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## Jindee Innovation Project

### Clearing and Revegetation Management Plan

Prepared for  
Westminster Estates Pty Ltd  
by Strategen  
December 2016



# **Jindee Innovation Project**

## **Clearing and Revegetation Management Plan**

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December 2016

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### **Client: Westminster Estates Pty Ltd**

Report Version	Revision No.	Purpose	Strategen author/reviewer	Submitted to Client	
				Form	Date
Draft Report	A	Client review	A Welker /J Morgan, D Walsh	Electronic	31/01/2014
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Declaration of accuracy

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed

Full name (please print)

Organisation (please print)

Date 16/12/16



Gareth Wilson

Estates Development Company



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# 1. Introduction

Westminster Estates Pty Ltd (Westminster) entered into an agreement in 2007 with the Western Australian Planning Commission (WAPC) and the City of Wanneroo to undertake an innovative residential development, known as the Jindee Innovation Project. The Jindee Innovation Project is located approximately 37 km north of Perth, and 14 km west of the Joondalup City Centre, Western Australia, in the City of Wanneroo (CoW) (the Project Area; Figure 1). The development will occur on land owned by Westminster within Lot 8000 Marmion Avenue.

The Project Area covers a total area of 119.5 ha, including 6.9 ha of Parks and Recreation which was developed in consultation with the WAPC and the Environmental Protection Authority (EPA) with an objective to maximise the biodiversity protected on site.

This Clearing and Revegetation Management Plan (CRMP) has been prepared in accordance with condition 12 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval for the Jindee Innovation Project (EPBC 2012/6631). The purpose of this CRMP is to address the collection, use and transfer of native seed, as well as revegetation and street scaping, with the aim of enhancing Carnaby's Cockatoo habitat.

## 1.1 Objectives

The objectives of this CRMP are to:

- provide a commitment to the collection of native seed prior to clearing, from within Carnaby's Cockatoo habitat in accordance with **condition 12a** of EPBC 2012/6631
- provide a commitment to provide native seed (not proposed to be utilised onsite) to the Department of Parks and Wildlife (DPAW) or another receiving party for use in revegetation in accordance with **condition 12b** of EPBC 2012/6631
- detail protocols for the collection and use of native seed in accordance with **condition 12c** of EPBC 2012/6631
- provide a commitment to at least 50% of trees and shrubs planted within the Project Area to be primary feeding plants for Carnaby's Cockatoo in accordance with **condition 12d** of EPBC 2012/6631.

## 1.2 Land details

The Project Area includes Lots 8000, 8001, 8002 and 11593 Marmion Avenue and has approximately 800 m frontage to the Indian Ocean. It is located in proximity to the Brighton District Centre, the Brighton rail station and the Mitchell Freeway extension.

Table 1: Land identification information

Street address	Suburb	Cadastral information	Title	Zoning	Structure Plan
2469 Marmion Avenue	Jindalee	Lot 8000 Marmion Avenue	Lot 8000 on DP 403862	Urban	LSP 84
2409K Marmion Avenue	Jindalee	Lot 8001 Marmion Avenue	Lot 8001 on DP 403862	Parks and Recreation	LSP 84
2435L Marmion Avenue	Jindalee	Lot 11593 Marmion Avenue	Lot 11593 on DP190531	Parks and Recreation	LSP 84
1000K Maritim Drive	Jindalee	Lot 8002 Marmion Avenue	Lot 8002 on DP 403862	Parks and Recreation	LSP 84

## 1.3 Statutory and policy context

### 1.3.1 MRS Amendment

The Project Area includes Lots 8000, 8001, 8002 and 11593 Marmion Avenue. The coastal environment within and adjacent to Lot 8000 includes both limestone cliffs and beaches underpinned by limestone formation, which can support development closer to the coast than contemplated by the former Metropolitan Regional Scheme (MRS) boundary. An MRS amendment application was lodged in 2008 to amend the boundary (1152/41) and was approved in November 2009.

