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Alkimos Beach

EPBC 2011/5902 Annual Compliance Report 2017

Prepared for
Lendlease
by Strategen

November 2017

Alkimos Beach

EPBC 2011/5902 Annual Compliance Report 2017

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Client: Lendlease

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1. Introduction

This report addresses the status and compliance of implementation of the Alkimos Beach residential development with the conditions in *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval 2011/5902 (EPBC 2011/5902). This report has been prepared for the purpose of meeting the requirements of condition 3 of EPBC 2011/5902, which requires the proponent to publish annual compliance reports.

1.1 Project background

Lendlease Communities (Alkimos) Pty Ltd (Lendlease) in partnership with LandCorp, is developing the Alkimos Beach Residential Development (Alkimos Beach, the project) located approximately 40 km northwest of the Perth Central Business District.

On 30 June 2012, the Alkimos Beach development was approved by the Federal Minister for the Environment under ss 130(1) and 133 of the EPBC Act. The Alkimos Beach development involves clearing approximately 97 ha of native vegetation for development of Lot 1004, 80L Romeo Road and 2611 Marmion Avenue, Alkimos (Figure 1).

1.2 Environmental approval to implement the project

Alkimos Beach was referred to the Department of the Environment (DotE) (now the Department of the Environment and Energy [DEE]), for assessment under the EPBC Act in 2011. The project received conditional approval on the 30 June 2012 (EPBC 2011/5902). A variation to EPBC 2011/5902 was approved on 24 August 2012, amending condition 14.

On 13 June 2013, following de-listing of the Graceful Sun-Moth from the threatened species list defined under the EPBC Act, a second variation to EPBC 2011/5902 was approved. The variation included removal of conditions 9, 10, 11, 15, 16, 17, Attachment B and changes to relevant definitions referring to those removed conditions. Revised conditions 10 and 11 were included in the EPBC 2011/5902 variation.


Following recommendations from the 2015 EPBC Act audit, the Precinct Landscape and Revegetation Plan, required under condition 12 of EPBC 2011/5902, was updated and submitted to DotE for approval on 7 October 2015. The revised PLRP was approved on 4 April 2016.

A further request to vary conditions was approved by DEE on 19 August 2016. The variation included revision to condition 4 of EPBC 2011/5902 to include the 'Revised Management Plan condition' whereby minor updates that do not result in a 'new or increased impact' to the protected matter can be made to management plans without requiring approval from the Minister.

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LEGEND

 SUBJECT LAND

CARNABYS BLACK COCKATOO


 RETENTION (0.14ha)

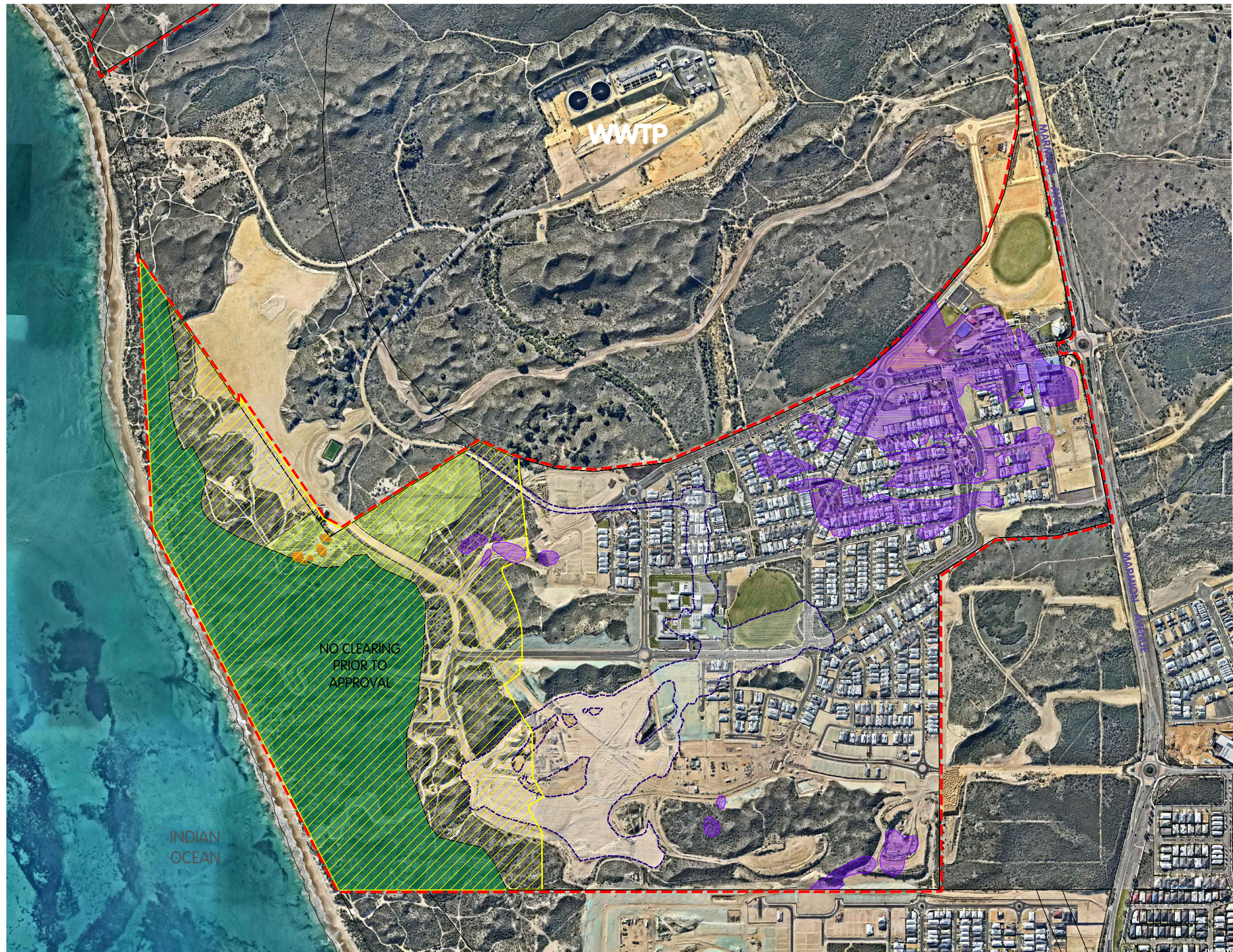
 LOSS (21.14ha)

TOTAL AREA - 21.28ha

 CONSERVATION POS

 REGIONAL OPEN SPACE

 AREA PREVIOUSLY
CLEARED DURING
WWTP WORKS



SIZE A3
1:10,000
0 metres 100 200 300 400 500

AERIAL PHOTOGRAPHY
SOURCE: NEARMAPS
YYMMDD: 170618

CADASTRAL INFORMATION
SOURCE: LANDGATE
YYMMDD: 101101
DWG REF: 0845cod
PROJECTION: PCG94

REV	DESCRIPTION	YYMMDD	DRAWN	APPR'D
F	UPDATE ORTHO & AREA CLEARED	170830	SB	RD
E	UPDATE ORTHO	160830	HH	RD
D	UPDATE ORTHO	150831	SB	RD
C	EXTEND CLEARED AREA	131202	SB	RD
B	ADD NOTES	131128	SB	RD
A	BASE PLAN	131125	SB	RD

CARNABYS BLACK COCKATOO - FIGURE
Alkimos Beach - South Alkimos
City of Wanneroo

REF NO.	DRAW NO.	REV.
DLL ALK	RD1 051	F

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2. Current status

Activities undertaken during the audit period (6 September 2016 to 5 September 2017) involved activities relating to Precinct (P) 1, 2, 3 and 4, conservation area and foreshore area of the Alkimos Beach development, including the following:

- planting within the following areas:
 - * Streetscapes on Graceful Boulevard, Painted Parkway, Leatherback Boulevard, Providence Drive (which are across both P1 and P2).
 - * POS G planting (P2)
 - * foreshore reserve.
- minor vegetation clearing within P4
- construction occurred in P2 within the following areas:
 - * Stage 4
 - * Stage 6
 - * Pectoral Promenade
 - * edge of POS G.

The amended FMP and the CAMP (changes summarised in corrigendas) both received approval from DEE on 22 September 2016.

The CAMP was again amended and submitted to the DEE on 6 April 2017. The amendment updated Figure 5 to remove footpaths adjacent to the CAMP area, and text was revised throughout the document to remove reference to pathways that were no longer proposed within the conservation area revegetation zones. These changes did not require approval as acknowledged by DEE on 10 April 2017.

3. Audit methodology

3.1 Audit plan

3.1.1 Purpose and scope

This document fulfils the requirement of condition 3 of EPBC 2011/5902. Condition 3 requires the person taking the action to publish an annual report for the previous twelve-month period, addressing compliance with each condition of EPBC 2011/5902; as follows:

'Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. Each management plan must be published on the website for the length of the approval.'

This Annual Compliance Report (ACR) addresses the audit period between 6 September 2016 and 5 September 2017 for the conditions and commitments of EPBC 2011/5902. The ACR is due to be published on the Lendlease website by 5 December 2017.

Proponent management commitments included in the following management plans, required by conditions 10, 11 and 12 respectively, were also assessed as part of the audit:

- Conservation Area Management Plan (CAMP) (RPS 2013)
- Foreshore Management Plan (FMP) (RPS 2014)
- Precinct Landscape and Revegetation Plan (PLRP) v 4 (Lendlease 2016).

Audit of the management plans involved assessment of each commitment to determine if the plan has been satisfactorily implemented.

Where a previous ACR had found a condition or management commitment to be 'Compliant (completed)' that finding is accepted as continuing to be applicable to the current audit period unless circumstances to the contrary are identified, in which case the item is re-assessed.

3.1.2 Methodology

The audit was undertaken in September 2017 and involved a site inspection by Tiffany George from Strategen on 1 September 2017, interviews with key members of the project team and a review of documentation to provide evidence to support the audit.

Table 1 provides an overview of the personnel consulted as part of the audit.

Table 1: Persons consulted during audit

Person	Position	Organisation
Nadja Kampfenkel	Sustainability Manager WA	Lendlease Communities
Jacob Abbott	Assistant Development Manager	Lendlease Communities
Peter Grose	Managing Director	Tranen
Emma Carr	Senior Landscape Architect	Emerge Associates
Rory Taylor	Landscape Officer	Total Eden
Colin Moore	Landscape Officer	Total Eden

Some items in management plans in previous audits have been deemed “unauditable” due to the wording, generally the item does not constitute an action, and is more like a note, providing context. These unauditable items remain in this year’s audit for consistency as deletion would disrupt the numbering in the audit tables.

3.2 Audit terminology

The ‘Status’ field of the audit tables (refer to Section 4) describes the implementation of actions and compliance with the approval. DEE (DotE 2014) has published Annual Compliance Report Guidelines and terminology from this guidance was applied in this audit.

Table 2: Action implementation status

Status	Acronym	Description
Conditions of approval		
Compliant	C	Sufficient evidence is required to confirm that all the requirements of a condition have been met, including the implementation of management plans or other measures required by those conditions. (Note Strategen also utilises the status ‘Compliant (completed)’ where a requirement has a finite period of application and has been determined to be satisfactorily completed).
Potentially Non-compliant	PNC	The requirements of a condition or elements of a condition, including the implementation of management plans and other measures, have not been met.
Not applicable	NA	The requirements of a condition or elements of a condition fall outside of the scope of the current reporting period. For example, a condition which applies to an activity that has not yet commenced.
Management Plans		
Conformant	C	Sufficient evidence is required to confirm that the requirements of the procedures, programs and/or management actions detailed within an Environmental Management Plan or similar document have been satisfactorily met.
Potentially Non-conformant	PNC	Considered to be any deviation from the procedures, programs and/or management actions detailed within an Environmental Management Plan or similar document.
Not applicable	NA	The requirements of a management action fall outside of the scope of the current reporting period. For example, a condition which applies to an activity that has not yet commenced.

Source: adapted from DotE (2014)

4. Audit results

The results of the 2017 audit of EPBC 2011/5902 are shown in Table 5.

The results of the 2017 audit of conformance with the management actions contained within the CAMP (condition 10), FMP (condition 11) and PLRP (condition 12) are outlined in Appendix 1, Appendix 2 and Appendix 3, respectively.

A total of 176 items were audited from EPBC 2011/5902, CAMP, FMP and PLRP.

4.1 Compliance with EPBC 2011/5902 conditions

No potential non-compliances with conditions of EPBC 2011/5902 (Table 5) were identified during the audit.

4.1.1 Conformance with the Conservation Area Management Plan

No potential non-conformances with the requirements of the CAMP (Appendix 1) were identified during the audit.

In accordance with the revised CAMP (refer to audit item CAMP 60), the ACR is required to contain a conservation area Carnaby's Black Cockatoo habitat revegetation section which will include the following:

- *revegetation completion criteria and weed monitoring*
- *revegetation and weed contingency actions if required*
- *erosion monitoring within the revegetation area*
- *report observations of feral pests*
- *temporary fencing and signage of the revegetation area*
- *report any fire incidences in the foreshore and the response.*

The information required to address CAMP 60 is provided in Table 3, and is based on advice from Lendlease and Tranen.

Table 3: Conservation area Carnaby's Black Cockatoo habitat revegetation performance

Action item	Status							
Revegetation completion criteria and weed monitoring	Monitoring of the CAMP completion criteria commenced in Spring 2015. Monitoring results of the amended completion criteria in the newly approved CAMP (approved on April 2017) are reported below:							
	Year after planting	Year 1	Year 2	Responsibility for three years post-commencement of works	Spring 2015 (overall mean)	Autumn 2016 (overall mean)	Spring 2016 (overall mean)	Autumn 2017 (overall mean)
	Survival (established plant density) ¹	4.5 plants/m ²	2.8 plants/m ²	Lendlease	-	-	2.3	1.9
	Minimum plant density ¹	5	4	Lendlease	2.2	1.8	2.3	1.9
	Minimum plant diversity (% of original number of planted species in project area that have survived)	70%	70%	Lendlease	84.1	93	93	107
	Plant coverage (% area of visual ground cover measured by a botanist/revegetation consultant)	25%	50%	Lendlease	1.9	18.3	37.5	44
Weeds coverage	10% cover	10% cover	Lendlease	<1	<1	<1	<1	
Revegetation and weed contingency actions if required	Infill planting has taken place where completion criteria are not being met. If planting success falls below 70% in two consecutive monitoring events, contingency measures will be implemented. Weed control continues to be undertaken as per the CAMP requirements.							
Erosion monitoring within the revegetation area	Erosion controls were put in place as part of the initial revegetation works (brushing and mulch). Brushing continues to be applied where required, and erosion monitoring is reported in the Tranen Monitoring Report.							
Report observations of feral pests	Rabbits seem to have been eliminated from the revegetation areas, as evidenced by the observations of the animal control expert and no rabbit damage has been observed to plants where the tree guards were knocked off by 4WDs and motorbikes. In addition, no fresh rabbit scats have been observed. Kangaroo grazing has been noted during summer months.							
Temporary fencing and signage of the revegetation area	Temporary fencing, boulders and signs have been installed in key areas to restrict access to the revegetation areas. Tracks not required for use have been revegetated. Monitoring of the temporary fencing and signage is carried out by the construction contractor.							
Report any fire incidences in the foreshore and the response	No fire incidents have been observed to date. Any future incidents and weed monitoring will be reported as part of the biannual monitoring report and contingency measures put in place if required.							

4.1.2 Recommendations

It is recommended that Tranen update their monitoring reports to reflect the current targets in the current version of the CAMP.

¹ Criterion corrected to % survival of established plant density (plants/m²) in the amended CAMP as this takes into account both the planted seedling survival rate as well as seed germination.

4.1.3 Conformance with the Foreshore Management Plan

No potential non-conformances with the requirements of the FMP (Appendix 2) were identified during the audit.

In accordance with the FMP (refer to audit item FMP 60), this ACR is required to contain a foreshore Carnaby's Black-Cockatoo habitat revegetation section which will include the following:

- *revegetation completion criteria and weed monitoring*
- *revegetation and weed contingency actions if required*
- *erosion monitoring within the foreshore area*
- *report observations of feral pests*
- *temporary fencing, pathways and signage of the revegetation area*
- *report any fire incidences in the foreshore and the response.*

The information required to address FMP 60 is provided in Table 4, and is based on advice from Lendlease and Tranen.

Table 4: Foreshore Carnaby's Black-Cockatoo habitat revegetation performance

Action item	Status							
Revegetation completion criteria and weed monitoring	Monitoring of the FMP completion criteria commenced in Spring 2015. Results of the monitoring against completion criteria is included in the table below:							
	Year after planting	Year 1	Year 2	Responsibility for five years post-commencement of works	Spring 2015 (overall mean)	Autumn 2016 (overall mean)	Spring 2016 (overall mean)	Autumn 2017 (overall mean)
	Survival (established plant density) – area planted at 3 plants/m ² (beach blowout only)	4.5 plants/m ²	3.6 plants/m ²	Lendlease	-	-	2.7 (Beach blowout 3.3)	2.5 (beach blow out 2.85)
	Survival (established plant density) – area planted at 2 plants/m ² (everywhere else)							
	Minimum plant density (plants/m ²)	5	4	Lendlease	2.8	2.5	2.7	2.5
	Minimum plant diversity (% of original number of planted species in project area that have survived)	70%	70%	Lendlease	86.6	84	84	110
	Plant coverage (% area of visual ground cover measured by a botanist/revegetation consultant)	25%	50%	Lendlease	2.4	13	16	26
	Weeds coverage	10% cover	10% cover	Lendlease	<1	<1	<1	<1
Revegetation and weed contingency actions if required	<p>Infill planting has taken place where completion criteria are not being met. It is recommended that all contingency measures listed in Table 4 of the FMP be reviewed, as required, if the plant density falls below the criterion of Year 2 in two consecutive events.</p> <p>Weed control continues to be undertaken as per the FMP requirements.</p>							

Action item	Status
Erosion monitoring within the revegetation area	Erosion controls have been put in place as part of the initial revegetation works (brushing and mulch). Matting continues to be applied where required.
Report observations of feral pests	Rabbits seem to have been eliminated from the revegetation areas, as evidenced by the observations of the animal control expert and no rabbit damage has been observed to plants where the tree guards were knocked off by 4WDs and motorbikes. In addition, no fresh rabbit scats have been observed. Kangaroo grazing has been noted during summer months.
Temporary fencing, pathways and signage of the revegetation area	Temporary fencing, boulders and signs have been installed in key areas to restrict access to the revegetation areas. Tracks not required for use have been revegetated. Monitoring of the temporary fencing and signage is carried out on a weekly basis by the construction contractor.
Report any fire incidences in the foreshore and the response	No fire incidents have been observed to date. Any future incidents and weed monitoring will be reported as part of the biannual monitoring report and contingency measures put in place if required.

