

DEPARTMENT OF THE ENVIRONMENT AND ENERGY

To: Kim Farrant, Assistant Secretary, Assessments and Waste Branch (for decision)

Proposed Approval Decision Brief (recommendation report) – Mount Gilead Residential Development, Gilead, New South Wales (EPBC 2015/7599)

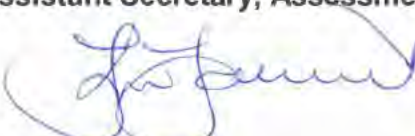
Timing: As soon as possible - statutory timeframe for final decision was 30 October 2018.

Recommendations:

1. Consider the recommendation report at Attachment A.
Considered / please discuss
2. Consider the finalised preliminary documentation at Attachment C.
Considered / please discuss
3. Agree that the recommended decision commencing on page 1 of the recommendation report (Attachment A), and summarised in the table below, reflects your proposed decision.
Agreed / Not agreed
4. Sign the letters at Attachment D to consult with the proponent (who is also the person proposing to take the action) and relevant Commonwealth Ministers on your proposed decision.
Signed / Not signed
5. Agree to not publish the proposed decision at Attachment B on the internet for public comment.
Agreed / Not agreed

Summary of recommendations on each controlling provision:

Controlling Provisions for the action	Recommendation	
	Approve	Refuse to Approve
Listed threatened species and communities (ss 18, 18A)	Approve	

Kim Farrant, Assistant Secretary, Assessments and Waste Branch:
 Comments: 
 Date: 12/11/18

Key points:

1. This brief seeks your consideration of the proposed decision on whether or not to approve the Mount Gilead Residential Development under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Lendlease Communities (Mt Gilead) Pty Ltd (the proponent and also the person proposing to take the action) proposes construction of a residential development including water and sewerage infrastructure, a community centre, a

small kiosk / store, internal roads and two open space and recreation reserves on Lot 3 DP 1218887 and Lot 61 DP 752042 at Gilead, approximately 7 km south of Campbelltown city centre, New South Wales.

2. On 8 January 2016, a delegate of the Minister determined the proposed action to be a controlled action for likely significant impacts on listed threatened species and communities (section 18 and section 18A) and determined the proposed action would be assessed by preliminary documentation.
3. The final preliminary documentation (Attachment C) was received on 30 August 2018. This commenced the approval decision timeframe with a decision due by 30 October 2018.
4. Further information on the assessment process is in the recommendation report (Attachment A).

Potential impacts on protected matters

5. If approved, the proposed action will result in the following impacts:

Shale Sandstone Transition Forest of the Sydney Basin Bioregion – critically endangered (SSTF)	removal of 5.36 hectares and indirect impacts on a further 0.6 hectares
Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest – critically endangered (CPW)	removal of 0.15 hectares and indirect impacts on a further 0.39 hectares
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) (<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)-vulnerable	removal of 10.85 ha and indirect impacts on a further 3.53 hectares
Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>)	removal of 10.85 ha hectares of foraging habitat

6. Impacts from the proposed action are discussed in more detail in the recommendation report at Attachment A.
7. The Department considers the potential impacts on the above protected matters can be addressed through the recommended conditions of approval (Attachment B) and considers that the likely impacts of the proposed action on the above protected matters will not be unacceptable, provided the action is undertaken in accordance with the recommended conditions.

Public consultation

8. The proponent received 24 public comments on the preliminary documentation which raised concerns about: administrative issues surrounding publication of the preliminary documentation and report content, impacts of the proposed action on Matters of National Environmental Significance, adequacy of proposed offsets and other EPBC issues including broader planning issues and cumulative impacts of suburban development on the important local Koala population.
9. The proponent's response to the comments is included in the final preliminary documentation (Attachment C).
10. Subsequent to the public comment period, the Department received submissions from the following conservation groups: Oatley Flora and Fauna Conservation group, EDO on behalf of the International Fund for Animal Welfare (including 5 documents relating to Koala

populations in the Campbelltown area), and the Georges River Environmental Alliance, and individual concerned residents. Concerns of these groups and individuals related to likely impacts on koala populations, proposed offsets, the NSW Biocertification process, cumulative impacts of the proposed development and the legal challenge to the re-zoning of the property currently underway in the NSW Land and Environment Court. The additional information provided was considered by the Department in the recommendation report. In addition to the above groups the Department has received a meeting request from the Sydney based conservation group, the Total Environment Centre (TEC), requesting a meeting to discuss the proposed development, with a meeting proposed for the week ending 16 October 2018.

Internal consultation

11. Line area advice was received from the Threatened species section of the Biodiversity Conservation Division of the Department (Attachment G). The Department has consulted with the Office of Compliance and the Post Approvals Section on the proposed conditions of approval (Attachment H), the Investigation and Intelligence Section on the proponent's environmental history (Attachment I), and the Biodiversity Conservation Division on the relevant statutory documents (Attachment J).

Recommendations

12. The Recommendation Report (Attachment A), prepared in accordance with Section 95C of the EPBC Act, concludes that the proposed action should be approved under section 130(1) and 133 of the EPBC Act subject to the proposed conditions recommended by the Department (see proposed approval notice at Attachment B). This conclusion was reached by having regard to the likely impact of the proposed action for the purposes of each controlling provision and the relevant social and economic considerations under section 136. You are required to have regard to any approved conservation advices in deciding whether or not to approve the proposed action. The approved conservation advices relevant to the action are at Attachment E.
13. If you agree with the Department's recommendation, letters to the proponent and the Department of Defence inviting them to provide comments on your proposed decision are at Attachment D for your signature.
14. Under section 131A of the EPBC Act, you may invite public comment on your proposed decision and any conditions that you are proposing to attach to the approval. The Department considers that adequate consultation has occurred for the proposed action, including on the referral and the preliminary documentation, and that public comment on the proposed decision is not warranted.

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Southern NSW & ACT Assessments Section
Assessments and Waste Branch
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9/11/2018

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ATTACHMENTS

- A: Recommendation report
- B: Proposed approval decision
- C: Finalised preliminary documentation
 - C1 - Mt Gilead PD Response to submissions_v4_27082018.pdf
 - C2 - Mt Gilead BCA report and BC strategy_v11_Final Application 20180702.pdf
 - C3 - Mt Gilead Species list Plots data_v1_01092017.xlsx
 - C4 - Mt Gilead stormwater management and flooding study_Worley Parsons_September 2014.pdf
 - C5 - Concept Open Space Landscape Plans.pdf
 - C6 - Fernhill Central West Biobank Assessment_GHD Feb 2014.pdf
- D: Letters to proponent and the Commonwealth Department of Defence
- E: Conservation advices, recovery plans and threat abatement plans
- F: ERT 11/10/2018
- G: Line area advice from the Threatened species section
- H: Office of Compliance and post approvals comments on draft conditions
- I: Environmental History Check
- J: Species and Policy Check of statutory documents

RECOMMENDATION REPORT

Mount Gilead Residential Development, Gilead, New South Wales (EPBC 2015/7599)

Recommendation

That the proposed action for the construction of a residential development including water and sewerage infrastructure, a community centre, a small kiosk / store, internal roads and two open space and recreation reserves on Lot 3 DP 1218887 and Lot 61 DP 752042 at Gilead, approximately 7 km south of Campbelltown city centre, New South Wales (as described in EPBC Act Referral 2015/7599 received 2 November 2015, and subject to the variations of the action accepted by the Minister under section 156B on 29 May 2017 and 12 April 2018), be approved subject to the following conditions.