The MRS amendment was referred under s 48A of the *Environmental Protection Act 1986* (EP Act) to the EPA in March 2008. The level of assessment was set at 'Scheme Amendment Not Assessed – Advice Given' in May 2008. The EPA supported the scheme amendment on the basis that two Parks and Recreation reserves were to be provided to offset the area of the foreshore Parks and Recreation Reserve that was proposed to be zoned Urban. As a result a land exchange was completed between the landowner and the WAPC for part of the reserves that are now Lots 8001, 8002 and 11593.

### 1.3.2 Environment Protection and Biodiversity Conservation Act 1999

The Project Area is the subject of EPBC Act approval, EPBC 2012/6631, referred to the Department of the Environment (DotE) on 16 November 2012 and approved 18 July 2013. The CRMP has been prepared in accordance with condition 12 of EPBC 2012/6631 as indicated in Table 2.

Table 2: Condition 12 and corresponding section where condition has been addressed

Condition	Relevant section
12. To mitigate impacts to Carnaby's Black Cockatoo, the approval holder must prepare and submit a Clearing and Revegetation Management Plan for the <b>Minister's</b> approval. The plan must include:	N/A
(a) a commitment to the staged collection of native seed prior to <b>clearing</b> from the shaded areas as per <b>Attachment A</b> , for use in <b>revegetation</b> ;	Section 3.1
(b) a commitment to store native seed and either use it on-site for <b>revegetation</b> or transport it to a seed bank or receiving site(s) where <b>revegetation</b> is being undertaken by the <b>WA DPaW</b> or another receiving party (or parties).	Section 3.1
(c) detailed protocols for collection and use of native seed required by condition 12 (a) and 12 (b) including:	Section 3.2
i the optimal methodology for native seed collection from the <b>proposal site</b>	
ii how clearing will be staged to best utilise the native seed resource for <b>revegetation</b>	Section 3
iii how native seed will be stored and transported; and	Section 3.2
iii onsite supervision and implementation monitoring mechanisms.	Section 4 & 6
(d) a commitment for at least 50% of plantings of trees and shrubs on the <b>proposal site</b> to consist of plants known to be <b>primary feeding plants</b> for Carnaby's Black Cockatoo. Site selection for replanting must take account of any risk of vehicle strike to Carnaby's Black Cockatoos.	Section 3.1
If the <b>Minister</b> approves the plan, then the approved plan must be implemented.	N/A



**Figure 1: Site location and Project Area**

Scale 1:15,000 at A4



Coordinate System: GDA 1994 MGA Zone 50  
 Note that positional errors may occur in some areas  
 Date: 5/07/2016  
 Author: JCrute

Source: Topography: Geoscience Australia 2006. Aerial image: Nearthmap 06/2012. Cadastre: Online SLIP Database, Landgate 06/2016.



**Legend**

- Project Area
- Existing cadastre



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## 2. Carnaby's Cockatoo

### 2.1 Species information

Carnaby's Cockatoos (*Calyptorhynchus latirostris*) are endemic to the South West of Western Australia. They mainly occur in uncleared remnant native eucalypt woodlands, especially those that contain salmon gum, wandoo, and in shrubland or Kwongan heathland dominated by *Hakea*, *Dryandra*, *Banksia* and *Grevillea* species (DSEWPaC 2012). Current data on distribution of this species shows that there are numerous records along the northern Swan Coastal Plain, including records in and around the Project Area.

### 2.2 Habitat within the Project Area

The vegetation within the Project Area is varied, reflecting the topography and soils found on site. Areas of *Banksia* woodland as well as the *Banksia* (formerly *Dryandra*) *sessilis* thickets within the Project Area have the potential to support flora species known to be a food source for Carnaby's Cockatoo (Bamford 2006). The Project Area is not considered to contain breeding habitat for this species as it does not contain trees suitable for breeding purposes (RPS 2012).

