



OFFSET MANAGEMENT PLAN

Lot 13107, Boyup Brook Cranbrook Road, Tonebridge / Frankland River

FEBRUARY 2013



solutions for the human environment interface



Telephone +618 9755 7217

info@accendoaustralia.com.au PO Box 5178 West Busselton WA 6280 ABN 11 160 028 642

www.accendoaustralia.com.au

Document Control

Version	Date	Author	Reviewer
Draft	18/12/2012	KMT	AJM
V1	15/02/2013	KMT	AJB & ZGEPH
Filename	1261_Offset Mgt Plan V1		



Contents

1	INTRODUCTION1
1.1	BACKGROUND1
1.2	DEVELOPMENT PROPOSAL1
1.3	APPROVALS
1.4	PURPOSE AND SCOPE
1.5	LEGISLATION
2	BLACK COCKATOO HABITAT4
2.1	CARNABY'S BLACK COCKATOO4
2.2	BAUDIN'S BLACK COCKATOO4
2.3	FOREST RED-TAILED BLACK COCKATOO4
3	OFFSET IMPLEMENTATION6
3.1	OFFSET SITE DESCRIPTION
3.2	AGREEMENT TO RESERVE7
3.3	MANAGEMENT ACTIONS7
3.3	3.1 Natural Regeneration
3.3	8.2 Feral Animal Control
3.3	8.3 Fencing and Access Control
3.4	MONITORING REQUIREMENTS
3.4	1.1 Performance Criteria
3.4	1.2 Reporting
3.5	MANAGEMENT RESPONSES AND CONTINGENCIES
3.5	5.1 Weed Control
3.5	5.2 Contingent Revegetation
3.5	5.3 Monitoring and Reporting11
3.6	ROLES, RESPONSIBILITY AND TIMING
REFE	RENCES
FIGU	RES
APPE	NDIX A – CORRESPONDANCE REGARDING AGREEMENT TO RESERVE



Tables

Table 1:Actions, responsibilities and timing for the implementation of the Offset Management
Plan.

Figures

Figure 1: Locality Plan



1 INTRODUCTION

1.1 Background

Fairway Developments Pty Ltd and Zaph Pty Ltd (herein referred to as Fairway Developments) propose to develop Stage 3 of the Old Broadwater Farm Estate Subdivision, specifically portion of Lot 9005 on Deposited Plan 46853, house 56 New River Ramble/Pickmore Circus, West Busselton (Certificate of Title 2596-970) (herein referred to as the subject site). The subject site is located in the municipality of the City of Busselton, within Western Australia.

The development will involve the creation of a 239 lot residential subdivision comprised of private residences, grouped housing, public open space, orchid conservation reserves, a redesigned nine hole golf course and a commercial area.

The development has the potential to impact habitat associated with Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksia*) and Baudin's Black Cockatoo (*Calyptorhynchus baudinii*) (collectively referred to as 'Black Cockatoos'), which in accordance with the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) are listed as 'Vulnerable', 'Endangered' and 'Vulnerable', respectively.

To offset the potential impacts to Black Cockatoo habitat as a result of the proposed development, Fairway Developments has committed to conserving 39.74 hectares (ha) of eucalypt woodland located on private property on Lot 13107 on Deposited Plan 213299, Boyup Brook Cranbrook Road, Tonebridge / Frankland River (Certificate of Title 1765-286) (refer to **Figure 1**) (herein referred to as the offset site).

This plan outlines Fairway Developments' management measures related to the offset site which will be established to achieve long-term environmental benefits for Black Cockatoos in response to the predicted extent of clearing of potential breeding and foraging habitat for the proposed development.

1.2 Development Proposal

Fairway Developments is proposing to implement the final stage of the Old Broadwater Farm Estate, which will involve urban development of the balance of the site (portion of Lot 9005 on Deposited Plan 46853, house 56 New River Ramble/Pickmore Circus, West Busselton). The development will be staged and will ultimately involve the creation of a residential subdivision comprised of the following:

- Provision for 239 single residential allotments of varying sizes to cater for all age groups and lifestyles;
- A large grouped housing site opposite the golf course;
- Provision of larger residential lots (+900m²) along the Busselton Bypass to facilitate the opportunity for bush lifestyle lots with native vegetation;
- A commercial site of 1.09 ha to provide for convenient retail facilities for residents;
- A re-designed nine hole golf course of 7.91 ha to enable the retention of significant remnant vegetation;
- Three orchid conservation areas (1.53 ha) strategically located to enable the retention of a local *Caladenia procera* population;
- The Busselton Bypass Reserve of 0.66 ha to provide visual and noise relief whilst also protecting a stand of significant remnant vegetation; and
- Additional conservation and recreational reserves totalling 4.70 ha.



