

# NATURAL VALUES ASSESSMENT

117 CONINGHAM ROAD, CONINGHAM



For

**M. TRENDALL**

14<sup>th</sup> October 2024

**LARK & CREESE PTY LTD**  
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## 1. Summary

Marc Trendall engaged Lark and Creese to report on the natural values within 117 Coningham Road, Coningham (C.T. 144318/7). This report looks at the proposed development and assesses potential short and long term residual impacts on ecological functions within and surrounding the proposed site to assist local, State and Commonwealth agencies during the assessment and approval process. The study site was assessed by Doug Summers (Author) on 9 Sept 2024.

### Legislative Implications

#### Threatened Flora

- No threatened plant species listed under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* had previously been recorded within the site. Twisting rapier sedge (*Lepidosperma tortuosum*) listed as rare under Tasmania's *Threatened Species Protection Act 1995*, the has previously been recorded within 500m to the south,
- Previous and current land use and management practices have resulted in removal or significant modification of vegetation. Assessment indicates the site does not represent potential habitat values for this species, or threatened orchis species recorded within 2km of the site,
- Given proposed development is limited to land classified as Urban / Modified, it is unlikely the proposed development will result in a loss of potential habitat for this species. No further assessment or permit under Section 51 of Tasmania's *Threatened Species Protection Act 1995*. No formal referral to the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Vegetation types

- TASVEG 4.0 classify a narrow linear strip of vegetation occupying the northern boundary as dry *Eucalyptus amygdalina* woodland/forest on sandstone (DAS), land use Urban / Modified land (FUR),
- Site assessment indicates the degraded remnant vegetation on the northern boundary is consistent with TASVEG 4.0 classification DAS but is classified as significantly altered,
- The proposed access, development site, and wastewater land application area will not impact degraded DAS vegetation communities or tree protection zones (TPZ),
- Degraded DAS vegetation community recorded on the northern boundary is listed as vulnerable under Schedule 3A of Tasmania's *Nature Conservation Act 1995*. Given the proposed development and associated wastewater infrastructure will not impact threatened DAS vegetation communities, no further assessment or referral will be required under *Nature Conservation Act 2002* or *Land Use Planning and Approvals Act 1993*.

#### Threatened fauna

##### Tasmanian Devil, Eastern Quoll & Eastern-barred bandicoot

The site is within range boundaries of the Tasmanian Devil, Eastern quoll and Eastern-barred bandicoot. Site assessment indicates the proposal is likely to result in the minor loss of potential foraging habitat for these species. However, given the small scale of the development, it is expected works will result in disturbance only and not considered a threatening process for these species under the Significant Impact Guidelines issued by the Commonwealth agency. No further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

##### Swift parrot

This species has been recorded with 1km of the site however no core foraging habitat was recorded within the allotment. Very high biodiversity value *Eucalyptus amygdalina* & *E. obliqua* on the northern boundary represent potential nesting habitat but no visible hollows recorded. The proposed wastewater and split land application area has been positioned clear of the tree protection zones of these trees. Given the distance between potential nesting habitat, it is not expected collision avoidance mechanism are required to be incorporated into the design. No further assessment or referral is required under Tasmania's *Threatened*

*Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Forty-spotted pardalote

Site assessment found the proposed development site does not support potential core foraging habitat values for the endangered Forty-spotted pardalote. Proposal will not impact the very high biodiversity value *Eucalyptus amygdalina* & *E. obliqua* on the northern boundary that represent potential nesting habitat for this species. Given the proposal will not impact potential foraging or nesting habitat no further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Masked owl

Proposal will not impact very high biodiversity values eucalypts on the northern boundary that represent potential nesting habitat. No recorded observations of Masked owls within 500m or nests within 1km line-of-sight. Not expected further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Grey Goshawk, Tasmanian Wedge-tailed eagle & White-bellied sea eagle

A Grey Goshawk have previously been recorded within 2km to the west. Assessment found the proposed development site is not consistent with preferred nesting habitat suitability categories for this species and including the Tasmanian Wedge-tailed eagle & White-bellied sea eagle. No nests recorded within 500m or nest within 1km line-of-sight. Unlikely to disturb nesting or breeding activities. No further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Introduced plant species

The landowners have implemented, and undertaken management works in accordance with the respective Statutory weed Management Plans for Canary broom and Blackberry including a 5 year management plan to meet the management objectives for these weed species. No additional management prescriptions required under the *Weed Management Act 1995*.

#### E10.7 Biodiversity Code – Building and Development Standards

The study site is within Kingborough Council's Biodiversity Protection Area and in accordance with KIPS2015 E10. Table 1, the environs within the study site zoned Low Density Residential supports 'Moderate' to 'High' biodiversity priority values. Site plans show the proposed development and associated wastewater infrastructure will not impact threatened DAS vegetation communities and clear of the tree protection zones of 4 'very high' biodiversity value *Eucalyptus amygdalina* located on the northern boundary. Whilst some works are within the Biodiversity Protection Area, the proposal will not impact or require the removal of native vegetation and therefore unlikely to trigger provisions within the Biodiversity Code and Council's Biodiversity Offset Policy 6.10 V2 and '*Guidelines for the use of Biodiversity Offsets in the local planning approval process*'.