The development will result in the removal of approximately 41 ha of potential Carnaby's Cockatoo foraging habitat. Approximately 4.28 ha of good – excellent potential Carnaby's Cockatoo foraging habitat will be retained in two Parks and Recreation Reserves, Public Open Spaces (POS) and civic spaces (Figure 2).



**Figure 2: Carnaby's Black-Cockatoo foraging habitat**

Scale 1:9,000 at A4



Coordinate System: GDA 1994 MGA Zone 50  
Note that positional errors may occur in some areas

Date: 5/07/2016

Author: DWhite

Source: Aerial image: Nearmap 2012. Concept plan: Client 01/2016.

**Legend**

Project Area

Subdivision layout

Potential foraging habitat for Carnaby's Black Cockatoo to be cleared (38.01 ha)

Potential foraging habitat for Carnaby's Black Cockatoo to be retained and cleared in POS/ROS (minimum total area retained 4.28 ha; maximum total area cleared 2.88 ha)



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### 3. Management measures for Carnaby's Cockatoo and its habitat

#### 3.1 Habitat management

The purpose of this CRMP is to address the collection, use and transfer of native seed, as well as revegetation and street scaping, with the aim of enhancing Carnaby's Cockatoo habitat within the Project Area. Within the Project Area Carnaby's Cockatoo foraging habitat will be retained in:

- Parks and Recreation Reserves
- POS and civic spaces.

The management program for vegetation clearing and revegetation has been developed to minimise the impact to retained Carnaby's Cockatoo habitat during and post development of the Jindee Innovation Project. As such, the proponent has incorporated the following environment management commitments into the development to achieve these outcomes:

1. Collection of suitable native seed from habitat planned to be cleared.
2. Use of collected suitable seed to revegetate degraded habitat areas (degraded areas were identified in the Conservation Management Plan).
3. Transfer of any remaining native seed to DPaW or another receiving party for use in revegetation projects.
4. Use of plants known to be primary feeding plants for Carnaby's Cockatoo in at least 50% of trees and shrubs planted within the Project Area.

Detailed protocols, management actions and timing for these commitments are provided in the following sections.

#### 3.2 Detailed protocols for the collection and use of native seed

Condition 12(c) of EPBC 2012/6631 requires the preparation of protocols for the collection and use of suitable native seed from within Carnaby's Cockatoo habitat proposed to be cleared for use in revegetation. The overall aim for revegetation within the Project Area is to improve the condition of degraded habitat.

There is approximately 0.75 ha of degraded habitat that has been identified within the proposal site (Figure 3). Some of these degraded areas are not proposed to be revegetated as they are proposed to be used in the creation of formal pedestrian pathways (up to 3 m wide) and associated recreational infrastructure (such as an observation deck and seating). Westminster intends to use the existing degraded areas for this purpose to reduce any requirement for additional clearing within the Parks and Recreation Reserves. All degraded areas not proposed to be used for pathways and recreational infrastructure will be revegetated.

