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Project: Ecological Assessment Report

Proposed Quarry Sites – Lot 8 on AB200

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Appendices

1. Background

1.1 Project description

Santos Ltd (Santos) has commissioned Aurecon Australia Pty Ltd (Aurecon) to undertake ecological investigations of proposed areas of development for the expansion of the Fairview Gas Fields.

The Fairview gas fields are situated approximately 40km from Injune in southern Queensland. This area is characterised by elevated sandstone ranges including the Carnarvon and Expedition Ranges and part of the Mount Hutton and Kongabula Ranges. The Dawson River and other smaller watercourses drain this area and the vegetation is dominated by Eucalyptus and White Cypress Pine woodland, Brigalow and Semi-evergreen Vine Thicket (Eddie, 2007).

Much of this area has been subjected to cattle grazing and other agricultural practices as well as previous developments associated with the gas fields.

This report is specific to the proposed development areas listed below and shown in Figures 1-3:

- Quarry AWAF-1-A (FV-PB-009)
- Quarry AWAF-1-B (FV-PB-010)
- F-HCS-04 Camp Site Potential Quarry Source (FV-PB-016)

These areas are collectively referred to as the 'proposed development areas', and are located entirely within Lot 8 on AB200.

1.2 Purpose of report

The aim of this report is to provide an ecological assessment of the proposed development areas located within Lot 8 on AB200 (Figures 1-3) and to identify areas and species of notable ecological or conservation value. This report does not make any recommendations regarding the development in relation to any Santos environmental authorities or other approvals.

2. Methodology

2.1 Desktop methodology

Proposed development areas have been projected on a range of maps provided by Santos. These maps include Regional Ecosystem (RE) Mapping (version 6.0; Department of Environment and Resource Management [DERM]), Environmentally Sensitive Areas (ESA) mapping, drainage mapping and aerial photography. Where available ahead of time, these resources were reviewed to determine target areas for the field inspection. It is important to note that the RE classifications referred to in this report are based on the 'biodiversity status' of the vegetation and not the '*Vegetation Management Act 1999* (VM Act) status' of the vegetation. Note that the official DERM mapping (based on the VM Act status) was used to generate the figures within this report.

2.2 Field methodology

The proposed development areas were assessed by Aurecon ecologists between the months of March and August 2011. The purpose of these assessments were to determine the existing vegetation communities and habitat value of the proposed clearing within the development areas as well as to verify the RE mapping as produced by the DERM.

GIS environmental constraints layers (eg RE Mapping, ESA mapping etc) and high resolution aerial photography were uploaded onto a toughbook (C5 mobile clinical assistant CFT-001 – Motion computing) with an integrated GPS were used to locate surveys areas. Handheld Garmin GPS units (GPS map 76) were also used during the field investigations. It should be noted that while efforts were made to ensure the GPS co-ordinates provided in this report are accurate, a margin of error approximately +/- 15 m is expected due to the limitations of the devices used and the recording environment.

The ground-truthing of the proposed development areas included the undertaking of detailed flora species surveys including the sampling of unknown flora and recording all incidental fauna observations. All species known to be of conservation significance (such as endangered, vulnerable, near threatened or Type A species under the *Nature Conservation Act 1992* [NC Act] or endangered, vulnerable or rare species under the *Environment Protection and Biodiversity Conservation Act 1999* [EPBC Act]) were recorded using the toughbook.

A list of flora species observed in the proposed development areas has been included in Appendix A. Incidental fauna observations are provided in the relevant sections throughout this report.

3. Ecological assessment

3.1 AWAF-1-A Quarry (FV-PB-009)

3.1.1 General

The AWAF-1-A Quarry proposed development area is located within an existing clearing, situated between Bonnie-Doon Road (side track) and Fairview 69 Access Road (Figure 1).

The proposed development area is largely mapped as non-remnant vegetation on the DERM RE Mapping. An Endangered RE community (11.10.1/11.9.5a) is both mapped as occurring in association with the slopes surrounding the proposed development area and mapped as occurring marginally within the proposed development footprint. Ground-truthing of the proposed development area has confirmed that it occurs entirely within non-remnant vegetation and that the extent of the RE Mapping is considered slightly inaccurate. The species composition of the mapped RE community is also considered inaccurate. The fringing RE community is analogous to the 'No Concern at Present' RE 11.10.9.

As a result of its close proximity to a mapped Endangered RE community, this proposed development area is mapped as occurring immediately adjacent to a Category B ESA.

No mapped watercourses occur within the proposed development area. The closest watercourse is mapped at the base of the adjacent southern slope, located approximately 100 m to the south.