4.1.4 Recommendations

It is recommended that all contingency measures listed in Table 4 of the FMP be reviewed, as required, if the plant density falls below the criterion of Year 2 in two consecutive events.

It is also recommended that Tranen update their monitoring reports to reflect the current targets in the current version of the FMP.

4.1.5 Conformance with the Precinct Landscape and Revegetation Plan

Two potential non-conformances with the requirements of the PLRP (Appendix 3) were identified during the audit.

The plant tracking spreadsheet indicates the 50% planting target for Carnaby's Cockatoo trees and shrubs across all precincts is at risk of not being met at project completion unless 100% of Carnaby's Cockatoo shrub species are planted in future stages. Lendlease believes this would not only negatively impact on delivering the vision for the development but may also be of limited value to the Carnaby's Cockatoo. To date approximately 17% of trees and shrubs that have been planted consist of plant species known to be primary feeding plants for Carnaby's Cockatoo (PLRP 6).

Not meeting the 50% planting target means that this specific PLRP objective and target would not be met (PLRP 7). Lendlease is currently in discussion with DEE to address this matter and seek an alternative approach that would deliver an equal to or better outcome for CBC protection than the previous target and meet the intention of the approval.

4.1.6 Recommendations

The PLRP, version 4, required by condition 12 of EPBC 2011/5902, was satisfactorily implemented during the audit period. Version 3 of the PLRP, approved by DEE on 8 April 2014, was on the Lendlease website during the audit period. Lendlease updated the PLRP published on their website to version 4, in October 2017.

4.1.7 PLRP performance

In accordance with the annual reporting requirements outline in the PRLP (audit item PLRP 19), this ACR is required to include the following:

1. Provide an update of any completed or tendered landscape for future stages. A summary of the works undertaken during the audit period, including plant schedules provided in Appendix 4.
2. Report against planting targets. Tracking against the rehabilitation targets are provided in Appendix 5, including tree and shrub tracking spreadsheets.
3. Report against survival of landscape (PLRP 2, Appendix 3).

Table 5: Compliance with Conditions of EPBC 2011/5902

Condition number	Condition	Evidence/Comment	Compliance status
1	Within 30 days after the commencement of Construction, the person taking the action must advise the Department in writing of the actual date of commencement.	This item is reported as completed in the 2014 Compliance Report (R_001).	C (completed)
2	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Accurate records for all applicable conditions have been maintained and were available at the time of the audit and following the audit (refer to other items in this table and appendices).	C
3.1	Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>C_001 Lendlease EML Strategen EPBC 2011_5902 ACR 16.</p> <p>C_002_Lendlease notification of ACR 16 on website.</p> <p>The DEE was notified via email on 24 November 2016 that the 2016 Compliance Report (R_001) was to be published on the Alkimos Beach website, within 3 months of the anniversary of the commencement of the action (C_001).</p> <p>The email provided as evidence that the 2016 ACR was posted on the Lendlease website on 30 November 2016 goes to "Page Does Not Exist" (C_002); however, provides evidence that the report was put onto the Lendlease website at that time.</p> <p>The 2013, 2014, 2015 and 2016 Compliance Reports were on the Lendlease website during the audit period (1 September 2017) at:</p> <p>http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/</p> <p>Lendlease confirmed during the site inspection that the website was updated after evidence was provided to Strategen (new link above).</p> <p>The 2016 Compliance Report (R_001) addresses compliance with the conditions of approval and implementation of the PLRP, CAMP and FMP.</p>	C

Condition number	Condition	Evidence/Comment	Compliance status
3.2	Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>C_001 Lendlease EML Strategen EPBC 2011_5902 ACR 16.</p> <p>C_002_Lendlease notification of ACR 16 on website.</p> <p>Email evidence shows the DEE was notified on 24 November 2016 (C_001) that the 2016 Compliance Report (R_001) was to be published on the Alkimos Beach website.</p> <p>A subsequent email (C_002) to Strategen suggests that the 2016 Compliance Report was published on the Lendlease website on 30 November 2016.</p> <p>The were no non-compliances identified in the 2016 ACR.</p>	C
3.3	Each management plan must be published on the website for the length of the approval.	<p>The amended CAMP and FMP were posted to the Lendlease website on 21 September 2016 (C_004); however, that link was no longer active at the time of this audit. Lendlease confirmed that the website had been updated during the audit period and the documents were found under new link below.</p> <p>The PLRP, CAMP and FMP were sighted on the Alkimos Beach website after the completion of the audit period (26 September 2017) at:</p> <p>http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/</p>	C
4.1	a) The person taking the action may choose to revise the CAMP, FMP and PLRP approved by the Minister under conditions 10, 11 and 12 without submitting it for approval (including approval under section 143A of the EPBC Act), if the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact.	<p>R_002_Post Approvals-Condition 4-Signed Variation Notice-20160819.</p> <p>The variation to condition 4 of EPBC 2011/5902 was approved by DEE in the previous audit period on 19 August 2016 (R_002).</p> <p>Following this approval an amended CAMP and an amended FMP were submitted to DEE on 23 August 2016 (C_003). These amendments were presented as a corrigendas detailing minor updates to the plans (corrections and clarifications of the existing plans).</p> <p>The CAMP and FMP were submitted to DEE as clarifications of the rehabilitation targets were proposed, to ensure the approved plans were consistent with respect to targets, in addition to minor corrections.</p> <p>The amended CAMP and FMP were approved by DEE on 22 September 2016.</p>	C

Condition number	Condition	Evidence/Comment	Compliance status
4.2	<p>If the person taking the action makes this choice they must:</p> <p>i) Notify the Department in writing that the approved plan has been revised and provide the Department with:</p> <ul style="list-style-type: none"> • an electronic copy of the revised plan • an explanation of the differences between the revised plan and the approved plan; and • the reasons the person taking the action considers that taking the action in accordance with the revised plan would not be likely to have a new or increased impact. 	<p>C_003_EPBC 2011-5902 submitting plans under condition 4.</p> <p>C_006_DEE notification_CAMP Corr 2_10042017.</p> <p>DEE was notified prior to the audit period that a revised CAMP and FMP had been prepared on 23 August 2016 (C_003). An explanation of the proposed amendments and justification that the revised plans would not result in a new or increased impact was also provided as part of the notification.</p> <p>Despite the amended CAMP and FMP not requiring approval, they were approved by DEE on 22 September 2016.</p> <p>DEE was also notified on 6 April 2017 that the CAMP had been amended with the addition of Addendum 2.</p>	C
4.3	<p>ii) Declare in writing a date on which the revised plan will first be implemented by the person taking the action. That date of initial implementation must be at least 28 days after the revised plan is submitted.</p>	<p>C_003_EPBC 2011-5902 submitting plans under condition 4.</p> <p>The submission of the amended CAMP and FMP on 23 August 2016 included a request for the 28 day holding period detailed in condition 4(ii) of EPBC 2011/5902 to be waived as the requirement is not applicable, as the 'revisions' to the CAMP and FMP were corrections and clarifications of the existing plans (C_003).</p> <p>A formal response to the above request was not provided by DEE at the time of approving the revised CAMP and FMP (C_004); however, the acceptance of the revised plans is taken by the auditors to constitute tacit approval of the waiver.</p> <p>Amendments to the CAMP in April 2017 were summarised in Addendum 2 of that plan. These amendments concerned reference to pathways that were no longer proposed and did not affect current implementation of the CAMP, thus the 28 day delay period for implementation was not relevant.</p>	C
4.4	<p>b) The person taking the action may revoke their choice under condition 4.a) at any time by giving written notice to the Department, in which case from the following day the person taking the action must implement the approved plan.</p>	<p>R_004_Management Advice_NK comments_29082017 (29 August 2017).</p> <p>No management plans were submitted to the DEE for approval during the audit period.</p>	NA

Condition number	Condition	Evidence/Comment	Compliance status
4.5	<p>c) If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised plan would be likely to have a new or increased impact, then:</p> <p>i) Condition 4.a) does not apply, or ceases to apply, in relation to the revised plan; and</p> <p>ii) The person taking the action must implement the approved plan.</p> <p>To avoid any doubt, this condition does not affect any operation of conditions 4.a) and 4.b) in the period before the day notice is given.</p>	<p>R_004_Management Advice_NK comments_29082017.</p> <p>The Minister did not give notice that the revised management plans were likely to have a new or increased impact, therefore, this condition is not applicable.</p>	NA
4.6	<p>At the time of giving the notice the Minister may also notify that for a specified period of time condition 4.a) does not apply for one or more specified plans required under the approval.</p>	<p>Refer to item 4.5.</p>	NA
5	<p>If the Minister believes that it is necessary or convenient for the better protection of Listed threatened species and communities (sections 18 and 18A) to do so, the Minister may request that the person taking the action make specified revisions to the management plan specified in the conditions and submit the revised management plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved management plan must be implemented. Unless the Minister has approved the revised management plan then the person taking the action must continue to implement the management plan originally approved, as specified in the conditions.</p>	<p>R_004_Management Advice_NK comments_29082017 (29 August 2017).</p> <p>Lendlease advised that no request has been received from the Minister for any management plans to be updated.</p>	NA
6	<p>If, at any time after five years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.</p>	<p>The action has substantially commenced within five years of from the date the approval.</p>	C (completed)
7.1	<p>Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in their conditions of approval on their website.</p>	<p>The PLRP, CAMP and FMP were sighted on the Alkimos Beach website after the completion of the audit period (26 September 2017) at:</p> <p>http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/</p>	C

Condition number	Condition	Evidence/Comment	Compliance status
7.2	Each management plan must be published on the website within 1 month of being approved and must remain on the website for the life of the project.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>R_003_Revised PLPR Revision 4-Approval Letter-20160404.</p> <p>C_007_Revised PLPR 2011-5902 approval letter SEC UNCLASSIFIED.</p> <p>The reapproved CAMP and FMP were sighted on the Alkimos Beach website at the beginning of the audit period (22 September 2016) by the previous auditor (R_001). The documentation provided during the current audit advising that the reports were published on the website within 1 month of approval now return "page not found", therefore the 2016 ACR was used to verify this information.</p> <p>Version 4 of the PLRP was approved by DEE in April 2016. However, version 3 of the PLRP, (approved on 8 April 2014), was on the Lendlease website during the audit period. Lendlease updated the PLRP published on their website to version 4, in October 2017. There are only minor differences in the Table of Contents between version 3 and version 4 of the PLRP so the auditor concludes that the PLRP on the website during the audit period, for all intents and purposes, is identical to the approved version 4.</p> <p>The auditor has verified that the approved management plans remain on the website at the end of the audit period at:</p> <p>http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/</p>	C
8	The person taking the action must not clear more than 21.1 ha of Carnaby's Black Cockatoo foraging habitat from Lot 1004, 80L Romero Road and 2611 Marmion Avenue, Alkimos, Western Australia.	<p>C_008_Clearing of 21.1 ha of CBC foraging habitat_28092017.</p> <p>C_011_Alkimos_Total CBC habitat cleared_11102017.</p> <p>Figures provided show clearing during the audit period of 0.421 ha of Carnaby's Cockatoo foraging habitat in Precinct 4.</p> <p>Clearing of CBC foraging habitat to date is 20.58 ha.</p>	C
9	<i>Condition 9 deleted.</i>	NA.	NA

Condition number	Condition	Evidence/Comment	Compliance status
10.1	<p>To protect habitat for listed threatened species, the person taking the action must prepare and submit a Conservation Area Management Plan (CAMP) detailing management of POS (designated Conservation POS at Attachment A), for the approval by the Minister. The CAMP must include:</p> <ol style="list-style-type: none"> at least 2 ha of Carnaby's Black-Cockatoo foraging habitat to be retained and rehabilitated in POS on the project area, as shown in Attachment A, to be managed for habitat recovery, protection and conservation; details of supplementary planting equivalent to at least 1 ha of Carnaby's Black-Cockatoo foraging habitat on the project area (to be spread across conservation POS and ROS), including timeframes and survival targets proposed for plantings; measures to manage weeds and feral pests; bushfire prevention and management measures; erosion control measures; access management (including boardwalks, pathways, signage and fencing); performance indicators and corrective measures; monitoring and reporting measures; roles and responsibilities of contractors, staff and the person taking the action; and time frames for the implementation and management of the above measures. 	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>The process of preparation, submission and approval of the CAMP has been previously assessed as compliant in the 2014 Compliance Report (R_001).</p> <p>The recently amended CAMP (including Addendum 2) contains the relevant content as required:</p> <p>http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/</p>	C
10.2	The CAMP must be submitted to the Department within 12 months of the date of approval.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>This requirement was indicated to have been previously found compliant in the 2013 Compliance Report (R_001).</p>	C (completed)
10.3	If the Minister approves the CAMP, the approved plans must be implemented.	<p>The key actions of the CAMP were assessed during this audit period and it was found that of the 60 key actions identified within the CAMP:</p> <ul style="list-style-type: none"> 50 conformant seven conformant (completed) two N/A one not auditable. <p>Refer to Appendix 1 for further detail.</p>	C
10.4	No construction can commence in the area shown as the No Clearing area on Attachment C until the CAMP is approved by the Minister.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>The CAMP was initially approved on 8 April 2014 (R_001). The 2014 Compliance Report confirms that no clearing had occurred in the No Clearing area prior to this date.</p>	C (completed)

Condition number	Condition	Evidence/Comment	Compliance status
11	<p>To protect habitat for listed threatened species, the person taking the action must prepare and submit a Foreshore Management Plan (FMP) detailing management of ROS on the project area (designated Regional Parks and Recreation at Attachment A), for approval by the Minister. The FMP must include:</p> <ol style="list-style-type: none"> details of supplementary planting equivalent to at least 1 ha of Carnaby's Black-Cockatoo foraging habitat on the project area (to be spread across conservation POS and ROS), including timeframes and survival targets proposed for plantings; details of funding to be provided for long-term conservation management of ROS and details of the entity who will be responsible for management of ROS; measures to manage weeds and feral pests; bushfire prevention and management measures; erosion control measures; access management (including visitor facilities, boardwalks, pathways, signage and fencing); performance indicators and corrective measures; monitoring and reporting measures; roles and responsibilities of contractors, staff and the person taking the action; and time frames for the implementation and management of the above measures. 	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>The process of preparation, submission and approval of the FMP has been previously assessed as Compliant in the 2014 Compliance Report (R_001).</p> <p>The recently amended FMP (with corrigenda 1) contains the relevant content as required:</p> <p>http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/</p>	C
11.2	The FMP must be submitted to the Department within 12 months of the date of approval.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016</p> <p>This requirement was indicated to have been previously found compliant in the 2013 Compliance Report (R_001).</p>	C (completed)
11.3	If the Minister approves the FMP, the approved plans must be implemented.	<p>The key actions of the FMP were assessed during this audit period and found that of the 60 key actions identified within the FMP:</p> <ul style="list-style-type: none"> 48 conformant 11 conformant (completed) one not auditable. <p>Refer to Appendix 2 for further detail.</p>	C
11.4	No construction can commence in the area shown as the No Clearing area on Attachment C until the FMP is approved by the Minister.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016</p> <p>The FMP was approved on 8 April 2014. The 2016 Compliance Report (R_001) confirms that no clearing had occurred in the No Clearing area prior to this date.</p>	C (completed)

Condition number	Condition	Evidence/Comment	Compliance status
12	<p>To protect habitat for listed threatened species the person taking the action must prepare and submit a Precinct Landscape and Revegetation Plan (PLRP) for the project area, for approval by the Minister. The PLRP must include:</p> <ol style="list-style-type: none"> measures to establish the equivalent of at least 5 ha of Carnaby's Black-Cockatoo habitat on the project area, through streetscape and landscape planting; at least 50% of plantings of trees and shrubs in streetscape and landscape planting must consist of plant species known to be primary feeding plants for Carnaby's Black-Cockatoo; timeframes and survival targets proposed for plantings; contingency measures if survival targets are not achieved; monitoring and reporting measures; roles and responsibilities of contractors, staff and the person taking the action; and timeframes for the implementation and management of the above measures. 	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>The process of preparation, submission and approval of the PLRP has been previously assessed as completed in the 2016 Compliance Report (R_001). The PLRP (version 4) contains the relevant content as required: http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/</p>	C
12.2	The PLRP must be submitted to the Department within 12 months of the date of approval.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>This requirement was indicated to have been previously found completed in the 2016 Compliance Report (R_001).</p>	C (completed)
12.3	If the Minister approves the PLRP, the approved plans must be implemented.	<p>The key actions of the PLRP were assessed during this audit period and found that of the 25 actions identified within the PLRP:</p> <ul style="list-style-type: none"> two potentially non-conformant 14 conformant two completed six N/A one not auditable. <p>Refer to Appendix 3 for detail.</p> <p>The auditor determined that the PLRP was being implemented during the audit period, despite two items that were found to be non-conformant. Lendlease began discussion with the regulators at the end of the audit period about the interpretation of the objective and target in the PLRP that were found to be non-conformant (see Appendix 3 for detail). Until this is resolved and interpretation is unambiguous, this sub-condition cannot be assessed as non-compliant.</p>	C
12.4	No construction can commence in the area shown as the No Clearing area on Attachment C until the PLRP is approved by the Minister.	<p>R_001_EPBC 20115902 Annual Compliance Report_2016.</p> <p>The PLRP was approved on 8 April 2014. The 2014 Compliance Report confirms that no clearing had occurred in the No Clearing area prior to this date (R_001).</p>	C (completed)

Condition number	Condition	Evidence/Comment	Compliance status
13.1	To offset the loss of habitat for Carnaby's Black-Cockatoo, the person taking the action must, within 12 months of the commencement of construction, provide funds to WA DEC for the acquisition, and a contribution to management of the offset described in Alkimos Lot 1004 Residential Development Mitigation and Offsets Strategy for Matters of National Environmental Significance (Eco Logical Australia, January 2012).	R_001_EPBC 20115902 Annual Compliance Report_2016. This item has been reported as completed in the 2016 Compliance Report (R_001).	C (completed)
13.2	The offset land must be at least 126 ha of freehold land in the Gingin area and contain vegetation that has equivalent or better foraging habitat for Carnaby's Black-Cockatoo, including Banksia woodland/shrubland. Within 4 weeks of the funding being provided to the WA DEC, the person taking the action must provide written evidence to the Department of the payment.	R_001_EPBC 20115902 Annual Compliance Report_2016. This item has been reported as completed in the 2016 Compliance Report (R_001).	C (completed)
14	Within 12 months of the commencement of construction, the person taking the action must provide the Department with a description and map clearly defining the location and boundaries of the offset property described at Condition 13, which must be accompanied with the offset attributes and a shapefile.	R_001_EPBC 20115902 Annual Compliance Report_2016. This item has been reported as completed in the 2016 Compliance Report (R_001).	C (completed)

5. References

Department of the Environment (DotE) 2014, *Annual Compliance Report Guidelines*, Commonwealth of Australia, Canberra.

