

Australian Government

Department of the Environment and Energy

APPROVAL

Bruce Highway, Cooroy to Curra (Section D, Woondum to Curra), east of Gympie, Queensland (EPBC 2017/7941)

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth).* Note that section 134(1A) of the **EPBC Act** applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

Details

| Person to whom the approval is granted (approval holder) | Department of Transport and Main Roads |
|--|--|
| ABN of approval holder | 39 407 690 291 |
| Action | To upgrade and realign an existing 26 kilometre section of the Bruce Highway, including a bypass between Cooroy and Curra, east of Gympie, Queensland. |

Approval decision

My decisions on whether or not to approve the taking of the action for the purposes of each controlling provision for the action are as follows.

Controlling Provisions

| Listed Threatened Species and Communities | | |
|---|---------|--|
| Section 18 | Approve | |
| Section 18A | Approve | |

Period for which the approval has effect

This approval has effect until 30 June 2040.

Decision-maker

| Name and position | Andrew McNee |
|-------------------|--|
| | Assistant Secretary of Assessments and Governance Branch |
| | Department of the Environment and Energy |
| | |

Leuch Lee 24 September 2019 Signature Date of decision

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Conditions of approval

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

Project requirements

- 1. Within the impact site, the approval holder must not clear more than:
 - a. 3.24 hectares of Lowland rainforest;
 - b. 8.08 hectares of Black-breasted Button-quail habitat; and
 - c. 135.83 hectares of Koala habitat.
- Prior to commencement, a suitably qualified person must undertake a baseline survey to determine the extent (in hectares) and quality of Lowland rainforest in the riparian area of Six Mile Creek. Surveys must be undertaken in accordance with the best practice guidelines in effect at the time of the surveys. The approval holder must publish the results of the baseline surveys in the first annual compliance report required under condition 20.
- 3. To ensure no net loss in the quality and extent of Lowland rainforest in the riparian area of Six Mile Creek as a result of the action, the approval holder must implement a program of annual monitoring for Lowland rainforest in the riparian area, for the duration of this approval or as otherwise agreed to in writing by the Department. The monitoring program must be developed by a suitably qualified person within 12 months of commencement and include:
 - a. A description of the methodology, timing, effort and frequency of monitoring, consistent with current best practice surveys for the relevant species in this area as reasonably known by a **suitably qualified person**;
 - b. Quantitative and qualitative data to determine the current **quality** of **Lowland rainforest** against the baseline survey data collected under condition 2;
 - c. Performance measures to detect any changes in **quality** of **Lowland rainforest** compared to the baseline data collected under condition 2; and
 - d. Corrective measures to be developed and implemented to address any adverse impacts on the **quality** of **Lowland rainforest** that are attributed to the action.

The annual monitoring must be undertaken by a **suitably qualified person** and must commence within 12 months of **commencement** of the action. Each year the annual results of the monitoring program must be submitted as part of the annual compliance report required under condition 20.

 Prior to operation of the action, the approval holder must establish fauna connectivity structures and fauna exclusion fencing. Once established, the fauna connectivity structures and fauna exclusion fencing must be maintained by the approval holder for the duration of the approval. Exclusion fencing must include gates that are secured at all times with padlocks or a similar breakproof securing mechanism.

Translocation requirements

- 5. Prior to any translocation of **Pineapple zamia** plants, the approval holder must:
 - a. record the number of viable adult Pineapple zamia plants at the impact site;
 - collect enough seeds from Pineapple zamia plants at the impact site and, if necessary, from alternative sites, to enable replacement of no less than 48 per cent of the number of adult Pineapple zamia plants at the impact site; and
 - c. legally secure the translocation site.
- 6. Prior to commencement of Contract 2, the approval holder must translocate every Pineapple zamia plant from the impact site to the translocation site. Within 20 business days of removing the last Pineapple zamia plant from the impact site, the approval holder must notify the Department of the date the last Pineapple zamia plant was removed and the total number of Pineapple zamia plants removed (specifying the number of adult Pineapple zamia plants removed and the number of seedling Pineapple zamia plants removed).
- 7. The approval holder must ensure any adult Pineapple zamia plant that suffers mortality at the translocation site, within 5 years of the date the last Pineapple zamia plant was removed from the impact site, is replaced by 4 Pineapple zamia plants. Replacement plants must be sourced from propagation of seeds collected from the impact site or from alternative sites. Replacement plants must be planted within 1 year of the mortality of the plant they are replacing.
- 8. By one year before the end date of this approval, the approval holder must ensure that the number of **Pineapple zamia** plants that exist at the **translocation site** is at least 1.5 times the number of **Pineapple zamia** plants translocated from the **impact site**, as reported under condition 6.