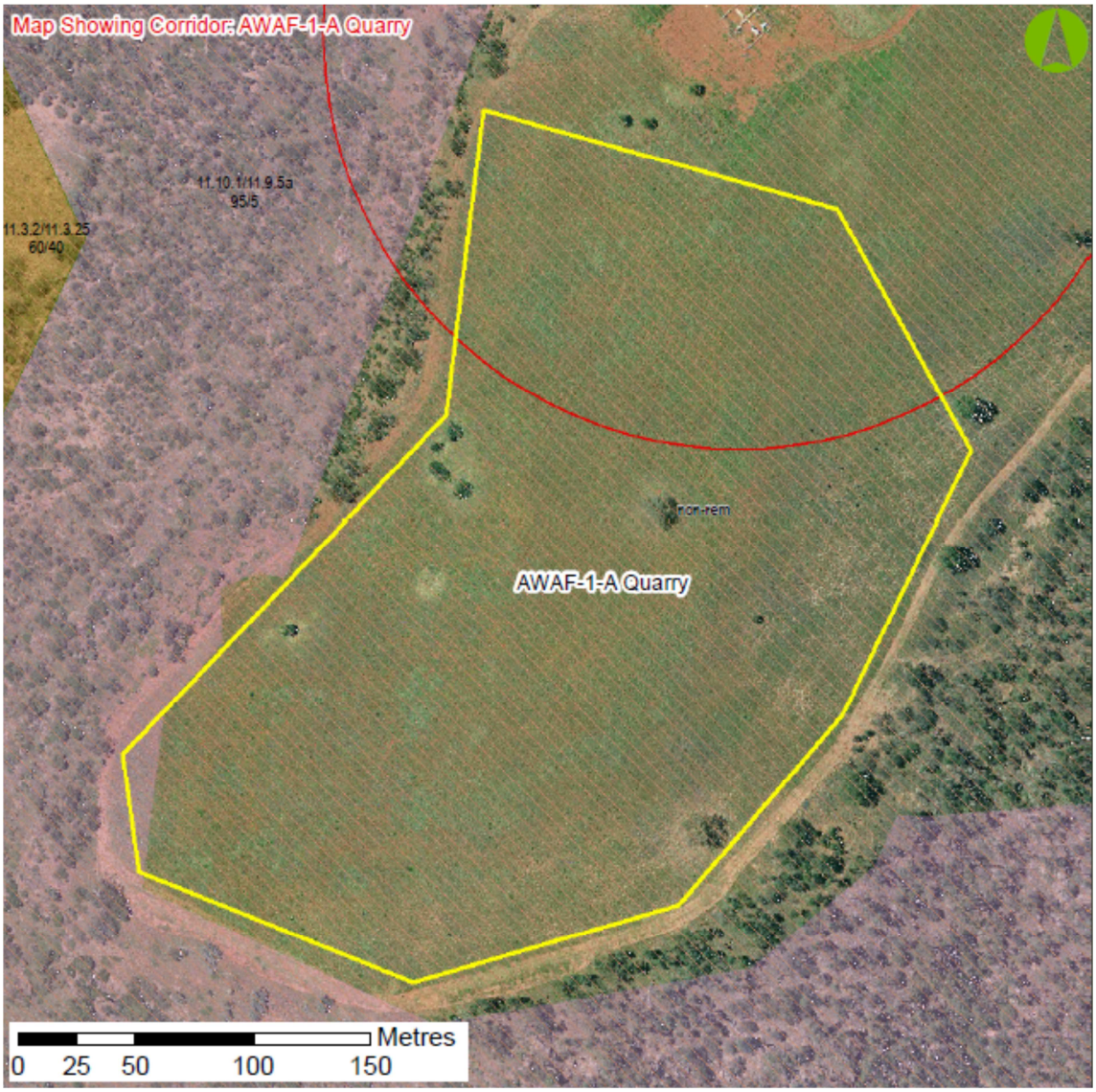

Figure 1 AWAF-1-A Quarry Proposed Development Area

3.1.2 Floristics

The proposed development area is considered a highly modified environment as a result of historical vegetation clearing and current grazing practices. As discussed in Section 3.1.1, this proposed development area occurs entirely within non-remnant vegetation, despite the DERM RE Mapping indicating otherwise. Ground-truthing has concluded that the extent and floristic composition of the RE Mapping is inaccurate. The surrounding remnant vegetation is analogous to RE 11.10.9 (No Concern at Present), which is described as '*Callitris glaucophylla* woodland on coarse-grained sedimentary rocks'.

The canopy stratum within the cleared development footprint is considered very sparse (~1%) and is typically represented by species recorded in the adjoining RE community (ie *Eucalyptus chloroclada* [Baradine Red Gum], *Callitris glaucophylla* [White Cypress Pine] etc). The average height of the few canopy trees recorded was approximately 10 m, with a typical height range of 8 to 12 m.

The shrub stratum recorded with this proposed development area is considered sparse (~5%), with an average height of 1 m. Species representing this stratum include *Acacia leiocalyx* (Black Wattle), *Callitris glaucophylla* (White Cypress Pine), *Alectryon diversifolius* (Scrub Boonaree), *Hakea lorea* (Bootlace Oak), *Eremophila mitchelli* (False Sandalwood) and *Grevillea striata* (Beefwood).

The dense (~95%) ground cover stratum is dominated by *Pennisetum ciliare* (Buffel Grass), with occurrences of *Verbena tenuisecta* (Mayne's Curse), *Melinis repens* (Red Natal Grass), *Eragrostis brownii* (Brown's Lovegrass), *Pterocaulon sphacelatum* (Apple Bush) and *Brachyscome dentata* (Lobe-seed Daisy).

No species of 'conservation significance' under the provisions of the NC Act or EPBC Act were observed within the proposed development area. Furthermore, no Type A restricted plants (under the provisions of the NC Act) were detected within the proposed development area.

A list of flora species observed within the proposed development area is provided in Appendix A.