While the majority of the subject site is comprised of parkland cleared paddocks and fairways, the development will involve clearing of approximately 9.03 ha of remnant vegetation. Of this, 8.60 ha is categorised as degraded potential breeding and foraging habitat for Black Cockatoos.

1.3 Approvals

Subject to the Commonwealth EPBC Act, Fairway Developments formally referred the proposed development to the Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) for assessment in December 2009. The proposal was considered in accordance with Part 9 of the EPBC Act and on 20 September 2011, conditional approval was granted. Pursuant to the conditional approval instrument issued by the SEWPaC, Condition 8 necessitates the preparation of an Offset Management Plan (OMP) and subsequent approval by the Minister, prior to the commencement of construction. Specifically, Condition 8 of the SEWPaC conditional approval stipulates the following:

8. To ensure the long term survival of Black Cockatoos, the person taking the action must develop an Offset Management Plan for the areas identified in Condition 7. The Offset Management Plan must include and not be limited to:

- Background;
- Site Description;
- Agreement to Reserve (in accordance with WA Soil and Land Conservation Act 1945);
- Revegetation and landscaping methodology;
- Fencing and predator control measures;
- Roles and responsibilities;
- Monitoring and reporting requirements; and
- Timeframes and implementation of the above measures.

The Offset Management Plan must be submitted to and approved by the Minister prior to construction commencing.

1.4 Purpose and Scope

The purpose of this OMP is to describe the management measures that will be implemented by Fairway Developments associated with the Black Cockatoo offset site. Accordingly, the OMP provides the following:

- Site details including existing habitat, condition of vegetation and vegetation communities;
- Specifications associated with the long term protection and reservation of the offset site;
- Revegetation methodology;
- Predator mitigation and management measures;
- Roles and responsibilities associated with the management of the offset site;
- Monitoring and reporting requirements; and
- Timeframes associated with the implementation of the management measures.

1.5 Legislation

Pursuant to the SEWPaC's EPBC Act Environmental Offsets Policy (2012a), environmental offsets are defined as 'actions taken outside a development site that compensate for the impacts of that development including direct, indirect or consequential impacts'. Actions that can be considered as environmental offsets are typically categorised as direct offsets or other compensatory measures (indirect offsets).



This OMP is associated with the rehabilitation and protection of 39.74 ha of Black Cockatoo breeding and foraging habitat and therefore it is considered as a direct offset. The primary objective of direct offsets is the preservation and improvement of habitat values, which may include (SEWPaC 2012a):

- Long-term protection of existing habitat, including through the acquisition and inclusion of land through covenanting arrangements on private land;
- Restoration or rehabilitation of existing degraded habitat; and
- Re-establishment of habitat.



2 BLACK COCKATOO HABITAT

2.1 Carnaby's Black Cockatoo

Carnaby's Black Cockatoo is endemic to the southwest of Western Australia, within an area extending from the Murchison River to Esperance and inland to Coroow, Kellerberrin and Lake Cronion. They are commonly observed on the Swan Coastal Plan to the north of Perth and some areas of the northern Wheatbelt but are locally extinct within the central Wheatbelt (Johnstone and Kirkby 2006).

Carnaby's Black Cockatoo typically breed in the northern Wheatbelt region within uncleared or remnant eucalypt woodlands, predominately comprised of Salmon Gum or White Gum (Wandoo). They feed in Kwongan heath on various species of Banksia, Grevillea, Hakea, Dryandra species and seeds of Eucalyptus species (Shah 2006).

During the non-breeding season (mid-October to early July), they disperse to the higher rainfall coastal areas of the southwest of Western Australia to feed in Banksia woodlands, coastal and near-coastal scrub and introduced pine plantations (Shah 2006).

2.2 Baudin's Black Cockatoo

Baudin's Black Cockatoo is endemic to approximately 2,000 km² within the southwest of Western Australia (Johnstone and Storr 1998). They are currently distributed from Albany extending north to Gidgegannup, east to Mount Helena, Wandering, Quindanning, Kojonup, Frankland and King River and to the eastern margin of the Swan Coastal Plain including West Midland, Byford, North Dandalup, Yarloop, Wokalup and Bunbury (Johnstone and Storr 1998).