Koala and Black-breasted Button-quail Offset requirements

- 9. To compensate for the loss of 135.83 hectares of Koala habitat and 8.08 hectares of Black-breasted Button-quail habitat, the approval holder must, prior to commencement, legally secure a minimum of 283.91 hectares at the Koala offset areas and 32.15 hectares at the Black-breasted Button-quail offset area. Within 20 business days of securing the Koala offset areas and Black-breasted Button-quail offset area, and prior to commencement, the approval holder must provide the Department with evidence of the date the Koala offset areas and Black-breasted Button-quail offset area were legally secured and electronic spatial data (e.g. shapefile) and offset attributes of the Koala offset area.
- 10. Within 6 months of legally securing the Koala offset areas and Black-breasted Button-quail offset area, the approval holder must complete baseline surveys of the entire Koala offset areas and Black-breasted Button-quail offset area. The baseline surveys must be conducted by a suitably qualified person in accordance with the most recently published version of the Department's survey guidelines and include details of:
 - a. the quality of Black-breasted Button-quail habitat and Koala habitat;
 - b. weed infestation;
 - c. Koala density and Black-breasted Button-quail presence; and
 - d. pest abundance.
- 11. Within 1 year of legally securing the **Koala offset areas** and **Black-breasted Button-quail offset area**, the approval holder must publish on the **website** and provide to the **Department** a report detailing:
 - a. the results of the baseline surveys required under condition 10;

- b. management measures, prepared by a **suitably qualified person** and subsequently reviewed by an independent **suitably qualified person**, (including timing, frequency and longevity) that will be implemented to deliver the outcomes required by condition 12, including:
 - i. performance and completion criteria for evaluating the success of the management measures and criteria for triggering remedial action (if necessary);
 - ii. a program, including timelines, to monitor (capable of timely detection of triggers for corrective action) and report on the effectiveness of the management measures, and progress against the performance and completion criteria;
 - iii. remediation measures to be implemented where monitoring of the performance criteria indicate failure to achieve the outcomes of condition 12; and
 - iv. a description of potential risks to the successful implementation of the management measures and a description of the control measures that would be implemented to mitigate against these risks and residual risk ratings.
- 12. The approval holder must:
 - a. for the duration of the approval, ensure no net loss in the quality and extent of
 Black-breasted Button-quail habitat and the Koala habitat within the Koala offset areas and
 Black-breasted Button-quail offset area compared to the baseline survey data reported under condition 11.a;
 - b. within 12 months of **legally securing** the **Koala offset areas**, commence implementation of an ongoing **Koala food tree** replanting program in the **Koala offset areas**. The replanting program must be undertaken by a **suitably qualified person** and include measures to ensure the maintenance and survival of new **Koala food trees** in the **Koala offset areas**.
 - c. within 15 years of legally securing the Koala offset areas, the approval holder must demonstrate a 20% increase in **Koala food tree** recruitment over the entire **Koala offset areas** compared to the baseline survey results reported under condition 11.a;
 - d. demonstrate the following reductions in **weed infestation** compared to the baseline data reported under condition 11.a:
 - i. 50% reduction within 3 years of **legally securing** the **Koala offset areas** and **Black-breasted Button-quail offset area**;
 - ii. 90% reduction within 10 years of **legally securing** the **Koala offset areas** and **Blackbreasted Button-quail offset area**.
 - e. Within 15 years of legally securing the Koala offset areas, demonstrate that an increase of at least 50% of Koala density has been achieved across the entire Koala offset areas compared to the baseline data reported under condition 11.a. To determine progress towards this outcome, Koala density surveys must be undertaken across the entire Koala offset areas by a suitably qualified person within 5 and 10 years respectively of legally securing the Koala offset areas. Contingency measures must be implemented to increase Koala density across the entire Koala offset areas where the results of these surveys indicate minimal increases in Koala density;
 - f. demonstrate a reduction, maintained for 10 consecutive years from **legally securing** the **Koala offset areas** and **Black-breasted Button-quail offset area**, in **pest abundance** compared to the baseline data reported under condition 11.a;
 - g. report to the **Department**, as part of Annual Compliance Reporting required under condition 20, matters required under condition 11.b and progress towards and achievement of the outcome milestones specified in condition 12.