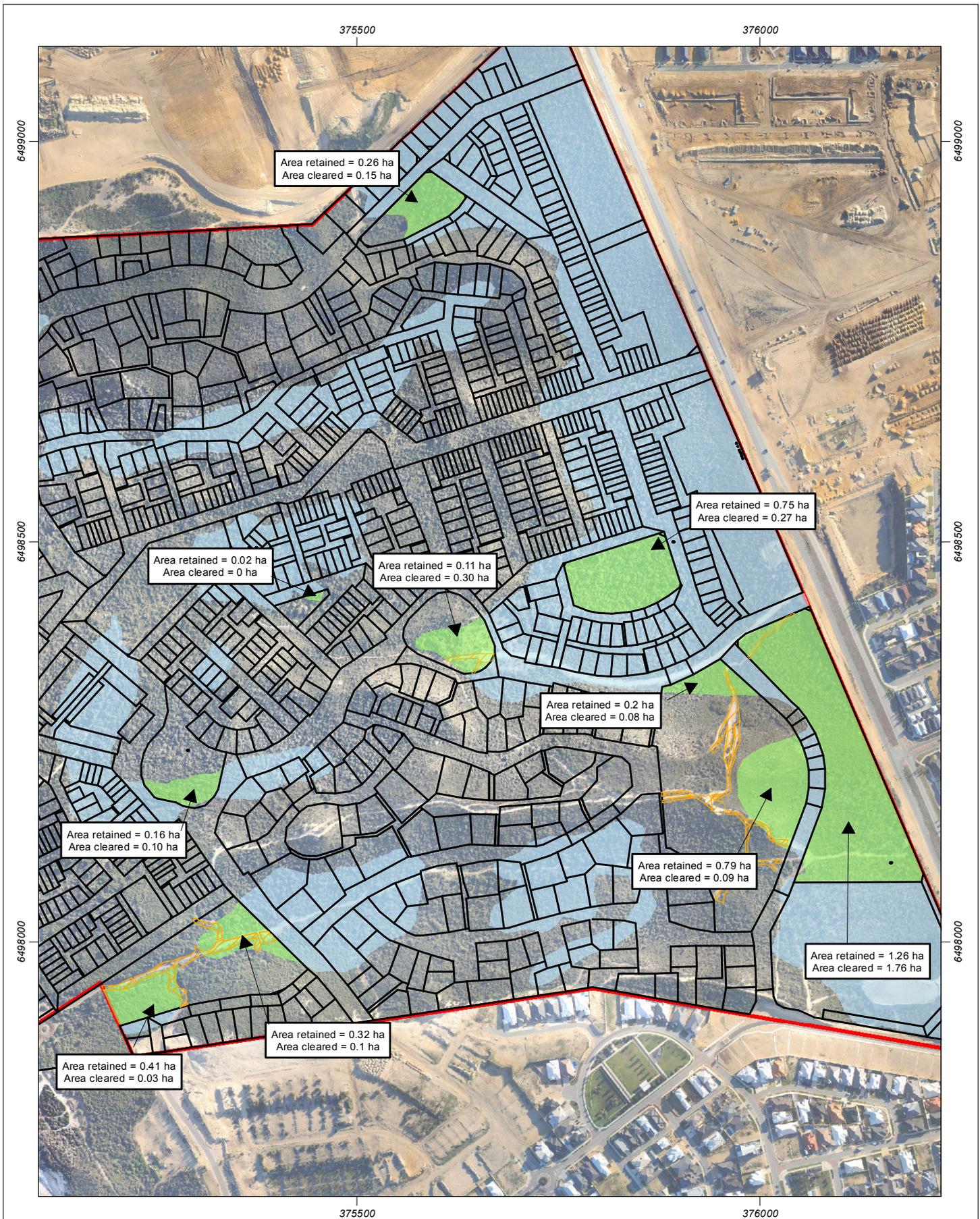
An assessment was undertaken on the amount of degraded habitat required for pathways (assuming a 3 m wide access pathway) and recreational infrastructure. As a result it is anticipated that a minimum of 50% (0.38 ha) of the degraded areas would be able to be revegetated. Revegetation will be achieved through the removal of weeds and the long-term establishment of native vegetation, in accordance with EPBC 2012/6631.

The collection and use of native seed will be managed in accordance with the management actions described in Table 3 in order to meet targets described in Table 4. Weeds will be managed and monitored as described Table 3 and Table 5 to meet targets in Table 4.

As per condition 12(d) of EPBC 2012/6631, 50% of all plantings of trees and shrubs on the proposal site (including degraded areas) will consist of known primary feeding plants for Carnaby's Cockatoo. A list of key Carnaby's Black Cockatoo primary feeding plants proposed to be used in revegetation is provided in Appendix 1 or as otherwise listed within:

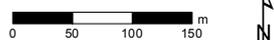
- *Plants used by Carnaby's Cockatoo* (Groom 2011)
- *Plants for Carnaby's Search Tool* (DEC 2012)
- resources from Birdlife Australia (Birdlife Australia 2012).