Conditions	Relevant paragraph in report
Impacts	
1. The approval holder must ensure that clearing of protected matters within the proposed action area is limited to the area marked as 'development area' in Attachment 1 .	35
Compensation measures	
2. To offset the impacts on 3.3 ha of SSTF and 0.37 ha of CPW , the approval holder must ensure that 8 ha of SSTF and 0.8 ha of CPW is secured within onsite offset areas prior to the commencement of the action .	45-51
3. To offset the impacts on 1.79 ha of SSTF , the approval holder must secure a minimum of 4 ha of SSTF at the Fernhill Central West biobanking site prior to the commencement of the action .	45-51
4. To compensate for impacts on 0.85 ha of SSTF , and 0.17 ha of CPW , not compensated through offsetting through Conditions 2 and Condition 3, the approval holder must submit, for the Minister's approval, an offset strategy in accordance with the EPBC Act environmental offsets policy . The offset strategy must outline how these impacts will be offset in perpetuity. The offset strategy should be submitted at least three months prior to the intended commencement date . The approval holder must not commence the action unless the offset strategy has been approved by the Minister .	45-51
5. To compensate for impacts on Koala and the GHFF the approval holder must submit, for the Minister's approval, an offset strategy in accordance with the EPBC Act environmental offsets policy . The offset strategy must outline how these impacts will be offset in perpetuity. The offset strategy should be submitted at least three months prior to the intended commencement date . The approval holder must not commence the action unless the offset strategy has been approved by the Minister .	68-71, 85-88

	Note: Koala and GHFF strategies may be prepared and submitted separately.	
6.	Within 10 business days of securing the relevant offsets specified in Condition 2 - 5, the approval holder must provide the Department with evidence of when the offsets were secured and what mechanism was used to secure the offsets.	45-51 67-71 85-88
7.	Prior to the commencement of the action , the approval holder must prepare and implement a Koala Management Plan for the proposed action area to the satisfaction of the Minister . This must include provisions for the approval holder to contribute at least \$100,000 each year for five years to fund activities outlined in the plan. The approval holder must provide the Department with evidence of the Koala Recovery Team's endorsement of the Koala Management Plan prior to the commencement of the action .	45-51 67-71 85-88
Construction environmental management plan		
8.	At least three months prior to the commencement of the action , the approval holder must submit a construction environmental management plan (CEMP) for the Minister's approval to avoid and mitigate potential indirect impacts on protected matters in the onsite offset areas and the Council Reserve as a result of construction . If the Minister approves the CEMP, then the approved CEMP must be implemented.	43
9.	The approval holder must not commence the action unless the Minister has approved the CEMP in writing.	43

<p>10. The CEMP must be consistent with the Department's Environmental Management Plan Guidelines, and must include:</p> <ol style="list-style-type: none"> a. The CEMP environmental objectives, relevant to protected matters and a reference to EPBC Act approval conditions to which the CEMP refers; b. A table of commitments made in the CEMP to achieve the objectives, and a reference to where the commitments are detailed in the CEMP; c. Details of the parties responsible for undertaking management actions; d. A description of management actions that will be implemented pre, during and post construction, including for stormwater discharge and road runoff, sediment and erosion control, invasion by exotic species and weeds, and fencing and access; e. Hygiene protocols to minimise the risk of spread of <i>Phytophthora cinnamomi</i>; f. Reporting and review mechanisms, and documentation standards to demonstrate compliance with the CEMP; g. An assessment of risks to achieving the CEMP environmental objectives and risk management strategies that will be applied; h. Impact avoidance, mitigation and/or repair measures, and their timing; and i. A monitoring program, which must include: <ol style="list-style-type: none"> i. measurable performance indicators; ii. trigger values for corrective actions; iii. the timing and frequency of monitoring to detect changes in the performance indicators and timely detection of trigger values; and iv. proposed corrective actions, if trigger values are reached. 	43
Vegetation management plan	
<p>11. At least three months prior to the commencement of the action, the approval holder must submit a vegetation management plan for the protection of protected matters in the Council Reserve, for the Minister's approval. If the Minister approves the vegetation management plan, then the approved vegetation management plan must be implemented.</p>	44
<p>12. The approval holder must not commence the action unless the Minister has approved the vegetation management plan in writing.</p>	44

<p>13. The vegetation management plan must be consistent with the Department's Environmental Management Plan Guidelines, and must include:</p> <ul style="list-style-type: none"> a. The vegetation management plan environmental objectives, relevant to protected matters and a reference to EPBC Act approval conditions; b. A table of commitments made in the vegetation management plan to achieve the objectives, and a reference to where the commitments are detailed in the vegetation management plan; c. Details of the parties responsible for undertaking management actions; d. Reporting and review mechanisms, and documentation standards to demonstrate compliance with the vegetation management plan; e. An assessment of risks to achieving the vegetation management plan environmental objectives and risk management strategies that will be applied; f. Impact avoidance, mitigation and/or repair measures, and their timing; and g. A monitoring program, which must include: <ul style="list-style-type: none"> i. measurable performance indicators; ii. trigger values for corrective actions; iii. the timing and frequency of monitoring to detect changes in the performance indicators and trigger values; and iv. proposed corrective actions, if trigger values are reached. 	44
Notification of date of commencement of the action	
<p>14. The approval holder must notify the Department in writing of the date of commencement of the action and the date of commencement of each stage of the action within 10 business days after the date of commencement of the action or the relevant stage of the action.</p>	Standard condition
<p>15. If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister.</p>	Standard condition
Compliance records	
<p>16. The approval holder must maintain accurate and complete compliance records.</p>	Standard condition
<p>17. If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.</p> <p>Note: Compliance records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the Department's website or through the general media.</p>	Standard condition

Preparation and publication of plans	
<p>18. The approval holder must:</p> <ul style="list-style-type: none"> a. submit plans electronically to the Department for approval by the Minister; b. publish each plan on the website within 20 business days of the date the plan is approved by the Minister or of the date a revised action management plan is submitted to the Minister, unless otherwise agreed to in writing by the Minister; c. exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public; and d. keep plans published on the website until the end date of this approval. 	Standard condition
Annual compliance reporting	
<p>19. The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. The approval holder must:</p> <ul style="list-style-type: none"> a. publish each compliance report on the website within 60 business days following the relevant 12 month period; b. notify the Department by email that a compliance report has been published on the website within five business days of the date of publication; c. keep all compliance reports publicly available on the website until this approval expires; d. exclude or redact sensitive ecological data from compliance reports published on the website; and e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication. <p>Note: Compliance reports may be published on the Department's website.</p>	Standard condition
Reporting non-compliance	
<p>20. The approval holder must notify the Department in writing of any: incident; non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify:</p> <ul style="list-style-type: none"> a. the condition which is or may be in breach; and b. a short description of the incident and/or non-compliance. 	Standard condition