Lowland rainforest offset requirements

- 13. To compensate for the loss of 3.24 hectares of Lowland rainforest, the approval holder must submit an Offset Strategy prepared by a suitably qualified person in accordance with the Environmental Management Plan Guidelines and the principles of the EPBC Act Environmental Offsets Policy. The action must not commence until the Offset Strategy has been approved by the Minister in writing. The approved Offset Strategy must be implemented and published on the website. The Offset Strategy must:
 - a. provide a written description and map that clearly defines the location and boundaries of the proposed offset area(s) for **Lowland rainforest** and includes **offset attributes** and **shapefiles**;
 - b. include timelines and mechanisms for legally securing the offset area(s);
 - c. demonstrate the presence of Lowland rainforest in the proposed offset area(s) and the quality of the Lowland rainforest in the proposed offset area(s), including evidence that it meets the threshold criteria for Lowland rainforest;
 - d. commit to ecological outcomes and offset completion criteria for **Lowland rainforest** and the timeframes in which these will be achieved;
 - e. include time bound performance and completion criteria for evaluating that ecological outcomes have been achieved and criteria for triggering remedial action;
 - f. commit to a program to monitor and report on progress against the performance and completion criteria.

Corrective action requirements

- 14. If, at any time during the life of the approval, the Minister is not satisfied that the outcomes required under conditions 3, 8 or 12 are likely to be achieved, or is not satisfied there is sufficient evidence that the outcomes required under conditions 3, 8 or 12 are likely to be achieved (including on the basis of information provided in compliance reports and or audit(s) under these conditions of approval), the Minister may require the approval holder to submit a corrective action plan for the Minister's approval, to monitor, manage, avoid, mitigate, offset, record or report on, impacts to Pineapple zamia, Lowland rainforest, the Black-breasted Button-quail and/or the Koala.
 - a. The **Minister** may set a timeframe in which the corrective action plan must be submitted, and may specify that the corrective action plan must be prepared or reviewed by a **suitably qualified person** (or another specified person).
 - b. If the **Minister** approves the corrective action plan, the approval holder must implement the approved corrective action plan.

Part B – Standard administrative conditions

Commencement of the action

15. The approval holder must notify the **Department** in writing of the date of **commencement** within 10 **business days** after the date of **commencement**.

Compliance records

- 16. The approval holder must maintain accurate and complete compliance records.
- 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.

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.

Preparation and publication of plans

18. The approval holder must:

- 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 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.
- 19. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required the conditions of this approval, is prepared in accordance with the **Department's** *Guidelines for biological survey and mapped data* (2018) and submitted electronically to the **Department** with the relevant **plan**.

Annual compliance reporting

- 20. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement**, or as otherwise agreed to in writing by the **Minister**. The approval holder must:
 - 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 5 **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.

Note: Compliance reports may be published on the Department's website.

Reporting non-compliance

- 21. 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 5 **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:
 - a. the condition which is or may be in breach; and
 - b. a short description of the incident and or non-compliance.
- 22. 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:
 - 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.

Independent audit

- 23. The approval holder must ensure that **independent audits** of compliance with the conditions are conducted as requested in writing by the **Minister**.
- 24. For each independent audit, the approval holder must:
 - 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.
- 25. 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.

Revision of plans

26. The approval holder may choose to revise a plan or strategy approved by the Minister under condition 13, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves the plan then, from the date specified, the approval holder must implement the plan in place of the previous plan.

Completion of the action

27. Within 20 **business days** after **completion**, the approval holder must notify the **Department** in writing and provide **completion data**.

Part C - Definitions

In these conditions, except where contrary intention is expressed, the following definitions are used.

Adult Pineapple zamia means Pineapple zamia plants that have an underground stem.

Alternative sites means a site or sites that support Pineapple zamia plants in a representative geographical region (as determined by a suitably qualified person) to the Pineapple zamia plants within the impact site.

Black-breasted Button-quail means the Black-breasted Button-quail (*Turnix melanogaster*) listed as a threatened species under the **EPBC Act**.

Black-breasted Button-quail habitat means any areas of vegetation that provides habitat suitable for the **Black-breasted Button-quail** as described in the current conservation and/or recovery plan for the species approved by the **Minister**.