#### E11.7.1 Buildings and Works within Waterways and Coastal Protection Area.

Site plans show the proposed development is clear of the significantly modified 40m wide WCPA however, the northern wastewater land application area is within WCPA. Assessment indicates the proposal does not satisfy Acceptable Solutions A1 of E11.7.1 Development Standards for Buildings and Works. However, given the modification of the site and lack of native vegetation, the proposal appears meets alternative solutions in Performance Criteria P1.

#### E7.0 Stormwater Management Code

Stormwater quantity requirements must always comply with requirements of the local authority including catchment-specific standards. All stormwater flow management estimates should be prepared according to

methodologies described in Australian Rainfall and Runoff (Engineering Australia 2004) or through catchment modelling completed by a suitably qualified person. The proposal does not comply with Acceptable Solutions E7.7.1 A1 however, it appears the proposal satisfies alternative solution Performance Criteria P1 in that:

*'Stormwater from new impervious surfaces must be managed by any of the following'*

- b) *Collected for re-use on the site.* Site plans indicate the stormwater will be collected on-site for re-use in 225000L collection tanks. Overflow point will implement mechanisms to mitigate erosion and mobilisation of sediments.

#### E23.0 On-site Wastewater Management Code

Site plans provided by Cromer, W. C. (2024) (*Site and Soil Evaluation Report, and System Design for On-site Wastewater Management, proposed visitor accommodation at 117 Coningham Road, Coningham*). indicate the proposed wastewater system and split 360m<sup>2</sup> wastewater land application area is contained within land classified as Urban / Modified and positioned clear of the TPZ of adjacent very high biodiversity value eucalypts. Providing the system and infrastructure is appropriately designed to geotechnical specifications by approved manufactures and implemented by certified operators, it is not anticipated the wastewater will result in excess nutrient loading or impact surface or groundwater quality down-slope from the facility.

#### Conclusions

Providing development is consistent with plans provided by Hobart Engineering Design and the proposed wastewater system and northern land application area is installed in accordance with W. C. Cromer recommendations, including the additional management prescriptions outlined in this report are complied with, it is anticipated the proposed development will not result in a significant loss of remaining potential threatened habitat values or compromise the existing ecological systems and functions within the site and surrounding environs. Under Significant Impact Guidelines issued by the Commonwealth Dept of the Environment to determine if referral to the department is required, indicates the proposal will not:

- Impact native vegetation or a native vegetation community,
- Directly impact potential threatened species habitat,
- Lead to a long-term decrease in the size of populations, reduce area of occupancy of a significant population, fragment an existing population or destroy habitat critical to the survival of species,
- Disrupt the breeding cycle of an important population,
- Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline,
- Result in invasive species that are harmful to a threatened species becoming established in the threatened species habitat.

Therefore, it is unlikely the proposal will result in “significant impacts” as described in the EPBC Act. No further assessment or referral is required under Tasmania’s *Threatened Species Protection Act 1995* or Commonwealth’s *Environmental Protection Biodiversity Conservation Act 1999*.

## 2. Introduction, Scope, and Methodology

### Purpose

The owner and proponent has engaged Lark and Creese to detail the natural values supported within 117 Coningham Road, Coningham (C.T. 144318/7) as part of a development application to the Kingborough Council to construct an access, visitor accommodation and installation of an approved wastewater system and land application area.

### Scope

The survey specifically focuses on:

- Assessment of the potential conservation significance within and adjacent to the study site including descriptions on the types, distribution, condition and composition of existing vegetation,
- Potential threatened flora and fauna habitat values within and adjacent to the proposed development footprint and the possible implications of the proposal regarding the Tasmanian *Threatened Species Protection Act 1995* and Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*,

### Aboriginal Cultural Heritage

A desktop assessment of the Aboriginal Heritage Register (PS0348532) for PID 2679678 did not identify and registered Aboriginal relics or apparent risk of impacting registered Aboriginal relics within the allotment. I do not anticipate further assessment is required.

### Site description

The 1975m<sup>2</sup> property is currently zoned Low Density Residential (Zone Number 12.0) under the Kingborough Interim Planning Scheme 2015 within a Strata Corporation Eagles Drift Number 144318. The study site has a northerly aspect with gradients in the order of 0-3°. Neighbouring properties to the east, south and west all support residential style accommodation on larger allotments. Currently the property is accessed at the southern boundary via a private road. At the time of assessment, development was limited to two water tanks near the southern boundary. The allotment is generally clear of vegetation with sparse vegetation occupying the western and eastern boundaries. All grid references in this report are in GDA2020 MGA55 unless stated otherwise. (Centre coordinates E:521755, N:5231016, GDA94, MGA55, PID 2679678, C. T. 144318/7).