<p>21. The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying:</p> <ul style="list-style-type: none"> a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future; b. the potential impacts of the incident or non-compliance; and c. the method and timing of any remedial action that will be undertaken by the approval holder. 	Standard condition
Independent audit	
<p>22. The approval holder must ensure that independent audits of compliance with the conditions are conducted as requested in writing by the Minister.</p>	Standard condition
<p>23. For each independent audit, the approval holder must:</p> <ul style="list-style-type: none"> a. provide the name and qualifications of the independent auditor and the draft audit criteria to the Department; b. only commence the independent audit once the audit criteria have been approved in writing by the Department; and c. submit an audit report to the Department within the timeframe specified in the approved audit criteria. 	Standard condition
<p>24. The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval.</p>	Standard condition
Revision of action management plans	
<p>25. The approval holder may, at any time, apply to the Minister for a variation to an action management plan approved by the Minister under condition 9 or condition 12, or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.</p>	Standard condition
<p>26. The approval holder may choose to revise an action management plan approved by the Minister under condition 9 or condition 12, or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the RAMP would not be likely to have a new or increased impact.</p>	Standard condition

<p>27. If the approval holder makes the choice under condition 26 to revise an action management plan without submitting it for approval, the approval holder must:</p> <ol style="list-style-type: none"> a. notify the Department in writing that the approved action management plan has been revised and provide the Department with: <ol style="list-style-type: none"> i. an electronic copy of the RAMP; ii. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP; iii. an explanation of the differences between the approved action management plan and the RAMP; iv. the reasons the approval holder considers that taking the action in accordance with the RAMP would not be likely to have a new or increased impact; and v. written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 business days after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the Department. b. subject to condition 29, implement the RAMP from the RAMP implementation date. 	Standard condition
<p>28. The approval holder may revoke its choice to implement a RAMP under condition 26 at any time by giving written notice to the Department. If the approval holder revokes the choice under condition 26, the approval holder must implement the previous action management plan approved by the Minister.</p>	Standard condition
<p>29. If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the RAMP would be likely to have a new or increased impact, then:</p> <ol style="list-style-type: none"> a. condition 26 does not apply, or ceases to apply, in relation to the RAMP; and b. the approval holder must implement the action management plan specified by the Minister in the notice. 	Standard condition
<p>30. At the time of giving the notice under condition 29, the Minister may also notify that for a specified period of time, condition 26 does not apply for one or more specified action management plans.</p> <p>Note: conditions 28, 29, 30 and 31 are not intended to limit the operation of section 143A of the EPBC Act which allows the approval holder to submit a revised action management plan, at any time, to the Minister for approval.</p>	Standard condition

Completion of the action	
31. Within 30 days after the completion of the action , the approval holder must notify the Department in writing and provide completion data .	Standard condition
Definitions	
<p>32. In these conditions, except where contrary intention is expressed, the following definitions are used:</p> <ul style="list-style-type: none"> a. BioBanking – the New South Wales Government’s biodiversity credit and offset scheme of that name created under the <i>Threatened Species Conservation Act 1995 (NSW)</i>, as amended and repealed or an equivalent scheme under a successor mechanism under the Biodiversity Conservation Act 2016 (NSW). b. Business days means a day that is not a Saturday, a Sunday or a public holiday in New South Wales. c. Cleared means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of SSTF or CPW. d. Commencement of the action means the first instance of any specified activity associated with the action including clearance of vegetation and construction of any infrastructure. Commencement does not include minor physical disturbance necessary to: <ul style="list-style-type: none"> i. undertake pre-clearance surveys or monitoring programs; ii. install signage and /or temporary fencing to prevent unapproved use of the proposed action area; and iii. protect environmental and property assets from fire, weeds and pests, including erection or construction of fencing and signage, and maintenance or use of existing surface access tracks, if agreed in writing by the Department. e. Completion data means an environmental report and spatial data information clearly detailing how the conditions of this approval have been met. The Department’s preferred spatial data format is ESRI shapefile, including containing '.shp', '.shx' and '.dbf' files and other files capturing attributes including at least the EPBC reference and a '.prj' file or specification of the projection/geographic coordinate system used. f. Completion of the action means the time at which all approved conditions (except condition 31) have been fully met. g. Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder’s possession or that are within the approval holder’s power to obtain lawfully; 	Standard condition

- h. **Compliance reports** means written reports:
- i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
 - ii. consistent with the **Department's Annual Compliance Report Guidelines (2014)**
 - iii. include a shapefile of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and
 - iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.
- i. **Construction** means the creation and development of services (sewerage, electricity, water, stormwater), the use of heavy equipment for the purposes of breaking ground for buildings or infrastructure, and the building of infrastructure associated with the action. This does not include preparatory works such as the erection of signage or temporary fencing.
- j. **Council reserve** means the area designated as '**Council Reserve (Proposed Biobanking Site)**' on the map at **Attachment 4**.
- k. **CPW** means the Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest ecological community listed as critically endangered under the EPBC Act and shown on the map at **Attachment 2**.
- l. **Department** means the Australian Government agency responsible for administering the **EPBC Act**.
- m. **EPBC Act** means the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.
- n. **EPBC Act environmental offset policy** means the document: Department of Sustainability, Environment, Water, Population and Communities (2012). *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy*. Commonwealth of Australia, Canberra.
- o. **Evidence** means documentation from the relevant authority showing that the offset has been **secured**.
- p. **Fernhill Central West biobanking site** means the area designated as 'Offset (4 ha)' in the map at **Attachment 5**.
- q. **Grey-headed Flying-fox** means *Pteropus poliocephalus* listed as vulnerable under the **EPBC Act**, within habitat shown on the map at **Attachment 3**
- r. **Impact/ Impacted** means any measureable direct or indirect disturbance/change that occurs as a result of any activity associated with the proposed action.

- s. **Incident** means any event which has the potential to, or does, **impact** on **protected matters**.
- t. **Independent audit**: means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines* (2015).
- u. **like-for-like credits** has the meaning given under the *Threatened Species Conservation Act 1995* (NSW) (now repealed), or an equivalent biodiversity offsetting mechanism under the *Biodiversity Conservation Act 2016* (NSW) and includes the **retirement** of credits from the following plant community types:
- SSTF (Shale Sandstone Transition Forest in the Sydney Basin Bioregion)**
- i. *Narrow-leaved Ironbark – Broad-leaved Ironbark – Grey Gum open forest of the edges of the Cumberland Plain, Sydney Basin Bioregion*
 - ii. *Broad-leaved Ironbark – Melaleuca decora shrubby open forest on clay soils of the Cumberland Plain, Sydney Basin Bioregion*
 - iii. *Turpentine – Grey Ironbark open forest on shale in the lower Blue Mountains, Sydney Basin Bioregion.*
- CPW (Cumberland Plain Woodland)**
- i. *Shale Hills Woodland*
 - ii. *Cumberland Shale Hills Woodland*
 - iii. *Grey Box-Forest Red Gum grassy woodland on shale of the southern Cumberland Plain, Sydney Basin*
- v. **Koala** means the combined populations of Queensland, New South Wales and the Australian Capital Territory) (*Phascolarctos cinereus* (combined populations of Qld, NSW and the ACT) listed as vulnerable under the **EPBC Act** within habitat shown on the map at **Attachment 3**.
- w. **Minister** means the Australian Government Minister administering the EPBC Act including any delegate thereof.
- x. **New or increased impact** means a new or increased environmental **impact** or risk relating to any **protected matter**, when compared to the likely **impact** of implementing the action management plan that has been approved by the **Minister** under condition 9 or condition 12, including any subsequent revisions approved by the **Minister**, as outlined in the *Guidance on 'New or Increased Impact' relating to changes to approved management plans under EPBC Act environmental approvals* (2017).