Lend Lease, *Precinct Landscape and Revegetation Plan*, V4, March 2016.

RPS 2013, *Conservation Area Management Plan (Commonwealth), Alkimos Beach*, Rev 1, report prepared for Lend Lease, September 2013.

RPS 2014, *Foreshore Management Plan (Commonwealth) Alkimos Beach*, Rev 3, report prepared for Lend Lease, March 2014.

Appendix 1
Compliance with Conservation Area
Management Plan

Audit code	Action	Timing	Evidence/comment	Conformance status
Section 4.2 CAMP Revegetation and Monitoring Program				
Section 4.2.2 Carnaby's Black-Cockatoo Habitat - Native Vegetation Species to be Used				
CAMP 1.	A range of indigenous plant species will be used in this revegetation program for the CAMP study area. <i>The proposed native species to be used for rehabilitation purposes in the CAMP study area are outlined in Appendix 2.</i>	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. D_002_CBC tracking planting sheet for all precincts. Tranen Monitoring Reports (R_006 and R_007) and the CBC tracking planting list (D_002) confirm that a range of indigenous plant species were used in the revegetation program. Not all species identified in Appendix 2 of the CAMP have been planted; however, the auditors consider this action has been met as a mix of species from Appendix 2 including local species has been used as confirmed by the revegetation specialist.	C
CAMP 2.	A range of overstorey and understorey species will be planted in order to provide diversity to the vegetation structure and habitat. <i>The proposed native species to be used for rehabilitation purposes in the CAMP study area are outlined in Appendix 2.</i>	NA	Tranen Monitoring Reports (R_006 and R_007) confirm that a range of overstorey and understorey species are being used in revegetation.	C
Section 4.2.3.1 Plant Propagation				
CAMP 3.	Tubestock will be propagated from provenance seed at an accredited nursery.	NA	D_001_Plantrite delivery dockets. Tranen provided Delivery Notes from Plantrite to verify (D_001) tubestock from provenance seed was ordered. Plantrite is an accredited NIASA nursery (http://www.plantrite.com.au/).	C
CAMP 4.	Tubestock should be appropriately prepared and hardened and be free from pest and disease.	NA	Management advice on 1 September 2017. Tranen advised that as an accredited NIASA nursery, Plantrite provide tubestock to industry standards.	C
Section 4.2.3.2 Site Protection - Prior to Revegetation				
CAMP 5.	In order to avoid accidental clearing from construction activities and prevent unauthorised access, the identified Carnaby's Black-Cockatoo habitat in the revegetation area will be fenced.	NA	IMG_5277 flagging around Tuarts. IMG_5278 flagging around Tuarts. R_001_EPBC 20115902 Annual Compliance Report_2016. The temporary flagging around the Tuarts (Carnaby's Black-Cockatoo habitat) in the CAMP area to prevent accidental clearing has come down in places. However, the area is closed off and there is no vehicular access to the site. The auditor verified that the vegetation was not cleared during the audit period. The revegetation area was fenced throughout the 2016 audit period (R_001).	C
CAMP 6.	All construction activities will be restricted to the subdivision areas and will avoid the revegetation area.	NA	Management advice on 1 September 2017. Site visit 1 September 2017. Construction was restricted to subdivision areas and revegetation areas were not impacted.	C
CAMP 7.	Signage will be placed on the fences around the revegetation area to inform workers the area is prohibited for construction activities.	NA	P_001_20170901_Signage. Signage sighted during site inspection.	C
Section 4.2.3.3 Revegetation Site Preparation				
CAMP 8.	To maximise the potential for revegetation success, the areas that are subject to revegetation will be prepared in the following manner: • weed spraying commenced, rubbish and debris will be removed and disposed of appropriately.	NA	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2016 audit report (R_001) confirmed that rubbish and debris were removed prior to revegetation in 2015, and that weed control had been undertaken prior to revegetation, and therefore this action is considered to be completed.	C (completed)
CAMP 9.	• brushing and / or mulching if required may be used to assist stabilising soil in erosion prone locations.	NA	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2016 audit report (R_001) confirmed that mulch and brush was used to stabilise bare prior to revegetation in 2015 and therefore this action is considered to be completed.	C (completed)
Section 4.2.3.4 Revegetation Method				
CAMP 10.	Revegetation species will be subdivided into four categories: 1. Beach grasses and herbaceous species adopted for the most exposed locations. 2. Semi-stable dune colonisers adapted to partially protected areas. 3. Plants of protected dunal situations. 4. Plants of protected well stabilised and vegetated areas.	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. The monitoring results in the Tranen Monitoring Reports (R_006 and R_007) subdivided the revegetation species into four categories.	C
Section 4.2.3.5 Scheduling				
CAMP 11.	Tube stock used in the revegetation program will be sourced from local accredited nurseries.		Refer to CAMP 3.	C
CAMP 12.	Planting will be carried out in winter; around June-July when the soil moisture content is high enough for optimum seedling growth without irrigation and after the existing weeds have germinated and have been sprayed.	In winter; around June-July	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Management advice on 1 September 2017. Infill planting occurred in the conservation area in late September 2016 as there were less kangaroos to impact new plantings. While this is outside of the timeframe required by the CAMP, the auditor deemed the reasons for planting in September were to improve the likelihood of success of revegetation and still conducted when soil moisture content was high. Weed control by herbicide spraying and manual removal occurred on numerous occasions between March 2016 and October 2016.	C

Audit code	Action	Timing	Evidence/comment	Conformance status
CAMP 13.	Each tube stock will be planted with a plastic guard, if required, to prevent rabbits feeding on plant stock and to protect from strong winds (updated from corrigenda, dated 18/8/16).	NA	Tranen advised it did not use tree guards during the audit period as rabbits seem to have been eliminated from the revegetation areas (R_006) (also refer to CAMP 15). In addition to this the City of Wanneroo requires tree guards to be removed prior to summer to avoid them causing the plants to overheat (R_001).	C
CAMP 14.	Tubestock will mostly be planted at a density of two plants per m ² (as a minimum, species dependent) for rehabilitation.	NA	R_001_EPBC 20115902 Annual Compliance Report_2016 The 2015 audit confirmed that plants were installed at a density of 2 plants/m ² and this action is considered to be completed (subsequent planting to be addressed through monitoring and contingency actions – refer to CAMP 23–CAMP 35).	C (completed)
CAMP 15.	Rabbit guards will be used (if required) for tube stocks in the revegetation areas.	NA	Refer to CAMP 13.	C
Section 4.2.3.6 Signage				
CAMP 16.	To assist in preventing unauthorised access and trampling of revegetation efforts, additional signage may be installed.	NA	Management advice on 1 September 2017. Site inspection 1 September 2017. Signage sighted during site inspection (P_001).	C
Section 4.2.3.7 Watering				
CAMP 17.	Some tube stock will be planted with tablets/water crystals during planting to help improve survival rates.	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Management advice on 1 September 2017. Tubestock was not planted with tablets/water crystals during the audit period. Tranen advised they were not required. High rainfall periods were experienced in January 2017 (R_007).	C
Section 4.2.4 Weed Management				
CAMP 18.	If weeds are considered an issue within the revegetation area, a weed spraying program to eradicate weed species, prior to installation of seeds and seedlings will be implemented.	Spring and autumn prior to initial revegetation	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2015 audit confirmed that weed control had been undertaken prior to revegetation and this action is considered to be completed (subsequent weed control to be addressed through monitoring and contingency actions – refer to CAMP 23–CAMP 35) (R_001).	C (completed)
CAMP 19.	Table 2 (of CAMP) details herbicide application at the optimum application rate according to that manufacturers guidelines and seasonal timing for specific weed species.	Refer to Table 2 of CAMP	R_001_EPBC 20115902 Annual Compliance Report_2016. This table and the applications rates are considered to relate to the initial revegetation planting, which has been completed (refer to CAMP 18). The revegetation expert (Tranen) has advised that different weed species, other than what is listed in Table 2, have been recorded within the revegetation areas. Tranen has advised that it proposes to undertake different management techniques than outlined in Table 2 if ongoing weed control is required; the auditors accept this meets the intention of the CAMP, with subsequent weed management addressed through ongoing monitoring and contingency actions – refer to CAMP 23–CAMP 35.	C (completed)
CAMP 20.	In addition to herbicide application, other practises to control weeds will include: <ul style="list-style-type: none"> Where necessary, apply a wetting agent in accordance with the herbicide manufacture's recommendations. Use a biodegradable marking dye during all spot spraying tasks. Prior to the application of weed control, install safety-warning signage around the perimeter of the area to be controlled. The warning signage shall include information on the control mechanism and timing and will remain in place until the area has dried. Only undertake spraying when the weather is calm, in order to minimise spray drift. Therefore, spraying will occur on days with a wind speed less than two kilometres per hour in accordance with the Department of Health WA Codes and Regulations. Spraying will avoid times when the plants are under stress such as very hot days and dry to dusty conditions to assist with maximum herbicide uptake. 	NA	Refer to CAMP 18.	C (completed)
CAMP 21.	Weed spraying will be undertaken to manage the abundance and spread of weed species into and within the revegetation area if required.	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Management Advice 1 September 2017. Tranen advised that weed spraying is ongoing as required. The Tranen monitoring reports indicate that weed control by herbicide spraying and manual removal occurred between March 2016 and October 2016 (R_006) and between November 2016 to March 2017 (R_007). The revegetation area was only observed to have minimal weeds during the site inspection.	C
Section 4.2.5 Completion Criteria (updated from corrigenda dated 18/8/16)				
CAMP 22.	The key target completion criteria to monitor the success of the revegetation efforts are specified in Table 3 (of CAMP).	Refer to Table 3 of CAMP	Action not auditable. Refer to CAMP 24 and Section 5.2.2 for assessment against completion criteria.	Not auditable
CAMP 23.	Revegetation efforts will be undertaken and monitored for a period of three years from the commencement of the revegetation plantings.	For a period of three years from the commencement of the revegetation plantings.	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Revegetation commenced in 2015, and monitoring will occur until 2018. To date, monitoring has been undertaken in Spring 2015 and Autumn 2016 (R_001), and Spring 2016 and Autumn 2017 (R_006 and R_007).	C

Audit code	Action	Timing	Evidence/comment	Conformance status			
CAMP 24.	If completion criteria are not met, further infill planting will be required (updated from corrigenda dated 18/8/16).		NA	<p>R_006_Tranen_Monitoring Report Revegetation Spring 2016.</p> <p>R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017.</p> <p>The target completion criteria for year one was not achieved in the previous reporting period (R_001) and infill planting was conducted in September 2016.</p> <p>Not all quadrats met the 2.8 plants/m² criterion nor the target plant cover during the audit period (R_007). Tranen advised the reason for this was that most of the surviving plants are of species of dense sprawling form and have out-shaded smaller plants of more compact form. Also, weeds would have competed with the native seedlings for soil moisture, which would have constrained native plant growth.</p> <p>The percentage of minimum plant diversity of 107% (accounting for survival of both seedling planting and direct seeding) was above the target of 70%.</p> <p>Plant coverage of 44% was below the year 2 target of 50%.</p> <p>Weeds cover of less than 1% was well below the year 2 target of 10%</p> <p>Infill planting is planned in Spring 2017 (after the end of the audit period).</p>	C		
	Year after Planting	Year 1				Year 2	Responsibility for Three Years Post-commencement of Works
	Survival (established plant density)	4.5 plants/m ²				2.8 plants/m ²	Lend Lease
	Minimum plant density (stems/m ²)	5				4	Lend Lease
	Minimum plant diversity (% of original number of planted species in project area that have survived)	70%				70%	Lend Lease
	Plant coverage (% area of visual ground cover measured by a botanist/revegetation consultant)	25%				50%	Lend Lease
Weeds coverage	10% cover	10% cover	Lend Lease				

Section 4.2.7 Monitoring and Reporting

CAMP 25.	Following planting, the areas of revegetation will be reviewed six weeks after planting and any new weed growth will be hand removed from 0.5 m around any new seedling.	Following planting, 6 weeks after planting	R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Manual weed control occurred between November 2016 to March 2017 (R_007).	C
CAMP 26.	The revegetation areas will be monitored biannually (including weed monitoring) each spring and autumn and maintained for a three year period after installation within each site.	Biannually (Spring and Autumn) for 3 years	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Monitoring was conducted biannually.	C
CAMP 27.	A monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any issues requiring attention.	Following each formal monitoring event	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Reports for each monitoring event were provided to Lendlease.	C
CAMP 28.	Monitoring plot, of 5 m x 5 m will be established per revegetation area as well as one permanent photograph reference point at each monitoring plot.	NA	Tranen advised that it halved the size of the quadrats and doubled the number of quadrats required at the City of Wanneroo's request (R_001). Tranen advised that this has enabled some of the more narrow trails to be monitored. The total area monitored remains the same (i.e. 10 quadrats at 2.5m x 5 m rather than 5 quadrats at 5 m x 5 m). Permanent photograph reference points have been established in each quadrant (R_007). The auditors accept that although the monitoring configuration used is different to the stated action, what has been undertaken is consistent with the action's intent and suggest the change can be viewed as an improvement.	C
CAMP 29.	Photographic records will be captured prior to construction and annually to qualitatively assess density, diversity and weed cover.	Prior to construction and annually	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Photographic evidence of the revegetation areas are provided within R_006 and R_007.	C
CAMP 30.	Monitoring and management activities that may be required in the two years include but are not limited to the following: <ul style="list-style-type: none"> repairs and replacement of damaged or failed areas of revegetation to meet the completion criteria. 	In the two years (biannual monitoring)	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Two revegetation monitoring reports have been provided, from Spring 2016 and Autumn 2017 (R_006 and R_007). These reports detail the maintenance activities that have been undertaken, including weed control, infill planting and site inspections.	C
CAMP 31.	<ul style="list-style-type: none"> replacement of seedlings that have died to meet the completion criteria. 	NA	Refer to CAMP 30.	C
CAMP 32.	<ul style="list-style-type: none"> weed control. 	NA	Refer to CAMP 30.	C
CAMP 33.	The first assessment in spring will assess the developing threats, the stabilisation of each area and the short-term survival of the seedlings and weed cover.	Spring	The revegetation monitoring report for Spring 2015 (R_006) refers to threats, weed cover, stabilisation and survival of seedlings.	C
CAMP 34.	The second and third assessment would occur in the following autumn will determine if there are any losses over the dry summer period, and this will form the basis for the maintenance winter program.	In the following autumn	The revegetation monitoring reports for Autumn 2017 (R_007) refers to survival rates of revegetation.	C
CAMP 35.	The emergence of summer weeds will also be assessed, so that control can be scheduled as required.	Summer	The revegetation monitoring report for Autumn 2017 (R_007) refers to weed cover within each quadrat.	C

Section 4.3: Feral pests

Table 5: Feral Pest Key Actions

CAMP 36.	Install signage outlining that dogs are to be restrained in the CAMP area - only for the proposed paths that go through or near the revegetation areas.	NA	Lendlease advised that no paths are proposed in the Conservation Area so signage is not considered to be required at present.	NA
CAMP 37.	Observe for evidence of feral animals during the revegetation monitoring (biannually).	Biannually, during monitoring events	Two revegetation monitoring reports (R_006 and R_017) provided indicate that the revegetation sites were observed for evidence of feral animals.	C