### Geology

A desktop assessment (Listmap geological layer – Geology Units 250K) indicates the study site sits atop an outcrop of upper glaciomarine sequences of pebbly mudstone, pebbly sandstone and limestone surrounded by quartz sandstone. A desktop assessment indicated no geomorphic conservation features or geoconservation sites within the property.

### Biosecurity

A desktop search of the Natural Values Atlas found there were no known biosecurity risks found within the study site or within 1000m of the site (Centre coordinates E:521755, N:5231016, GDA94, MGA55).

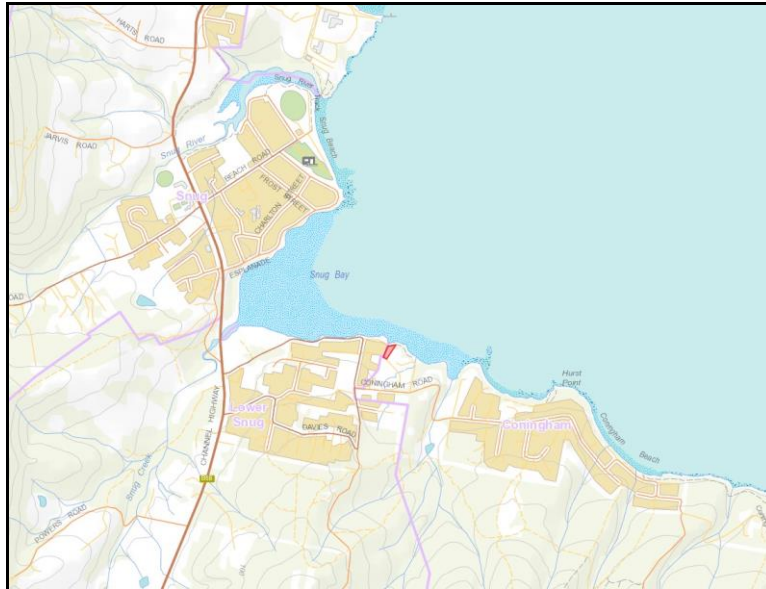


Figure 1 – Locality map, 117 Coningham Road, Coningham C.T. 144318/7 (Ref – LISTmap, Cadastral Parcels layer).