Baudin's Black Cockatoo primarily feed on seeds of Marri, in the forested regions of southwest Western Australia (Sanders 1974). They also feed on seeds on various Banksia species, Jarrah and Dryandra species. Their diet also includes invertebrate larvae, which they obtain by stripping bark from trees (Johnstone and Storr 1998). Unlike Carnaby's Black Cockatoo, Baudin's Black Cockatoo is not known to feed on commercial pine plantations that are present in its range (Saunders 1974).

Baudin's Black Cockatoos nest in mature Marri, Karri, Jarrah and Wandoo trees in the lower southwest of Western Australia (Johnstone and Storr 1998). They nest in large tree hollows, 30-40 cm in diameter and more than 30 cm deep (Saunders 1974).

2.3 Forest Red-tailed Black Cockatoo

The Forest Red-tailed Black Cockatoo is endemic to the southwest of Western Australia (Mawson and Johnstone 1997). It inhabits the dense Jarrah, Karri and Marri forests in high rainfall areas, occurring north of Perth and east to Mount Helena, North Banister, Mt Saddleback, Rocky Gully and the upper King River (Johnstone 1997). The movements of Forest Red-tailed Black Cockatoos are irregular and can be observed on the Swan Coastal Plain at any time of the year (Stranger 1997).

They roost in Jarrah, Marri and Blackbutt habitat on road sides, paddocks or forest blocks. Flocks depart the roost at sunrise and feed in small groups, usually within one to 4 km of the roost (Johnstone and Kirkby 1999). Forest Red-tailed Black Cockatoos predominately feed on the seeds of Marri and Jarrah. They are also known to strip bark from trees in search of invertebrate larvae (Johnstone and Kirkby 1999).



Similar to Baudin's Cockatoo, the Forest Red-tailed Black Cockatoo nest in the large hollows of Marri, Jarrah and Karri (Johnstone and Kirkby 1999). In Marri, the nest hollows of the Forest Red-tailed Black Cockatoo range from 8-14 m above ground, the entrance is 12–41 cm in diameter and the depth is 1-5 m (Johnstone and Storr 1998).



3 OFFSET IMPLEMENTATION

Fairway Developments has committed to conserve 39.74 ha of remnant vegetation located within three discrete blocks in the offset site. In consideration of the Black Cockatoo's habitat range, the remnant vegetation within the offset site has been identified as strategically important for the preservation of Black Cockatoos, being located on migratory pathways and providing suitable foraging and breeding habitat for the three species. In order to ensure the protection and improvement of the offset site, a series of management measures will be implemented, as documented within this Section.

3.1 Offset Site Description

The offset site is owned by Fairway Developments and has previously been used for agricultural and plantation purposes. The site is currently comprised of a Blue Gum plantation and areas of remnant vegetation containing Jarrah and Marri trees. Following discussions with the property owner (M. Hair, pers. comm., 2 August 2010), remnant vegetation within the offset site has never been subject to clearing denoting the presence of old growth woodlands within these areas.

A vegetation condition and significant tree assessment (Ecoedge 2010) was undertaken to determine the Black Cockatoo breeding and foraging potential of the vegetation within the offset site and therefore the suitability of the remnant vegetation as an offset. The assessment aimed to locate all trees within the subject site that had a diameter at breast height (DBH) of 50cm or greater. Trees of this size are regarded by the SEWPaC as Black Cockatoo breeding habitat, regardless of the presence of hollows (SEWPaC 2011).

Following the completion of the assessment (Ecoedge 2010), three blocks of remnant vegetation were identified as containing suitable Black Cockatoo habitat. As a result, these blocks of remnant vegetation were deemed as a suitable offset for Black Cockatoos in consideration of the proposed clearing for the residential subdivision. For the purposes of identification, these blocks have been named 'East', 'Central' and 'West' (refer to **Figure 1**). A general description of each block is provided below.

East Block

The vegetation is comprised of approximately 80% Jarrah and 25% Marri which are generally a minimum of 40 years old. The average DBH is approximately 160 cm denoting the presence of potential Black Cockatoo breeding habitat (Ecoedge 2010).

This block of remnant vegetation has previously been fenced to exclude stock which is evidenced by the presence of intact and diverse understorey. As per the Keighery (1994) condition scale, the vegetation is classified as being in 'Very Good' condition. Natural regeneration is evident, with a number of seedlings observed throughout the block. *Hypochaeris glabra* was identified as the predominant weed species and two active rabbit warrens were identified within the block, each posing a significant threat to the natural regeneration of vegetation (Ecoedge 2010).

Central Block

The composition of the overstorey within the Central block is comprised of 50% Jarrah and 50% Marri, with an approximate age of 35 years. The average DBH is 85 cm, indicating the presence of potential Black Cockatoo breeding habitat (Ecoedge 2010).

