lighting		
Drawings showing: • location of all light poles and service conduits • location of all other cross road conduits • type of wattage and lighting • any traffic calming devices • additional plans for roundabouts and major roads (if applicable) • details of any variations to normal alignment	☐ Confirmed ☒ Not applicable	

• details of lighting levels.		
Applications for operational work involving public utility services		
Drawings showing: • any existing light poles and power poles • any existing underground services • details of proposed services • alteration to existing services.	☐ Confirmed ☒ Not applicable	
Applications for operational work involving landscaping works		
Drawings showing: • the location of proposed plant species • a plant schedule indicating common and botanical names, pot sizes and numbers of plants • planting bed preparation details including topsoil depth, subgrade preparation, mulch type and depth, type of turf, pebble, paving and garden edge • the location and type of any existing trees to be retained • construction details of planter boxes, retaining walls and fences • the proposed maintenance period • irrigation system details.	☐ Confirmed ☒ Not applicable	

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

OFFICE USE ONLY

Date received | Reference numbers

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

Appendix C CLR/EMR Search Results

Department of Environment and Heritage Protection (EHP)
ABN 46 640 294 485
400 George St Brisbane, Queensland 4000
GPO Box 2454, Brisbane QLD 4001, AUSTRALIA
www.ehp.qld.gov.au

SEARCH RESPONSE
ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

InfoTrack Pty Ltd
PO Box 10314
Adelaide Street Brisbane QLD 4000

Transaction ID: 50221016 EMR Site Id: 120797 11 November 2015
Client Reference:
Cheque Number:

This response relates to a search request received for the site:
Lot: 211 Plan: SP241404

EMR RESULT

The above site IS included on the Environmental Management Register. IMPORTANT please read the ADDITIONAL ADVICE below.

The site you have searched has been subdivided from the following site, which IS included on the EMR or the CLR.

Lot: 1 Plan: SC211
Address: KANG KANG ROAD
AURUKUN 4871

The site has been subject to the following Notifiable Activity or Hazardous Contaminant.
SERVICE STATIONS - operating a commercial service station.
LANDFILL - disposing of waste (excluding inert construction and demolition waste).

CLR RESULT

The above site is NOT included on the Contaminated Land Register. IMPORTANT please read the ADDITIONAL ADVICE below.

ADDITIONAL ADVICE

This search response does NOT include:-
1. land which is contaminated but EHP has not been notified,
2. land which has a notifiable activity being undertaken on it but EHP has not been notified,
3. a complete list of notifiable activities or contamination if EHP has not been notified.

If you have any queries in relation to this search please phone 13QGOV (13 74 68)

Administering Authority

Appendix D SOE Project, Flora & Fauna Assessment of the Beagle Camp, Amban and Pera Head Access Tracks

ECOTONE ENVIRONMENTAL SERVICES Pty. Ltd.

SOE Project, Flora & Fauna Assessment of the Beagle Camp, Amban and Pera Head Access Tracks.

Draft Report

Prepared for
Rio Tinto Technology & Innovation,
Brisbane.

24th November 2015

EES Document No. 2015/12

Cover Photo: Typical section of access road in Darwin stringybark woodland (RE 3.5.2)

Title	**SOE Project, Flora & Fauna Assessment of the Beagle Camp, Amban and Pera Head Access Tracks.**
Date Printed/delivered	24th November 2015
Media	MS Word document via email
Job Number	SOEpxx15
Document Number	2015/12
Status	Draft Report
Version	0
Client	Rio Tinto Projects, Technology & Innovation
Client Rep	Glenn Woodrow, Environmental Specialist - South of Embley Project
Authors	Morgan Thomas
Filename	SOE Access Track Flora and Fauna Assessment Draft Report_24Nov15
Authorised	Morgan Thomas – Principal Ecologist
Signature	