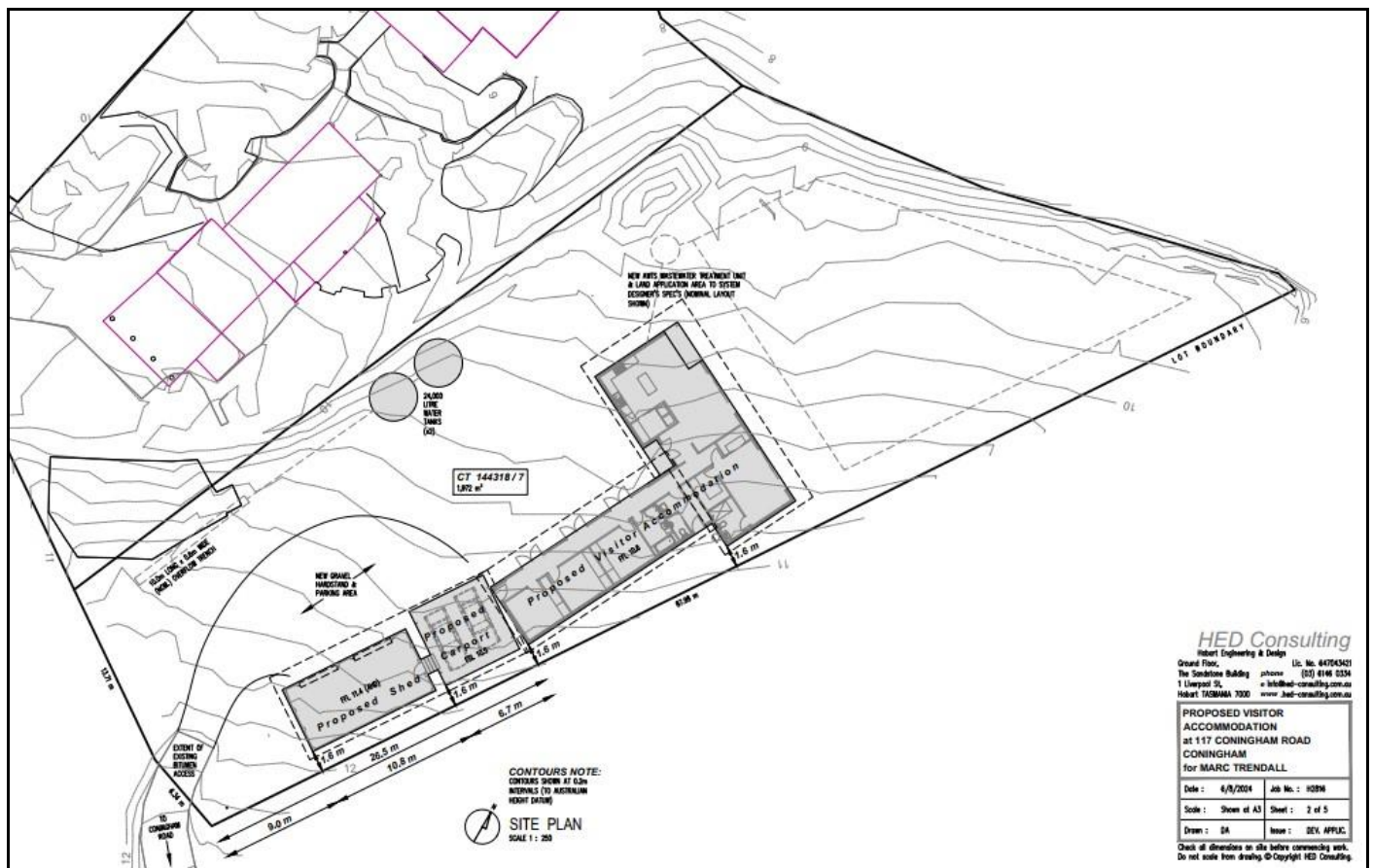


Figure 2 – Site plan, 117 Coningham Road, Coningham (Ref – Hobart Engineering & Design Consulting, Proposed Visitor Accommodation at 117 Coningham Road, Coningham for Marc Trendall, Job # H2816).

**Limitations**

The natural values assessment of the proposed access and subdivision footprint identified by designers/proponents was undertaken 9 September 2024. Every effort was made to sample the range of habitats within the study site. Many plant species have seasonal growth and flowering, patchy distribution. During the flora and fauna survey it is possible some species were missed, particularly grass species, and not recorded at time of survey. Whilst every effort was made to survey the range of habitat to overlap likelihood occurrence. Optimum survey times are usually spring to summer, however their potential for occurrence is



discussed. The survey was also limited to vascular plant species and did not include mosses, lichens and fungi. Surveys for threatened fauna were limited to the likelihood of species the study site represented potential range habitat and the identification of tracks, scats and other signs.

### 3. Native Vegetation

#### Methodology

Survey methodology is based on ‘Site Examination for Threatened and Endangered Plant Species’ supported by methodology outlined in “Manual for Assessing Vegetation Condition in Tasmania”. The report also specifically addresses possible environmental issues that may arise under the Tasmanian Planning Scheme (TPS) particularly in relation to the Biodiversity Code. Vegetation classification is in accordance with TASVEG 4.0, as described in ‘From Forest to Fjaeldmark: Descriptions of Tasmania’s vegetation (Kitchener & Harris 2013).

Vascular plant species nomenclature is consistent with de Salas & Baker (2014) for scientific names. Fauna species scientific and common names is in accordance with fauna listed in the *Natural Values Atlas* report for the site (NRE). Any features surveyed measured using Trimble R12(i) RTK GNSS, GDA94, MGA55.

#### Vegetation types and distribution

TASVEG 4.0 vegetation mapping and classification is undertaken mainly using a desktop analysis based on aerial photography and can differ from site assessment vegetation mapping, particularly at a small scale and/or due to recent works impacting vegetation. LISTmap TASVEG 4.0 overlay identifies 1 native vegetation community located on the northern boundary of the allotment. The remaining land within the allotment is classified as Urban / Modified (FUR).



Figure 3 – TASVEG 4.0 classification of vegetation within the allotment. TASVEG 4.0 codes DAS- dry *Eucalyptus amygdalina* woodland / forest on sandstone (DAS), FAG – Agricultural / Modified land, FRG – Regenerating land, FUR – Urban / Modified land, (Ref – LISTmap TASVEG 4.0, NRE).

At the time of assessment, the allotment was in a managed condition with 95% of the allotment consistent with TASVEG 4.0 Urban / Modified land classification. Managed land consisted of open grassed areas with the distribution vegetation limited to the northern and eastern boundary. Comments from the landowner indicate all shrubs and trees within the allotment has been planted including consisting of a small group of

*Allocasuarina littoralis* in the north-east corner, 3-4 *Dodonaea viscosa* subsp *spatulata*, *Pomaderris apetala* / *elliptica* and 2 *Eucalyptus tenuiramis*. Sparse *Juncus pallidus* has colonised the poorly drained areas within the site with *Poa* .