Vegetation within this block if considered 'Degraded' due to a lack of understorey species which can be attributed to a history of grazing pressure from stock and feral animals. The block also contains small, scattered infestations of Bridal Creeper (*Asparagus asparagoides*) (Ecoedge 2010).



West Block

Vegetation within this block is predominately comprised of Marri and Jarrah which are estimated to be 40 years old. The average DBH is 80 cm with scattered individuals up to 150 cm DBH, indicating sufficient size for potential Black Cockatoo breeding habitat (Ecoedge 2010).

While the vegetation within the block has been subject to grazing which has reduced the diversity and cover of understorey species, the vegetation condition is classified as 'Good' to 'Very Good'. Evidence of natural regeneration was identified with the presence of a variety of seedlings throughout the block. The predominant weed species identified within the block was *Hypochaeris glabra* (Ecoedge 2010).

3.2 Agreement to Reserve

An Agreement to Reserve will be applied in accordance with the *Soil and Land Conservation Act 1945* to the offset site in relation to the three areas identified within **Figure 1** to ensure the long term protection of 39.74 ha of remnant vegetation. The agreement is binding not only on the landowner entering into the agreement but also to any successors in title to the land. The Agreement to Reserve will also stipulate inperpetuity land use commitments within the three nominated areas to:

- Retain all vegetation (dead or alive);
- Install and maintain fencing around the perimeter of the three areas; and
- Retain all fallen timber/branches/leaf litter.

The Commissioner of Soil and Land Conservation has commenced preparatory work in association with the Agreement to Reserve (refer to **Appendix A**). It is anticipated that the associated documents and mapping will be finalised by the 30th June 2014.

3.3 Management Actions

In consideration of the condition of the three blocks of remnant vegetation, the most suitable rehabilitation approach is natural regeneration. A feral animal control program will be implemented for two years to improve the natural regeneration potential of vegetation within the three blocks.

3.3.1 Natural Regeneration

Revegetation activities are resource intensive and may interrupt the natural regeneration process already occurring within the remnant vegetation onsite. Natural regeneration is the most effective means of restoring the ecological values of remnant vegetation. It results in the regeneration of vegetation communities which are composed of locally appropriate and typically diverse plant species. Natural regeneration assists in preserving local genetics and therefore maintaining biological diversity. As a result, where the appropriate natural conditions prevail, natural regeneration is the preferred methodology over revegetation for the re-establishment of native vegetation (NSW Office of Environment and Heritage 2012).

Large-scale revegetation activities are not considered necessary within the three blocks on the offset site as their existing condition will support natural regeneration in conjunction with management measures to minimise potential threats. This determination is based on guidance provided by the NSW Office of Environment and Heritage (2012) and the presence of a viable seed bank within the soil of the three blocks, as confirmed by recent observations of regeneration (Ecoedge 2010).

In order to improve the resilience of the remnant vegetation and therefore improve the rate of regeneration, some management measures will be undertaken. This will include an initial two year



management program for feral animals followed by fencing of the three remnant vegetation blocks once the existing Blue Gum plantation has been harvested.

3.3.2 Feral Animal Control

Feral fauna have the potential to cause impacts on existing native flora species, particularly via predation and habitat destruction. Rabbits and rabbit warrens have been recorded within the three blocks.

Control of the rabbit population is considered essential to the success of any regeneration program as the species has the potential to damage establishing vegetation through grazing and/or trampling. On this basis, an integrated approach to rabbit control will be applied which will initially involve a baiting program. Baiting will be undertaken by a licenced pest management operator and will consist of 1080 placed inside warrens to minimise the potential for consumption by non-target species. This is to be supplemented by open-range shooting and ripping of rabbit warrens with a bulldozer or similar piece of equipment where suitable access can be achieved whilst avoiding impacts to native vegetation.

Feral animal control will be undertaken annually for two years during an initial two year management program. Subsequent feral animal control will be undertaken on an as needs basis.

3.3.3 Fencing and Access Control

While the remnant vegetation is situated on private property and no access is provided to the general public, it will still be necessary to define the offset area, exclude domestic stock and manage unauthorised access; once the existing Blue Gum plantation has been harvested. On this basis, appropriate fencing (i.e. standard stock/farm fencing with lockable gate) will be installed around the three blocks of vegetation upon the completion of the final rotation for the Blue Gum plantation. This is likely to occur within a minimum of 12 years, once the Blue Gum plantation achieves adequate maturation for harvesting. Subsequently, fencing will be maintained in a functional condition, with repairs undertaken promptly if damage occurs.