Audit code	Action	Timing	Evidence/comment	Conformance status
Section 4.3.6 Monitoring and Reporting				
CAMP 38.	The revegetation areas will be monitored biannually each spring and autumn and maintained for a three-year period after installation within each site.	Biannually (Spring and Autumn) for 3 years	Two revegetation monitoring reports have been provided (Spring 2016 and Autumn 2017) (R_006 and R_007).	C
CAMP 39.	Foxes, rabbits and feral cats as part of the revegetation monitoring program will also be monitored and if observed reported.	NA	The Spring 2016 and Autumn 2017 (R_006 and R_007) monitoring reports indicate that the revegetation sites were observed for evidence of feral animals and installation of rabbit fencing. Evidence of rabbit activity was reported in the Spring 2016 that rabbits seem to have been eliminated from the revegetation areas (R_006). Tranen advised (1 September 2017) that the key threat to revegetation seedlings are kangaroos.	C
CAMP 40.	The monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any issues requiring attention.	After monitoring event	The monitoring reports (R_006 and R_007) were submitted to Lendlease.	C
Section 4.4 Bushfire				
Table 7: Bushfire Management Key Actions				
CAMP 41.	No rubbish or vegetation will be burnt on site.	NA	Management advice on 1 September 2017. There was no burning of rubbish or vegetation on site. No evidence of any burning of vegetation or rubbish was observed during site inspection.	C
CAMP 42.	Reduced fuel levels in the revegetation area through weed control as required. This is in accordance with Section 4.2.6.	NA	R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. The Autumn 2017 monitoring report indicates that weed control by herbicide spraying and manual removal occurred between November 2016 and March 2017 (R_007). The highest priority for intensive weed control has been afforded to the higher profile areas more visible to the general public – the eastern and western CAMP batters, and along the south beach path and northern beach road and path (R_006).	C
CAMP 43.	The perimeter roads and dedicated pathways between the conservation POS area act as key firebreak(s) (updated from corrigenda dated 6/4/17).	NA	Perimeter roads are currently under construction. Pathways are no longer proposed to be constructed in the conservation area.	C
CAMP 44.	Provide records of any fires in the conservation POS area to the City of Wanneroo / DFES.	NA	Management advice (1 September 2017). No fires recorded.	C
Section 4.4.6 Monitoring and Reporting (updated from corrigenda dated 18/8/16)				
CAMP 45.	The monitored of weeds will be undertaken biannually each spring and autumn and maintained for a three-year period.	Biannually (Spring and Autumn) for 3 years	Monitoring reports (R_006 and R_007) indicate that the revegetation sites were monitored for weeds.	C
CAMP 46.	The monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any issues requiring attention.	After monitoring event	The monitoring reports (R_006 and R_007) were submitted to Lendlease.	C
Section 4.5 Erosion Table 9: Erosion Control Key Actions				
CAMP 47.	Placement of brush/mulch over revegetation areas that are have bare soil exposed to the elements.	NA	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2015 audit confirmed that mulch and brush was used to stabilise bare soil and therefore this action is considered to be completed (R_001).	C (completed)
CAMP 48.	Undertake revegetation of bare / open areas of risk in the revegetation area.	NA	Infill planting occurred in September 2016 (R_006).	C
CAMP 49.	Installation of temporary fencing in / around the revegetation area.	NA	The revegetation area was noted to have been fenced during the 2015 audit. The fencing was confirmed to still be present in the site inspection (P_002).	C
CAMP 50.	Installation of education signage informing the community / visitors beach of the revegetation areas - only for the proposed paths adjacent to the rehabilitation areas.	NA	Management advice 1 September 2017. Lendlease advised that no paths are proposed in the conservation area and; therefore, no public access is proposed. As such signage is considered by Lendlease as not required at present.	C
Section 4.5.6 Monitoring and Reporting				
CAMP 51.	Monitoring of the erosion / open areas in the revegetation area will be biannually each spring and autumn and maintained for a three year period as part of the revegetation monitoring.	Biannually (Spring and Autumn) for 3 years	Revegetation monitoring reports from Spring 2016 and Autumn 2017 (R_006 and R_007) indicate that the revegetation sites were observed for erosion / open areas and where required additional brush material installed.	C
CAMP 52.	The monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any erosion issue(s) requiring attention.	After monitoring event	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. The monitoring reports (R_006 and R_007) were submitted to Lendlease.	C
CAMP 53.	Lendlease will monitor annually the integrity of the temporary fencing and signage until hand over to the City of Wanneroo.	Annually	Revegetation monitoring reports (R_006 and R_007) indicate that the revegetation sites were monitored for the integrity of fencing.	C
Section 4.6 Access Management Table 11: Access Management Key Actions				
CAMP 54.	Removed (updated from corrigenda dated 6/4/17).			NA
CAMP 55.	Undertake revegetation if required of tracks not required for pedestrian access, within the revegetation areas.	NA	Revegetation of track areas is discussed in Tranen monitoring reports (R_006 and R_007).	C
CAMP 56.	Installation of temporary fencing in / around the revegetation area.	NA	R_001_EPBC 20115902 Annual Compliance Report_2016. Previous audits show evidence of temporary fencing (R_001), however infill revegetation that was undertaken during the audit period was not fenced, rather the whole conservation area is fenced. Tracks being revegetated were physically blocked off at each end using large limestone blocks to prevent vehicles from accessing the revegetation areas (R_001).	C

Audit code	Action	Timing	Evidence/comment	Conformance status
CAMP 57.	Installation of education signage informing the community / visitors of revegetation areas - only for the proposed paths adjacent to the revegetation areas (updated from corrigenda dated 6/4/17).	NA	Management advice on 1 September 2017. No paths are proposed in the conservation area; therefore, no public access is available and signage is not considered to be required at present.	C
Section 4.6.6 Monitoring and Reporting				
CAMP 58.	Lendlease will monitor annually the integrity of the temporary fencing and signage until hand over to the City of Wanneroo (updated from corrigenda dated 6/4/17).	Annually until handover to the City of Wanneroo	Revegetation monitoring reports (R_006 and R_007) indicate that the revegetation sites were monitored for the integrity of fencing.	C
Section 5.0 Monitoring and Reporting Measures				
CAMP 59.	To satisfy Condition 3 of the EPBC Act approval, Lend Lease will publish a compliance report every 12 months from the commencement of the construction works.	Annually	R_001_EPBC 20115902 Annual Compliance Report_2016. C_001 Lendlease EML Strategen EPBC 2011_5902 ACR 16. Email evidence shows the DEE was notified on 24 November 2016 (C_001) that the 2016 Compliance Report (R_001) was to be published on the Alkimos Beach website.	C
CAMP 60.	The compliance report will contain a conservation area (CAMP) Carnaby's Black Cockatoo habitat revegetation section which will include the following: <ul style="list-style-type: none"> • revegetation completion criteria and weed monitoring • revegetation and weed contingency actions if required • erosion monitoring within the revegetation area • report observations of feral pests • temporary fencing and signage of the revegetation area (updated from corrigenda dated 6/4/17) • report any fire incidences in the foreshore and the response. 	Annually	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2016 compliance report contained the relevant Carnaby's Black Cockatoo habitat revegetation section.	C

Appendix 2
Compliance with Foreshore
Management Plan

Audit code	Action	Timing	Evidence/comment	Conformance status
Section 5.2.2 Carnaby's Black Cockatoo Habitat – Native Vegetation Species to be Used				
FMP 1.	A range of native plant species will be used in this revegetation program for the foreshore area. <i>The proposed native species to be used for rehabilitation purposes in the foreshore area are outlined in Appendix 2.</i>	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. D_002_CBC tracking planting sheet for all precincts. Tranen Monitoring Reports (R_006 and R_007) and the CBC tracking planting list (D_002) confirm that a range of indigenous plant species were used in the revegetation program. Not all species identified in Appendix 2 of the FMP have been planted; however, the auditors consider this action has been met as a mix of species from Appendix 2 including local species has been used as confirmed by the revegetation specialist.	C
FMP 2.	A range of overstorey and understorey species will be planted in order to provide diversity to the vegetation structure and habitat. The proposed native species to be used for rehabilitation purposes in the foreshore area are outlined in Appendix 2.	NA	Tranen Monitoring Reports (R_006 and R_007) confirm that a range of overstorey and understorey species are being used in revegetation.	C
Section 5.2.3.1 Plant Propagation				
FMP 3.	Tubestock will be propagated from provenance seed at an accredited nursery.	NA	R_001_EPBC 20115902 Annual Compliance Report_2016. D_001_Plantrite delivery dockets. Tranen previously advised that tubestock used in initial planting has been propagated from provenance seed collected from Shorehaven (approximately 2.5 km north of project area) and propagated by Plantrite (R_001). Tranen provided Delivery Notes from Plantrite to verify (D_001) tubestock from provenance seed was ordered. Plantrite is an accredited NIASA nursery (http://www.plantrite.com.au/).	C
FMP 4.	Tubestock should be appropriately prepared and hardened and be free from pest and disease.	NA	The Tranen Monitoring Reports (R_006 and R_007) outline the seedling propagation method being implemented. Tranen advised that as an accredited NIASA nursery, Plantrite provide tubestock to industry standards.	C
Section 5.2.3.2 Site Protection – Prior to Revegetation				
FMP 5.	A temporary fence will be positioned around the retained Carnaby's Black-Cockatoo habitat and revegetation area (1 ha).	NA	Previous audit reports state that fencing separated the conservation areas from the foreshore areas (R_001). There is a small area of trees mapped as Carnaby's Black-Cockatoo habitat in the foreshore area. This site was flagged during the 2015 audit period; however, the temporary flagging came down around the Tuarts (Carnaby's Black-Cockatoo habitat) during the current audit period. The temporary flagging was designed to prevent unauthorised clearing. The area was closed off during the audit period and there is no vehicular access to the site. The auditor verified that the vegetation was not cleared during the audit period.	C (completed)
FMP 6.	All construction activities will be restricted to the subdivision areas and will avoid this foreshore area.	NA	Site inspection confirmed construction activities are within subdivision areas and have avoided revegetation areas in the ROS.	C (completed)
FMP 7.	Signage will be placed on the temporary fence(s) around the retained Carnaby's Black Cockatoo habitat and revegetation area to inform workers the area is prohibited for construction activities.	NA	Previous site inspections recorded evidence of signage (R_001). Retained Carnaby's Black Cockatoo habitat was fenced and demarcated utilising bunting and star-pickets.	C (completed)
Section 5.2.3.3 Revegetation Site Preparation				
FMP 8.	To maximise the potential for revegetation success, the area(s) that are subject to revegetation will be prepared in the following manner: • weed spraying commenced, rubbish and debris will be removed and disposed of appropriately if required.	NA	The 2015 audit confirmed that rubbish and debris were removed prior to revegetation and weed control had been undertaken prior to revegetation and therefore this action is considered to be completed (R_001). Areas where illegal dumping of soil and limestone blocks occurred near the carpark were removed during the audit period (R_007).	C (completed)
FMP 9.	• brushing and mulching if required may be used to assist stabilising soil in erosion prone locations as required.	NA	The 2015 audit (R_019) confirmed that mulch and brush was used to stabilise bare soil and therefore this action is considered to be completed. Tranen has noted that coir netting has been used instead of mulch in some areas to assist to prevent erosion of large exposed areas (P_008).	C (completed)
Section 5.2.3.4 Revegetation Method				
FMP 10.	Revegetation species will be subdivided into four categories: 1. Beach grasses and herbaceous species adopted for the most exposed locations. 2. Semi-stable dune colonisers adapted to partially protected areas. 3. Plants of protected dunal situations. 4. Plants of protected well stabilised and vegetated areas.	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. The monitoring results in the Tranen Monitoring Reports (R_006 and R_007) subdivided the revegetation species into four categories.	C
Section 5.2.3.5 Scheduling				
FMP 11.	Tube stock used in the revegetation program will be sourced from local accredited nurseries.	NA	Refer to FMP 3.	C
FMP 12.	Planting will be carried out in winter; around June-July when the soil moisture content is high enough for optimum seedling growth without irrigation and after the existing weeds have germinated and have been sprayed.	In winter; around June-July	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Management advice on 1 September 2017. Infill planting occurred in the ROS in late September 2016 as there were less kangaroos to impact new plantings. While this is outside of the timeframe required by the FMP, the auditor deemed the reasons for planting in September were to improve the likelihood of success of revegetation and still conducted when soil moisture content was high. Weed control by herbicide spraying and manual removal occurred on numerous occasions between March 2016 and October 2016.	C
FMP 13.	Each tube stock will be planted with a plastic guard, if required, to prevent rabbits feeding on plant stock and to protect from strong winds (updated from corrigenda dated 18/8/16).	NA	Tranen advised it did not use tree guards during the audit period as rabbits seem to have been eliminated from the revegetation areas (R_006) (also refer to FMP 15). In addition to this the City of Wanneroo requires tree guards to be removed prior to summer to avoid them causing the plants to overheat (R_001).	C

Audit code	Action	Timing	Evidence/comment	Conformance status
FMP 14.	Tube stock will mostly be planted at a density of two plants per m ² (as a minimum, species dependent) for rehabilitation.	NA	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2015 audit confirmed that plants were installed at a density of 2 plants/m ² and this action is considered to be completed (subsequent planting to be addressed through monitoring and contingency actions – refer to FMP 23–FMP 35).	C (completed)
FMP 15.	Rabbit guards will be used (if required) for tube stocks in the revegetation areas.	NA	Refer to FMP 13.	C
Section 5.2.3.6 Signage				
FMP 16.	To assist in preventing unauthorised access and trampling of revegetation efforts, additional signage may be installed.	NA	Additional signage was not required in the ROS during the audit period.	C
Section 5.2.3.7 Watering				
FMP 17.	Some tube stock will be planted with tablets/water crystals during planting to help improve survival rates. The coastal plant species to be used in the revegetation of the foreshore area (as outlined in Appendix 2) are typically drought tolerant and therefore it is not anticipated these coastal natives will require irrigation or extensive hand watering.	NA	R_006_Trannen_Monitoring Report Revegetation Spring 2016. R_007_Trannen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Management advice on 1 September 2017. Tubestock was not planted with tablets/water crystals during the audit period and Trannen advised they were not required. High rainfall periods were experienced in January 2017 (R_007).	C
Section 5.2.4 Weed Management				
FMP 18.	If weeds are considered an issue within the revegetation area, a weed spraying program to eradicate weed species, prior to installation of seeds and seedlings will be implemented.	Each spring and autumn prior to initial revegetation	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2015 audit confirmed that weed control had been undertaken prior to revegetation and this action is considered to be completed (subsequent weed control to be addressed through monitoring and contingency actions – refer to CAMP 23–CAMP 35) (R_001).	C (completed)
FMP 19.	Table 2 (of FMP) details the herbicide application at the optimum application rate according to the manufacturer's guidelines and seasonal timing for each weed species.	Refer to Table 2 of FMP	R_001_EPBC 20115902 Annual Compliance Report_2016. R_007_Trannen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Table 2 and the applications rates are considered to relate to the initial revegetation planting, which has been completed (refer to FMP 18). Trannen advised that different weed species, other than what is listed in Table 2, have been recorded within the revegetation areas (Table 6 of R_007). Trannen advised management sites are all relatively weed-free, although many tiny germinants were starting to emerge during Autumn– refer to FMP 23– FMP 35.	C (completed)
FMP 20.	In addition to herbicide application, other practises to control weeds will include: <ul style="list-style-type: none"> • Where necessary apply a wetting agent in accordance with the herbicide manufacture's recommendations. • Use a biodegradable marking dye during all spot spraying tasks. • Prior to the application of weed control, install safety warning signage around the perimeter of the area to be controlled. The warning signage shall include information on the control mechanism and timing and will remain in place until the area has dried. • Only undertake spraying when the weather is calm, in order to minimise spray drift. Therefore, spraying will occur on days with a wind speed less than two kilometres per hour in accordance with the Department of Health WA Codes and Regulations. • Spraying will avoid times when the plants are under stress such as very hot days and dry to dusty conditions to assist with maximum herbicide uptake. 	When wind speed is less than 2 km per hour	Refer to FMP 18.	C (completed)
FMP 21.	Weed spraying will be undertaken to manage the abundance and spread of weed species into and within the revegetation area if required.	NA	R_006_Trannen_Monitoring Report Revegetation Spring 2016. R_007_Trannen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Management Advice 1 September 2017. Trannen advised that weed spraying is ongoing as required. The Trannen monitoring reports indicate that weed control by herbicide spraying and manual removal occurred between March 2016 and October 2016 (R_006) and between November 2016 to March 2017 (R_007). The revegetation area was only observed to have minimal weeds during the site inspection.	C
Section 5.2.5 Completion Criteria (updated from corrigenda dated 18/816)				
FMP 22.	The key target completion criteria to monitor the success of the revegetation efforts are specified in Table 3 (of FMP).	Refer to Table 3 of FMP	Action not auditable. Refer to FMP 24 and Section 5.2.2 for assessment against completion criteria.	Not auditable
FMP 23.	Revegetation efforts will be undertaken and monitored for a period of five years from the commencement of the revegetation plantings.	5 years post revegetation	Revegetation commenced in 2015, so monitoring is to occur until 2020. To date, monitoring has been undertaken in Spring and Autumn in 2015 and 2016, and the monitoring reports have been provided (R_006 and R_007).	C