TASVEG 4.0 layer classifies vegetation occupying the northern boundary and the Coastal Reserve as part of a dry *Eucalyptus amygdalina* woodland / forest on sandstone (DAS) vegetation community that extends to the east and south-east. The vegetation is significantly degraded through the presence of Canary broom, as it is separated from the Coastal Reserve by a walkway and occupies a narrow strip of land between the walkway and managed land. The groundcover / understory *Poa poiformis*, *Rytidosperma setaceum*? *Carpobrotus aequilaterus*, *Goodenia ovata*, *Gonocarpus tetragynus*, *Dianella brevicaulis*. Shrub layer consisted of *Acacia longifolia*, *Acacia terminalis*. Introduced plants include Canary broom, flinders range wattle, Spear thistle, Centaury plant, Sheep sorrel and Sweet vernal grass, Yorkshire fog grass.



Figure 4 – Image looking north at the managed condition of the allotment showing the large *Eucalyptus obliqua* on the northern boundary.



Figure 5 – Image showing narrow strip of degraded DAS on the northern boundary between the public walkway (right).



Figure 6 – Native vegetation roughly classified as degraded DAS vegetation community occupying the north-east corner.



Figure 7 – Image of planted *Allocasuarina littoralis* near north-east corner.



Figure 8 - Image of planted *Dodonaea viscosa* & *Pomaderris apetala* on the eastern boundary.

#### 4. Introduced Plants

Assessment indicates the allotment supports a number of introduced species with Canary broom and Blackberry listed as Declared weed species under the Tasmanian *Weed Management Act 1995*. The Natural Values Atlas biosecurity database indicates no plant pathogens, such as *Phytophthora cinnamomi*, *Chytrid fungus* and fungal *Mucormycosis* have been recorded within 1km radius of the site.

##### Weed & hygiene management

The landowners have implemented the Statutory Weed Management Plans for Canary broom and Blackberry within the property resulting achieving required management objectives of control and contain, including a 5 year monitoring plan of the site. In line with best practice, future development should implement hygiene mechanisms prior to commencement of any works to prevent the accidental transportation of additional weed species into the allotment. To avoid the accidental importation of additional weeds, including plant pathogens such as *Phytophthora cinnamomi* (Pc), recommendations include that all vehicles, machinery and equipment must be washed down or shaken down offsite in accordance with ‘*Tasmanian Washdown Guidelines for Weed and Disease Control: Machinery, Vehicles and Equipment: Edition 1*’.

##### Phytophthora cinnamomi (Pc)

Pc is an introduced mould that attacks the roots of susceptible plant species causing the roots to rot. Dieback, caused by Pc and other factors, is a listed “Key Threatening Process” under both the Federal *Environment Protection and Biodiversity Conservation Act 1999* and Tasmanian *Threatened Species Protection Act 1995*. Pc cannot be eradicated from an area once it has become infested.

Forest Practices Authority Technical Note No. 8 indicates WOB and SHW vegetation communities present within the study site are not considered susceptible to *Phytophthora cinnamomi*. However, individual species present such as *Pultenaea spp.*, *Leucopogon spp* and *Epacris* species are susceptible to Pc. Recent survey of the Natural Values Database indicated no Pc infestation within the EMZ or within 1km of the property.

Table 1 – Weed species recorded within the study site.

Species	Comments	Distribution	Recommendations
Plant species listed as ‘Declared’ weed species under the Tasmanian <i>Weed Management Act 1999</i> (WMA) & Priority and Zone ranking of Blackberry, Canary broom classification from Statutory Weed Management Plans (SWMP)			
Blackberry ( <i>Rubus fruticosus</i> )	Declared weed, Weed of National Significance – WMA. Zone B: Containment Priority Rank 4	Appears all infestations have been managed. Small regrowth within disturbed site on western boundary.	Maintain current management actions to control and contain in accordance with the Statutory Weed Mgt Plan. Physical removal of seedlings & small plants. Targeted herbicide application of plants. Monitor the site for minimum of 5 yrs. for new plants.
Canary broom <i>Genista monspessulana</i>	Declared weed, Weed of National Significance – WMA. Zone B: Containment Priority Rank 4	Limited to the disturbed area in the north-west and eastern corners. Single mature plant recorded on northern boundary. Sparse seedlings recorded in norther third.	Maintain current management actions to control and contain in accordance with the Statutory Weed Mgt Plan. Physical of mature plant o northern boundary. Physical removal of seedlings or targeted herbicide application of plants. Monitor the site for minimum of 5 yrs. for new plants.



Figure 9 – Image showing mature flowering Canary broom plant (centre) with the narrow strip of degraded DAS vegetation community occupying the northern boundary.



Figure 10 – Foxglove recorded near disturbance on the western boundary,



Figure 11 – Canary Broom seedling recorded in the north-eastern corner.



Figure 12 – Canary Broom seedling recorded in the north-eastern corner.