Placement of primary feeding trees and shrubs will occur within the two Parks and Recreation Areas and other areas may include POS/civic spaces and streetscapes. Where planting occurs within streetscapes it will take into consideration the risk of vehicle movements to Carnaby's Cockatoos as detailed in the management actions in Table 3.



**Figure 3: Degraded Carnaby's Cockatoo habitat in the Project Area**

Scale 1:6,356 at A4



Coordinate System: GDA 1994 MGA Zone 50  
Note that positional errors may occur in some areas

Date: 5/07/2016

Author: DWhite

Source: Aerial image: Nearmap 2012. Concept plan: Client 01/2016.

**Legend**

Degraded areas in which revegetation will occur

Subdivision layout

Potential foraging habitat for Carnaby's Black Cockatoo to be cleared

Potential foraging habitat for Carnaby's Black Cockatoo in POS/ROS

Project Area



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Table 3: Detailed protocols for the collection and use of native seed

Actions	Timing	Responsibility
<b>Seed collection and transport</b>		
Seek quotations and engage contractor licensed by DPaW to collect seed from areas of Carnaby's Cockatoo habitat to be cleared when Carnaby's Cockatoo foraging species are seeding based on advice from seed collectors.	Pre-construction	Westminster
Undertake seed collection in designated areas of Carnaby's Cockatoo habitat proposed to be cleared (Figure 2).	Pre-construction	Revegetation contractor
Ensure seed for on-site revegetation and street scaping plus any off-site use is stored and transported in accordance with Revegetation Industry of Western Australia (RIAWA) standards to ensure seed viability (RIAWA 2014a, 2014b).	Pre & during Construction	Revegetation contractor
Monitor native seed and maintain a register of volumes, species collected, locations and quantities.	Pre construction	Revegetation contractor
Any native seed that cannot be utilised in the Project Area will be provided to DPaW or other receiving party (or parties).	During construction	Westminster
<b>Site preparation and maintenance for onsite revegetation</b>		
Select on-site reference sites containing landforms and vegetation comparable (or likely to have been comparable) to those areas proposed to be revegetated.	Pre or during construction	Revegetation contractor
Survey the onsite reference sites to determine indicator species, density of native species, % cover of native species, native species richness and % weed cover.	During construction	Revegetation contractor
Determine success criteria for revegetation sites based on the survey of the reference sites.	During construction	Revegetation contractor
Provide temporary barriers to prevent pedestrian access; such as fencing, and signage around degraded areas identified for revegetation.	During construction	Revegetation contractor
Undertake weed control as required at the revegetation site until targets are achieved as per Section 4 and 6.	During construction	Revegetation contractor
Primary feeding plants for the Carnaby's Cockatoo will not be planted along roads with speed limits exceeding 50 km/hr (to minimise the risk to Carnaby's Cockatoo).	During construction	Westminster
<b>Broadcast seeding for onsite revegetation</b>		
Determine the quantity of seed of various native flora species required for broadcasting within on-site revegetation areas.	During construction	Revegetation contractor
Prior to direct seeding, seed should undergo the appropriate treatments required to break dormancy and improve germination rates. The treatments could include smoking, freezing, boiling or scarifying.	During construction	Revegetation contractor
Undertake seed viability and germination testing if deemed necessary.	During construction	Revegetation contractor
After achieving required weed control, area should be raked (scarified) in preparation for direct seeding.	During construction	Revegetation contractor
The treated seed should be combined with an appropriate medium (e.g. yellow sand or vermiculite) and manually distributed (i.e. broadcast by hand) by an experienced operator, ensuring an even coverage over the whole area.	During construction	Revegetation contractor
<b>Plant propagation for onsite revegetation</b>		
Determine the quantity of various flora species required to be propagated for on-site revegetation annually.	Pre-construction	Westminster
Engage a nursery to propagate seedlings (if seedlings are included as part of the annual revegetation program).	During construction	Westminster
For on-site revegetation produce propagated plants from local provenance seed in an accredited nursery.	During construction	Revegetation contractor
Ensure the quantities of plants are available for pick-up or delivery to the contractor.	During construction	Revegetation contractor
Determine appropriateness of additives, which could include Seasol (or equivalent), water granules, soil breaker, water retainer, wetting agent or fertiliser tablets. If required, they will be added at the relevant time (i.e. in the hole prior to planting or upon watering-in plants).	During construction	Revegetation contractor