Black-breasted Button-quail offset area means the area within the boundary lines for the offset site as shown by the map at <u>Attachment F.</u>

Black-breasted Button-quail presence means number of Black-breasted Button-quail identified on the **Black-breasted Button-quail offset area**, including evidence of **Black-breasted Button-quail** foraging, sheltering or otherwise using available habitat within the **Black-breasted Button-quail offset area**.

Buffers means 'buffer zone' as described in Threatened Species Scientific Committee (2011). *Commonwealth Listing Advice on Lowland Rainforest of Subtropical Australia.* Department of Sustainability, Environment, Water, Population and Communities, Canberra.

Business day means a day that is not a Saturday, a Sunday or a public holiday for the whole of Queensland.

Commencement means the first instance of the use of heavy duty equipment for the purpose of clearing vegetation or breaking the ground to construct roads associated with the action. This does not include physical disturbance necessary to:

- a. undertake pre-clearance surveys or monitoring programs;
- b. install signage and or temporary fencing to prevent unapproved use or access to the **impact** site or the **translocation site**;
- c. protect environmental and property assets from fire, weeds and pests, including construction of fencing and maintenance of existing surface access tracks;
- d. undertake geotechnical investigations;
- e. relocate public utility plant (e.g. electricity transmission lines); or
- f. translocate **Pineapple Zamia** plants from the **impact site** to the **translocation site**.

Completion means the time at which all conditions have been fully met.

Completion data means an environmental report and spatial data information clearly detailing how the outcomes required under the conditions of this approval have been met. The **Department's** preferred spatial data format is **shapefile**. This includes, but is not limited to information detailing:

- i. the date, location and extent of **protected matter** habitat cleared within the **impact site**;
- ii. the location, extent and quality of protected matter habitat within the Koala offset areas and Black-breasted Button-quail offset area;
- iii. the date, location and extent of **Lowland rainforest** cleared within the **impact site**;
- iv. the location, extent and **quality** of offsets for **Lowland rainforest** as required by the approved Offset Strategy; and
- v. the number of **Pineapple zamia** plants at the **translocation site**.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval. This includes any documentation in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

Compliance report(s) means written reports:

- a. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
- b. consistent with the Department's Annual Compliance Report Guidelines (2014);
- c. including a **shapefile** of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and
- d. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

Contract 2 means the Northern Contract of approximately 18 km in length that will extend from north of Sandy Creek Road to Curra as shown in the map at <u>Attachment A</u>.

Department means the Australian Government agency responsible for administering the EPBC Act.

Department's survey guidelines means the relevant Survey Guidelines for Australia's threatened birds and Survey Guidelines for Australia's threatened mammals as published at

http://www.environment.gov.au/epbc/publications#compliance, immediately prior to the undertaking of the relevant survey.

EPBC Act means the Environment Protection and Biodiversity Conservation Act 1999 (Cth).

EPBC Act Environmental Offsets Policy means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* (October 2012), or subsequent revision, including the Offsets Assessment Guide.

EPBC Act listed threatened species and communities includes the Koala, Black-breasted Button-quail, Pineapple zamia and Lowland rainforest.

Environmental Management Plan Guidelines means the **Department's** *Environmental Management Plan Guidelines*. Commonwealth of Australia (2014), or subsequent revision.

Fauna connectivity structure means a structure designed by a **suitably qualified person** capable of enabling safe passage of the **Black-breasted Button-quail** and the **Koala** under the road(s) constructed as a part of the action at the locations marked as 'Fauna Connectivity Structure' in the maps at <u>Attachments B1, B2, B3 and B4</u>.

Fauna exclusion fencing means a structure and tree and shrub free precinct, the design of which is certified by a **suitably qualified person** to be capable of preventing the **Black-breasted Button-quail** and the **Koala** from crossing the road(s), constructed as a part of the action, located where marked as 'Fauna Exclusion Fencing' in the maps at <u>Attachments C1 and C2</u>.

Impact site means the area marked as Contract 1 and Contract 2 in the map at Attachment A.

Incident means any event which has the potential to, or does, impact on protected matter(s).

Independent audit(s) means an audit conducted by an independent and **suitably qualified person** as detailed in the **Department's** *Environment Protection and Biodiversity Conservation Act 1999* Independent Audit and Audit Report Guidelines (2015).

Koala means the Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) (*Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)*) listed as a threatened species under the **EPBC Act**.