## 5. Potential threatened flora and fauna values

### Initial assessment

A desktop assessment of natural values data bases recording of flora and fauna listed as threatened under the *Threatened Species Protection Act 1995* and *Commonwealth Environment Protection & Biodiversity Conservation Act 1999*, vegetation communities listed under Tasmania's *Nature Conservation Act 2002* including additional conservation values. Remote assessment resources using:

- The LIST (Land Information Systems Tasmania), Department of Natural Resources and Environment, Tasmania,
- Department of Natural Resources and Environment's *Natural Values Atlas Report 117 Coningham Road, Coningham – M. Trendall 12 Sept 2024*,) 5km search radius E:521755, N:5231016, GDA94, MGA55,
- TASVEG 4.0 vegetation classification, Land Information Systems Tasmania, Department of Natural Resources and Environment, Tasmania,
- Forest Practices Authority's *Biodiversity Values Database* generated report, 5km search radius E:521751, N:5231021, GDA94, MGA55,

### Flora

#### Plant species

A desktop assessment indicates no vascular plant species listed under Schedule 3, 4 or 5 of the *Threatened Species Protection Act 1995* has previously been recorded within the site. Twisting rapiersedge (*Lepidosperma tortuosum*) listed as rare has been recorded within 500m of the study site but not recorded at the time of assessment. A desk top assessment indicates the orchids Daddy longlegs (*Caladenia filamentosa*) has been recorded within 2km in Snug to the north while the Tailed Spider-orchid (*Caladenia caudata*) and the Leafy fireweed (*Thelymitra bracteata*) have been recorded in bushland to the east.

#### Vegetation types

Previous and current land use and management practices have significantly modified environs within the allotment. Assessment found majority of the allotment is consistent with TASVEG 4.0 Urban / Modified (FUR) land. A flora survey classified native species occupying the northern boundary of the allotment as significantly degraded dry *Eucalyptus amygdalina* woodland on sandstone ( DAS) vegetation community. DAS is listed as vulnerable under Schedule 3A of Tasmania's *Nature Conservation Act 2002*.

### Fauna

#### Masked Owl

The Tasmanian Masked Owl is a subspecies that occurs only in Tasmania and listed under the Tasmanian *Threatened Species Protection Act 1995* and Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* due to small population and ongoing habitat loss. Potential habitat is within undisturbed wet and dry sclerophyll forest, modified agricultural areas and urban environments below 600m ASL, and all areas that have mature trees capable of generating large hollows (15cm or greater). In accordance with Fauna Technical Note #16: Identifying masked owl habitat and #14: Nest Identification, a ground based assessment found the eucalypts on the northern boundary exceeding 70cm dbh are large represent potential nesting however, no hollows were recorded.

#### Grey Goshawk,

The site is within range boundaries of the Grey Goshawk, listed as vulnerable under the Tasmanian *Threatened Species Protection Act 1995*. An interim technical note prepared by David Young (2020) and Forestry Practice Authority Fauna Technical Note #12: Goshawk habitat categories, provides guidance for Goshawk nesting habitat suitability categories. Ground based assessment found the exposed site is not consistent with suitable nesting habitat values.

#### Swift parrots

The proposed development envelope is with Swift Parrot Important Breed Areas (SPIBA) with Swift parrots recorded within 500m of the site. No core foraging habitat (*Eucalyptus globulus* & *E. ovata*) was recorded within the allotment. The *Eucalyptus amygdalina* on the northern boundary are considered large enough to generate nesting hollows for this species. In accordance with Forestry Authority Fauna Technical Note No. 3: Identifying swift parrot foraging and breeding habitat (Table 2 & 3 respectively) assessment indicates the dry sclerophyll vegetation occupying the proposed access and development site is classified as representing Nil potential foraging-habitat as no foraging habitat present. Potential nesting habitat as Low as tree greater than 70cm dbh are present but less than 8/ha.

#### Tasmanian Devil, Eastern Quoll and Eastern-barred bandicoot

The site is within range boundaries and represents potential habitat for the Tasmanian Devil, the Eastern quoll and the Eastern-barred bandicoot. Devils range from coastal heath, open dry sclerophyll and mixed sclerophyll-rainforest where shelter and food are available and will hide in dens but at night it can roam up to 16 km and although not territorial, have a home range. They inhabit a diverse range of habitats utilising hollow logs, caves, rock piles and disused rabbit or wombat burrows.

The eastern quoll prefers a habitat consisting of a mosaic of open grassed land juxtaposed to dry sclerophyll bushland constituting potential refuse / foraging habitat for insects and worms from the soil. They nest under vegetation and will use burrows / dens as refuge and for birthing. Numbers have been declining in Tasmania, in large due to predation by cats. In accordance with Fauna Technical Note #10, the mosaics of DAS grassland, dry woodland / forest vegetation community and residential land surrounding the property considered marginal but supporting potential habitat values for the Eastern Quoll.

Potential habitat for the Eastern-barred bandicoot is open vegetation types including woodlands and open forests with a grassy understorey, native and exotic grasslands, particularly in landscapes with a mosaic of agricultural land and remnant bushland. A survey of the site recorded diggings that can be associated with both the Eastern-barred bandicoots and the common Brown bandicoot. However, vegetation within the allotment lacked significant habitat such as dense tussock grass-sagg-sedge swards and denser patches of low shrubs.