A.B.N. 15 078 058 750

PO Box 9
Yungaburra, QLD 4884
Ph: (07) 0418 631 391
Email: morgan@ecotone.com.au

Contents

1. Introduction

1.1 Background and Objectives

The objective of this work was to gather field data and undertake an ecological assessment to accompany a Development Approval for the road augmentation works proposed by Rio Tinto for access to the South of Embley Project area. The access roads are all located outside the Rio Tinto Mining Lease and comprise the following:

- Beagle Camp access road (13.9km)
- Amban access track (5.5km)
- Pera Head access track (7km)

The main tasks of the study were to gather information on flora and fauna occurring or potentially occurring along the road alignment and provide an assessment of the potential impact of the project on these species. The assessment focused on EPBC threatened flora and fauna with the objective of conducting sufficient field survey to satisfy the Commonwealth survey guidelines for fauna species and provide a robust assessment of the presence/absence of the species along the alignment.

The tracks of interest traverse predominantly Darwin Stringybark woodland on bauxite plateau (Regional Ecosystem 3.5.2) but also cross a minor drainage line and the Coconut Creek riparian corridor near Beagle Camp. A deeply incised seasonal drainage gully also occurs just after the Aurukun turn off.

An initial field survey was conducted in October 2012 and included fauna and flora survey activity along the Beagle Camp and Pera Head access roads. A subsequent assessment of trees to be removed along these tracks was undertaken via photography in April 2015 and during a ground inspection in October 2015. The Amban access track was assessed during weed surveys conducted in June 2013. This report summarises the findings of all of these assessments.

Ecotone Environmental Services (EES) undertook survey work under Queensland Department of Environment & Heritage Scientific Purposes Permit WISP14589914.

1.2 Acknowledgements

We would like to acknowledge provision of access to the study area provided by Traditional Owners and the contribution of Wolf Leschniok (SOE Field Construction Superintendent) to field logistics which enabled the successful completion of this work. The EES survey team comprised:

- Morgan Thomas - Principal Ecologist
- Bryan Robinson - Principal Ecologist (Queensland Fauna Consultancy)
- Caitlin Phillips - Ecologist
- Andrew Dawson - Ecologist

2. Study Approach

2.1 2012 Flora and Fauna Survey

This survey was conducted between the 21st and 27th June 2013 and comprised the following:

- Ground truthing of vegetation to verify Regional Ecosystem mapping along the Beagle Camp and Amban roads.
- Multiple inspection points along the tracks to confirm the flora present and the potential presence of threatened flora species. Sites were located opportunistically to cover any variation in vegetation type.
- Target species for the survey comprised those State and Commonwealth threatened flora species identified in the SOE Project EIS.
- Fauna habitat assessment including description of general habitat features within main habitats along the tracks.
- Targeted surveys for:
    - red goshawk – searches for nests along and adjacent to the tracks; observations for flying or perched individuals; and call playback surveys;
    - masked owl/rufous owl – call playback surveys at multiple points on two nights; and,
    - northern quoll – cage trapping and camera trapping at multiple sites

Fauna survey effort and methods satisfied the Commonwealth *Environment Protection and Biodiversity Conservation* Act 1999 (EPBC Act) Guidelines for fauna survey. The location of flora and fauna survey points along the tracks is indicated in **Figure 2-1**.