Koala density means the number and/or utilisation and distribution of **Koalas** per unit area as determined in field surveys over the entire **Koala offset areas** undertaken by a **suitably qualified person** using a scientifically robust and repeatable methodology over a timeframe that serves as a sound basis for comparison.

Koala food tree means a species of tree of genus Angophera, Corymbia, Eucalyptus, Lophostemon or Melaleuca, with a height of more than 4 metres or with a trunk circumference more than 31.5 centimetres at 1.3 metres above the ground, the leaves of which are known to be consumed by the **Koala**.

Koala habitat means any vegetation that contains Koala food trees and scores five or more using the habitat assessment tool in Table 4 of the **Koala referral guidelines**.

Koala offset areas means the areas within the boundary lines for offset sites as shown by the maps at <u>Attachments E1 and E2</u>.

Koala referral guidelines means **Department's** *EPBC Act referral guidelines for the vulnerable koala* (combined populations of Queensland, New South Wales and the Australian Capital Territory), Commonwealth of Australia, 2014.

Legally secure means protect for conservation under a voluntary declaration under the *Vegetation Management Act 1999* (Qld) or as a nature refuge under the *Nature Conservation Act 1992* (Qld) or another enduring protection mechanism agreed to in writing by the **Department**.

Lowland rainforest means vegetation that is determined by surveys undertaken by a **suitably qualified person** as conforming to the Lowland Rainforest of Subtropical Australia listed as a threatened ecological community under the **EPBC Act** and defined in accordance with the Threatened Species Scientific Committee (2011). *Commonwealth Listing Advice on Lowland Rainforest of Subtropical* Australia. Department of Sustainability, Environment, Water, Population and Communities, Canberra. This includes **buffers**.

Minister means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.

Monitoring data means the data required to be recorded under the conditions of this approval.

Offset attributes means an '.xls' file capturing relevant attributes of the offset area, including:

- i. EPBC Act reference number
- ii. Physical address of the offset area;
- iii. Coordinates of the boundary points in decimal degrees;
- iv. EPBC Act listed threatened species and communities that the offset compensates for;
- v. Any additional protected matters that are benefiting from the offset; and
- vi. Size of the offset in hectares.

Operation means the first point at which public vehicles can traverse the roads constructed as a result of the action.

Pest abundance means the number, composition and distribution of non-native vertebrate animals known to predate on the **Black-breasted Button-quail** or the **Koala**, as determined in a field survey over the entire **Koala offset areas** and **Black-breasted Button-quail offset area** undertaken by a **suitably qualified person** using a scientifically robust and repeatable methodology over a timeframe that serves as a sound basis for comparison to data acquired to demonstrate achievement of the milestone required under condition 12.f.

Pineapple zamia means Pineapple zamia (*Macrozamia pauli-guilielmi*) listed as a threatened species under the **EPBC Act**.

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).

Protected matter(s) means the following listed threatened species and ecological communities protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect:

- Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) (*Phascolarctos cinereus (combined populations of Qld, NSW and the ACT*));
- Black-breasted Button-quail (Turnix melanogaster);
- Pineapple zamia (Macrozamia pauli-guilielmi);
- Lowland Rainforest of Subtropical Australia.

Quality means a measure, as determined by a **suitably qualified person**, of site condition, site context and species individual or population persistence or species stocking rate calculated in accordance with the requirements of the **EPBC Act offsets assessment guide** or other biocondition assessment process agreed by the **Department**. The assessment process must use a scientifically robust and repeatable methodology over a timeframe that serves as a sound basis for comparison to baseline data acquired to demonstrate achievement of relevant milestones required in conditions 3, 12 and 13.

Riparian area means the areas of **Lowland rainforest** along Six Mile Creek as identified in the map at <u>Attachment G.</u>

Seedling Pineapple zamia means Pineapple zamia plants that are not adult Pineapple zamia plants.

Sensitive ecological data means data as defined in the **Department's** *Sensitive Ecological Data* – *Access and Management Policy V1.0.* (2016).

Shapefile(s) means an ESRI shapefile format used for storing location and attributes information of geographic features. **Shapefiles** must contain '.shp', '.shx', '.dbf' files and a '.pri' file that specifies the projection/geographic coordinate system used. **Shapefiles** should also include an '.xml' metadata file that describes the **shapefile** for discovery and identification purposes.