#### Forty-spotted pardalote

The endangered Forty-spotted pardalote and has been recorded to the east of the site within 2km with Sheppards Hill and Coningham Nature Recreation Area to the south and east supporting a population of this endangered species. In accordance with FPA Biodiversity Values Database, potential habitat for this species is any forest and woodland supporting *Eucalyptus viminalis* (white gum) where the canopy cover of *E. viminalis* is greater than or equal to 10% or where *E. viminalis* occurs as a localised canopy dominant or codominant in patches exceeding 0.25ha. Significant habitat for the Forty-spotted pardalote is all potential habitat associated with known colonies and such habitat within 500m of known colonies. No core foraging habitat was recorded however, given the proximity to a known population, assessment for potential nesting habitat found the large *Eucalyptus amygdalina* trees that exceed 70cm dbh are considered suitable potential nesting habitat.

#### Tasmanian Wedge-tailed eagle, White-bellied sea eagle

Modelling for potential Tasmanian Wedge-tailed eagle and White-bellied sea eagle nesting habitat indicates the site represents nil likelihood of suitable nesting habitat. A desk top assessment indicates no Wedge-tailed eagle or White-bellied sea eagle nests have been recorded within 500m and no nests within 1km line-of-sight. Ground based assessment in accordance with Forestry Practice Authority Fauna Technical Note #1 and #6, indicates the exposed, north facing site does not support suitable nesting habitat.

#### Chaostola skipper

This species of butterfly has been recorded within 500m to the south. Potential habitat for the Chaostola Skipper is dry forest and woodland supporting *Gahnia radula* (usually on sandstone and other sedimentary

rock types) or *Gahnia microstachya* (usually on granite-based substrates) FPA Fauna Tech Notes. No potential habitat for this species was recorded within the allotment.

## 6. Discussions & Conclusions

### Threatened Flora

No threatened plant species listed under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* had previously been recorded on site. Twisting rapiersedge (*Lepidosperma tortuosum*) has previously been recorded 500m to the south in heathland heathy woodland. Given the extent of previous clearance and modification within the proposed development site, it is unlikely the proposed development and establishment of the 360m<sup>2</sup> wastewater application area will result in a loss of potential habitat for this species. The proposed development is also unlikely to result in a loss of potential habitat for threatened orchid species recorded within 2km of the site. Table 2 provides details of threatened flora recorded within 5km of the proposed development site. No further assessment or permit under Section 51 of Tasmania's *Threatened Species Protection Act 1995* or Commonwealth's *Environmental Protection, Biodiversity Conservation Act 1999*.

### Vegetation types

The narrow strip of native vegetation occupying the northern boundary is degraded through fragmentation and presence of weed species but roughly consistent with threatened dry *Eucalyptus amygdalina* woodland on sandstone (DAS) classification. Site assessment indicates the proposed development site and on-site wastewater system, and land application area are located clear of DAS vegetation boundaries and tree protection zones of very high biodiversity value *Eucalyptus amygdalina* & *E. obliqua* trees. DAS vegetation community is listed as threatened vegetation community under Schedule 3A of Tasmania's *Nature Conservation Act 1995*. Given the proposal will not impact native vegetation, no further assessment or permit required under *Nature Conservation Act 2002* or *Land Use Planning and Approvals Act 1993*.

Table 2 – Threatened plant species previously recorded within 5 km radius of the study area with discussion on likelihood of potential habitat within the study site and listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA), and the Commonwealth's *Environmental Protection, Biodiversity Conservation Act 1999* (EPBCA). Flora surveys was not limited to threatened flora species listed under TSPA & EPBC but also included species considered within potential range and suitable habitat.

CONSERVATION STATUS			
Threatened Flora within 500 metres			
<i>Lepidosperma tortuosum</i> Twisting rapiersedge	rare	-	Not previously recorded or at time of survey. Recorded within 500m to the south in heathy woodland. Site assessment indicates the allotment does not support suitable habitat for this species. The proposal will not result in a loss of potential habitat values for this species. No further assessment or referral required under TSPA.
Threatened Flora within 5000 metres			
SPECEIES	TSP	EPBC	COMMENTS
<i>Asperula scoparia</i> subsp <i>scoparia</i> Prickly woodruff	rare	-	Not previously recorded on site or at the time of assessment. Generally recorded from grassy woodlands and tall eucalypt forest. Anticipated the proposal will not result in a loss of potential habitat. No referral or further assessment is required under the TSPA.
<i>Austrostipa bigeniculata</i> Doublejointed speargrass	rare	-	Not previously recorded on site or at the time of assessment. Mature inflorescences are required for identification (Nov - Jan, Feb). Tas distribution generally found in the southeast and midlands in open woodlands and grasslands, often associated with <i>Austrostipa nodosa</i> . Unlikely future development will result in a loss of potential habitat. No referral or further assessment required under the TSPA.