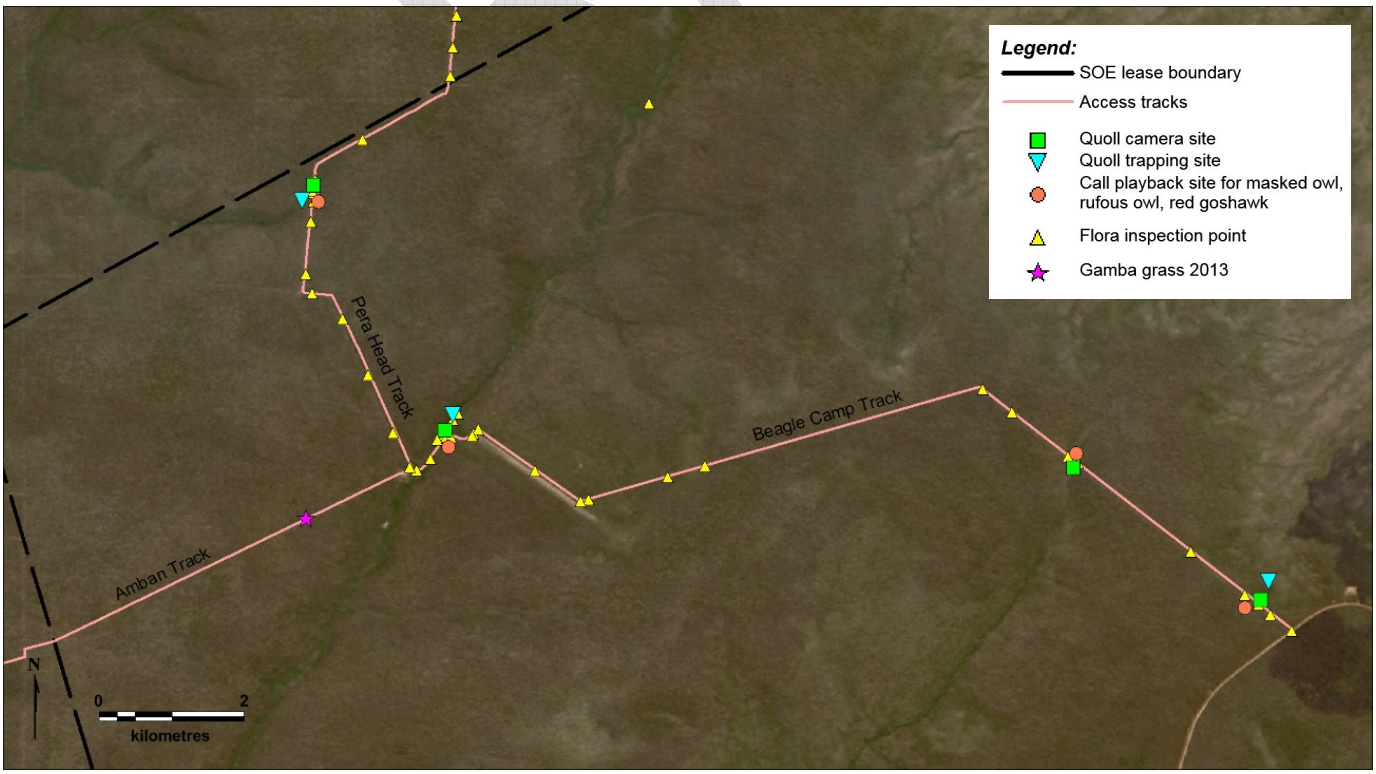


Figure 2-1 Location of flora and fauna survey points

2.2 Other Assessments

The other assessments conducted for this work comprised:

- Assessments of the Amban access track during the 2013 weed survey involved verification of regional ecosystem mapping and observations for EVNT flora and fauna. A single traverse of the track was undertaken.
- The vegetation characteristics at key points along the tracks was assessed in April 2015 by reviewing photographs of these locations supplied by Rio Tinto.
- Trees to be removed along the tracks were inspected for hollows, nests and other significant habitat characteristics in October 2015.

3. Results

3.1 General Habitat Features

The vegetation and habitat occurring along the access tracks is typical of vegetation and habitats occurring throughout the local area and indeed in the wider Weipa region on the bauxite plateau landscape. The vegetation is dominated by Darwin stringybark woodland (**Photo 1**) with much smaller areas of riparian vegetation associated with Coconut Creek (**Photo 2**) and three minor drainage lines (**Photo 3**). An area of regrowth vegetation (**Photo 4**) also occurs at Beagle Camp resulting from previous clearing activity around the camp area.