Following the installation of the fences, maintenance will be required on an as needs basis in perpetuity, to ensure its functionality.

3.4 Monitoring requirements

Two monitoring events will be undertaken to determine the success of the initial feral animal control program and regeneration within the three blocks. Monitoring will be undertaken once a year during the spring months for a period of two years following the commencement of the feral animal control program. This will also include a baseline assessment to be completed in spring prior to the implementation of feral animal control.

3.4.1 Performance Criteria

Annual monitoring will be undertaken in two randomly selected monitoring quadrats within each of the three blocks. The dimensions of the monitoring plots will be five metres by five metres and will be pegged on each corner. GPS recordings will be taken in the quadrats and referred back to if pegs are removed or lost. An assessment will be undertaken against the following performance criteria:

- Rate of regeneration;
- Seedling survival and health;
- Weed impacts;
- Pest attacks; and
- Other factors affecting seedling survival.



This information will assist in informing contingent revegetation and weed control requirements.

3.4.2 Reporting

A brief report outlining the findings of the monitoring will be prepared following each monitoring event. The report will include:

- An account of the rate of regeneration and seedling survival rates;
- The overall average health of seedlings within each block;
- The presence of weeds and their effect on native plant survival and growth;
- Recommendation regarding weed control, feral animal control and contingent revegetation, if required.

Subsequently, following the completion of the initial two year feral animal control program, results from the two monitoring events will be summarised and consolidated into a final report. The final report will be submitted to the SEWPaC for their consideration and action, if required. The final report will include:

- A summary of any work undertaken within the period;
- An account of regeneration success;
- The presence of weeds and their effect on native plant survival and growth;
- Recommendation regarding weed control and/or feral animal (if required); and
- Recommendations regarding contingent revegetation.

3.5 Management Responses and Contingencies

Following completion of the initial two year feral animal control program, where the rate of natural regeneration is poor and/or weeds appear to be effecting native seedling survival and growth, appropriate contingency measures will be applied.

3.5.1 Weed Control

If required, contingent weed control will be implemented to prevent weed species from competing with native vegetation for light, nutrients and moisture. In order to reduce potential impacts associated with soil compaction and destruction of seedlings during weed control, only the two predominant weed species identified during the vegetation condition assessment (Ecoedge 2010) will be targeted. This includes Flatweed (*Hypochaeris glabra*) and Bridal Creeper (*Asparagus asparagoides*) which were observed within the three blocks (Ecoedge 2010).

Targeted chemical spraying of these two species will involve the application of:

- Flatweed (*Hypochaeris glabra*) 2% Glyphosate including Pulse[®], wetting agent and Chlorsulfuron; and
- Bridal Creeper (Asparagus asparagoides) 0.5g/100L metsulfuron and approved adjuvant (e.g. Pulse[®]).

Herbicide will be applied during the plants growing phase, before flowering and prior to the development of seed heads. This period is typically just before or during spring. During the implementation of the weed control program, work will commence from areas in the best condition to those in the worst condition.

The application of herbicide will occur in still, dry conditions when no rain is predicted within 12 hours. Spraying will be conducted in such a manner that spray drift is minimised and that any nearby native species are not affected.



Herbicide application will be undertaken by trained personnel in accordance with manufacturers' instruction, which will include the application of appropriate safety requirements.

Weed control will be undertaken annually for two years if deemed necessary following the completion of the initial two year feral animal control program. The monitoring program described in **Section 3.4** will continue for a further two years to determine the success of the weed control program.

3.5.2 Contingent Revegetation

While it may take two years before seedlings naturally germinate, where no regeneration is taking place and the block is not responding to regeneration techniques, revegetation activities such as tubestock planting will be undertaken. This requirement will be based on the outcomes of the two year initial feral animal control program.

If deemed necessary, revegetation will be undertaken within specific locations to enhance the resilience of remnant vegetation (i.e. to create windbreaks, shelterbelts or corridors) and therefore enable regeneration.

Species Selection

All revegetation stock will be sourced from (preferably) local nurseries with NIASA accreditation to ensure that tubestock soil is disease free. Provenance stock is to be used where available. The indicative species list (based on availability) is provided below:

- Eucalyptus marginate subsp. marginata (Jarrah);
- Corymbia calophylla (Marri);
- Eucalyptus wandoo (Wandoo);
- Allocasuarina fraseriana (Sheoak);
- Banksia attenuata (Candlestick Banksia);
- Banksia sessilis (Parrot bush);
- Banksia menziesii (Firewood Banksia);
- Hakea amplexicaulis (Prickly hakea);
- Hakea lissocarpha (Honey bush).