Audit code	Action	Timing	Evidence/comment	Conformance status																												
FMP 24.	If completion criteria are not met, further infill planting will be required (updated from corrigenda dated 18/8/16).	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. The target completion criteria for year one was not achieved in the previous reporting period (R_001) and infill planting was conducted in September 2016. None of the quadrats met the 3.6 plants/m ² criterion (for year 2), however the target plant cover of 25% (for year 1) was met (R_007). Tranen advised that most of the surviving plants are of species of dense sprawling form and have out-shaded smaller plants of more compact form. Also, weeds would have competed with the native seedlings for soil moisture, which would have constrained native plant growth. The percentage of minimum plant diversity of 110% was above the target of 70%. Plant coverage of 26% was above the year 1 target of 25%. Weeds cover of less than 1% was well below the year 2 target of 10%. Infill planting is planned in Spring 2017 (after the end of the audit period).	C																												
	<table border="1"> <thead> <tr> <th>Year after Planting</th> <th>Year 1</th> <th>Year 2</th> <th>Responsibility for Five Years Post-commencement Works</th> </tr> </thead> <tbody> <tr> <td>Survival (established plant density) – area planted at 3 plants/m² (beach blowout only)</td> <td>4.5 plants/m²</td> <td>3.6 plants/m²</td> <td>Lend Lease</td> </tr> <tr> <td>Survival (established plant density) – area planted at 2 plants/m² (everywhere else)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Minimum plant density (stems/m²)</td> <td>5</td> <td>4</td> <td>Lend Lease</td> </tr> <tr> <td>Minimum plant diversity (% of original number of planted species in project area that have survived)</td> <td>70%</td> <td>70%</td> <td>Lend Lease</td> </tr> <tr> <td>Plant coverage (% area of visual ground cover measured by a botanist/revegetation consultant)</td> <td>25%</td> <td>50%</td> <td>Lend Lease</td> </tr> <tr> <td>Weeds coverage</td> <td>10% cover</td> <td>10% cover</td> <td>Lend Lease</td> </tr> </tbody> </table>	Year after Planting	Year 1	Year 2	Responsibility for Five Years Post-commencement Works	Survival (established plant density) – area planted at 3 plants/m ² (beach blowout only)	4.5 plants/m ²	3.6 plants/m ²	Lend Lease	Survival (established plant density) – area planted at 2 plants/m ² (everywhere else)				Minimum plant density (stems/m ²)	5	4	Lend Lease	Minimum plant diversity (% of original number of planted species in project area that have survived)	70%	70%	Lend Lease	Plant coverage (% area of visual ground cover measured by a botanist/revegetation consultant)	25%	50%	Lend Lease	Weeds coverage	10% cover	10% cover	Lend Lease			
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Section 5.2.7 Monitoring and Reporting																																
FMP 25.	Following planting, the areas of revegetation will be reviewed six weeks post-planting and any new weed growth will be hand removed from 0.5 m around any new seedling.	Following planting, 6 weeks after planting	R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Manual weed control occurred between November 2016 to March 2017 (R_007).	C																												
FMP 26.	The revegetation areas will be monitored biannually (includes weed monitoring) each spring and autumn, and maintained for a five-year period after installation within each site.	Biannually (Spring and Autumn) for 5 years	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Monitoring was conducted biannually.	C																												
FMP 27.	A monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any issues requiring attention.	Following each formal monitoring event	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Reports for each monitoring event were provided to Lend Lease.	C																												
FMP 28.	Monitoring plot, of 5 m x 5 m will be established per revegetation area as well as one permanent photograph reference point at each monitoring plot.	NA	Tranen advised that it halved the size of the quadrats and doubled the number of quadrats required at the City of Wanneroo's request (R_001). Tranen advised that this has enabled some of the more narrow trails to be monitored. The total area monitored remains the same (i.e. 10 quadrats at 2.5m x 5 m rather than 5 quadrats at 5 m x 5 m). Permanent photograph reference points have been established in each quadrant (R_007). The auditors accept that although the monitoring configuration used is different to the stated action, what has been undertaken is consistent with the action's intent and suggest the change can be viewed as an improvement.	C																												
FMP 29.	Photographic records will be captured prior to construction and annually to qualitatively assess density, diversity and weed cover.	Prior to construction and annually	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Photographic evidence of the revegetation areas are provided within R_006 and R_007.	C																												
FMP 30.	Monitoring and management activities that may be required in the five years include but are not limited to the following: <ul style="list-style-type: none"> repairs and replacement of damaged or failed areas of revegetation to meet the completion criteria. 	In the five years (biannual monitoring)	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Two revegetation monitoring reports have been provided, from Spring 2016 and Autumn 2017 (R_006 and R_007). These reports detail the maintenance activities that have been undertaken in the audit period, including weed control, infill planting and site inspections.	C																												
FMP 31.	<ul style="list-style-type: none"> replacement of seedlings that have died to meet the completion criteria. 	NA	Refer to FMP 30.	C																												
FMP 32.	<ul style="list-style-type: none"> weed control if required. 	NA	Refer to FMP 30.	C																												
FMP 33.	The first assessment in spring will assess the developing threats. the stabilisation of each area and the short-term survival of the seedlings and weed cover.	Spring	The revegetation monitoring report for Spring 2015 (R_006) refers to threats, weed cover, stabilisation and survival of seedlings.	C																												
FMP 34.	The second assessment in the following autumn will determine if there are any losses over the dry summer period, and this will form the basis for the maintenance winter program.	In the following autumn	The revegetation monitoring reports for Autumn 2017 (R_007) refers to survival rates of revegetation.	C																												
FMP 35.	The emergence of summer weeds will also be assessed, so that control can be scheduled as required.	Summer	The revegetation monitoring report for Autumn 2017 (R_007) refers to weed cover within each quadrat.	C																												
Section 5.2.8 Feral Pests																																
FMP 36.	Install signage outlining dogs are to be restrained in the revegetation area (not on the beach) - only for the proposed paths that go through or near the revegetation areas.	NA	Public access to FMP area was completed in December 2015 (R_006). Signage was noted at the parking areas at the start of public access way (P_003_Signage in ROS).	C																												

Audit code	Action	Timing	Evidence/comment	Conformance status
FMP 37.	Observe for evidence of feral animals during the revegetation monitoring (biannually).	Biannually, during monitoring events	Two revegetation monitoring reports (R_006 and R_007) provided indicate that the revegetation sites were observed for evidence of feral animals.	C
Section 5.2.8.6 Monitoring and Reporting				
FMP 38.	The revegetation areas will be monitored biannually each spring and autumn and maintained for a five year period after installation within each site.	Biannually (Spring and Autumn) for 3 years	Two revegetation monitoring reports have been provided (Spring 2016 and Autumn 2017) (R_006 and R_007).	C
FMP 39.	Foxes, rabbits and feral cats as part of the revegetation monitoring program will also be monitored and if observed reported.	NA	The Spring 2016 and Autumn 2017 (R_006 and R_007) monitoring reports indicate that the revegetation sites were observed for evidence of feral animals and installation of rabbit fencing. Evidence of rabbit activity was reported in the Spring 2016 that rabbits seem to have been eliminated from the revegetation areas (R_006). Tranen advised (1 September 2017) that the key threat to revegetation seedlings are kangaroos.	C
FMP 40.	The monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any issues requiring attention.	After monitoring event	The monitoring reports (R_006 and R_007) were submitted to Lendlease.	C
Table 7: Bushfire Management Key Actions				
FMP 41.	No rubbish or vegetation will be burnt on site.	NA	Management advice on 1 September 2017. There was no burning of rubbish or vegetation on site. No evidence of any burning of vegetation or rubbish was observed during site inspection.	C
FMP 42.	Reduced fuel levels in the revegetation area through weed control as required and in accordance with Section 5.2.6.	NA	The autumn 2016 monitoring report indicates that weed control by herbicide spraying and manual removal occurred between October 2015 and February 2016 (R_006).	C
FMP 43.	The perimeter roads and dedicated pathways between the foreshore reserve and the pathways act as key firebreak(s).	NA	Management advice on 1 September 2017. Perimeter roads and pathways were completed in 2015.	C (completed)
FMP 44.	Provide records of any fires in the foreshore to the City of Wanneroo / DFES.	NA	Management advice on 1 September 2017. Tranen advised that no fires have been recorded in the audit period.	C
Section 5.2.9.6 Monitoring and Reporting				
FMP 45.	The monitored of weeds will be undertaken biannually each spring and autumn and maintained for a five year period.	Biannually (Spring and Autumn) for 5 years	Monitoring reports (R_006 and R_007) indicate that the revegetation sites were monitored for weeds.	C
FMP 46.	The monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any issues requiring attention.	After monitoring event	The monitoring reports (R_006 and R_007) were submitted to Lendlease.	C
Section 5.2.10 Erosion: Table 9: Erosion Control Key Actions				
FMP 47.	Placement of brush/mulch over revegetation areas susceptible to potential erosion in the revegetation areas.	NA	The 2015 audit confirmed that mulch and brush was used to stabilise bare soil and therefore this action is considered to be completed. Tranen has noted that coir netting has been used as mulch in some areas to assist to prevent erosion of large exposed areas (R_001).	C (completed)
FMP 48.	Undertake revegetation of bare/open areas of risk in the revegetation area.	NA	Revegetation of areas that were bare and open were sighted during site inspection (P_004_Erosion matting).	C
FMP 49.	Installation of temporary fencing in/around the revegetation area.	NA	The revegetation area was noted to have been fenced during the 2015 audit. The fencing was confirmed to still be present in the site inspection (P_003).	C
FMP 50.	Installation of education signage informing the community/visitors of access points and revegetation areas - only for proposed paths that go through or near the rehabilitation areas.	NA	Public access to FMP area was completed in December 2015 (R_001). Signage was noted at the parking areas at the start of public access way (P_003).	C
Section 5.2.10.6 Monitoring and Reporting				
FMP 51.	Monitoring of the erosion / open areas in the revegetation area will be biannually each spring and autumn and maintained for a five year period as part of the revegetation monitoring.	Biannually (Spring and Autumn) for 5 years	Revegetation monitoring reports from Spring 2016 and Autumn 2017 (R_006 and R_007) indicate that the revegetation sites were observed for erosion / open areas and where required additional brush material installed.	C
FMP 52.	The monitoring report will be submitted to Lend Lease following each formal monitoring event, to assess if there are any erosion issue(s) requiring attention.	After monitoring event	The monitoring reports (R_006 and R_007) were submitted to Lendlease.	C
FMP 53.	Lendlease will monitor annually the integrity of the foreshore fencing and signage until hand over to the City of Wanneroo.	Annually	Management advice 1 September 2017. Georgiou is responsible for the foreshore fencing and City of Wanneroo is responsible for the public signage at the beach access points in the ROS. R_010_Fence inspection record_JulyAugust2017. R_011_Fence inspection record_July2017.	C
Section 5.2.11 Beach access: Access Management Table 11: Beach Access Key Actions				
FMP 54.	Control beach access routes and access points only for the proposed paths that go through or near the revegetation areas.	Post construction	Fencing, signage and bollards contribute to restricted access near beach footpaths points and roads (P_003).	C
FMP 55.	Undertake revegetation if required of tracks not required for pedestrian access, within the revegetation areas.	NA	R_006_Tranen_Monitoring Report Revegetation Spring 2016. R_007_Tranen_Monitoring Report Alkimos Beach Revegetation Autumn 2017. Monitoring reports and evidence from the site inspection show revegetation on previous 4 x wheel drive tracks (P_005).	C

Audit code	Action	Timing	Evidence/comment	Conformance status
FMP 56.	Installation of temporary fencing in/around the revegetation area.	NA	Permanent fencing has now been established around revegetation areas (P_003, P_006).	C
FMP 57.	Installation of education signage informing the community/visitors access points and revegetation areas - only for the proposed paths that go through or near the revegetation areas.	NA	Public access to the FMP area was completed in December 2015 (R_001). Signage was noted at the parking areas at the start of public access way (P_003).	C
5.2.11.6 Monitoring and Reporting				
FMP 58.	Lend Lease will monitor annually the integrity of the temporary fencing, pathways and signage until hand over to the City of Wanneroo.	Annually until handover to the City of Wanneroo	Management advice 1 September 2017. Most of the fencing, pathways and signage along the beach access areas through the ROS are the responsibility of City of Wanneroo.	C
Section 6: Monitoring and Reporting Measures				
FMP 59.	To satisfy Condition 3 of the EPBC Act approval, Lend Lease will publish a compliance report every 12 months from the commencement of the construction works.	Annually	Refer to condition 3 of EPBC Act approval.	C
FMP 60.	The compliance report will contain a foreshore Carnaby's Black-Cockatoo habitat revegetation section which will include the following: <ul style="list-style-type: none"> • revegetation completion criteria and weed monitoring • revegetation and weed contingency actions if required • erosion monitoring within the foreshore area • report observations of feral pests • temporary fencing, pathways and signage of the revegetation area • report any fire incidences in the foreshore and the response. 	Annually	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2016 ACR (R_001) include these requirements.	C

Appendix 3
Compliance with Precinct Landscape
and Rehabilitation Plan

Audit Code	Action	Timing	Evidence/comment	Conformance Status																		
Section 3 Planting schedule																						
Section 3.1 Replication of greater than 5ha of Carnaby's Cockatoo habitat																						
PLRP 1	<p>Condition 12(a) of EPBC 2011/5902 relates to replicating greater than 5 ha of Carnaby's Cockatoo habitat through planned future landscape and streetscape across the development. The Department of the Environment (DotE) and Lend Lease determined the approach to meet this requirement during the finalisation of the approval for the project in May / June 2012. It was decided that this requirement specifically relates to established trees on the Parks and Wildlife Plants for Carnaby's list using the ratio as follows:</p> <ul style="list-style-type: none"> - 500 trees: 1 ha of habitat <p>Therefore in order to replicate greater than 5 ha of Carnaby's Cockatoo habitat, the following ratio will be applied:</p> <ul style="list-style-type: none"> - 2,500 trees: 5 ha of habitat 	Revegetation - during revegetation	<p>D_002_CBC tracking planting sheet for all precincts.</p> <p>D_003_DEC Species List_Plants used at AB.</p> <p>Management advice 1 September 2017.</p> <p>Lendlease has planted more than 2500 Carnaby's Cockatoo tree species and has met the target.</p>	C																		
PLRP 2	<p>Table 3 describes the objective, target and indicators to meet the above requirements:</p> <p>Table 3 Objectives, targets and indicators – replication of 5 ha of Carnaby's habitat</p> <table border="1"> <thead> <tr> <th>Objective</th> <th>Target</th> <th>Performance indicator</th> </tr> </thead> <tbody> <tr> <td>Replicate greater than 5 ha of Carnaby's Cockatoo habitat within the project area</td> <td>Establish 2,500 Carnaby's Cockatoo habitat species across all four precincts by handover of final stage to the City with a 90% survival rate.</td> <td>Number of Carnaby's Cockatoo species identified in annual monitoring (number, species and location). 90% survival rate achieved.</td> </tr> </tbody> </table>	Objective	Target	Performance indicator	Replicate greater than 5 ha of Carnaby's Cockatoo habitat within the project area	Establish 2,500 Carnaby's Cockatoo habitat species across all four precincts by handover of final stage to the City with a 90% survival rate.	Number of Carnaby's Cockatoo species identified in annual monitoring (number, species and location). 90% survival rate achieved.	Revegetation - during revegetation	<p>Management advice on 1 September 2017.</p> <p>D_002_CBC tracking planting sheet for all precincts.</p> <p>Lendlease has planted more than 2500 Carnaby's Cockatoo tree species and has met the target.</p> <p>Upwards of 80% survival rate was estimated by Total Eden. However, these areas have not been handed over to City of Wanneroo for maintenance yet, and contingency actions to increase survival rate to the 90% target are planned.</p>	C												
Objective	Target	Performance indicator																				
Replicate greater than 5 ha of Carnaby's Cockatoo habitat within the project area	Establish 2,500 Carnaby's Cockatoo habitat species across all four precincts by handover of final stage to the City with a 90% survival rate.	Number of Carnaby's Cockatoo species identified in annual monitoring (number, species and location). 90% survival rate achieved.																				
PLRP 3	<p>Table 4 provides an indicative Precinct by Precinct breakdown of the Carnaby's Cockatoo tree targets (refer to Appendix C for a map) to track progress against the ultimate target described in Table 3, across all precincts. These are interim targets for monitoring purposes only; the total of 2,500 trees remains the ultimate compliance target.</p> <p>Table 4: Precinct breakdown of Carnaby's Cockatoo tree targets</p> <table border="1"> <thead> <tr> <th>Precinct</th> <th>Area (ha)</th> <th>Carnaby's Tree Target</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>50.30</td> <td>1,000</td> </tr> <tr> <td>2</td> <td>47.87</td> <td>500</td> </tr> <tr> <td>3</td> <td>32.51</td> <td>500</td> </tr> <tr> <td>4</td> <td>43.89</td> <td>500</td> </tr> <tr> <td>TOTAL</td> <td>2,500 (5 ha of habitat)</td> <td></td> </tr> </tbody> </table>	Precinct	Area (ha)	Carnaby's Tree Target	1	50.30	1,000	2	47.87	500	3	32.51	500	4	43.89	500	TOTAL	2,500 (5 ha of habitat)		Revegetation - during planning	<p>Lendlease has planted more than 2500 Carnaby's Cockatoo tree species and has met the target. Over 3400 Carnaby's Cockatoo tree species have been planted up until the end of the audit period.</p> <p>(Refer to PLRP 1).</p>	C
Precinct	Area (ha)	Carnaby's Tree Target																				
1	50.30	1,000																				
2	47.87	500																				
3	32.51	500																				
4	43.89	500																				
TOTAL	2,500 (5 ha of habitat)																					
PLRP 4	For each landscaping stage of the development an indicative Plant Schedule is prepared and updated as required and will be used as a guide to check that planting numbers are trending toward compliance with the overall tree target.	Revegetation - during planning	<p>R_008_COW approval_POS S Providence Drive & Leatherback Boulevard SS ABE.</p> <p>R_009_COW approval_POS G & streetscapes Alkimos Beach RESUBMISSION.</p> <p>Staging plans indicated the plant schedules allowed the attainment of the overall tree target to be reached.</p>	C																		
PLRP 5	All future planting schedules and landscape designs will be in accordance with the principles in the PLRP.	Revegetation - during planning	<p>R_008_COW approval_POS S Providence Drive & Leatherback Boulevard SS ABE.</p> <p>R_009_COW approval_POS G & streetscapes Alkimos Beach RESUBMISSION.</p> <p>C_012_Alkimos_PLRP 5_02112017.</p> <p>While staging plans submitted to the City of Wanneroo in December 2016 for approval were not in accordance with the 50% target for primary feeding plants for Carnaby's Cockatoo as described in the PLRP, planting schedules and landscape designs are in accordance with the principles of the PLRP to protect Cockatoo habitat.</p>	C																		
Section 3.2 Target 50% of landscape and streetscape for Carnaby's habitat																						
PLRP 6	Condition 12 (b) of EPBC 2011/5902 requires that at least 50% of plantings of trees and shrubs in streetscape and landscape planting must consist of plant species known to be primary feeding plants for Carnaby's Cockatoo. The 50% target applies across all precincts across the project area.	Revegetation - during planning	<p>D_002_CBC tracking planting sheet for all precincts.</p> <p>C_009_Alkimos Beach EPBC Cond 12b.</p> <p>The current tracking spreadsheet (D_002) indicates the 50% planting target is at risk of not being met at project completion unless 100% of Carnaby's Cockatoo shrub species are planted in future stages. Lendlease believes planting Carnaby shrub species would not only negatively impact on delivering the vision for the development but may also be of limited value to the Carnaby's Cockatoo.</p> <p>To date approximately 17% of trees and shrubs that have been planted consist of plant species known to be primary feeding plants for Carnaby's Cockatoo.</p> <p>At the end of the audit period Lendlease commenced proceedings to discuss this target with DEE and will seek to revise the target to be achievable and practical.</p>	PNC																		