3.1.3 Habitat values

Habitat features associated with the proposed development area include:

- Limited canopy cover suitable for shelter, foraging and perching
- Fissured tree bark
- Dense groundcover vegetation (ie grassy tussocks)
- Woody debris (ie fallen/felled timber, including hollow-bearing logs)

The habitat value of the proposed development area can be considered to be low overall, especially for EVNT species, given its highly modified state. Notwithstanding, the proposed development area provides limited sources of fauna habitat, particularly for more common species normally associated with disturbed sites. The scattered trees provide foraging, refuge and nesting niches for some larger bird species, such as Torresian Crows (*Corvus orru*) and Australian Magpies (*Gymnorhina tibicen*).

The adjacent vegetation associated with the mapped RE community is likely to provide habitat for a range of native avian fauna. As an instrument for fauna movement, the surrounding remnant vegetation forms a fragmented corridor leading to larger tracks land with higher habitat values.

Five (5) incidental fauna species were recorded within the proposed development area, as indicated in Table 3.1 below. All of these species are listed as Least Concern under the provisions of the NC Act, and are not listed under the provisions of the EPBC Act.

Table 3.1 Incidental fauna species recorded within the AWAF-1-A proposed development area

Common name	Species
Torresian Crow	*Corvus orru*
Australian Magpie	*Gymnorhina tibicen*
Eastern Grey Kangaroo	*Macropus giganteus*
Noisy Miner	*Manorina melanocephala*
European Rabbit	*Oryctolagus cuniculus*
Striated Pardalote	*Pardalotus striatus*

3.2 AWAF-1-B Quarry (FV-PB-010)

3.2.1 General

The AWAF-1-B proposed development area is located within an existing clearing, immediately to the north of AWAF-1-A proposed Quarry Site (Figure 2).

The proposed development area is largely mapped as non-remnant vegetation on the DERM RE Mapping. An Endangered RE community (11.10.1/11.9.5a) is both mapped as occurring in association with the slopes surrounding the proposed development area and mapped as occurring marginally within the proposed development footprint (along the western boundary). Ground-truthing of the proposed development area has confirmed that it occurs entirely within non-remnant vegetation and that the extent of the RE Mapping is considered slightly inaccurate. The species composition of the mapped RE community is also considered inaccurate. The fringing RE community is analogous to the 'No Concern at Present' RE 11.10.9.

As a result of its close proximity to a mapped Endangered RE community, this proposed development area is mapped as occurring immediately adjacent to a Category B ESA.

No mapped watercourses occur within the proposed development area. The closest watercourse is mapped at the base of the adjacent south-west slope, located approximately 360 m to the south-west.