The Darwin stringybark woodlands that dominate the area provide habitat for a modest community of native flora and fauna with seasonal spikes in fauna activity aligned with seasonal flowering events of certain canopy and understorey trees and shrubs including *Eucalyptus tetrodonta* (Darwin stringybark), Melville Island bloodwood (*Corymbia nesophila*), *Parinari nonda* (nonda plum), *Melaleuca* spp. (Melaleucas/paperbarks), *Planchonia careya* (cocky apple), and *Ficus opposita* (sandpaper fig). *Eucalyptus tetrodonta* and *Corymbia nesophila* also provide numerous hollows and spouts for tree hollow dwelling fauna such as microbats, mammals and numerous bird species.

The riparian vegetation of Coconut Creek supports a gallery forest typical of the many spring fed freshwater waterways that drain the area. Canopy species include *Lophostemon suaveolens* (swamp mahogany), *Melaleuca leucadendra* (weeping tea tree) with a sub-canopy of *Parinari nonda* (nonda plum), *Carallia brachiata* (corkwood) and *Acacia aulacocarpa*. The habitat values in this area are enhanced by the seasonal flows through the creek and ecosystems such as this provide seasonal foraging habitats for many mobile species. Much of the productivity of this habitat is associated with the dry season flowering of the large Melaleucas which fringe the stream and attract many nectivorous fauna species such as honeyeaters, rainbow lorikeets and flying foxes.

3.2 Vegetation and Flora

3.2.1 Vegetation

A total of three different Regional Ecosystems occur along the access road/tracks comprising:

- RE 3.5.2 - *Eucalyptus tetrodonta* and *Corymbia nesophila* tall woodland on deeply weathered plateaus and remnants

- RE 3.3.9 - *Lophostemon suaveolens* open forest on streamlines, swamps and alluvial terraces
- RE 3.5.22c - *Corymbia clarksoniana* +/- *Erythrophleum chlorostachys* +/- *Corymbia* spp. woodland on plains

The conservation status of these REs under the Queensland *Vegetation Management* Act 1999 is not of concern.

None of these vegetation types are listed as threatened ecological communities under the EPBC Act.

3.2.2 Flora

The flora community observed within the three REs was typical of that occurring in these ecosystems throughout the Weipa region. Key species recorded during the survey that are indicative of the RE's present are listed in **Table 3-1**. More information on the floristics of each RE can be found on DEHP's online Regional Ecosystem Description database (REDD; https://environment.ehp.qld.gov.au/regional-ecosystems/).

Photo 1 Typical Darwin stringybark woodland

Photo 2 Riparian vegetation of Coconut Creek

Photo 3 Drainage gully near the Aurukun Rd

Photo 4 Regrowth at Beagle Camp

Table 3-1 Key Flora Species

Species	Regional Ecosystem			Species	Regional Ecosystem		
	3.5.2	3.5.22c	3.3.9		3.5.2	3.5.22c	3.3.9
Canopy				Shrubs/Small trees			
Eucalyptus tetrodonta	x	x		*Acacia rothii*	x		
Corymbia nesophila	x			*Planchonia careya*	x		
Corymbia clarksoniana		x		*Grevillea glauca*	x	x	
Melaleuca leucadendra			x	*Grevillea striata*	x	x	
Lophostemon suaveolens		x	x	*Ficus opposita*	x		x
Melaleuca clarksoni		x		*Melaleuca viridiflora*	x	x	
Sub canopy				*Livistona muelleri*	x	x	x
Erythrophleum chlorostachys	x		x	*Alphitonia excelsa*	x	x	x
Parinari nonda	x	x	x	*Xylomelum schottianum*	x		
Carallia brachiata			x	Ground cover			
Acacia aulacocarpa			x	*Heteropogon triticeus*	x		
Alstonia actinophylla	x			*Sarga plumosum*	x		
				Alloteropsis semialata	x	x	

3.3 Fauna

A list of the fauna species recorded during surveys is provided in **Appendix B**. This is not a definitive list of the entire fauna suite inhabiting the area but provides an indication of the type of fauna community present in these habitats. None of the fauna species detected are unexpected for the study area and all are frequently encountered in the region.