Audit Code	Action	Timing	Evidence/comment	Conformance Status						
PLRP 7	<p>Table 5 includes objectives, targets and indicators for achieving Condition 12(b) of EPBC 2011/5902.</p> <p>Table 5: Objectives, targets and indicators – 50% Carnaby's Cockatoo planting target Objective Target Performance</p> <table border="1"> <thead> <tr> <th>Objective</th> <th>Target</th> <th>Performance indicator</th> </tr> </thead> <tbody> <tr> <td>At least 50% of plantings of trees and shrubs in streetscape and landscape planting across all precincts must consist of plant species known to be primary feeding plants for Carnaby's Cockatoo.</td> <td>50% of plantings of trees and shrubs in streetscape and landscape planting across all precincts are plant species known to be primary feeding plants for Carnaby's Cockatoo, with a 90% survival rate.</td> <td>Number of Carnaby's Cockatoo species identified in streetscape and landscape planting through annual monitoring reporting. 90% survival rate achieved.</td> </tr> </tbody> </table>	Objective	Target	Performance indicator	At least 50% of plantings of trees and shrubs in streetscape and landscape planting across all precincts must consist of plant species known to be primary feeding plants for Carnaby's Cockatoo.	50% of plantings of trees and shrubs in streetscape and landscape planting across all precincts are plant species known to be primary feeding plants for Carnaby's Cockatoo, with a 90% survival rate.	Number of Carnaby's Cockatoo species identified in streetscape and landscape planting through annual monitoring reporting. 90% survival rate achieved.	Revegetation - during planning	<p>Management advice 1 September 2017.</p> <p>D_002_CBC tracking planting sheet for all precincts.</p> <p>The tracking spreadsheet (D_002) indicates the 50% planting target is at risk of not being met at project completion unless 100% of Carnaby's Cockatoo shrub species are planted in future stages. Therefore, the PLRP objective and target are at risk of not being achieved.</p> <p>Upwards of 80% survival rate of plants was estimated by Total Eden. However, these areas have not been handed over to City of Wanneroo for maintenance yet, and contingency actions to increase survival rate to the 90% target are planned.</p>	PNC
Objective	Target	Performance indicator								
At least 50% of plantings of trees and shrubs in streetscape and landscape planting across all precincts must consist of plant species known to be primary feeding plants for Carnaby's Cockatoo.	50% of plantings of trees and shrubs in streetscape and landscape planting across all precincts are plant species known to be primary feeding plants for Carnaby's Cockatoo, with a 90% survival rate.	Number of Carnaby's Cockatoo species identified in streetscape and landscape planting through annual monitoring reporting. 90% survival rate achieved.								
PLRP 8	<p>Appendix C details the locations of parks across the project area.</p> <p>Appendix D provides a record of the number of Carnaby's Cockatoo planted in the first stages of the project.</p> <p>Appendix E sets indicative planting targets for parks across the whole project area, including number of Carnaby's Cockatoo species to be planted. It is indicative only, to guide tracking of progress against the objective and target in Table 5 and will be updated to reflect revised planting numbers across the project area, throughout project implementation.</p>	Revegetation - during planning	The PLRP appendices were last updated prior to April 2016. They are only indicative and some inconsistencies with the planting targets are expected as planting schedules are moving documents. The inconsistencies do not constitute a non-conformance as the inconsistencies do not hinder progression toward meeting the PLRP targets.	C						
PLRP 9	The landscape strategy for the project acknowledges that revegetated areas must provide a diversity of species, including both Carnaby's Cockatoo species and other species which occur naturally in the area. If during revegetation activities the Plants for Carnaby's list does not provide a great enough diversity of species that are suitable to a coastal environment and, endorsed by the City, Lend Lease will investigate opportunities to include a greater diversity species on that list in consultation with Parks and Wildlife.	Revegetation - during planning	<p>C_010_Email to DBCA_04092017.</p> <p>Lendlease contacted the Department of Biodiversity, Conservation and Attractions (previously Department of Parks and Wildlife) to discuss the landscape strategy as the diversity of shrubs that were permitted to be planted was not suitable.</p>	C						
Section 4 Monitoring, Reporting and Review										
PLRP 10	<p>Monitoring, reporting and review of targets will be undertaken in accordance with parameters described in Table 6.</p> <p><i>Key monitoring actions include:</i></p> <ul style="list-style-type: none"> Review landscape plans, plant orders and planting schedules to determine number and type of species planted (i.e. Carnaby's Cockatoo species) (annually) Record the species, location and number of Carnaby's Cockatoo plants installed during the planting phase (during planting) Monitor success of species planted (annually). 	NA	<p>Management advice 1 September 2017.</p> <p>Monitoring actions, reporting and review are conducted as part of practical completion for each stage (which is not annually), and as part of the annual compliance program (this report).</p>	C						
Section 4.1 Survival targets										
PLRP 11	For all planting to occur within parks and streetscape, the survival target is 90% or greater.	During Construction	Refer to PLRP 2.	C						
PLRP 12	Following the completion of a landscaping stage (POS or streetscape), the landscape architects visit the area on behalf of Lendlease to ensure the specifications have been met by the contractor (including the planting of specified Carnaby's Black Cockatoo species as documented within the approved design drawings).	During Construction	<p>Management advice 1 September 2017.</p> <p>Practical completion certificates are completed following the completion of a landscaping stage. None of these were completed during the audit period. The Practical Completion reports do not include species counts; however, species numbers are included in plant schedules and as constructed drawings, and this is taken to meet the requirement.</p>	C						
PLRP 13	Prior to handover to the City, Lendlease will ensure the 90% plant survival target is met to enable the handover to the City to be finalised.	During Construction	Upwards of 80% survival rate was estimated by Total Eden. However, these areas have not reached practical completion yet and have not been handed over to City of Wanneroo for maintenance yet. Contingency actions to increase survival rate to the 90% target are planned during the next audit period.	C						
Section 4.2 Timeframes for the implementation										
PLRP 14	Handover to the City will be undertaken a minimum of 2 years after practical completion.	24 months following planting	<p>Management advice 1 September 2017.</p> <p>No parks or stages have been handed over the CoW to date.</p>	NA						
PLRP 15	Following handover, maintenance of streetscapes and POS will be managed by the City.	On-going following handover	<p>Management advice 1 September 2017.</p> <p>No parks have been handed over the CoW to date.</p>	NA						
PLRP 16	Handover of planting across the site will be staged in accordance with the park and street delivery. All parks and streets are expected to be handed over by the completion of the project. Refer to the indicative precinct plan in Appendix C for the breakdown of park and street delivery across the Estate.	On completion of each area During Construction	<p>Management advice 1 September 2017.</p> <p>No parks have been handed over the CoW to date.</p>	NA						
Section 4.2.1 City of Wanneroo process										
PLRP 17	For each stage of landscaping (streetscape or POS) a detailed design is submitted to the City for their review and approval.	Pre-construction	Action assessed as completed during 2014 compliance audit (R_001).	C (completed)						
PLRP 18	The City assesses each design to ensure it complies with their standards and confirms that ultimately the City will be able to manage the area following the required 2 year maintenance period.	Handover	<p>Management advice 1 September 2017.</p> <p>No parks have been handed over the CoW to date.</p>	NA						
PLRP 19	As the management of the park in the long term is undertaken by the City, a City officer visits the area prior to handover of a stage to the City, to ensure it meets the specifications (and therefore planting of specified Carnaby's Black Cockatoo species as documented within the approved design drawings) and survival targets.	Prior to handover	<p>Management advice 1 September 2017.</p> <p>No parks have been handed over the CoW to date.</p>	NA						

Audit Code	Action	Timing	Evidence/comment	Conformance Status
PLRP 20	Once a stage of landscaping is handed over to the City, the requirements of the Condition for that park and streetscape are considered complete. The City accepts no liability for the requirements of the conditions of the EPBC Act approval and will not report on the ongoing management of the Carnaby's species.	Handover	Management advice 1 September 2017. No parks have been handed over the CoW to date.	NA
PLRP 21	For the ROS, the City has reviewed and supported the State level Foreshore Management Plan. For the Conservation POS, the City has reviewed and approved the Vegetation and Fauna Management Plan. These plans will deliver on the Carnaby's targets set in this PLRP and include the management plans required by Condition 10 and 11 of the approval.	Prior to approval of management plans	This action is unauditible and is considered more a note.	Not auditible.
PLRP 22	Due to the City requirements streetscape works in residential streets will be completed at the time of the front yard landscaping by the landscape contractor. In this instance it is incumbent on the landscape contractor to ensure that planting schedules meet the PLRP requirements.	Prior to approval of management plans	Management advice 1 September 2017. Front yard landscaping in residential streets meets the PLRP requirements.	C
Section 4.3 Restriction on clearing				
PLRP 23	Clearing within the 'no clearing area' on Attachment C of EPBC 2011/5902 is not permitted to commence until the Management Plans required under Condition 10-12 of the approval are approved.	Prior to approval of management plans	Action assessed as completed during 2014 compliance audit (R_001).	C (completed)
Section 4.4 Annual reporting requirements				
PLRP 24	Lendlease is required to submit an ACR in accordance with Condition 3 of EPBC 2011/5902, as detailed below: <i>'Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. Each management plan must be published on the website for the length of the approval.'</i>	Annually	R_001_EPBC 20115902 Annual Compliance Report_2016. C_001 Lendlease EML Strategen EPBC 2011_5902 ACR 16. C_002_Lendlease notification of ACR 16 on website. The DEE was notified via email on 24 November 2016 that the 2016 Compliance Report (R_001) was to be published on the Alkimos Beach website, within 3 months of the anniversary of the commencement of the action (C_001). The email provided as evidence that the 2016 ACR was posted on the Lendlease website on 30 November 2016 goes to "Page Does Not Exist" (C_002); however, however, provides evidence that the report was put onto the Lendlease website at that time. The 2013, 2014, 2015 and 2016 Compliance Reports were on the Lendlease website during the audit period (1 September 2017) at: http://communities.lendlease.com/alkimos-beach/living-in-alkimos-beach/6-star-green-star-living/ Lendlease stated that the website was being updated after evidence was provided to Strategen (new link above). The 2016 Compliance Report (R_001) addresses compliance with the conditions of approval and implementation of the PLRP, CAMP and FMP.	C
PLRP 25	In accordance with the PLRP the following details are required to be included in the ACR: 1. An update of any completed stages or tendered landscape for future stages. 2. Report against planting targets and landscape survival targets. 3. Update of completed tree planting for each stage. 4. Amendments to precinct and staging plans 5. Updated plant schedules for each stage of the development.	Annually	R_001_EPBC 20115902 Annual Compliance Report_2016. The 2016 Annual Compliance Report (R_001) provides a summary of the current status of the project, including works undertaken during the audit period and practical completion. Future planting schedules were provided in Appendix 4 of the report and tracking against the rehabilitation targets was provided in Appendix 5.	C

Appendix 4
Plant schedules

TREE LIST POS G

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Agfl	Agonis flexuosa	Willow Myrtle	Transplant	5	AS SHOWN
Caob	Casuarina obesa	Swamp Oak	Transplant	13	AS SHOWN
Mequ	Melaleuca quinquenervia	Broad-leaved Paperbark	Transplant	12	AS SHOWN
Phca	Phoenix canariensis	Canary Island Date Palm	Transplant	3	AS SHOWN
Mari	Macrozamia riedlei	Macrozamia Palm	Transplant	48	AS SHOWN

POS G PLANT MIX 1

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Emi	Eremophila nivea		130mm	261	700 mm
Grcr	Grevillea crithmifolia (prostrate)		130mm	261	700 mm
Thsa	Thryptomene saxicola		130mm	261	700 mm
Weda	Westringia dampieri		130mm	261	700 mm

POS G PLANT MIX 2

Key	Botanic Name	Common Name	Pot Size	Qty.	Spacing
Chun	Chamaelucium uncinatum	Geraldton Wax	130mm	328	700 mm
Dire	Dianella revoluta	Black-anther Flax-lily	130mm	328	700 mm
Ergl	Eremophila glabra	Common Emu-bush	130mm	328	700 mm
Grob	Grevillea obtusifolia		130mm	328	700 mm

POS G PLANT MIX 3

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Cavi	Carpobrotus virescens	Coastal Pigface	130mm	738	700 mm
Dire	Dianella revoluta var. divaricata		130mm	738	700 mm
Mene	Melaleuca nesophila	Showy Honey-myrtle	130mm	740	700 mm

STREET PLANT MIX A

Key	Botanic Name	Qty.	Pot
Eniv	Eremophila nivea	274	130mm
Gcri	Grevillea crithmifolia	274	130mm

STREET PLANT MIX B

Key	Botanic Name	Qty.	Pot
Cmat	Callistemon 'Mathew Flinders'	346	130mm
Gobt	Grevillea obtusifolia 'Gin Gin Gem'	346	130mm

CASUARINA OBESA NOT APPROVED DUE TO INVASIVE ROOT SYSTEM PLEASE SUBSTITUTE WITH ALLOCASUARINA FRASERIANA (TYP)

EPBC CONDITION REQUIRES THAT 50% OF THE SPECIES OF TREES MUST CONSIST OF PLANT SPECIES KNOWN TO BE PRIMARY FEEDING PLANTS OF THE CARNABY BLACK COCKATOO.