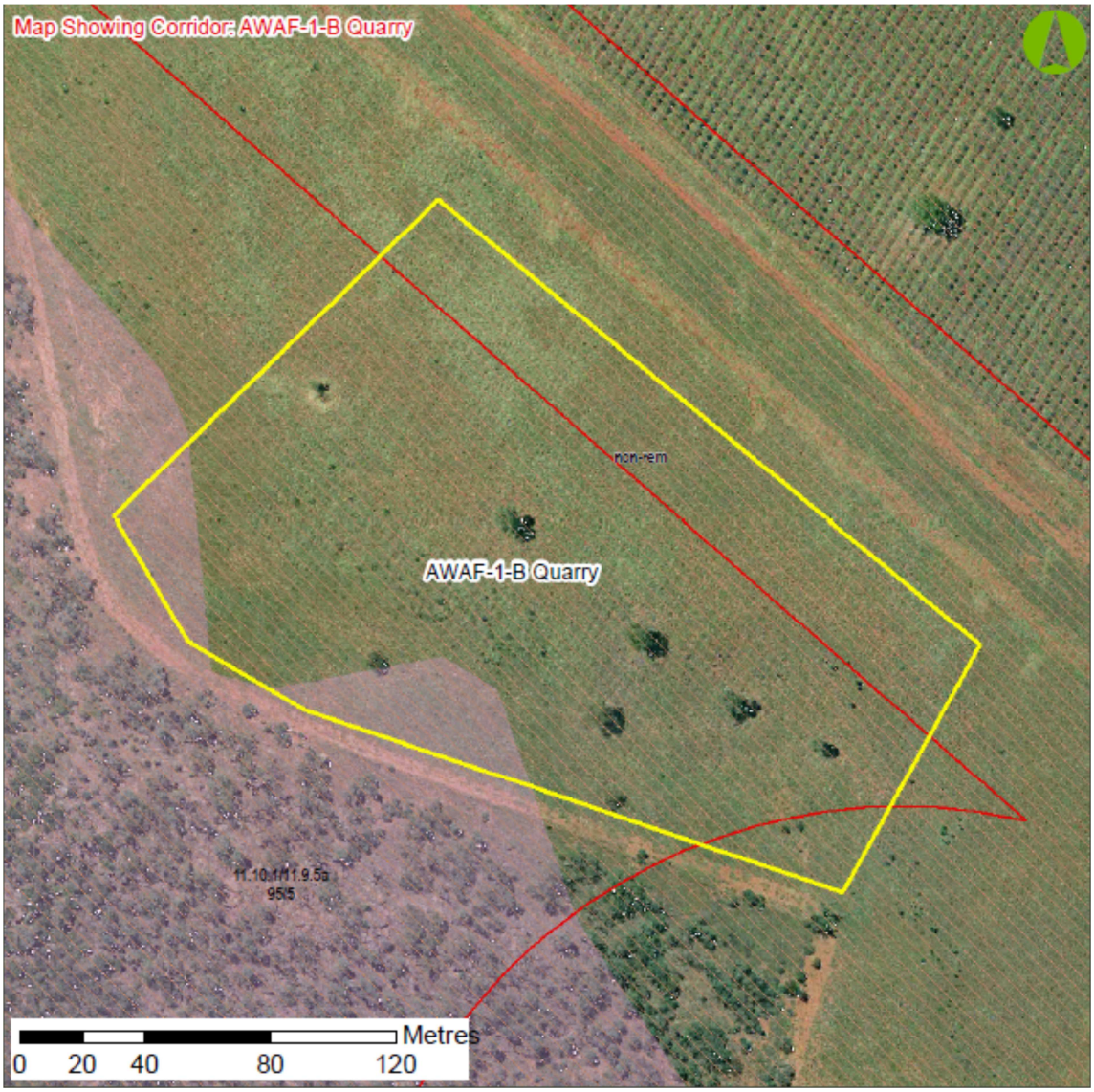

Figure 2 AWAF-1-B Quarry Proposed Development Area

3.2.2 Floristics

The proposed development area is considered a highly modified environment, as a result of historical vegetation clearing and current grazing practices. As discussed in Section 3.2.1, this proposed development area occurs entirely within non-remnant vegetation, despite the DERM RE Mapping indicating otherwise. Ground-truthing has concluded that the extent and floristic composition of the RE Mapping is inaccurate. The surrounding remnant vegetation is analogous to RE 11.10.9 (No Concern at Present), which is described as '*Callitris glaucophylla* woodland on coarse-grained sedimentary rocks'.

The canopy stratum within the cleared development footprint is considered very sparse (~1%) and is typically represented by species recorded in the adjoining RE community (ie *Eucalyptus chloroclada* [Baradine Red Gum], *Callitris glaucophylla* [White Cypress Pine], and *Corymbia tessellaris* [Moreton

Bay Ash]). The average height of the few canopy trees recorded was approximately 10 m, with a typical height range of 8 to 12 m.

The shrub stratum recorded with this proposed development area is considered moderately sparse (~10%), with an average height of 2 m. Species representing this stratum include *Acacia leiocalyx* (Black Wattle), *Acacia decora* (Pretty Wattle), *Callitris glaucophylla* (White Cypress Pine), *Alstonia constricta* (Bitterbark) and *Grevillea striata* (Beefwood).

The dense (~90%) ground cover stratum is dominated by *Pennisetum ciliare* (Buffel Grass), with occurrences of *Verbena tenuisecta* (Mayne's Curse), *Melinis repens* (Red Natal Grass), *Eragrostis brownii* (Brown's Lovegrass), *Cheilanthes sieberi* (Mulga Fern) and *Brachyscome dentata* (Lobe-seed Daisy).

No species of 'conservation significance' under the provisions of the NC Act or EPBC Act were observed within the proposed development area. Furthermore, no Type A restricted plants (under the provisions of the NC Act) were detected within the proposed development area.

A list of flora species observed within the proposed development area is provided in Appendix A.

3.2.3 Habitat values

Habitat features associated with the proposed development area include:

- Limited canopy cover suitable for shelter, foraging and perching
- Fissured tree bark
- Dense groundcover vegetation (ie grassy tussocks)
- Woody debris (ie fallen/felled timber, including hollow-bearing logs)

The habitat value of the proposed development area can be considered to be low overall, especially for EVNT species, given its highly modified state. Notwithstanding, the proposed development area provides limited sources of fauna habitat, particularly for more common species normally associated with disturbed sites. The scattered trees provide foraging, refuge and nesting niches for some larger bird species, such as Torresian Crows (*Corvus orru*) and Magpies (*Gymnorhina tibicen*).

The adjacent vegetation associated with the mapped RE community is likely to provide habitat for a range of native avian fauna. As an instrument for fauna movement, the surrounding remnant vegetation forms a fragmented corridor leading to larger tracks land with higher habitat values.

Three (3) incidental fauna species were recorded within the proposed development area, as indicated in Table 3.2 below. All of these species are listed as Least Concern under the provisions of the NC Act, and are not listed under the provisions of the EPBC Act.

Table 3.2 Incidental fauna species recorded within the AWAF-1-B proposed development area

Common name	Species
Torresian Crow	*Corvus orru*
Willie Wagtail	*Rhipidura leucophrys*
Crested Pigeon	*Ocyphaps lophotes*

3.3 F-HCS-04 Camp Site – Potential Quarry Source (FV-PB-016)

3.3.1 General

The F-HCS-04 Camp Site Potential Quarry Source development area is located on the north-eastern slope of a jump-up to the north of the existing IR4 Irrigation Areas on Lot 8 on AB200. The proposed development area has been partially cleared previously, however still contains areas of remnant vegetation (Figure 3).

The proposed development area is largely mapped as RE 11.10.7a ('No concern at present' Biodiversity Status) on the certified DERM RE Mapping Some areas of the mapped remnant vegetation were confirmed during field investigations to be non-remnant (ie an area of vegetation on the plateau does not meet the canopy cover or height requirements to be considered a remnant community).

The vegetation present on the slope of the jump-up is dominated by mature Brigalow (*Acacia harpophylla*), and is mapped as RE 11.10.7a. However, field investigations confirmed this vegetation is in fact consistent with RE 11.9.5 ('Endangered', Biodiversity Status).

No mapped ESAs occur within the proposed development area, with the nearest ESA located more than one (1) km to the north of the area. However, some of the vegetation on the slope is considered characteristic of the threatened Brigalow ecological community listed under the provisions of the EPBC Act. The floristics and habitat value of this community are discussed further in following sections.