- y. **Offset attributes** – mean an '.xls' file capturing relevant attributes of the offset site, including the **EPBC Act** reference ID number, the physical address of the offset site, coordinates of the boundary points in decimal degrees, the **EPBC Act protected matters** that the offset compensates for, any additional **EPBC Act protected matters** that are benefiting from the offset, and the size of the offset in hectares.
- z. **Onsite offset areas** means the area designated 'Proposed BioBank Sites (Applications Submitted)' at **Attachment 4**.
- aa. **Plan(s)** means any of the documents required to be prepared, approved by the **Minister**, and/or implemented by the approval holder and published on the **website** in accordance with these conditions (includes action management plans and/or strategies).
- bb. **Proposed action area** means the area designated as 'Study Area' on the map at **Attachment 1**.
- cc. **Protected matter(s)** means **protected fauna** and other matters protected by Part 3 of the EPBC Act, including **SSTF** and **CPW**.
- dd. **Retirement** means a change in the status of a credit such that the credit can no longer be bought or sold.
- ee. **Shapefiles** – means an ESRI Shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes of the offset site, including the shape, EPBC Act reference ID number and **protected matters** present at the relevant site. **Shapefile** files must also include either a '.prj' file or specification of the projection/geographic coordinate system used.
- i. Attributes should also be captured in '.xls' format.
- ff. **Secure/secured** means long-term protection under a legal mechanism that is either:
- i. **retirement** of sufficient **like-for-like credits** in accordance with the New South Wales Government's **BioBanking Scheme** created under the *Threatened Species Conservation Act 1995* (NSW), as amended and repealed or an equivalent biodiversity offsetting mechanism under the *Biodiversity Conservation Act 2016* (NSW);
OR
- ii. another legal mechanism that has been endorsed in writing by the **Minister**.
- gg. **Sensitive ecological data** means data as defined in the Australian Government Department of the Environment (2016) Sensitive Ecological Data – Access and Management Policy V1.0.
- hh. **Successor mechanism** - any biodiversity offsetting mechanism legislated and implemented by the New South Wales Government to

replace, or as a successor to, BioBanking. Such a mechanism is only acceptable for the purposes of this approval if it:

- i. is included in a bilateral agreement under the EPBC Act (either referenced directly in the agreement, or as part of a wider process that is adopted in a bilateral agreement) OR
 - ii. has been agreed by the Department in writing to the approval holder or the title holder as being an appropriate successor mechanism.
- ii. **SSTF** means the Shale Sandstone Transition Forest of the Sydney Basin Bioregion ecological community listed as critically endangered under the **EPBC Act** and Act and shown on the map at **Attachment 2**.
- jj. **Suitably qualified person** means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.
- kk. **website** means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

ATTACHMENTS

Attachment 1 – Map showing proposed action area

Attachment 2 – Map showing the extent of SSTF (Dark green) and CPW (Dark orange) within the proposed action area. Impacted areas are those areas outside the green lines.

Attachment 3 – Map showing the extent of Koala and Grey-headed Flying Fox habitat within the proposed action area

Attachment 4 – Map showing onsite offset areas and Council Reserve (Proposed BioBank site)

Attachment 5 – Map of Fernhill Central West biobanking site

Background

Description of the project and location

1. Lendlease Communities (Mt Gilead) Pty Ltd (ACN 605 278 331) propose a residential development of Lot 3 DP12188867, part Lot 2 DP 807555 and Lot 61 DP 75042 at Gilead, NSW. The proposed action includes:
 - a. clearing of remnant vegetation
 - b. subdivision of land into 1700 lot
 - c. establishment of an Asset Protection Zone (APZ) in the form of a perimeter road and building set backs
 - d. construction of residential dwellings, a community centre and store or kiosk and associated infrastructure including roads, stormwater detention basins, water, sewer and electrical supply infrastructure and recreational areas
 - e. retention of 22.53 hectares (ha) of remnant vegetation within three proposed BioBank sites (Figure 1)
2. The proposed action area is approximately 208.9 ha and the total disturbance footprint of the proposed development is 168.74 ha. Under the Campbelltown Local Environmental Plan (CLEP 2015) the majority of the site is zoned as Low Density Residential (R2), Public Recreation (RE1), Rural Landscape (RU2), Special Infrastructure (SP2) and Neighbourhood Centre (B1).
3. The proposed action area is a part of the Mt Gilead grazing property. The majority of the area has been previously cleared for grazing, with approximately 31.99 ha classified as remnant vegetation and scattered paddock trees. The preliminary documentation states that the long history of grazing, pasture improvement and weed invasion has fragmented and modified vegetation in the proposed action area.
4. The proposed action area is located within the Campbelltown Local Government Area (LGA), 7 kilometres (km) south of Campbelltown and approximately 56 km south-west of the Sydney Central Business District (Figure 2).
5. Immediately to the north of the proposed action area is the Campbelltown City Council Noorumba Biobank site, beyond which is the low density urban area of Rosemeadow. To the south of the proposed action area is the Beulah Biobank site and to the east Appin Road, and then the Georges River and Dharawal National Park. The Mount Gilead property extends to the west beyond the proposed development.
6. Although not included as part of the proposed action, the proponent is also supporting a major upgrade of the Appin Road from 2 to 6 lanes by NSW Roads and Maritime Services (RMS). The preliminary documentation states that the Appin Road upgrade does not require assessment under Part 9 of the EPBC Act as it falls into the category of works covered under the Strategic Assessment between the Commonwealth Minister for the Environment and the NSW Roads and Maritime Services. Under this agreement, the majority of actions which encompass road and traffic management works assessed and determined by RMS under Part 5 of the NSW EP&A Act are endorsed under "the Program" (*Program Report – Environmental assessment and decision making by NSW Roads and Maritime Services Assessment under Part 10 of the Commonwealth EPBC Act, May 2015*). The endorsement of "the Program" removes the need for referral (and assessment/approval) under the EPBC Act for such works.



Figure 1: Proposed development layout



Figure 2: Proposed action area (red line)

Controlling provisions, assessment approach and public consultation

7. The proposal was referred to the Department on 2 November 2015 and public comments were invited until 16 November 2015. Two public submissions were received.
8. The proposal was determined to be a controlled action on 8 January 2016 due to likely significant impacts on listed threatened species and communities (sections 18 and 18a of the EPBC Act). On the same date, the delegate determined the proposed action would be assessed on preliminary documentation.
9. On 12 February 2016, the Department wrote to the proponent requesting further information.
10. The proposed action was varied on 29 May 2017 to incorporate an additional 34 ha of adjacent land (Lot 61 DP 75042). The variation expanded the maximum lot yield from 1300 to 1700 lots. The action was again varied on 12 April 2018 to correct the DP number of Lot 61 DP 75042.
11. On 11 December 2017, the proponent submitted preliminary documentation which satisfied the requirements of the request for information, following review and revision of earlier drafts.
12. On 13 December 2017 the delegate of the Minister directed the proponent to publish the preliminary documentation and invite public comment for a minimum of 20 business days. The proponent voluntarily extended the period for a total of 30 business days in response to stakeholder concerns about access to the documents, the complexity of the material and the time available to comment. The draft preliminary documentation was exhibited for comment from 20 December 2017 to 2 February 2018.
13. During this period, 24 submissions were made on the draft preliminary documentation. The submissions raised the following issues:
 - Administrative issues surrounding timing of the exhibition of the Preliminary documentation, problems with accessing documents, non-inclusion of original referral information and the validity of the referral and report content.
 - Concern regarding impacts of the proposed action on threatened species and communities and migratory species and specifically the Koala, Grey-headed flying Fox, the Large-eared Pied Bat/ Micro Bats, Swift Parrot, Critically Endangered Ecological Communities and the Cattle Egret.
 - Concern about the adequacy and appropriateness of proposed offsets.
 - Other issues including concerns about planning for the Greater Macarthur Growth Area, concern about cumulative impacts of the proposed action as well as development of future blocks of land adjacent to the Mt Gilead site (also owned by Lendlease) and the upgrade of Appin Road.
 - Concern about the lack of infrastructure in the area including schools, train lines, hospitals.
 - Concern about heritage and agricultural values at Mt Gilead.
14. Cost recovery fees for Stages 3 and 4 were paid on 8 January 2018 and 18 January 2018 respectively.