Suitably qualified person means a person who has professional qualifications, training, skills and at least three (3) years of relevant experience specific to locating, identifying and conserving the **protected matters** that are subject to this approval and can give authoritative independent assessment, advice and analysis specific to the **protected matters** using the relevant protocols, standards, methods and/or literature. If the person does not have appropriate professional qualifications, the person must have at least five (5) years of relevant experience specific to locating, identifying and conserving the **protected matters** that are subject to this approval and can give authoritative independent assessment, advice and analysis specific to the **protected matters** that are subject to this approval and can give authoritative independent assessment, advice and analysis specific to the **protected matters** using the relevant protocols, identifying and conserving the **protected matters** that are subject to this approval and can give authoritative independent assessment, advice and analysis specific to the **protected matters** using the relevant protocols, standards, methods and/or literature.

Threshold criteria means the key diagnostic characteristics and condition thresholds used to define **Lowland rainforest** as described in the Threatened Species Scientific Committee (2011). *Commonwealth Listing Advice on Lowland Rainforest of Subtropical Australia*. Department of Sustainability, Environment, Water, Population and Communities, Canberra.

Translocation site means the area adjacent to Curra Creek South Branch as shown as 'MPG Translocation Site' in the map at <u>Attachment D</u>.

Viable Pineapple zamia plant means an adult Pineapple zamia plant or seedling Pineapple zamia plant deemed by a suitably qualified person to be suitable for translocation from the impact site to the translocation site.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Weed infestation means the abundance, composition and distribution of non-native flora species known to restrict the movement or adversely impact on available habitat of the **Black-breasted Button-quail** and/or the **Koala** across the landscape, as determined by a field survey over the entire **Koala offset areas** and **Black-breasted Button-quail offset area** undertaken by a **suitably qualified person** using a scientifically robust and repeatable methodology over a timeframe that serves as a sound basis for comparison to data acquired to demonstrate achievement of the milestones required under condition 12.c.

ATTACHMENTS

Attachment A — map of impact site

Attachments B1, B2, B3 and B4 — maps of fauna connectivity structures

Attachments C1 and C2 — maps of fauna exclusion fencing

Attachment D — map of translocation site

Attachments E1 and E2 — maps of Koala offset areas

Attachment F – map of Koala and Black-breasted Button-quail offset areas

Attachment G - map of Six Mile Creek Lowland rainforest riparian area

Attachment A – map of impact site. Development footprint identified as areas within green lines of Contract 1 and red lines of Contract 2.



Attachment B1 – map of fauna connectivity structures for Koala located at northern section of impact site – connectivity structures marked as yellow bars on impact site



Attachment B2 – map of fauna connectivity structures for Koala located at northern section of impact site – connectivity structures marked as yellow bars on impact site



6 Innovation Parkway Britinya OLD 4575 Australia T 617 5413 8100 F 617 5413 8199 E bta0 Innai@ghd.com W www.ghd.com

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Attachment B3 – map of fauna connectivity structures for Koala located at central section of impact site – connectivity structures marked as yellow bars on impact site



n 18) Project Area (March 2017), Road Design (Nevember 2018), USC, Kosta Evidence Present (2016), Created brachadwo

Attachment B4 – map of fauna connectivity structures for Koala and Black-breasted Button-quail located at southern section of impact site – connectivity structures marked as yellow bars on impact site





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Attachment C1 – map of fauna exclusion fencing for Koala and Black-breasted Button-quail located at southern section (Contract 1) of impact site - exclusion fencing marked as purple lines on impact site



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Attachment D - map of translocation site for Pineapple Zamia located at northern section (Contract 2) of impact site - translocation site marked in yellow next to impact site



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Attachment E1 – map of Koala offset areas located at northern section of impact site – offset areas contained within areas bounded by black lines on northern side of impact site



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Attachment E2 - map of Koala offset areas located at central section of impact site - offset areas contained within areas bounded by black lines

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Offset Sites Locality Plan

Attachment F – map of Koala and Black-breasted Button-quail offset areas located at southern section of impact site – offset areas contained within areas bounded by black lines



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Attachment G – map of riparian area for lowland rainforest ecological community located along Six Mile Creek - marked as purple shaded area along Six Mile Creek only







Department of Transport and Main Roads Bruce Highway Cooroy to Curra (Section D: Woondum to Curra) Job Number 41-29914 Revision A Date 11 Apr 2019

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