Actions	Timing	Responsibility
Place plants in a hole that is approximately twice the size of the plant pot, ensuring the base of the plant is slightly below the original soil surface.	During construction	Revegetation contractor
Fill soil around the plant ensuring it sits in a basin that is approximately 200-300 mm in diameter and 50 mm deep to provide adequate water capture. The base of the plant will be flush with the soil surface within the basin to prevent collar rot.	During construction	Revegetation contractor
Water seedlings when planted as required.	During construction	Revegetation contractor
Install stakes (10-12 mm diameter) and a protective guard (plastic) around the seedlings to protect the seedlings from rabbits (Note: protective guards are only required in areas outside rabbit-proof fencing).	During construction	Revegetation contractor

## 4. Performance indicators and monitoring actions

Table 4 lists a number of environmental targets and performance indicators that have been developed for the management of Carnaby's Cockatoo habitat being cleared, as per condition 12 of EPBC 2012/6631.

Table 4: Targets and indicators

Target	Key Performance Indicator
Utilise suitable native seed collected from within Carnaby's Cockatoo habitat proposed to be cleared in revegetation projects (including on-site degraded areas illustrated in Figure 3).	Proportion of native seed collected used on-site or transferred to receiving party as per seed register.
Revegetate 0.38 ha of degraded land (Figure 3) so that native species richness and/or density are within 80% of the native species richness and/or density recorded in reference quadrats.	Comparison of vegetation community type and weeds within the degraded areas proposed to be revegetated with that recorded in the survey of the reference site.
Manage weeds in 0.38 ha of degraded land proposed to be revegetated so that weed species density and/or cover are not greater than 10% of the weed species density and/or cover recorded in reference quadrats, and to ensure that there is no addition of new weed species compared to the on-site reference site.	Comparison weeds density/species and cover within the degraded areas proposed to be revegetated with that recorded in the survey of the reference site.
On-site planting within the Project Area are to be planted with 50% of tree and shrub species being primary feeding plants for Carnaby's Cockatoo.	Proportion of primary Carnaby's Cockatoo feeding plants to other non-Carnaby's Cockatoo feeding/introduced plants in planting lists and orders.

Table 5 details the monitoring program for the CRMP to achieve the performance targets mentioned above. The monitoring program has been developed focusing on monitoring of retained Carnaby's Cockatoo habitat within the site rather than monitoring of individual Carnaby's Cockatoos utilising the site. This species is highly mobile in nature and relies on different areas of habitat at different times of the year and between years. It would therefore be difficult to obtain a true representation of the effects of the development on this species through the monitoring of individual cockatoos.

Table 5: Monitoring program

Parameter	Frequency	Location	Purpose	Responsibility
<b>Seed collection and use</b>				
Proportion of native seed collected, used on-site and transferred to receiving party.	Annually by 30 June during construction until the suitable native seed as per Table 3 is utilised on-site or transferred.	Seed register.	To ensure native seed collected from within Carnaby's Cockatoo habitat is used for revegetation.	Westminster Estates
<b>On-site revegetation</b>				
Integrity of temporary fencing.	Daily during construction as part of construction area inspections.	On-site areas to be revegetated.	To ensure no inadvertent clearing of areas to be retained.	Revegetation contractor
Plant density Species richness Weed species density Weed species richness.	Annually after planting/direct seeding (September - October) until achievement of targets as per Section 6.	Monitoring quadrats in on-site revegetated areas.	To determine success of rehabilitation.	Revegetation Contractor
Number of suitable Carnaby's Cockatoo forage species in on-site planting.	Annually after planting/direct seeding (September - October) until achievement of targets as per Section 6.	Review planting lists and orders for on-site planting.	To monitor the abundance of species suitable for future use of Carnaby's Cockatoo for food.	Westminster Estates