15. On 30 August 2018, the final preliminary documentation, addressing submissions, was received by the Department. This notification started the 40 business day statutory timeframe for decision, with the decision due on 30 October 2018.
16. The finalised preliminary documentation was subsequently published for information only, for 10 business days from 5 September 2018 (Attachment C¹).
17. The Department met with the proponent on the 15 August 2018 to discuss the calculations of indirect impacts associated with the proposed action on threatened ecological communities included in the preliminary documentation. The proponent subsequently submitted additional information on the 30 August 2018 to substantiate minor reductions in impacts to these communities (Attachment C7).
18. Subsequent to the public comment period, the Department received submissions from the following conservation groups: Oatley Flora and Fauna Conservation group, EDO on behalf of the International Fund for Animal Welfare (including 5 documents relating to Koala populations in the Campbelltown area), and the Georges River Environmental Alliance. All three groups also submitted comments during the preliminary documentation public comment period. Concerns of these groups related to likely impacts on koala populations, in particular connectivity between two populations, proposed offsets, Cumulative impacts, Challenge to the re-zoning that underpins the Mt Gilead Development in the NSW Land and Environment Court. The additional information provided was considered by the Department in this recommendation report.

State Assessment and Approval

19. On 29 November 2017, Campbelltown City Council and the proponent applied for the proposed action area to be biocertified under section 126N of the *Threatened Species Conservation Act 1995* (NSW). The stated purpose of Biocertification is:
Biodiversity certification offers planning authorities a streamlined biodiversity assessment process for areas marked for development at the strategic planning stage. The process identifies areas of high conservation value at a landscape scale. These areas can be avoided and protected while identifying areas suitable for development. Biodiversity certification offers a range of secure options for offsetting impacts on biodiversity.

<http://www.environment.nsw.gov.au/biocertification/>
20. As part of the Biocertification process, the draft Mt Gilead Biodiversity Certification Assessment Report & Biocertification Strategy was exhibited for public comment for 30 days until 31 January 2018.
21. The preliminary documentation states that the application for Biocertification was submitted to the NSW Minister for the Environment for final determination in July 2018.
22. Approval for the proposed action will be required from the Campbelltown City Council under Part 4 of the New South Wales Environmental Planning and Assessment Act 1979 (EP&A Act). The preliminary documentation states that once the NSW government accepts the Biocertification report for the proposed action, biodiversity matters are not required to be considered by the proponent in its development application to Campbelltown City Council for residential development in the proposed action area.

¹ Attachments as listed are attachments to the proposed approval decision brief for EPBC 2015/7599.

Assessment

Mandatory Considerations – section 136(1)(a) Part 3 controlling provisions

23. The proposal was determined a controlled action under the following controlling provision of the EPBC Act:

- Listed threatened species and ecological communities (sections 18 and 18A).

This controlling provision is discussed below.

Listed threatened species and ecological communities (sections 18 and 18A)

24. The Department's Environment Reporting Tool (ERT) of 11 October 2018 identified a total of 35 threatened species and 5 ecological communities that are known to, likely to, or may occur within 5 km of the proposed action area (see Attachment F).

25. Based on the location of the action and likely habitat present in the proposed action area and the information provided in the preliminary documentation, the Department considers impacts potentially arise to the following matters:

- Shale Sandstone Transition Forest of the Sydney Basin Bioregion (SSTF) – critically endangered
- Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest (CPW) – critically endangered
- Koala (*Phascolarctos cinereus*) – vulnerable
- Swift Parrot (*Lathamus discolor*) – endangered
- Grey-headed Flying-fox (*Pteropus poliocephalus*) – vulnerable
- Large-eared Pied Bat (*Chalinolobus dwyeri*) – vulnerable

26. The delegate also considered that impacts may also potentially arise for suitable habitat for the listed Bynoe's Wattle (*Acacia bynoeana*) – vulnerable, Yellow Gnat-orchid (*Genoplesium baueri*) – endangered, Small-flower Grevillea (*Grevillea parviflora subsp. parviflora*) – vulnerable, Woronora Beard-heath (*Leucopogon exolasius*) – vulnerable, Deane's Melaleuca (*Melaleuca deanei*) – vulnerable, Bargo Geebung (*Persoonia bargoensis*) – vulnerable, Hairy Persoonia (*Persoonia hirsuta*) – endangered, Spiked Rice-flower (*Pimelea spicata*) – endangered, Rufous Pomaderris (*Pomaderris brunnea*) – vulnerable, and Sydney Plains Greenhood (*Pterostylis saxicola*) – endangered.

27. The preliminary documentation notes other matters potentially impacted were considered during the assessment. These matters were either considered not to occur in the proposed action area as suitable habitat was not available or their likelihood of occurrence was low and potential for impact was assessed as unlikely. The Department accepts this conclusion.

Shale Sandstone Transition Forest of the Sydney Basin Bioregion (SSTF) – critically endangered and Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest (CPW) – critically endangered

Description – SSTF

28. SSTF occurs only in the Sydney Basin Bioregion. It occurs around the transition between shale and sandstone substrate soils. The community has undergone a severe decline in

extent, with the total area of occupancy estimated at less than 10,000 ha (2010). What remains is highly fragmented, with the median patch size just 2.8 ha.

29. The *Approved Conservation Advice (including listing advice) for Shale Sandstone Transition Forest of the Sydney Basin Bioregion* states that any areas that meet the listing criteria, or are within a buffer to the community, are considered critical to the survival of the community. The recommended buffer zone to the community is a minimum of 30 m. The Approved Conservation Advice identifies the following as key threatening processes: land clearing; loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants, exotic perennial grasses, vines and scramblers, African Olive and lantana; Predation from foxes, feral cats and competition with rabbits, feral honey bees and noisy miners; and the introduction of the plant diseases 'dieback' (*Phytophthora cinnamomi*) and 'exotic rust fungus' (family Pucciniales).

Description – CPW

30. CPW is limited to the Sydney Basin Bioregion with most occurrences in the Cumberland Sub-region. This covers a geographic area commonly known as the Cumberland Plain, a rain shadow coastal valley to the immediate west of Sydney. This ecological community occurs within the Sydney Metro and Hawkesbury-Nepean Natural Resource Management Regions. In 2009, the ecological community occupied a maximum area of approximately 12 300 ha but is highly fragmented with remnants mostly under 10 ha in size. The SSTF conservation advice states that patches of the community >0.1 ha are considered critical to the survival of the community.
31. The conservation advice for the community identifies the following as key threatening processes: vegetation clearance largely associated with urban development, inappropriate grazing and fire regimes, weed invasion and the low level of protection in reserves.