Given that the remnant vegetation blocks are vegetated, scarification and/or ripping will not be undertaken prior to planting.

Planting Density

The maximum stock size will be limited to tubestock size as larger stock is likely to require supplementary watering to ensure survival. Plant layout will reflect natural conditions to the greatest extent possible by distributing plant species with adequate spacing for root development. It is necessary to ensure that planting density reflects the natural bush surroundings in order to create 'like for like' vegetation conditions. Seedlings will be set out within the planting area with 5m spacing for trees and 2m spacing for shrubs.

The planting of seedlings will occur between the months of May to July after substantial rain has saturated the soil profile. Non-phosphorous fertiliser granules will be used at the time of planting and seedlings will not be staked for support. Free standing plants have increased durability and strength as opposed to staked plants.

Each seedling planted will have a biodegradable tree guard placed around them to reduce predation from rabbits and kangaroos. The tree guards will be held in place with three 60cm to 80cm bamboo sticks.



These tree guards will be removed after one year which will prevent damage to the growing seedlings caused by constriction of outward growth.

Revegetation Maintenance

Revegetation works will require ongoing maintenance with the key elements being prevention of feral animals and suppression of smothering weeds. The prevention of damage or loss to plantings by rabbits will require maintenance of stakes and bags until plants are established. Ongoing weeding will also be required as previously discussed. This will entail spot spraying with the addition of mulch and fertiliser as required.

It is expected that following revegetation there will be a maximum loss of 20% of the original plantings. Subsequently, replacement plantings are required to maintain the original planting numbers at a minimum of 80% survivorship.

3.5.3 Monitoring and Reporting

In order to determine the success of the contingent weed control and revegetation works, monitoring will continue as per the specifications within **Section 3.4** for a further two years. This will include an assessment of the monitoring plots in addition to the revegetation areas for the following:

- Rate of regeneration;
- Seedling survival and health;
- Persistence of weeds;
- Pest attacks; and
- Other factors affecting seedling survival.

A brief report will be prepared on the results from each monitoring event, addressing the criteria in **Section 3.4.2** and the success of the revegetation program. A final report which summarises the results of the regeneration, feral animal control, weed control and revegetation will be submitted to the SEWPaC upon completion of the additional two year monitoring program. The requirement to undertake any additional works will subsequently be determined.

3.6 Roles, Responsibility and Timing

The overall responsibility for the implementation of this OMP initially rests with the Fairway Developments' Project Manager. This includes the initial two year period of feral animal control and monitoring and reporting, followed by contingent weed control and revegetation (if required). Subsequent landowners of the property will be responsible for the implementation of the following, in accordance with the Agreement to Reserve:

- Retention of all vegetation and fallen timber (dead or alive); and
- Maintenance of fencing around the perimeter of the three blocks of remnant vegetation.

Table 1 below provides a summary of the actions, timing and responsibilities associated with this OMP.



Item	Action	Timing	Responsibility	
Agreement to Reserve	Establish Agreement to Reserve over the property for the three blocks of remnant vegetation	Before 30 th June 2014	Fairway Developments	
Feral Animal Control	Undertake feral animal control	Annually for two years once Stage A clearing has been undertaken*	Fairway Developments	
Monitoring	Undertake baseline monitoring	Prior to fencing and feral animal control	- Fairway Developments	
	Monitor success of regeneration and feral animal control program	Annually for two years (during spring)		
Reporting	Report monitoring results to SEWPaC	Upon the completion of the two annual monitoring events	Fairway Developments	
Fencing	Install and upgrade fencing around the three blocks of vegetation	Once the Blue Gum plantation has been harvested.	Fairway Developments	
	Maintain fences in good working order	Ongoing	Fairway Developments and future landowners	
Contingency Me	easures			
Weed Control	Undertake weed control program (only if required)	July to October (for two years)	Fairway Developments	
Revegetation	Undertake contingent revegetation (only if required)	Post the completion of the initial management program	Fairway Developments	
	Implement revegetation maintenance (only if required)	One year post commencement of contingent revegetation	Fairway Developments	
Monitoring	Monitor success of contingent revegetation and weed control	Annually for two years (during spring)	Fairway Developments	
Reporting	Report monitoring results to SEWPaC	Upon the completion of the two annual monitoring events	Fairway Developments	

Table 1. Actions, timing and responsibilities for the implementation of the Offset Management Plan.

*Refer to Environmental Management Plan – Old Broadwater Farm (Accendo Australia 2013) for clearing Stages.