The surveys for northern quoll (*Dasyurus hallucatus*) did not locate the species and survey sites located nearby on the SOE Mining Lease also failed to locate the species. Similarly the red goshawk (*Erythrotriorchis radiatus*) was not observed during the surveys and no nests attributable to the species were observed. The masked owl (*Tyto novaehollandiae*) was not recorded during call playback surveys nor observed at any other time during the survey.

The northern quoll and masked owl have never been located within or adjacent to the SOE Project area during numerous surveys since 2006.

3.4 Threatened Species and Communities

3.4.1 Flora

No threatened flora were located along the access tracks and there is a very low likelihood that any threatened flora occur in areas to be disturbed. Most threatened flora in the bauxite landscape occur in association with riparian, spring, mangrove and wetland ecosystems. With the exception of Coconut Creek none of these habitats occur along the access tracks, and intensive searches at Coconut Creek during the surveys did not locate any threatened species in that location.

3.4.2 Fauna

No threatened fauna were located along the access road/tracks. The red goshawk and palm cockatoo (*Probosciger aterrimus*) have both been recorded from the SOE Project area and are highly mobile species that utilise a range of habitats within their home range. These species may visit areas in the vicinity of the access tracks from time to time but no signs of active or inactive nests or hollows for the species were located along the tracks. The habitat along the access tracks does not represent especially significant or higher quality habitat for these species than similar habitats in surrounding areas.

3.4.3 Communities, Ecosystems and Populations

No threatened communities ecosystems or populations listed under State or Commonwealth legislation occur along or adjacent to the access tracks.

3.5 Weeds and Feral Animals

A single plant of the major weed, gamba grass (*Andropogon gayanus*) was located during the 2013 weed survey on the Amban access track (refer **Figure 2-1**). This plant was removed at that time and subsequent visits to the site in 2015 did not locate any additional plants in the area.

A small number of minor environmental weed species currently occur in a few locations along the tracks in very low densities. The main area of weed occurrence is the Beagle Camp area. None of the species are declared plants in Queensland or listed as Weeds of National Significance. Species recorded comprise:

- grader grass, *Themeda quadrivalvis*;
- stylo, *Stylosanthes* sp.;
- hyptis, *Hyptis suaveolens*;
- rattlepod, *Crotalaria* sp.; and
- Spinyhead sida, *Sida acuta.*

A number of feral animal species are known to inhabit the study area. The feral cat (*Felis catus*) and feral pig (*Sus scrofa*) were recorded along the access tracks during surveys. Feral cattle (*Bos* spp.) and feral horses (*Equus caballus*) are also likely to occur along the access tracks. The dingo (*Canis lupis dingo*), arguably a naturalised species, is also likely to occur in the area.

3.6 Erosion and Sedimentation

Significant existing erosion occurs along the Beagle Camp airstrip with the eroded material deposited to Coconut Creek via two substantial erosion gullies. Deposited material has apparently infilled sections of Coconut Creek though long term patterns of sediment deposition in Coconut Creek will be determined by annual flow events.

Minor sedimentation has also occurred in the minor drainage line (RE 3.5.22c) between the Aurukun Rd and Beagle Camp. Deposition of sediment in this location increased after the track was graded in 2012.

4. Potential Impacts on Flora and Fauna

The proposed works involves minimal widening and supplementary clearing of vegetation along existing tracks. Only a small number (up to approximately 12) of mature trees immediately adjacent to the existing track alignment will be removed, with additional areas of shrubby vegetation and ground cover removed to widen the alignment and at passing bays.

4.1 Vegetation and Fauna

The effect of the minimal clearing on the local vegetation, flora and fauna community will be negligible. None of the vegetation or habitats to be effected is especially significant compared to

surrounding vegetation and habitat areas, and surveys did not locate any specific habitat features of significance.