Occurrence on site

32. To quantify the extent of SSTF and CPW in the proposed action area, the preliminary documentation states the proponent carried out surveys across the proposed action area using a total of 36 20 x 20 m biometric plots. The preliminary documentation notes that vegetation surveys were conducted according to methods outlined in the Biodiversity Assessment Methodology (BBAM). As the BBAM is an endorsed NSW policy, the Department considers the level of survey effort and the methodology to meet the Department's requirements.
33. The preliminary documentation states that field surveys confirmed presence of 17.70 ha of SSTF and 5.2 ha of CPW within the proposed action area (Figure 3, Attachment C).
34. SSTF on site is found in four discrete patches. These patches have connectivity, to each other and to offsite woodlands, through intervening non-SSTF woodland and scattered paddock trees. The condition of the SSTF in the proposed action area is highly variable, ranging from vegetation meeting Condition D (High condition) in the central patch to Condition A (Moderate condition) in the western and southern patches.
35. CPW on site is found in two discrete patches, both located along the northern boundary of the site. Both CPW patches adjoin a large remnant of CPW to the north within the Campbelltown City Council Noorumba BioBank site. The Campbelltown City Council Noorumba BioBank site and the on-site CPW and SSTF, retain connectivity with areas to the south and west through remnant patches and scattered paddock trees in the proposed

action area. The condition of the CPW in the proposed action area is a mix of Condition A and Condition B.

Potential Impacts

36. The preliminary documentation states the proposed action will directly impact 5.36 ha of SSTF and 0.15 ha of CPW through clearing for residential development, bioretention swales and Asset Protection zones (areas of vegetation outside the green lines on Figure 3).



Figure 3 Extent of SSTF (Dark green) and CPW (Dark orange) within the proposed action area. Green lines signify the extent of retained vegetation.

37. The preliminary documentation acknowledges additional indirect impacts to retained SSTF (0.60 ha) and CPW (0.39 ha) in buffer zones around patches of each community through edge effects (Table 1). These may include the introduction of weeds and exotic species, the spread of litter and rubbish, the introduction of domestic animals (cats and dogs), increased disturbance from pedestrian access, runoff from construction containing nutrients, inappropriate water, sewer and stormwater management, recreational use of open space adjacent to offset areas and recreation use of offset areas. The Department requires 30 m buffer zones to minimise edge effects.

Table 1: Area of SSTF and CPW impacted by the proposed action

Component of proposed action	Direct impacts	Indirect impacts	Total
<i>SSTF</i>			
Patch 3	0.23	0.33	0.56
Patch 7	3.59	0.28	3.87
Patch 9	1.54	0	1.54
Total	5.36	0.60	5.96
<i>CPW</i>			
Patch 1	0	0.12	0.12
Patch 8	0.15	0.11	0.26
Offsite impacts	0	0.16	0.16
Total	0.15	0.39	0.54

38. The Department also considers that there is a risk of transfer of disease caused by *Phytophthora cinnamomi* associated with vegetation clearance and construction work on the site.
39. Relevant Threat Abatement Plans (Attachment E2) and Conservation Advice (Attachment E1) for SSTF and CPW include:
- Department of the Environment (2014). *Threat abatement plan for disease in natural ecosystems caused by Phytophthora cinnamomi*. Canberra, ACT: Commonwealth of Australia. Available from: <http://www.environment.gov.au/resource/threat-abatement-plan-disease-natural-ecosystems-caused-phytophthora-cinnamomi>. In effect under the EPBC Act from 31-Jan-2014.
 - Department of the Environment (2014). *Approved Conservation Advice (including listing advice) for Shale Sandstone Transition Forest of the Sydney Basin Bioregion (EC25R)*. Canberra: Department of the Environment. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/146-conservation-advice.pdf>. In effect under the EPBC Act from 16-Dec-2014.
 - Department of the Environment, Water, Heritage and the Arts (2009). *Approved Conservation Advice for Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest ecological community*. Canberra, ACT: Department of the Environment, Water, Heritage and the Arts. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/112-conservation-advice.pdf>. In effect under the EPBC Act from 09-Dec-2009.

The Department considered those documents in preparing this recommendation report.

40. The Threat Abatement Plan for *P. cinnamomi* focuses on preventing the fungus spreading to new areas, as eradication from an area is extremely difficult once the fungus is established. Relevantly, *P. cinnamomi* spreads through transportation of infected soil loads, and through spores attached to construction machinery travelling from site to site. Key prevention methods are therefore site hygiene measures and thorough vehicle cleaning.

Avoidance and Mitigation measures

41. The preliminary documentation states that the proponent has committed to a range of measures to avoid impacts to SSTF and CPW. Measures include:
- a. identification and avoidance of high or higher conservation value areas during the rezoning process (2013-2017) and the creation of a biodiversity overlay to ensure

that these areas were appropriately considered in subsequent development application stages

- b. further refinement and commitments to permanently protect and manage conservation areas through the biocertification assessment and application process.
42. The preliminary documentation states that the proponent proposes to retain 1.89 ha of the central patch of SSTF on site as a 'council reserve'. The preliminary documentation states the site will initially be managed through an agreement with Campbelltown City Council and subsequently registered as a BioBanking site. The preliminary documentation states that ownership of this site will be secured by transferring the land from the proponent to Campbelltown City Council at a future date and classifying the land as 'community land' under the *Local Government Act 1993 (NSW)*. The preliminary documentation also proposes to use this site to compensate for impacts to SSTF arising from the proposed action.
 43. The *EPBC Biodiversity Offsets Policy and Assessment Guide* (EPBC offsets policy and guide) states that direct offsets should be protected in an enduring way and actively managed to maintain or improve the viability of the protected matter, and that the tenure of the offset should be secured for at least the same duration as the impact on the protected matter arising from the action. As the timeframe for registration of council reserve as a BioBank site is unclear, the Department considers that there is uncertainty about the in-perpetuity management of this area and therefore the long-term protection of SSTF retained within this area. Therefore the Department considers that retention of this area cannot be considered as compensation for impacted to SSTF arising from the proposed action.
 44. The proponent has committed to a range of mitigation measures to minimise impacts on retained SSTF and CPW on site through development and implementation of a comprehensive Construction and Environment Management Plan (CEMP). The preliminary documentation (Attachment C) states that the CEMP will include:
 - a. measures to minimise the risks assessed with the introduction of weeds or pathogens.
 - b. temporary and permanent protective fencing around areas of retained vegetation.
 - c. erosion and sediment control measures.
 - d. pre-clearing protocols to minimise potential direct impacts to hollow dependent fauna during tree clearance.
 - e. operational controls including measures to avoid risks associated with litter, lighting controls and waste management controls.