No mapped watercourses occur within the proposed development area. The closest watercourse is located approximately 360 m to the south-west.

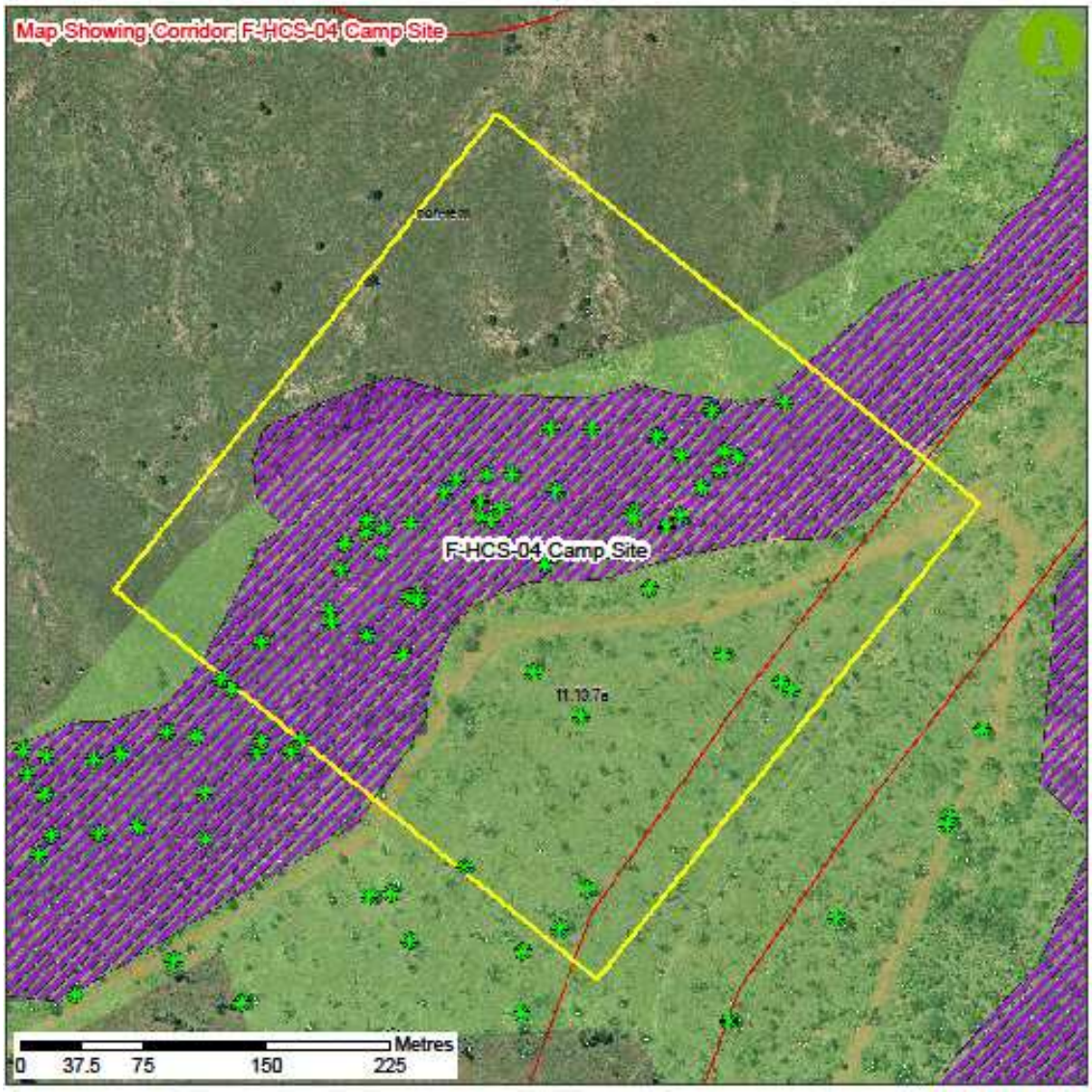

Figure 3 F-HCS-04 Camp Site Potential Quarry Source Development Area

3.3.2 Floristics

The vegetation on the plateau is currently mapped as RE 11.10.7a on the DERM RE Mapping; however field investigations confirmed that this vegetation has been previously cleared/disturbed and does not meet the requirements to be considered remnant vegetation (ie 50% of the canopy cover, 70% of the height of an undisturbed remnant community). *Eucalyptus melanophloia* (Silver-leaved Ironbark) dominates the sparse canopy layer on the plateau, with *Callitris glaucophylla* (White Cypress Pine) occurring as a sub-dominant species. The shrub layer is co-dominated by juvenile *E. melanophloia* and *Carissa ovata* (Currant Bush) (height range 1.5-3 m), with *Pennisetum ciliare* (Buffel Grass) the dominant ground cover species.

The vegetation on the slope of the jump-up is currently mapped as RE 11.10.7a ('No concern at present' Biodiversity Status), however field investigations confirmed the flora species composition is

consistent with RE 11.9.5 ('Endangered' Biodiversity Status) – *Acacia harpophylla* (Brigalow) and/or *Casuarina cristata* (Belah) open forest on fine-grained sedimentary rocks (DERM 2011).