Parameter	Frequency	Location	Purpose	Responsibility
Presence of feral animals	Annually after planting/direct seeding (September - October) until achievement of targets as described in Section 6.	On-site revegetated areas.	To ensure no feral animals are present within the on-site revegetated areas.	Revegetation contractor

## 5. Contingency actions

Contingency actions will be initiated if monitoring indicates that management measures have not been successful or effective and/or environmental targets are not being achieved (Table 6).

Table 6: Contingency actions

Trigger	Action
Inappropriate species used in on-site revegetation areas to meet onsite revegetation targets determined in Table 4	<ol style="list-style-type: none"> <li>1. Identify cause.</li> <li>2. Remove inappropriate species and replace (if required) with appropriate species.</li> <li>3. Ensure inappropriate species are not used in future.</li> </ol>
Insufficient quantity or quality of local provenance seed available to fulfil the requirements of the CRMP to meet onsite revegetation targets determined in Table 4.	<ol style="list-style-type: none"> <li>1. Identify alternative source of seed for revegetation species.</li> <li>2. Seed will be sourced from a collection location which is as close as possible to the project site, and within the Swan Coastal Plain, if seed is available.</li> <li>3. Broader provenances (outside the Swan Coastal Plain) will be considered as a last option if no other suitable alternatives are available.</li> </ol>
Inadequate native flora species richness and/or cover to achieve revegetation targets determined in Table 4 *	<ol style="list-style-type: none"> <li>1. Identify cause.</li> <li>2. Implement approach to remedy cause, which could include: <ul style="list-style-type: none"> <li>• collecting additional provenance seed for direct seeding or plant propagation to compensate for the insufficient native plant species richness and/or cover</li> <li>• undertake infill seedling planting and direct seeding</li> <li>• application of fertilisers or wetting agents etc, as approved by DPaW.</li> </ul> </li> <li>3. Monitor success of remedy.</li> </ol>
Unacceptable weed infestations in on-site revegetated sites as determined in Table 4 based on a 10% increase in weed density and cover or the addition of new weed species compared to the on-site reference site*	<ol style="list-style-type: none"> <li>1. Investigate cause (e.g. adjacent sources of weed seed).</li> <li>2. Implement measures to prevent further weed infestations (e.g. screening fencing, weed control in adjacent land), as practicable.</li> <li>3. Undertake weed control activities as required.</li> </ol>
Less than 50% of trees and shrubs used in on-site planting are primary feeding plants for Carnaby's Cockatoo (i.e. survivorship of plantings less than 100%)	<ol style="list-style-type: none"> <li>1. Identify cause.</li> <li>2. Infill plant with Carnaby's Cockatoo primary feeding species.</li> <li>3. Ensure 50% proportion is maintained in future.</li> </ol>
Feral animals noted within revegetated areas	<ol style="list-style-type: none"> <li>1. Investigate cause (e.g. breach in fencing or other barrier).</li> <li>2. Implement measures to prevent further feral animal intrusions, as practicable.</li> <li>3. Engage a qualified and licensed subcontractor, if necessary to undertake pest fauna control/removal appropriate to the species detected.</li> </ol>

\* Weeds will be controlled in revegetation areas prior to planting. Activation of the inadequate native flora species or the unacceptable weed infestations trigger after planting will be determined by vegetation monitoring. Baseline native/weed species richness and cover will be quantified via the establishment of reference monitoring quadrats within vegetated areas prior to construction (Refer to Table 3). If, following a monitoring event within revegetated areas, there is greater than 10% difference between weed species richness and/or density and greater than 20% different native species richness and/or density within revegetation quadrats in comparison to reference quadrats (i.e. 20% lower for native species and 10% higher for weed species); the relevant trigger will be activated.