Recommended conditions to further mitigate impacts

45. The Department recommends additional conditions to further minimise impacts to the SSTF and CPW as follows:
 - a. proposed condition 1 limiting the clearing of SSTF and CPW to within the designated development area
 - b. proposed condition 8 requiring the approval holder to submit a construction environmental management plan (CEMP) for the Minister's approval to avoid and

- mitigate potential indirect impacts on protected matters in the onsite offset areas and the Council Reserve as a result of construction
- c. proposed condition 9 requiring the approval holder must not commence the action unless the Minister has approved the CEMP in writing
 - d. proposed condition 10 requiring the CEMP to be consistent with the Department's Environmental Management Plan Guidelines
 - e. proposed condition 11 requiring the approval holder to submit a vegetation management plan for the protection of protected matters in the Council Reserve, for the Minister's approval at least three months prior to the intended commencement of date of the action
 - f. proposed condition 12 requiring the approval holder to not commence the action unless the Minister has approved the vegetation management plan in writing
 - g. proposed condition 13 requiring the vegetation management plan to be consistent with the Department's Environmental Management Plan Guidelines

Offsets

46. The Department considers that despite the effect of the avoidance and mitigation measures discussed above, the direct or indirect impacts to 5.96 ha of SSTF and 0.54 ha of CPW constitutes a residual significant impact that requires compensation in accordance with the EPBC offsets policy and guide or other endorsed offset policy.
47. The proponent has proposed an offset strategy including a combination of onsite and offsite components in their preliminary documentation (refer to section 8 of preliminary documentation at Attachment C and additional information provided by the proponent at Attachment C7). The proponent's offset strategy includes proposals to either compensate for impacts to SSTF and CPW through retirement of Biodiversity credits (calculated using the Biocertification Assessment Methodology, BCAM) or through land based offsets, calculated using the Department's Offset calculator. As the Biocertification Assessment Methodology (BCAM) has not been endorsed under the Bilateral Agreement relating to environmental assessment with NSW, it cannot be used to determine the proponent's offset liabilities associated with the proposed action.
48. *Onsite* The proponent proposes to partially offset impacts to SSTF arising from the proposed action through retention of a large part of the western patch of SSTF and management of this area through the proposed 'Macarthur-Onslow-Mt Gilead Biobank Site'. The proponent proposes to offset all impacts to CPW arising from the proposed action through retention of the north-eastern and north-western patches on site and management of these areas through the proposed 'Noorumba-Mt Gilead Biobank Site'. The preliminary documentation states that the Macarthur-Onslow-Mt Gilead Biobank site and the Noorumba-Mt Gilead Biobank site have not yet been formally registered by the NSW Office of Environment and Heritage (OEH) but that registration is imminent.
49. *Offsite* The proponent proposes to offset the remaining impacts to SSTF, through retirement of Biodiversity credits (equivalent to 4 ha of Condition D SSTF) at the Fernhill Central West BioBank site (Attachment C6). No offsite offsets have been proposed for impacts to CPW.

50. The proponent has used the Department's offset calculator to determine the percentage of impacts to SSTF and CPW offset by each of the proposed onsite and offsite offsets (Table 2).

Table 2: Summary of offset requirements for impacts to SSTF and CPW

Community/Condition class	Proposed offset site	Area of SSTF to be secured as offset (ha)	Area of SSTF impact that offset compensates for (ha)	% of SSTF impact that offset compensates for
SSTF				
Condition A and B (2.1 ha impacted)	Macarthur-Onslow-Mt Gilead Biobank Site	4.2	1.93	92.13
	Further offset area	TBD	0.16	7.9
Subtotal (Cond A and B SSTF)			2.1	100
Condition D (3.87 ha impacted)	Macarthur-Onslow-Mt Gilead Biobank Site	3.8	1.4	36.14
	Fernhill Central West Biobank Site	4	1.79	46.24
	Further offset area	TBD	0.68	17.6
Subtotal (D SSTF)			3.87	100
Total SSTF			5.96	
CPW (1.251 ha impacted)				
	Noorumba-Mt Gilead BioBank site	0.8	0.37	68.34
	Further offset area	TBD	0.17	31.7
Total CPW			0.54	100

51. In summary, the majority of the offsets for impacts to SSTF will be provided through securing and protecting 8 ha of SSTF within the proposed Macarthur-Onslow-Mt Gilead Biobank Site and 4 ha of SSTF within the Fernhill Central West Biobank Site (Table 3). The Department will require the proponent to provide additional land-based offsets to compensate for impacts to 0.16 ha of Condition A and B SSTF and 0.68 ha of Condition D SSTF (Table 3).
52. The proponent has proposed offsets for impacts to CPW by securing and protecting 0.8 ha of CPW within the proposed Noorumba-Mt Gilead Biobank Site. The Department will require the proponent to provide additional land-based offsets to compensate for impacts to 0.17 ha of CPW (Table 3).

Table 3: Summary of offset requirements (broken down by proposed offset site)

Proposed offset site	Community/condition class	Impact	Area of SSTF impact that offset compensates for (ha)
Macarthur-Onslow-Mt Gilead Biobank Site	SSTF Condition A and B	1.93	4.2
	SSTF Condition D	1.4	3.8

Proposed offset site	Community/ condition class	Impact	Area of SSTF impact that offset compensates for (ha)
	Subtotal	3.33	8
Noorumba-Mt Gilead BioBank site	CPW	0.37	0.8
Fernhill Central West Biobank Site	SSTF Condition D	1.79	4
Further offset area required	SSTF Condition A and B	0.16	TBD
	SSTF Condition D	0.68	TBD
	Subtotal	0.85	TBD
	CPW	0.17	TBD

Conclusion and recommendations

53. The Department is satisfied the assessment of impacts of the proposed action on SSTF and CPW in the preliminary documentation identifies the impacts and describes the avoidance and mitigation measures sufficiently to provide a high level of confidence on what the impacts will be, and that the impacts will not be unacceptable.
54. The Department considers that the proposed action would not have an unacceptable impact on SSTF or CPW, provided that it is undertaken in accordance with the measures discussed in this recommendation report and reflected in the conditions of approval recommended by the Department. The Department has considered the relevant Threat Abatement Plans (as discussed above) and is of the view that approval of this action would not be inconsistent with those plans.

Koala (*Phascolarctos cinereus*) (combined population in Queensland, New South Wales and the Australian Capital Territory) – vulnerable

Description

55. According to the *Conservation Advice on Phascolarctos cinereus (combined population in Queensland, New South Wales and the Australian Capital Territory)* (Koala conservation advice), the Koala is widespread in coastal and inland areas from north-east Queensland to the Eyre Peninsula in South Australia, covering an area of approximately 1 million square kilometres. Koalas inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by tree species from the genus *Eucalyptus*. The availability of feed trees (primarily *Eucalyptus tereticornis* and *Eucalyptus viminalis*) and the presence of mature trees is very important to the species. The species is known to be able to persist in fragmented habitats, and even survive in isolated trees across predominantly agricultural landscapes.
56. In the Sydney Basin bioregion, Koalas occur in eucalypt woodlands and forests around the Central Coast, Blue Mountains and the fringes of the Cumberland Plain. Given that large areas in the Sydney region are reserved as national parks, forests and woodland in these areas may support several hundred individuals at low densities.
57. The Koala population in the vicinity of the proposed action is estimated at approximately 200 individuals and recognised as a recovering population (from near extinction 20-30

years ago) currently undergoing a range expansion (Biolink 2018). The Department considers this to be an important population due to its size, health and vigour.