Acacia harpophylla dominates the mid-dense canopy stratum on the slope of the jump-up (height range of 5-14 m), with some semi-evergreen vine-thicket species present in the sub-canopy and shrub layers (including *Flindersia* species, *Myoporum acuminatum* [Boobialla], *Croton insularis* [Silver Croton] and *Brachychiton rupestris* [Narrow-leaved Bottle Tree]). This vegetation assemblage is considered characteristic of the threatened Brigalow ecological community under the provisions of the EPBC Act.

Cleared sections within the proposed development area (ie lower slopes of the jump-up and some areas on the plateau) are dominated by *P. ciliare*, with a low, sparse shrub layer including Brigalow, *Geijera parviflora* (Wilga) and *Eremophila mitchellii* (False Sandalwood). This sparse shrub layer consisted of vegetation with a height range of 1-4 m and was less than 10% of the cover of the total area).

Fifty-three (53) Type A restricted plants (protected under the provisions of the NC Act) were recorded within the proposed development area. Table 3.3 and Figure 3 provide the locations for these species.

Table 3.3 Type A restricted plants recorded within the F-HCS-04 Camp Site Potential Quarry Source Development Area

Species	Easting (GDA94, Zone 55J)	Northing (GDA94, Zone 55J)
Brachychiton populneus	706533	7152358
Brachychiton populneus	706549	7152382
Brachychiton populneus	706475	7152396
Brachychiton rupestris	706389	7152466
Brachychiton rupestris	706674	7152503
Brachychiton rupestris	706517	7152514
Brachychiton populneus	706684	7152482
Cymbidium canaliculatum	706632	7152525
Brachychiton rupestris	706667	7152508
Brachychiton sp. (Juvenile)	706697	7152548
Brachychiton rupestris	706437	7152524
Brachychiton rupestris	706416	7152536
Brachychiton rupestris	706394	7152544
Brachychiton rupestris	706392	7152551
Brachychiton rupestris	706441	7152559
Brachychiton rupestris	706447	7152561
Brachychiton rupestris	706446	7152556

Species	Easting (GDA94, Zone 55J)	Northing (GDA94, Zone 55J)
Brachychiton rupestris	706351	7152531
Brachychiton rupestris	706587	7152566
Brachychiton rupestris	706702	7152571
Brachychiton rupestris	706402	7152593
Brachychiton rupestris	706415	7152599
Brachychiton rupestris	706416	7152606
Brachychiton rupestris	706426	7152601
Brachychiton rupestris	706424	7152587
Brachychiton rupestris	706485	7152608
Brachychiton rupestris	706491	7152606
Brachychiton rupestris	706497	7152613
Brachychiton rupestris	706485	7152617
Brachychiton rupestris	706524	7152579
Brachychiton rupestris	706539	7152587
Brachychiton rupestris	706562	7152588
Brachychiton rupestris	706578	7152611
Brachychiton rupestris	706598	7152602
Brachychiton rupestris	706606	7152608
Brachychiton rupestris	706619	7152626
Brachychiton rupestris	706630	7152636
Brachychiton rupestris	706641	7152645
Brachychiton rupestris	706634	7152648
Brachychiton rupestris	706670	7152678
Brachychiton rupestris	706442	7152604
Brachychiton rupestris	706463	7152623
Brachychiton rupestris	706470	7152631
Brachychiton rupestris	706489	7152634
Brachychiton rupestris	706504	7152635
Brachychiton rupestris	706531	7152624
Brachychiton rupestris	706552	7152662
Brachychiton rupestris	706528	7152662

Species	Easting (GDA94, Zone 55J)	Northing (GDA94, Zone 55J)
Brachychiton rupestris	706578	7152607
Brachychiton rupestris	706607	7152645
Brachychiton rupestris	706592	7152657
Brachychiton rupestris	706626	7152673
Brachychiton rupestris	706626	7152673

A list of flora species observed within the proposed development area is provided in Appendix A.

3.3.3 Habitat values

Habitat features associated with the proposed development area include:

- Canopy cover suitable for shelter, foraging and perching
- Fissured tree bark
- Dense groundcover vegetation (ie grassy tussocks)
- Woody debris (ie fallen/felled timber, including hollow-bearing logs)
- Limited leaf litter layer
- Rocky crevices

The habitat value of the previously cleared sections of the proposed development area is considered to be low as the ground cover is dominated by *P. ciliare* (Buffel Grass) and contains limited canopy cover suitable for foraging and/or shelter.

The areas containing mature vegetation within the proposed development area (ie vegetated areas on the slope and the plateau) contain a diverse range of habitat features including canopy cover, fissured tree bark, leaf litter and rocky outcrops on the slopes of the jump up. These areas are likely to provide habitat for a range of generalist fauna species, particularly for avian and reptilian species. The habitat value of these areas is considered moderate to high.

Sixteen (16) incidental fauna species were recorded within the proposed development area, as indicated in Table 3.4 below. All of these species are listed as Least Concern under the provisions of the NC Act, and are not listed under the provisions of the EPBC Act.