REFERENCES

Department of Sustainability, Environment, Water, Population and Communities (SEWPaC). (2012a) *Environment Protection and Biodiversity Conservation Act* 1999 Environmental Offsets Policy. Commonwealth of Australia.

Department of Sustainability, Environment, Water, Population and Communities (SEWPaC). (2012b) EPBC Act Referral Guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered) *Calyptorhynchus latirostris*, Baudin's cockatoo (vulnerable) *Calyptorhynchus baudinii*, Forest red-tailed black cockatoo (vulnerable) *Calyptorhynchus banksii naso*. Commonwealth of Australia.

Johnstone, R. E. (1997) *Current studies on three endemic Western Australian Cockatoos*. Eclectus **3**, 34-35.

Johnstone, R.E., Johnstone, C. and Kirkby, T. (2006). *Report on Carnaby's Cockatoo* Calyptorhynchus latirostris *nest monitoring within the Cataby Project Area breeding season 2005-2006.* Prepared for Iluka Resources Limited. Unpublished report.

Johnstone, R. E. and Kirkby, T. (1999) Food of the Forest Red-tailed Black Cockatoo Calyptorhynchus banksii naso in south-west Western Australia. Western Australian Naturalist **22**, 167-177.

Johnstone, R. E. and Storr, G. M. (1998) *Handbook of Western Australian Birds*. Volume 1. Nonpasserines (Emu to Dollarbird). Western Australia Museum, Perth.

Keighery, B.J. (1994) *Bushland Plant Survey. A Guide to Plant Community Survey for the Community.* Wildflower Society of WA (Inc.), Western Australia.

Mawson, P. R. and Johnstone, R. E. (1997) Conservation status of parrots and cockatoos in Western Australia. Eclectus 2, 4-9.

Saunders, D. A. (1974) Subspeciation in the white-tailed black cockatoo, Calyptorhynchus baudinii, in Western Australia. Australian Wildlife Research **1**, 55-69.

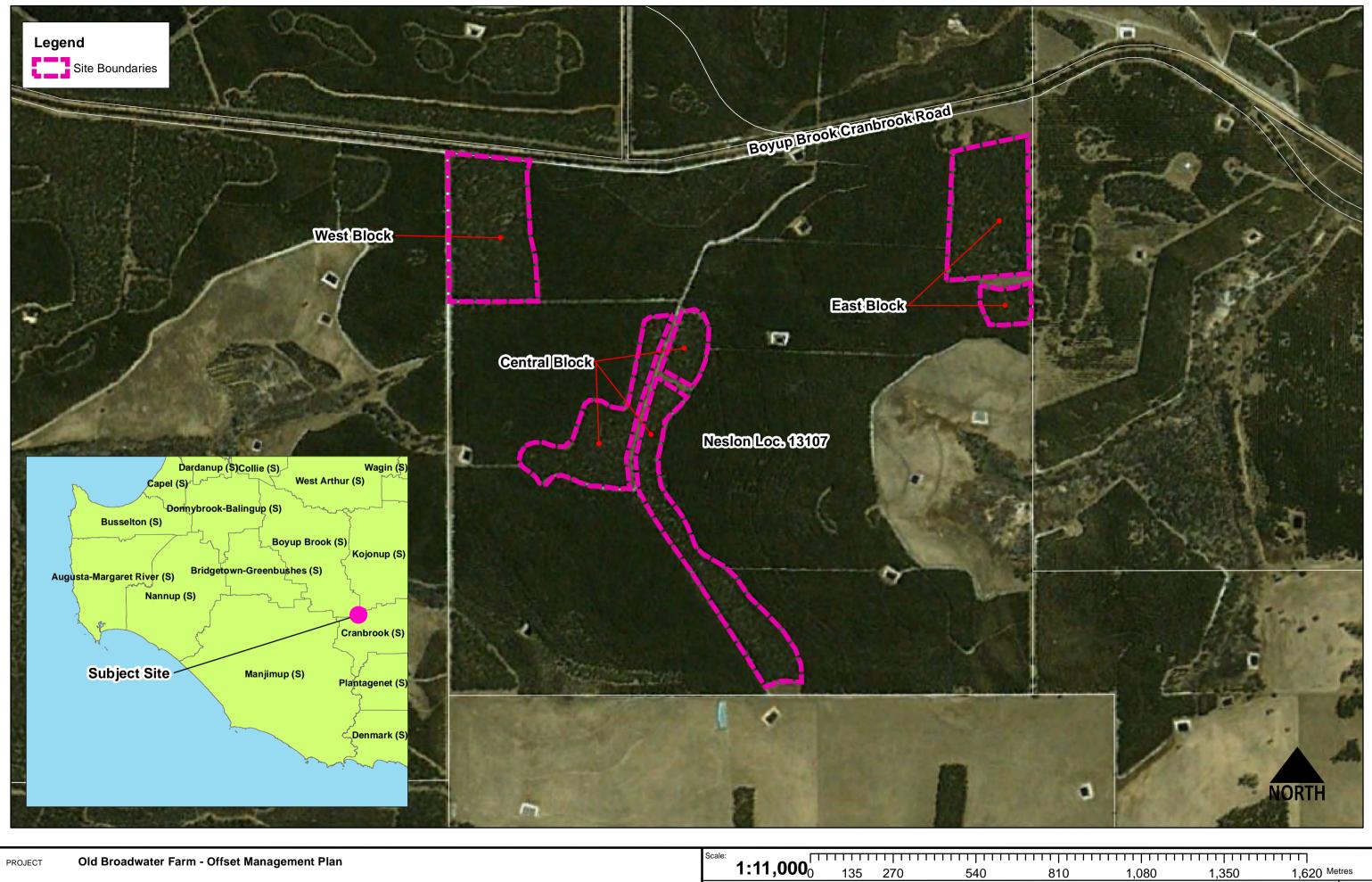
Shah, B. (2006). *Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia*. Birds Australia WA.