4.2 Threatened Species Communities and Populations

No threatened species, communities or populations were located along the access tracks. The red goshawk and palm cockatoo have been recorded from the nearby SOE Project area and may utilise habitats along the access tracks; however surveys did not locate any nest or hollow trees of these species along the access tracks, and the minimal level of disturbance proposed is unlikely to have any adverse impact on these species.

4.3 Weeds

Gamba grass was been found on the Amban access track in 2012 but appears to have been successfully eradicated; however there is a small chance that operation of machinery along this section of track could potentially translocate seed to other areas. Establishment of gamba grass in the area could cause significant environmental harm if uncontrolled.

Weeds from the main weed occurrence area at Beagle Camp have the capacity to be translocated by machinery along adjoining access tracks. While none of the weeds are of major significance, translocation of any weeds along the access tracks could facilitate further spread of weeds throughout adjoining areas and natural ecosystems and should be avoided.

4.4 Erosion and Sedimentation

The proposed works have the potential to contribute to erosion and sedimentation at Coconut Creek and the minor drainage line between the Aurukun Rd. and Beagle Camp if undertaken without appropriate design and consideration of erosion/sediment control measures. Continued deposition of sediment into Coconut Creek over the long term is likely to have an impact on aquatic ecosystems via infilling and simplification of the current channel diversity (e.g. decline of pool habitats) and modification of water quality. This would potentially lead to a decline in native aquatic fauna abundance or diversity.

Continued deposition of sediment into the minor drainage line could over the long term alter soil and substrate characteristics potentially leading to changes in the vegetation community, particularly the ground cover and shrub components.

5. Mitigation of Potential Impacts

5.1 Flora and Fauna

Significant impacts on flora and fauna (including threatened species, communities, ecosystems, and populations) along the access tracks are not anticipated, however;

- *it is recommended that mature trees to be removed along the access tracks are inspected prior to removal to confirm that they are not occupied by significant fauna species (R1).*

5.2 Weeds

Given the abundance of weeds in the Beagle Camp area;

- *it is recommended that construction machinery is cleaned down after working at Beagle Camp before proceeding to other sections of the access tracks (R2).*

Given the past occurrence of gamba grass on the Amban access road and the presence of this and other significant weed species in the Weipa region:

- *monitoring of the access tracks for weeds should be undertaken in the 24 month period following construction, and treatment of weeds undertaken where necessary to eradicate any occurrences of significant weeds (e.g. gamba grass, sicklepod) and any other weed species not already listed in Section 3.5 of this report as currently present along the access tracks (R3).*

5.3 Erosion and Sedimentation

Given the existing erosion and sedimentation occurring at two locations along the access tracks it is recommended that:

- *effective erosion and sediment control measures are included into the design and construction of the access track upgrade, particularly in the Coconut Creek area to mitigate current deposition of sediment into the creek (R4).*