Table 3.4 Incidental fauna species recorded within the F-HCS-04 Camp Site Potential Quarry Source Development Area

Species	Common name
Birds	
Australian Magpie	*Cracticus tibicen*
Brown Honeyeater	*Lichmera indistincta*
Blue-faced Honeyeater	*Entomyzon cyanotis*
Currawong	*Nymphicus hollandicus*

Species	Common name
Noisy Friarbird	*Philemon corniculatus*
Noisy Miner	*Manorina melanocephala*
Pale-headed Rosella	*Platycercus adscitus*
Pied Butcherbird	*Cracticus nigrogularis*
Rainbow Lorikeet	*Trichoglossus haematodus*
Red-backed Fairy-wrens	*Malurus melanocephalus*
Striated Pardalote	*Pardalotus striatus*
Torresian Crow	*Corvus orru*
Wedge-tailed Eagle	*Aquila audax*
Weebill	*Smicrornis brevirostris*
Willie Wagtail	*Rhipidura leucophrys*
Macropods	
Eastern Grey Kangaroo	*Macropus giganteus*

4. Conclusions

The proposed development areas discussed in this report occur within non-remnant and remnant vegetation communities. A number of ESAs have been identified within close proximity to the proposed development areas. However, the design has largely avoided mapped ESAs.

Fifty-three (53) Type A restricted plants as listed under the provisions of the NC Act were identified within the proposed development areas. No species listed as endangered, vulnerable or near-threatened under the provisions of the EPBC Act and/or the NC Act were identified.

The habitat values associated with the proposed development areas are considered low for the cleared/disturbed areas. Moderate to high value habitat was recorded at the F-HCS-04 Camp Site Potential Quarry site.

5. References

Eddie, C (2007) Field Guide to Trees and Shrubs of Eastern Queensland Oil and Gas Fields, First Edition, Santos Ltd, Adelaide.

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

Nature Conservation Act 1992 (Qld)

Regional Ecosystem Mapping, Version 6.0, Queensland Government Department of Environment and Resource Management (DERM).

Vegetation Maangement Act 1999 (Qld)

Appendices

Appendix A

Botanical species list

Family Name	Scientific Name	Common Name	Proposed Development Area		
			AWAF-1-A Quarry (FV-PB-009)	AWAF-1-B Quarry (FV-PB-010)	F-HCS-04 Camp Site Potential Quarry Source (FV-PB-016)
Adiantaceae	*Cheilanthes aspera*	Bristly Cloak Fern	√	√	√
Adiantaceae	*Cheilanthes sieberi*	Mulga Fern	√	√	√
Apiaceae	*Hydrocotyle laxiflora*	Pennywort			√
Apocynaceae	*Alstonia constricta*	Bitter Bark		√	√
Apocynaceae	*Carissa ovata*	Currant Bush	√		√
Apocynaceae	*Marsdenia australis*	Marsdenia			√
Apocynaceae	*Parsonsia lanceolata*	Monkey Rope			√
Asteraceae	*Brachycome dentata*	Lobe-seed Daisy	√	√	√
Asteraceae	*Bracteantha bracteata*	Everlasting Daisy			√
Asteraceae	*Calocephalus platycephalus*	Billy Buttons	√	√	√
Asteraceae	*Calotis cuneifolia*	Purple Burr Daisy		√	√
Asteraceae	*Calotis lappulacea*	Yellow Burr Daisy	√		√
Asteraceae	*Calotis multicaulis*	Woolly-head Burr Daisy			√
Asteraceae	*Chrysocephalum apiculatum*	Yellow Buttons	√		√
Asteraceae	*Cirsium vulgare*	Spear Thistle, Black Thistle			√
Asteraceae	*Conyza bonariensis*	Fleabane			√
Asteraceae	*Pterocaulon sphacelatum*	Apple Bush	√		√
Asteraceae	*Senecio lautus*	Fire Weed	√		√

Family Name	Scientific Name	Common Name	Proposed Development Area		
Asteraceae	*Sonchus oleraceus*	Sow Thistle			√
Bignoniaceae	*Pandorea pandorana*	Wonga Vine			√
Brassicaceae	*Sisymbrium thellungii*	African Turnip Weed			√
Cactaceae	*Opuntia stricta*	Prickly Pear	√		√
Cactaceae	*Opuntia tomentosa*	Velvety Tree Pear	√	√	√
Campanulaceae	*Wahlenbergia communis*	Large Bluebells		√	√
Campanulaceae	*Wahlenbergia gracilis*	Sprawling Bluebell	√	√	√
Capparaceae	*Capparis lasiantha*	Native Orange		√	
Capparaceae	*Capparis loranthifolia*	Nipan, Wait a while	√	√	√
Casuarinaceae	*Allocasuarina luehmannii*	Bull Oak			√
Celastraceae	*Elaeodendron australis*	Peach Leaf	√	√	
Celastraceae	*Maytenus cunninghamii*	Yellow Berry Bush			√
Chenopodiaceae	*Chenopodium carinatum*	Keeled Goosefoot			√
Chenopodiaceae	*Maireana microphylla*	Small-leaf Bluebush			√
Convolvulaceae	*Dichondra repens*	Kidney Weed			√
Cupressaceae	*Callitris glaucophylla*	White Cypress Pine	√	√	√
Cyperaceae	*Gahnia aspera*	Gahnia			√
Ebenaceae	*Diospyros humilis*	Scrub Ebony			√
Euphorbiaceae	*Acalypha sp.*	Turkey Bush			√
Euphorbiaceae	*Croton insularis*	Silver Croton			√
Fabaceae - Caesalpinioideae	*Senna artemisioides*	Senna			√
Fabaceae - Caesalpinioideae	*Senna coronilloides*	Coffee Senna			√
Fabaceae - Faboideae	*Glycine clandestina*	Glycine	√	√	√
Fabaceae - Faboideae	*Indigofera spicata*	Creeping Indigo, Purple Indigo	√	√	√
Fabaceae - Faboideae	*Medicago polymorpha*	Burr Medic	√	√	√
Fabaceae - Faboideae	*Swainsona galegifolia*	Swainsona			√