58. The Koala conservation advice states that the national Koala population has declined significantly since European settlement. Primary threats to the survival of the species include the loss, fragmentation and degradation of habitat, including dispersal habitat, and mortality due to vehicle strikes and dog attacks.
59. There is no National Recovery Plan or Threat Abatement Plan available for the species.

Onsite occurrence

60. The preliminary documentation states that surveys for the species were undertaken by the proponent for rezoning, biocertification and biobanking assessments in 2014 and 2018.
61. The preliminary documentation states that no Koalas were recorded in the study area during the assessment period but acknowledges the existence of numerous Koala records east of the proposed action area and along Appin Road, and north and south of the proposed action area within the Campbelltown City Council's Noorumba Biobank site to the north and the Beula BioBank site to the south. The proponent has also acknowledged the occurrence of several road kills along Appin Road where Koalas have been using habitat resources on both the eastern and western sides of Appin Road.
62. The preliminary documentation confirmed the presence of Koala feed trees within the proposed action area including *Eucalyptus tereticornis*, *E. moluccana* and *E. punctata*. Using the habitat assessment tool in the EPBC Act referral guidelines for the vulnerable Koala, the preliminary documentation states that habitat within the proposed action area obtained a score of 8, with a score of 5 or greater representing habitat critical to the survival of the species.
63. The preliminary documentation states that 'given the presence of food trees within all vegetation communities on site and the Koala's use of scattered paddock trees, it is considered that approximately 31.99 ha of Koala habitat occurs in the study area'.

Impacts

64. The preliminary documentation states that the proposed action will result in the direct loss of up to approximately 10.85 ha of Koala habitat critical to the survival of the Koala within the proposed action area; mainly a dense patch of SSTF in the centre of the study area (2 ha), a thin strip of trees along Appin Road (1.54 ha) and scattered paddock trees throughout the study area (6.48 ha). The proponent has also acknowledged likely 3.53 ha of indirect impacts through isolation of Koala habitat in the proposed Council Bushland reserve in the centre of the proposed action area.
65. The Department considers that in addition to direct impacts associated with the proposed action, the proposed action is likely to result in the loss of connectivity between large patches of remnant vegetation and known Koala habitat located within the Beulah and Campbelltown City Council's Noorumba Biobank, potentially impacting on the viability of these patches of habitat for the Koala.
66. Relevant Conservation Advice (Attachment E1) for the Koala is:
- Department of Sustainability, Environment, Water, Population and Communities (2012). *Approved Conservation Advice for Phascolarctos cinereus (combined*

populations in Queensland, New South Wales and the Australian Capital Territory).
 Canberra: Department of Sustainability, Environment, Water, Population and Communities. Available from:
<http://www.environment.gov.au/biodiversity/threatened/species/pubs/197-conservation-advice.pdf>, in effect under the EPBC Act from 02-May-2012.

The Department considered this document in preparing this recommendation report.

Avoidance and mitigation

67. Avoidance and mitigation measures discussed in paragraph 39 in relation to SSTF and CPW are also relevant to the Koala.

Offsets

68. The Department considers that despite the effect of the avoidance and mitigation measures discussed above, the direct or indirect impacts to 14.38 ha of potential Koala habitat constitutes a residual significant impact that requires compensation in accordance with the EPBC offsets policy and guide or other endorsed offset policy.
69. The preliminary documentation states that the proponent proposes to partially offset impacts to Koala arising from the proposed action through retention of 18.69 ha of remnant vegetation on site and management of this area through the proposed 'Macarthur-Onslow-Mt Gilead Biobank Site' and the proposed 'Noorumba-Mt Gilead Biobank Site'. The preliminary documentation further states that the proponent proposes to purchase and retire 151 BioBanking Koala credits from the Campbelltown City Council's Noorumba BioBank site (equivalent to 21.27 ha of land).
70. The Department has concerns about the viability of populations of Koala at offset sites proposed by the proponent due to the impending upgrade of Appin Road. This upgrade will increase the width of Appin Road from two to six lanes and be supplemented by a Koala exclusion fence on the eastern side of Appin Road designed to stop Koalas from crossing Appin Road and reduce the risk of Koala deaths through vehicle strike.
71. The Department considers that the Appin Road upgrade project will further restrict movement of Koalas across Appin Road from and into the Campbelltown City Council's Noorumba BioBank site, the proposed 'Macarthur-Onslow-Mt Gilead Biobank Site' and the proposed 'Noorumba-Mt Gilead Biobank Site'. As such the Department does not consider that land based offsets within these offset sites are suitable as they do not provide "an overall conservation outcome that improves or maintains the viability of the protected matter" (S7.1 of the EPBC Offset Policy). The Department recommends requiring additional offsets of Koala habitat in an offset area which is consistent with the requirements of the EPBC Offset Policy.

Additional offset requirements

72. Given that the proposed action will result in permanent removal of habitat critical to the survival of an important population of an EPBC Act listed vulnerable species and impact on populations of the species outside the proposed action area through loss of habitat

connectivity, the Department considers that additional measures are required in order to meet the Department's policy on offsets. These additional measures are as follows:

- a. To compensate for impacts on Koala and the Grey-headed Flying fox the Department recommends proposed condition 7 requiring the approval holder to submit, for the Minister's approval, an offset strategy in accordance with the EPBC Act environmental offsets policy. The offset strategy must outline how impacts to the Koala and the Grey-headed Flying fox will be offset in perpetuity. The offset strategy should be submitted at least three months prior to the intended date of commencement of the action. The approval holder must not commence the action unless the offset strategy has been approved by the Minister.
- b. Proposed condition 8 requiring the approval holder to provide the Department with evidence of when the offset was secured and what mechanism was used to secure the offset within 10 business days of securing the relevant offset specified in Condition 7.
- c. To further compensate for the loss of connectivity between the Noorumba Biobank site and the Beula BioBank site and cumulative impacts on the Koala associated with surrounding developments (above the land-based offsets recommended through condition 8), the Department recommends proposed condition 9 requiring the approval holder to prepare and implement a Koala Management Plan for the proposed action area in consultation with the Koala Recovery Team and contribute at least \$100,000 each year for five years to fund activities outlined in the plan.

Conclusion and recommendations

73. The Department is satisfied the assessment of the impact of the proposed action on the Koala in the preliminary documentation identifies the impacts adequately and describes appropriate avoidance and mitigation measures sufficient to ensure impacts are not unacceptable.
74. The Department considers the impacts on the Koala arising from the proposed action can be managed appropriately through the CEMP. Residual impacts will be compensated for by provision of land-based offsets and additional compensatory measures designed to address potential cumulative impacts on the species arising from the proposed action and surrounding related developments.
75. The Department considers that the impacts of the proposed action on Koala will be managed to an acceptable level if the proposed conditions are adopted.

Grey-headed Flying-fox (Pteropus poliocephalus) (GHFF) – vulnerable

76. The GHFF has a low capacity for population increase and is dependent on low levels of natural mortality and high survival of adults to maintain stable population levels. It is a canopy-feeding frugivore and nectarivore, which utilises vegetation communities including rainforests, open forests, closed and open woodlands, Melaleuca swamps and Banksia woodlands. It also feeds on commercial fruit crops and on introduced tree species in urban areas.
77. Winter and spring flowering food resources are particularly limited for the species, and the Department considers that an impact of >5 ha to winter/spring flowering resources within 50 km of a nationally important GHFF camp is an important impact to the species. The