Stranger, R. H. (1997) *Red-tailed black cockatoo feeding on berries of Cape lilac. Western Australian Naturalist* **21**, 182-183.



FIGURES





PO Box 5178 West Busselton Western Australia 6280

Telephone (08) 9755 7217 Mobile 0418 950 852

accendo

PROJECT Old Broadwater Farm - Offset Man	agement Pla
--	-------------

DRAWING TITLE FIGURE 1 : Locality Plan

Fairway Developments Pty Ltd PRINCIPAL

his drawing has been prepared by, and remains the property of Assendo Australia Pty Ltd. This drawing shall not be used without permission. he drawing shall be preliminary only and/or not for construction until signed approved.

810	1,080		1,350	1,620 ^{Me}	1,620 Metres				
	Project Numbe 1261	er	Drawing Number 01	Revision 00	Original A3				
	Designed Drawn	KMT DTF	Checked Approved		Date 31-01-13 Sheet 1 of 1				
Local Authority City of Busselton									

APPENDIX A – CORRESPONDANCE REGARDING AGREEMENT TO RESERVE







Mr A Bell Fairway Developments (WA) Pty Ltd PO Box 27 BUSSELLTON WA 6280 Our Ref: Enquiries: Andrew Watson (9368 3282) Email: andrew.watson@agric.wa.gov.au Date: 21 January 2013

Dear Mr Bell

AGREEMENTS TO RESERVE (STAGE 3-OLD BROADWATER FARM, WEST BUSSELTON)

Please find the attached letter addressed to the Department of Sustainability, Environment, Water, Population and Community, that advises that my office has commenced negotiating agreements to reserve to protect native vegetation with Fairway Developments (WA) Pty Ltd.

Should have any enquiries please contact Ms Monica Coates in the first instance.

Yours sincerely

Andrew Watson COMMISSIONER OF SOIL AND LAND CONSERVATION

Att





Mr S Gaddes A/g Assistant Secretary Compliance and Enforcement Branch Department of Sustainability, Environment, Water, Population and Community GPO Box 787 CANBERRA ACT 2601

Your Ref: EPBC 2009/5231 Enquiries: Andrew Watson (9368 3282) Email: andrew.watson@agric.wa.gov.au Date: 21 January 2013

Dear Mr Gaddes

OLD BROADWATER FARM ESTATE SUBDIVISION - STAGE 3 BUSSELTON

I am writing to you to advise you that my office has been requested by Fairway Developments (WA) Pty Ltd, to negotiate three agreements to reserve (ATR) on land within this development.

The purpose of the ATRs will be to protect land for the management of vegetation in compliance with your conditions 7-10. The conditions imposed on the proponent require ATRs that are irrevocable and in perpetuity. Please be aware for future reference, that there is an error in the drafting of your conditions.

Under section 30B of the *Soil and Land Conservation Act 1945*, only conservation covenants may be expressed to be irrevocable. The ATRs negotiated in accordance with your condition may be varied or revoked by mutual consent. Both ATRs and conservation covenants may be in perpetuity and both may be registered as memorials on certificate of land title.

Should you have any queries in relation to t his matter, please contact Ms Monica Coates in the first instance on 9368 3282.

Yours sincerely

Sal de A

Andrew Watson COMMISSIONER OF SOIL AND LAND CONSERVATION