5. Appendices

Appendix A Fauna Species List

Appendix A Fauna Species List

Common Name	***Genus***	***Species***
Amphibians		
Rocket Frog	*Litoria*	*nasuta*
Wood Frog	*Rana*	*daemelii*
Reptiles		
Gecko	*Nactus*	*eboracensis*
Skink	*Carlia*	*sexdentata*
Skink	*Glaphyromorphus*	*nigricaudis*
Brown Tree Snake	*Boiga*	*irregularis*
Macleay's Water Snake	*Enhydris*	*polylepis*
Birds		
Little Pied Cormorant	*Phalacrocorax*	*melanoleucas*
Nankeen Night Heron	*Nycticorax*	*caledonicus*
Australian White Ibis	*Threskiornis*	*molucca*
Whistling Kite	*Haliastur*	*sphenurus*
Brown Goshawk	*Accipiter*	*fasciatus*
Brown Falcon	*Falco*	*berigora*
Bush Stone-curlew	*Burhinus*	*grallarius*
Peaceful Dove	*Geopelia*	*striata*
Bar-shouldered Dove	*Geopelia*	*humeralis*
Sulphur-crested Cockatoo	*Cacatua*	*galerita*
Rainbow Lorikeet	*Trichoglossus*	*haematodus*
Red-winged Parrot	*Aprosmictus*	*erythropterus*
Pale-headed Rosella	*Platycerus*	*adscitus adscitus*
Pheasant Coucal	*Centropus*	*phasianinus*
Southern Boobook Owl	*Ninox*	*novaeseelandiae*
Tawny Frogmouth	*Podargus*	*strigoides*
Australian Owlet-Nightjar	*Aegotheles*	*cristatus*
Laughing Kookaburra	*Dacelo*	*novaeguinea*
Blue-winged Kookaburra	*Dacelo*	*leachii kempi*
Forest Kingfisher	*Todiramphus*	*macleayii*
Rainbow Bee-eater	*Merops*	*ornatus*
Striated Pardalote	*Pardalotus*	*striatus*
Noisy Friarbird	*Philemon*	*corniculatus*
Little Friarbird	*Philemon*	*citreogularis*
Blue-faced Honeyeater	*Entomyzon*	*cyanotis*
Yellow-spotted Honeyeater	*Meliphaga*	*notata*
Yellow Honeyeater	*Lichenostomus*	*flavus*
White-throated Honeyeater	*Melithreptus*	*albogularis*
Banded Honeyeater	*Certhionyx*	*pectoralis*
Lemon-bellied Flycatcher	*Microeca*	*flavigaster terraereginae*
Grey-crowned Babbler	*Pomatostomas*	*temporalis*
Varied Sittela	*Daphoenositta*	*chrysoptera striata*
Rufous Whistler	*Pachycephala*	*rufiventris*
Leaden Flycatcher	*Myiagra*	*rubecula*

Common Name	***Genus***	***Species***
Grey Fantail	*Rhipidura*	*fuliginosa*
Black-faced Cuckoo-shrike	*Coracina*	*novaehollandiae*
Black-backed Butcherbird	*Cracticus*	*mentalis*
Torresian Crow	*Corvus*	*orru*
Mistletoebird	*Dicaeum*	*hirundinaceum*
Mammals		
Common Brushtail Possum	*Trichosurus*	*vulpecula*
Antilopine Wallaroo	*Macropus*	*antilopinus*
Little Red Flying-fox	*Pteropus*	*scapulatus*
Water Rat	*Hydromys*	*chrysogaster*
Canefields Rat	*Rattus*	*sordidus*
feral Pig	*Sus*	*scrofa*
Feral Cat	*Felis*	*catus*

Revision history

Revision number	Revision date	Document author	Checked by	Approved by *
0	4/12/2015	R Powlett		
1	18/01/2016	R Powlett		
2	26/02/2016	R Powlett		

*Note: * Denotes wet signature supplied*

Change summary

Revision No.	Section	Change
1	1.0	Clarify MCU trigger and amend Table 1-1 to clarify proposed use and referral agencies.
	3.3.1 and 3.3.2	Clarify use of material excavated from watercourses. Amendment road names on Figures 3-1 to 3-15. Amendment to passing bay area on Figure 3-12.
	3.4	Clarify use of fill material.
	3.5	Clarify entity responsible for water related permits.
	4.3.3	Clarify vegetation clearing exemption and area to be cleared.
	5	Record of pre-lodgement discussion added
	6.1	Amendments to Table 6-2 including correction to figure reference, road design clarified, project name change and area of vegetation to be cleared.
	8	Reference added.
2	1.0	Amend section and Table 1-1 to add an additional application type.
	3.2	Amend Figures 3-1 to 3-15 to include contours.
	3.3.2 & 3.4	Amend text to confirm existing and proposed contours for excavation and filling.