PROPOSED PLANTING DENSITIES WITHIN THE POS NEED TO INCREASE TO 6 PLANTS PER SQUARE METRE (TYP)

PARK NAME SIGN IS REQUIRED AS PER POLICY PLEASE REFER TO SPECIFICATION PROVIDED FOR DETAILS(TYP)

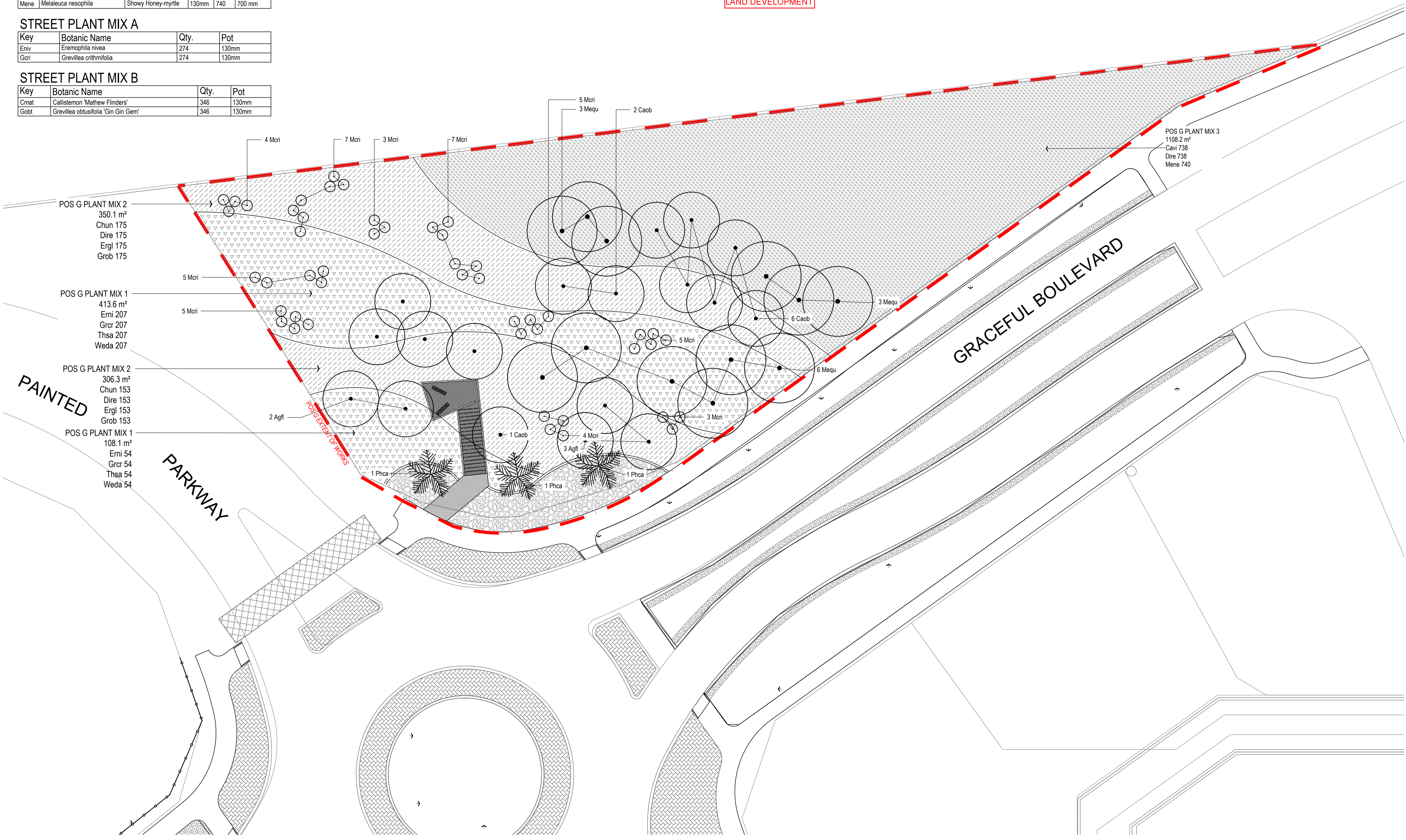
APPROVED
Alex Mokhtare
02/12/2016
A/COORDINATOR
LAND DEVELOPMENT

CITY OF WANNEROO
APPROVAL CONDITIONS
APPROVED SUBJECT TO STRICT ADHERENCE TO THE
- ENDORSEMENTS THEREON
- CONDITIONS IN THE CITY OF WANNEROO APPROVAL LETTER
- CONDITIONS LAID DOWN IN THE WAPC SUBDIVISION APPROVAL
WAPC NO.145429
151223
149348, 152135

**TURF IS NOT PERMITTED AS PER THE CITY OF WANNEROO STREETSCAPES & PUBLIC ACCESS WAYS LANDSCAPE DESIGN SPECIFICATION
TEMPORARY ITEMS ARE NOT CONSISTENT WITH CITY'S POS POLICY (TYP)**

LEGEND

- EXTENT OF WORKS
- SHRUB MIX PLANTING 1
- SHRUB MIX PLANTING 2
- SHRUB MIX PLANTING 3
- ROLL ON TURF
- PROPOSED 200L TREE



STANDARD NOTES

- SET OUT & DIMENSIONS.** THE CONTRACTOR SHALL SET OUT ALL PATHS, WALLS, HARD SURFACES AND ELEMENTS EITHER ON OR OFF SITE PRIOR TO CONSTRUCTION AND SHALL OBTAIN THE SUPERINTENDENT'S SET OUT APPROVAL PRIOR TO WORKS COMMENCING. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE. CHECK ALL DRAWING SCALES IN CONJUNCTION WITH DRAWING SIZE.
- SERVICES & SITE ASSETS.** THE CONTRACTOR SHALL INVESTIGATE THE NATURE AND LOCATION OF ALL EXISTING SERVICES AND RETAINED SITE ASSETS AFFECTED BY THEIR WORKS. FAILURE TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTOR'S LIABILITIES.
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B	05.10.16	TC	ISSUE FOR COW APPROVAL
A	27.09.16	AK	ISSUED FOR CLIENT REVIEW
REV	DATE	BY	ISSUE OR AMENDMENT

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PROJECT
ALKIMOS BEACH SALES OFFICE PRECINCT
STAGE OR PHASE
STAGE 1

DRAWING TITLE
POS G PLANTING PLAN

CLIENT
LEND LEASE

DESIGNED BY EC PRELIM DESIGN REVIEWED BY EC
DRAWN BY AK PRELIM DWG REVIEWED BY EC
DATE INITIALLY DRAWN 22.09.16

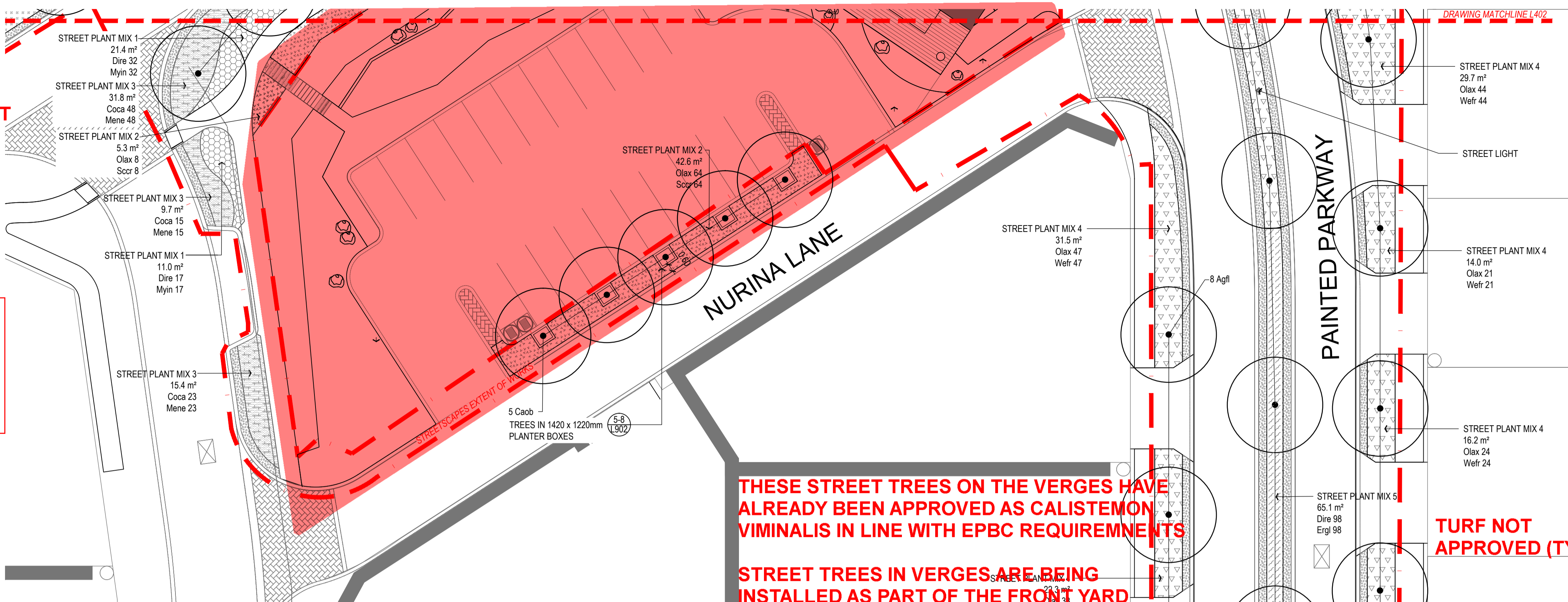
SCALE 1:200 @ A1 METRES

DRAWING NUMBER ALL-26-L401 REV B

AREA HIGHLIGHTED IN PINK IS NOT INCLUDED IN THIS APPROVAL AS BEING APPROVED VIA A DA (TYP)

CITY OF WANNEROO APPROVAL CONDITIONS
 APPROVED SUBJECT TO STRICT ADHERENCE TO THE ENDORSEMENTS THEREON
 CONDITIONS IN THE CITY OF WANNEROO APPROVAL LETTER
 CONDITIONS LAID DOWN IN THE WAPC SUBDIVISION APPROVAL WAPC NO.145429
 151223
 149348, 152135

APPROVED
 Alex Mokhtare
 02/12/2016
 A/COORDINATOR
 LAND DEVELOPMENT



THESE STREET TREES ON THE VERGES HAVE ALREADY BEEN APPROVED AS CALISTEMON VIMINALIS IN LINE WITH EPBC REQUIREMENTS
STREET TREES IN VERGES ARE BEING INSTALLED AS PART OF THE FRONT YARD PACKAGE SO THEY DO NOT GET DAMAGED BY CONSTRUCTION OF THE HOUSE

TURF NOT APPROVED (TYP)

1 PLANTING PLAN

PLANTING DENSITIES TO BE A MINIMUM OF 3 PLANTS PER SQUARE METRE AS PER CITY STREETScape SPECIFICATION
REVISE SPACINGS ACORDINGLY (TYP)

STREET PLANT MIX 1

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Dire	Dianella revoluta	Black-anther Flax-lily	130mm	233	600 mm
Myin	Myoporum insulare	Coastal Boobialla	130mm	233	600 mm

STREET PLANT MIX 2

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Olax	Olearia axillaris	Coast Daisy Bush	130mm	403	600 mm
Scor	Scaevola crassifolia	Cushion Fanflower	130mm	403	600 mm

STREET PLANT MIX 3

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Coca	Conostylis candidans	Grey Cottonheads	130mm	686	600 mm
Mene	Melaleuca nesophila	Dwarf variant	130mm	686	600 mm

STREET PLANT MIX 4

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Olax	Olearia axillaris	Coast Daisy Bush	130mm	1125	600 mm
Wefr	Westringia fruticosa	Coastal rosemary	130mm	1125	600 mm

STREET PLANT MIX 5

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Dire	Dianella revoluta	Black-anther Flax-lily	130mm	98	600 mm
Ergl	Eremophila glabra	Common Emu-bush	130mm	98	600 mm

STREET PLANT MIX A

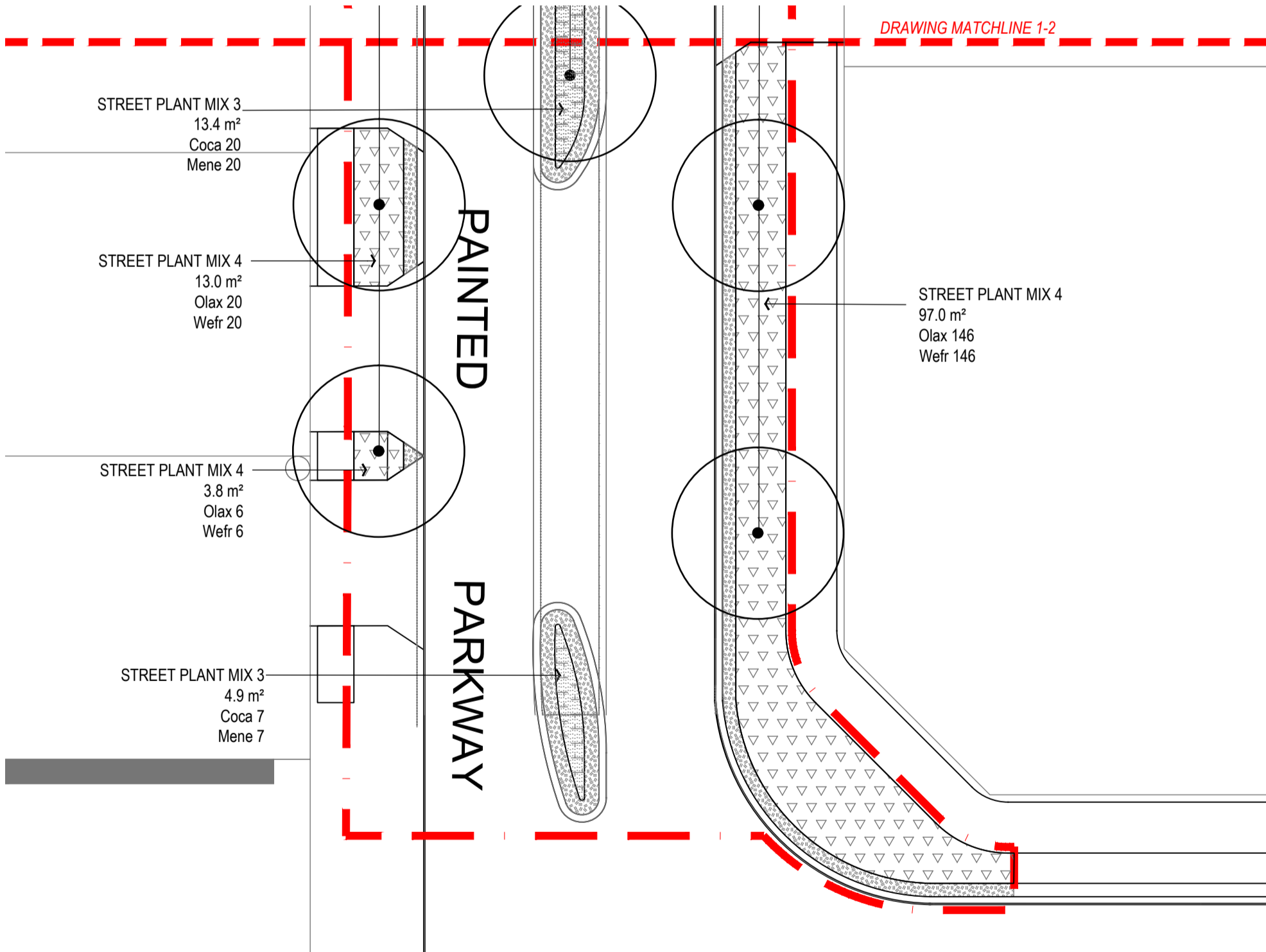
Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Eniv	Eremophila nivea	Emu Bush	130mm	274	600 mm
Gcri	Grevillea crithmifolia		130mm	274	600 mm

STREET PLANT MIX B

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Cmat	Callistemon 'Mathew Flinders'		130mm	346	600 mm
Gobt	Grevillea obtusifolia 'Gin Gin Gem'		130mm	346	600 mm

STREETScape TREES

Key	Botanic Name	Common Name	Pot	Qty.	Spacing
Agfl	Agonis flexuosa	Willow Myrtle	400 Litre	21	AS SHOWN
Caec	Casuarina equisetifolia	Coastal or Horsetail She-oak	400 Litre	7	AS SHOWN
Dere	Delonix regia	Royal Poinciana	Transplant	9	AS SHOWN
Eusi	Eucalyptus sideroxylon	Red Ironbark, Mugga	400 Litre	13	AS SHOWN
Coab	Casuarina obesa	Swamp Oak	400 Litre	5	AS SHOWN
Erin	Erythrina indica	Coral Tree	Transplant	4	AS SHOWN
Pfca	Phoenix canariensis	Canary Island Date Palm	Transplant	1	AS SHOWN



2 PLANTING PLAN

EPBC CONDITION 12 REQUIRES 50% OF TREE SPECIES ARE TO BE KNOWN PRIMARY CARNABY FODDER. ONLY 1 SPECIES IS PROPOSED HERE.

PLANTS BEING INSTALLED ON STREETScapeS ARE TO GROW LESS THAN 600MM HIGH AT MATURITY. SPECIES BEING REVISED ACCORDINGLY (TYP)

NOTE: PLANTING SCHEDULE CONTAINS PLANT NUMBERS FOR SHEET ALL-26-402 AND 403

EXTENT OF WORKS

- MK CONCRETE MOWING KERB (6 L900)
- 1.8M HIGH WELD MESH FENCING (13 L900)
- 600mm MULCH ONLY MAINTENANCE STRIP
- SHRUB MIX PLANTING 1
- SHRUB MIX PLANTING 2
- SHRUB MIX PLANTING 3
- SHRUB MIX PLANTING 4
- SHRUB MIX PLANTING 5
- SHRUB MIX PLANTING A
- SHRUB MIX PLANTING B
- ROLL ON TURF (4 L902)
- PROPOSED 200L TREE
- PROPOSED 100L TREE
- TRANSPLANT TREE

NOTE: TEMPORARY TURF TO BE INSTALLED TO MEDIANS ON PAINTED PARKWAY. MEDIAN TURF TO BE REMOVED AND RETURNED TO SHRUB PLANTING PRIOR TO HANDOVER.