## 6. Plan implementation

In accordance with condition 12 of EPBC 2012/6631 this CRMP will be implemented by Westminster Estates until performance targets have been achieved as per Table 7.

Table 7: Long-term management and timeframes for implementation

Type	Responsible for long term management	Legal mechanisms for protection in the future
Retained habitat in Parks and Recreation Reserves	The CRMP will be implemented by Westminster until the performance targets outlined in Table 4 are achieved to the satisfaction of CoW.  Formal transfer of management responsibility to CoW (in the form a of a revestment order over the lot) will be the responsibility of WAPC (refer to Section 6.1). WAPC will initiate the revestment order once Westminster Estate has completed the works required under 10 (g) of the EPBC approval.	Vested as Parks and Recreation Reserves as part of the MRS amendment.
Retained habitat in POS areas and civic spaces	The CRMP will be implemented by Westminster until the performance targets outlined in Table 4 are achieved and areas have been handed over following the completion of developer maintenance period. Handover will occur at the time the POS and Civic space land titles are created.	CoW Local Planning Policy requires Conservation Management Plans to be prepared for each of the local POS areas that include designated local conservation areas.

### 6.1 Roles and responsibilities

All contractors and staff will be required to operate in accordance with this CRMP. Key developer personnel and responsibilities are described in the following sections:

#### *Project manager*

The primary responsibilities of the project manager include:

- act as primary liaison between the construction contractor, revegetation contractor, DotE and the CoW
- ensure all construction contracts contain relevant environmental management provisions, and that these are implemented to comply with EPBC 2012/6631
- review progress activity reports provided by the revegetation contractor
- overall accountability to ensure native seed collection is undertaken in appropriate areas
- ensure all site personnel are aware of the requirements of the CRMP and related management plans
- report to DotE in accordance with Condition 4 of EPBC Approval 2012/6631.

#### *Revegetation contractor*

The primary responsibilities of the revegetation contractor include:

- ensure native seed is collected, stored and transported as per the procedures outlined in this plan unless otherwise agreed by the CoW
- to provide progress activity reports to the Project Manager which include details of activities undertaken and current status of the seed collection (species, quantities available, date and location of collection)
- ensure all revegetation personnel are aware of the requirements of the CRMP and related management plans

- provide support to the project manager and CoW as required during the construction phase.

### ***Western Australian Planning Commission***

The primary responsibilities of the WAPC include:

- facilitation of formal transfer of management responsibility of the Parks and Recreation Reserves to the long term manager (CoW).
- WAPC will initiate the revestment order once Westminster Estate has completed the works required under 10 (g) of the EPBC approval.
- As provincial landowner, ensure the land is managed consistent with the requirements of EPBC approval 2012/6631.

### ***City of Wanneroo***

The primary responsibilities of the CoW include:

- undertake the long term management and protection of retained habitat within the Project Area.

## 7. References

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**Appendix 1**  
**Preliminary flora species list**



Tree species

- *Acacia saligna*
- *Allocasuarina fraseriana*
- *Banksia attenuata*
- *Banksia menziesii*
- *Eucalyptus tottiana*.

Shrubs species

- *Acacia lasiocarpa*
- *Acacia pulchella*
- *Allocasuarina humilis*
- *Banksia sessilis*
- *Eremophila glabra*
- *Gastrolobium capitatum*
- *Hakea costata*
- *Hakea lissocarpha*
- *Hakea trifurcata*.

\*based on species listed in Groom 2011, Lee *et al.* 2013, Heydenrych 2012 and Johnstone *et al.* 2011