Family Name	Scientific Name	Common Name	Proposed Development Area		
Fabaceae - Faboideae	*Vicia sp.*	Vetch			√
Fabaceae - Mimosoideae	*Acacia decora*	Pretty Wattle	√	√	√
Fabaceae - Mimosoideae	*Acacia excelsa*	Ironwood			√
Fabaceae - Mimosoideae	*Acacia harpophylla*	Brigalow			√
Fabaceae - Mimosoideae	*Acacia leiocalyx*	Black Wattle	√	√	√
Fabaceae - Mimosoideae	*Acacia longispicata*				√
Goodeniaceae	*Goodenia glabra*	Smooth Goodenia		√	√
Goodeniaceae	*Goodenia rotundifolia*	Goodenia			√
Lamiaceae	*Spartothamnella puberula*	Spiky Bush			√
Lomandraceae	*Lomandra multiflora*	Lomandra			√
Malvaceae	*Abutilon oxycarpum*	Chinese Lantern			√
Malvaceae	*Sida acuta*	Spiny head Sida			√
Malvaceae	*Sida spinosa*	Spiny Sida			√
Meliaceae	*Owenia acidula*	Emu Apple	√		√
Myoporaceae	*Eremophila mitchellii*	False Sandalwood	√		√
Myoporaceae	*Myoporum acuminatum*	Boobialla			√
Myrtaceae	*Corymbia erythrophloia*	Variable-barked Bloodwood			√
Myrtaceae	*Corymbia tessellaris*	Moreton Bay Ash		√	
Myrtaceae	*Corymbia trachyphloia*	Small Fruited Bloodwood	√		
Myrtaceae	*Eucalyptus camaldulensis*	River Red Gum	√		
Myrtaceae	*Eucalyptus chloroclada*	Baradine Red Gum		√	
Myrtaceae	*Eucalyptus crebra X E melanophloia*				√
Myrsinaceae	*Anagallis arvensis*	Scarlet Pimpernel			√

Family Name	Scientific Name	Common Name	Proposed Development Area		
Oleaceae	*Jasminum didymum subsp. racemosum*	Native Jasmine			√
Orchidaceae	*Cymbidium canaliculatum*	Black Orchid			√
Oxalidaceae	*Oxalis stricta*	Yellow Wood Sorrel			√
Phormiaceae	*Dianella caerulea*	Blue Flax-lily			√
Picrodendraceae	*Petalostigma pachyphyllum*	Smooth Quinine			√
Pittosporaceae	*Bursaria spinosa*	Prickly Pine			√
Pittosporaceae	*Pittosporum angustifolium*	Native Apricot			√
Plantaginaceae	*Plantago cunninghamii*	Plantago			√
Poaceae	*Aristida calycina*	Dark Wiregrass			√
Poaceae	*Aristida caput medusae*	Curly Head Wire Grass	√		√
Poaceae	*Aristida jerichoensis*	Jericho wire grass			√
Poaceae	*Austrostipa verticillata*	Slender Bamboo Grass			√
Poaceae	*Chloris pectinata*	Comb Chloris			√
Poaceae	*Digitaria ammophila*	Digitaria			√
Poaceae	*Eragrostis fallax*	Tall Lovegrass	√		√
Poaceae	*Melinis repens*	Red Natal	√		
Poaceae	*Pennisetum ciliare*	Buffel Grass	√	√	√
Poaceae	*Themeda triandra*	Kangaroo Grass			√
Poaceae	*Urochloa mosambicensis*	Urochloa			√
Polygonaceae	*Emex australis*	Spiny Emex			√
Polygonaceae	*Rumex brownii*	Swamp Dock			√
Proteaceae	*Grevillea striata*	Beefwood	√		
Proteaceae	*Hakea lorea*	Bootlace Oak	√		
Rhamnaceae	*Ventilago viminalis*	Vine Tree			√
Rubiaceae	*Psydrax odorata forma buxifolia*	Round Leaf Psydrax			√
Rubiaceae	*Psydrax oleifolia*	Canthium	√		√
Rutaceae	*Citrus glauca*	Lime Bush			√

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Rutaceae	*Flindersia australis*	Crows Ash			√
Rutaceae	*Flindersia collina*	Leopardwood			√
Rutaceae	*Geijera parviflora*	Wilga			√
Santalaceae	*Santalum lanceolatum*	Sandalwood			√
Sapindaceae	*Alectryon diversifolius*	Scrub Boonaree	√		√
Sapindaceae	*Dodonaea viscosa*	Sticky Hopbush			√
Sapindaceae	*Dodonaea viscosa subsp. lanceolata*	Sticky Hopbush			√
Scrophulariaceae	*Verbascum virgatum*	Twiggy Mullein			√
Solanaceae	*Lycium ferocissimum*	African Boxthorn			√
Sterculiaceae	*Brachychiton populneus*	Kurrajong			√
Sterculiaceae	*Brachychiton rupestris*	Narrow-leaved Bottle Tree			√
Tiliacea	*Grewia latifolia*	Dysentery Plant			√
Verbenaceae	*Verbena officinalis*	Common Verbena, Native Verbena			√
Verbenaceae	*Verbena tenuisecta*	Mayne's Curse	√	√	√

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