- STANDARD NOTES**
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B	05.10.16	TC	ISSUE FOR COW APPROVAL
A	23.09.2016	TC	ISSUE FOR CLIENT REVIEW

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PROJECT: ALKIMOS BEACH SALES OFFICE PRECINCT
 STAGE 1
 DRAWING TITLE: STREETScape PLANTING PLAN SHEET 2
 CLIENT: LEND LEASE

DESIGNED BY: EC PRELIM DESIGN REVIEWED BY: EC
 DRAWN BY: AK PRELIM DWG REVIEWED BY: EC
 DATE INITIALLY DRAWN: 22.09.16

SCALE: 1:200 @ A1 METRES

DRAWING NUMBER: ALL-26-L403 REV: B

SEE E:\CORRECT PROJECTS\ALKIMOS BEACH - LEND LEASE OFFICE AND DISKAY HILGROVE AUTO-CASES\STREETScape\PLANTING

Appendix 5
Tracking against planting targets

Alkimos Beach - Native Trees and Shrubs

Carnaby's Black Cockatoo - Tracking Spreadsheet (vers. H)

Botanical Name	Common Name	Primary Feeding Plants for CBCs [#]	PRECINCT 1														PRECINCT 2		
			Stage 1 - Park B	Stage 1 - Park A	Stage 1 - Graceful Bvd	Stage 1 - Pink Species	Stage 1 - LAD 29	Stage 2 Streetscape	Marmion Ave & Entry	Stage 3 & 4	Stage 5 & 6 - Graceful Bvd	Stage 7 - Graceful Bvd	Stage 10 - Park U + Streetscape (Fairy Pde)	Stage 7 - Park F	Stage 11 - Parks B2&C	Streetscapes - Providence Dr & Leatherback Blvd	Leatherback Four Packs	Marmion Avenue Entry Threshold	Streetscape around SIC II & Park G
Year Entered			2013	2013	2013	2012	2013	2013	2013	2013	2014	2014	2014	2014	2015	2017	2015	2015	2017
Greenstock Report			<u>2</u>	<u>1</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>4</u>	<u>8</u>	<u>7</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>14</u>	<u>15</u>	<u>17</u>	<u>13</u>	<u>16</u>	<u>18</u>
TREES																			
<i>Agonis flexuosa</i>	WA Peppermint	Y	6	9						1		10	58	46	71	89			5
<i>Allocasuarina fraseriana</i>	Common Sheoak	N						4											13
<i>Allocasuarina littoralis</i>	Black Sheoak / River Black Oak	N											9						23
<i>Angophora costata</i>	Smooth Barked Apple	N																	
<i>Araucaria columnaris</i>	Cook Island Pine	N																	0
<i>Araucaria heterophylla</i>	Norfolk Island Pine	Y	13	6	3					10				2					34
<i>Banksia ashbyi</i>	Ashby's Banksia	Y												1155					1155
<i>Banksia attenuata</i>	Candlestick (Biara) Banksia	Y												29					29
<i>Banksia grandis</i>	Bull Banksia	Y												19					19
<i>Banksia integrifolia</i>	Coast Banksia	N												19					19
<i>Banksia menziesii</i>	Firewood Banksia	Y				54													876
<i>Banksia prionotes dwarf</i>	Dwarf Acorn Banksia	Y								82									82
<i>Banksia sessilis</i>	Parrot Bush	Y																	0
<i>Callitris preissii</i>	Cypress Pine	Y	8											47	91				146
<i>Callistemon Kings Park Special</i>	Bottlebrush	Y													37				37
<i>Casuarina equisetifolia</i>	Horse Tail Sheoak	N	111	27				79	38				53			111			23
<i>Casuarina obesa</i>	Swamp Sheoak	N		5	90							23		26	29				173
<i>Casuarina fraseriana</i>	Weeping Beach Sheoak	N												23					23
<i>Corymbia calophylla</i>	Marri	Y											23						23
<i>Corymbia ficifolia</i>	Red Flowering gum	Y																	0
<i>Corymbia maculata</i> #	Spotted gum	Y	20		9				2		8			19	63	92			213
<i>Erithrina indica</i>	Coral Tree	N														38			13
<i>Eucalyptus marginata</i>	Jarra	Y																	0
<i>Eucalyptus gomphocephala</i>	Tuart	Y	3	3	83				4	6	6	13	55						185
<i>Eucalyptus sideroxylon</i>	Ironbark	N			33							8							13
<i>Eucalyptus todtiana</i>	Coastal Blackbutt	Y															9		9
<i>Eucalyptus utilis</i>	Coastal Moort	N	5		7				6		10		17						5
<i>Eucalyptus victrix</i>	Coolibar	N												9					9
<i>Ficus macrophylla</i>	Morton Bay Fig	Y	3																3
<i>Hakea laurina</i>	Pincusion Haekea	Y								14					40				54
<i>Liquidambar styraciflua</i>	Liquidambar	Y												8	10				18
<i>Macadamia integrifolia</i>	Macadamia	Y												15					15
<i>Macrozamia riedlei</i>	Zamia palm	N																	48
<i>Melaleuca armillaris</i>	Bracelet Honey Myrtle	N													28				28
<i>Melaleuca lanceolata</i>	Rottnest Island Tea	N	21											29	2		10		62
<i>Melaleuca quinquenervia</i>	Broad-leaved	N	11	13	43						8		27	8	18				128
<i>Melaleuca preissiana</i>	Swamp Tea Tree	N											14	24					38
<i>Morus pendula alba</i>	Mulberry	N	1																1
<i>Metrosideros thomasi</i>	New Zealand Christmas	N									17								17
<i>Olea europaea</i>	Olive	N									5								5
<i>Phoenix canariensis</i>	Canary Island date palm	N																	3
<i>Robinia pseudoacacia</i>	Black Locust	N																	0
<i>Santalum acuminatum</i>	Native Peach (Quandong)	N																	0
<i>Tipuana Tipu</i>	Tipuana	Y				49					8			14					71
<i>Xanthorrhoea preissii</i>	Grass tree	Y												20	85				105
SHRUBS																			
<i>Acacia cyclops</i>	Western Coastal Wattle	N																	0
<i>Acacia drummondii</i>		N	116																116

SUMMARY
(Planted to Date)

Total - shrubs and trees only (Public Realm)	Primary Feeding Plants for CBC's (Trees and Shrubs)
295	295

17	
9	
23	
0	
34	34
1155	1155
29	29
19	19
19	
930	930
82	82
0	0
146	146
37	37
442	
173	
23	
23	23
0	0
213	213
51	
0	0
185	185
54	
9	9
50	
9	
3	3
54	54
18	18
15	15
48	
28	
62	
128	
38	
1	
17	
5	
3	
0	
0	
71	71
105	105
0	
116	

Botanical Name	Common Name	Primary Feeding Plants for CBCs*#	Stage 1 - Park B	Stage 1 - Park A	Stage 1 - Graceful Bvd	Stage 1 - Pink Species	Stage 1 - LAD 29	Stage 2 Streetscape	Marmion Ave & Entry	Stage 3 & 4	Stage 5 & 6 - Graceful Bvd	Stage 7 - Graceful Bvd	Stage 10 - Park U + Streetscape (Fairy Pde)	Stage 7 - Park F	Stage 11 - Parks B2&C	Streetscapes - Providence Dr & Leatherback Blvd	Leatherback Four Packs	Marmion Avenue Entry Threshold	Streetscape around SIC II & Park G	Total - shrubs and trees only (Public Realm)	Primary Feeding Plants for CBC's (Trees and Shrubs)
<i>Acacia lasiocarpa</i>		N		142	976						102			784	2,226	443			709	5382	
<i>Acacia littorea</i>		N																		0	
<i>Acacia saligna prostrate</i>	Dwarf Orange Wattle	Y											1682				63			1745	1745
<i>Acanthocarpus preisii</i>		N												374	605					979	
<i>Agonis flexuosa nana</i>	Dwarf WA Peppermint	Y								122			2362							2484	2484
<i>Alyogyne 'Blue Heeler'</i>	Native Hibiscus	N			174															174	
<i>Alyogyne 'Mellissa Anne'</i>	Lilac Hibiscus	N						360												360	
<i>Anigozanthos rufus 'Big Red'</i>	Red Kangaroo Paw	N											428	10						438	
<i>Anigozanthos 'Yellow Gem'</i>	Yellow Kangaroo Paw	N	142		160		100			138			252							792	
<i>Anigozanthos flavidus 'Red'</i>		N			135															135	
<i>Atriplex cinerea</i>	Coast Saltbush	N	278											1249	2,379					3906	
<i>Atriplex isatidea</i>		N																		0	
<i>Atriplex nummularia</i>		N								224										224	
<i>Baeckea virgata nana</i>		N										274								274	
<i>Banksia ashbyi dwarf</i>	Dwarf Ashby's Banksia	Y											382		779					1161	1161
<i>Banksia dallanneyi</i>	Couch Honeypot	Y																		0	0
<i>Banksia hookeriana</i>	Hookers Banksia	Y								130										130	130
<i>Banksia nivea</i>	Dryandra	Y								251			1155							1406	1406
<i>Boronia crenulata 'Pink Passion'</i>	Boronia	N	69								60									129	
<i>Chorizema cordatum</i>	Pea	N												374						374	
<i>Chorizema varium</i>	Limestone Pea	N											384							384	
<i>Callistemon salignus 'Great Balls of Fire'</i>	Bottlebrush	N			359	192														551	
<i>Callistemon citinus 'Little John'</i>	Little John Bottlebrush	N			1445			464	377	863	908	3490								7547	
<i>Callistemon viminalis</i>	Red Bottlebrush	Y																		0	0
<i>Callistemon viminalis 'Matthew Flinders'</i>	Bottlebrush	Y								172	590									762	762
<i>Calothamnus quadrifidus</i>	Onse Sided Bottle Brush	N	337	251		95								2179	1,718		162			4742	
<i>Chamelaucium uncinatum 'My sweet 16'</i>	Wax	N			926									326						1252	
<i>Chamelaucium uncinatum</i>	Geraldton Wax	N						236												1214	978
<i>Conospermum stoechadis</i>		N													723					723	
<i>Eutaxia obovata nana</i>		N		113																113	
<i>Eremophila glabra 'Amber Carpet'</i>	Tar Bush	Y			869							2428								3297	3297
<i>Eremophila glabra 'Silver Flame'</i>	Tar Bush	Y																		0	0
<i>Eremophila glabra</i>	Tar Bush	Y													898		101			3040	3040
<i>Eremophila glabra 'Kalbarri Carpet'</i>	Tar Bush	Y		234	2002			554	319	1482	274			326		478				5669	5669
<i>Eremophila glabra 'Silver Flame'</i>	Silver Flame Tar Bush	Y		63																63	63
<i>Eremophila glabra 'Green & Gold'</i>	Tar Bush	Y								102										102	102
<i>Eremophila maculata 'Lemon Delight'</i>	Tar Bush	N															81			81	
<i>Eremophila nivea 'Spring Mist'</i>	Emu Bush	N	218	90	135					42	193	104		784						1597	
<i>Gastrolobium capitatum</i>		N													334					334	
<i>Grevillea bipinnatifida</i>	Fuschia Grevillea	Y																		0	0
<i>Grevillea crithmifolia</i>	Grevillea prostrate	N		14	1658			97	1155	1230	449	104	222	2020		453				8852	1,450
<i>Grevillea thelemanniana 'Gilt Dragon'</i>	Guilt Dragon Grevillea	N	116																	116	
<i>Grevillea thelemanniana 'Red Lantern'</i>	Red Lantern Grevillea	N			218															218	
<i>Grevillea 'Robyn Gordon'</i>		N											1420							1420	
<i>Grevillea 'Ella Bella'</i>		N											2362		3,980					6342	
<i>Grevillea obtusifolia</i>	Gin Gin Gem'	N	664	220	883			15		539		274	1057	326	933					5257	346
<i>Grevillia olivacea</i>		N			174								2362				465			3001	
<i>Grevillea preissii</i>		N														948				2058	1,110
<i>Grevillea preissii</i>	Mini Marvel'	N														265				265	
<i>Grevillia thelemanniana</i>		N																		346	346
<i>Grevillia thelemanniana</i>		N												968	494		162			1624	
<i>Hardenbergia 'Meema'</i>	Native Wisteria	N				256			465									1,829		2550	
<i>Hardenbergia 'Purple Spray'</i>	Native Wisteria	N							410											410	
<i>Hibbertia aurea</i>		N													54					54	
<i>Hibbertia hypericoides</i>	Yellow Buttercup	N													54					54	

Botanical Name	Common Name	Primary Feeding Plants for CBCs [#]	Stage 1 - Park B	Stage 1 - Park A	Stage 1 - Graceful Bvd	Stage 1 - Pink Species	Stage 1 - LAD 29	Stage 2 Streetscape	Marmion Ave & Entry	Stage 3 & 4	Stage 5 & 6 - Graceful Bvd	Stage 7 - Graceful Bvd	Stage 10 - Park U + Streetscape (Fairy Pde)	Stage 7 - Park F	Stage 11 - Parks B2&C	Streetscapes - Providence Dr & Leatherback Blvd	Leatherback Four Packs	Marmion Avenue Entry Threshold	Streetscape around SIC II & Park G
<i>Hibbertia subvaginata</i>		N													1,267				
<i>Hibbertia racemosa</i>		N												759	54				
<i>Hibbertia spicata</i>		N												386					
<i>Hakea huegelii</i>		N													54				
<i>Hakea lissocarpa</i>	Honeybush	Y											1674						
<i>Hakea trifurcata</i>	Two Leaved Hakea	Y												374	605				
<i>Hakea varia</i>	Variable Leaved Hakea	Y													1,447				
<i>Leucophyta brownii</i>	Cusion Bush	N		220				10	792	422			3562	771	4,605	449			
<i>Leucophyta brownii</i> 'Silver nugget'	Cusion Bush	N																	
<i>Leucophyta brownii</i> 'Canal Rocks'	Canal Rocks Cusion Bush	N		66															
<i>Melaleuca</i> 'Little Nessie'		N			409								2233			635			
<i>Melaleuca pentagona</i> 'Little Penta'		N		70					100										
<i>Melaleuca cuticularis</i>		N													482				
<i>Melaleuca huegelii</i>		N	48	60										1249					862
<i>Melaleuca incana nana</i>		N			410	320			277										
<i>Melaleuca leuropoma</i>		Y																	
<i>Melaleuca linariifolia</i> 'Little Red'	Honey Myrtle , Little Red Honey	N			540	224			464										
<i>Melaleuca megacephala</i>		N													933				
<i>Melaleuca nesophila</i>		N																	62
<i>Melaleuca pulchella</i>		N													1,695				
<i>Melaleuca systena</i> (=Melaleuca acerosa)		N			977									771	752				
<i>Myoporum insulare</i>		N																	
<i>Olearia</i> 'Ghost Town'	Daisy Bush	N	742											784					
<i>Olearia axillaris</i> 'Little Silver'	Daisy Bush	N							554	513						752			1,111
<i>Olearia axillaris</i> 'Little Smokie'	Daisy Bush	N	691												724				
<i>Olearia pannosa</i>	Silver-leaved Daisy	N																	
<i>Pimelia ferruginea</i>		N								406				784	779				2,227
<i>Pimelia magenta mist</i>		N														234			
<i>Rhagodia baccata</i>		N												784	779				978
<i>Rhaphiolepis indica</i> 'Cosmic Pink'		N				64													
<i>Ricinocarpus</i> 'Bridal Star'	Wedding Bush	N			116														
<i>Rosmarinus</i> 'Tuscan Blue'	Rosemary	N								31									
<i>Scaevola nitida</i> 'Aussie Spirit'	Fan Flower	N																500	
<i>Scaevola crassifolia</i>	Fan Flower	N	388								204			1623	3,102	621	126		133
<i>Scaevola nitida</i>	Shining Fanflower	N																	2,227
<i>Spyridium globulosum</i> 'Little'		N												2179					
<i>Templetonia retusa</i>	Cockies Tounges	N			74									374	605				
<i>Thryptomene</i> 'Pink Lace'		N			496						60								
<i>Thryptomene saxicola</i>	'Paynes Hybrid	N			821						193	104							876
<i>Thryptomene saxicola</i>	Supa Nova'	N													1,447				
<i>Thryptomene saxicola</i>	Rock Thryptomene	N																	
<i>Westringia</i> 'Aussi Box	Box Westringa	N								334									512
<i>Westringia</i> 'Bulli Coastal Creeper'	Westringa	N							577						271				
<i>Westringia dampieri</i>	Shore Westringa	N	290		852						449	104		771	1,483		63		
<i>Westringia fruticosa</i>	Coastal rosemary	N														858			
<i>Westringia</i> 'Grey Box'	Grey Westringa	N	31						554										
<i>Westringia fruticosa</i> 'Mundi'	Coastal rosemary	N		173					578									500	
<i>Westringia</i> 'Jervis Gem'		N												784					
<i>Westringia fruticosa</i> 'Seefoam'	Coastal Rosemary	N													779				

Total - shrubs and trees only (Public Realm)	Primary Feeding Plants for CBC's (Trees and Shrubs)
1267	
813	
386	
54	
1674	1674
979	979
1447	1447
10831	
0	
66	
3277	
170	
482	
2219	
1007	
0	0
1228	
933	
62	
1695	
2500	
0	
1526	
2930	
1415	
0	
4196	
234	
2541	
64	
116	
31	
500	
6197	
2227	
2179	
1053	
556	
1994	
1447	
0	
846	
848	
4012	
858	
585	
1251	
784	
779	
4,623	3,423
154,506	23,959
159,129	27,382

Total trees
Total shrubs
Total trees & shrubs

Botanical Name	Common Name	Primary Feeding Plants for CBCs*#	Stage 1 - Park B	Stage 1 - Park A	Stage 1 - Graceful Bvd	Stage 1 - Pink Species	Stage 1 - LAD 29	Stage 2 Streetscape	Marmion Ave & Entry	Stage 3 & 4	Stage 5 & 6 - Graceful Bvd	Stage 7 - Graceful Bvd	Stage 10 - Park U + Streetscape (Fairy Pde)	Stage 7 - Park F	Stage 11 - Parks B2&C	Streetscapes - Providence Dr & Leatherback Blvd	Leatherback Four Packs	Marmion Avenue Entry Threshold	Streetscape around SIC II & Park G	
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Diff to Greenstock report

Total all

Total - shrubs and trees only (Public Realm)	Primary Feeding Plants for CBC's (Trees and Shrubs)
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*Plants for Carnaby's as listed in Groom, C (2011) Plants Used by Carnaby's Black Cockatoo. Department of Environment and Conservation; Birdlife Australia (2012) Carnaby's Black Cockatoo foraging and nesting plant species; Valentine, L & Stock, W (2008) Food Resources of Carnaby's Black Cockatoo in the Gngara Sustainability Study Area. Edith Cowan University.

#Corymbia maculata is considered a roosting tree for CBCs as per the DEC species list. It has still been included in the overall CBC tree count as it is a habitat tree but excluded from the 50% target, which is currently under review.

EPBC cond	
Target:	2,500 <i>habitat trees</i>
Actuals:	3,423
Actuals in %:	137%
Target:	50% <i>of trees & shrubs pri</i>
Actuals:	17%