<i>Caladenia caudata</i> Tailed spider-orchid	vulnerable	Vulnerable	Not previously recorded or at time of survey. Mature inflorescences required for identification. (Sept-Nov). Occurs in heathy and open eucalypt forest and woodland, often with sheoaks, and in heathland on sandy and loamy soils. It is most often found on sunny north-facing sites. Proposal will not result in a loss of potential habitat. No further assessment or referral required under TSPA or EPBCA
<i>Caladenia filamentosa</i> Daddy longlegs	rare	-	Not previously recorded or at time of survey. Mature inflorescences required for identification. (Oct-Nov). Inhabits lowland heathy and sedgy open eucalypt forest and woodland on sandy soils. Site does not represent potential habitat and will not result in a loss of potential habitat. No further assessment or referral required under TSPA.
<i>Comesperma defoliatum</i> Leafless milkwort	rare	-	Not previously recorded or at the time of survey. Flowers necessary for identification (Nov–May). Generally recorded in wet heathland / sedgeland, coastal low scrub and on the crest of dunes. Site does not represent potential habitat and will not result in a loss of potential habitat. No further assessment or referral required under TSPA.
<i>Corunastylis morrisii</i> Bearded midge-orchid	endangered	-	Not previously recorded or at time of survey. Flowers required for identification (Jan-Feb). Generally recorded in near-coastal lowland habitats in buttongrass moorland and sedgy open eucalypt woodland on moderately drained sites but also clay pans in poorly drained peaty sedgeland. Proposal unlikely to result in a loss of potential habitat for this species. No further assessment or referral required under TSP.
<i>Corunastylis nudiscapa</i> Bare midge-orchid	endangered	-	Not previously recorded or at time of survey. Flowers required for identification (Feb-Apr). Generally recorded in open forests and woodlands on mudstone dominated by <i>Eucalyptus tenuiramis</i> and occasionally <i>E. obliqua</i> . Proposal unlikely to result in a loss of potential habitat for this species. No further assessment or referral required under TSP.
<i>Deyeuxia minor</i> Small bentgrass	rare	-	Not previously recorded or at time of survey. Generally inhabits open eucalypt forests or the margins of wet sclerophyll forest in the south of the State. The proposal will not result in a loss of potential habitat values for this species. No further assessment or referral required under TSP.
<i>Junus vaginatus</i> Clustered rush	rare	-	Not previously recorded or at time of survey. Generally recorded near margins of streams or in permanently wet soakage areas of marshes. The proposal will not result in a loss of potential habitat values for this species. No further assessment or referral required under TSP.
<i>Lepidospera tortuosum</i> Twisting rapiersedge	rare	-	Not previously recorded or at time of survey. Recorded within 500m to the south in heathy woodland. Site assessment indicates the allotment does not support suitable habitat for this species. The proposal will not result in a loss of potential habitat values for this species. No further assessment or referral required under TSP.
<i>Pterostylis squamata</i> Ruddy greenhood	vulnerable	-	Not previously recorded or at time of survey. Occurs in a variety of habitats predominantly in open forest, woodland and heathland with a sparse to dense heathy top grassy understorey. Proposal unlikely to result in a loss of potential habitat for this species. No further assessment or referral required under TSP.
<i>Senecio squarrosus</i> Leafy fireweed	rare	-	Not previously recorded or at time of survey. Specialist keys required for this short lived perennial. Occurs in a variety of habitats predominantly in lowland damp tussock grassland, grassy dry forests but extends to wet forest and other vegetation types. Proposal unlikely to result in a loss of potential habitat for this species. No further assessment or referral required under TSP.

<p><i>Thelymitra bracteata</i> Leafy sun-orchid</p>	<p>endangered</p>	<p>-</p>	<p>Not previously recorded or at time of survey. Recorded to the south within 2km. Flowers required for identification (Sept-Dec). Generally recorded on hot sunny days. Inhabits open grassy , heathy forest / woodland on sedimentary substrates. Proposal unlikely to result in a loss of potential habitat for this species. No further assessment or referral required under TSP.</p>
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Note: Information outlined above is derived from Department of Natural Resources and Environment (NRE) *Natural Values Atlas*, *Forestry Practices Authority (FPA) Biodiversity Values Database*, *Threatened Species Unit* for potential habitat values and descriptions and Author's experience.

#### Threatened Fauna

##### Swift Parrot

The site is within Swift Parrot Important Breeding Area however, no potential core foraging habitat was recorded within the allotment. *Eucalyptus amygdalina* on the northern boundary clear of the proposed development are considered potential nesting habitat values for this species. Assessment indicates the proposed development will not impact native vegetation community supporting potential foraging or nesting habitat values.

Site plans indicate the distance of the proposed visitor accommodation to adjacent potential Swift parrot foraging habitat is approximately 16m. Whilst I cannot discount the chance of Swift parrot bird strike, it is considered the separation distance between the structure and potential habitat will not significantly increase the risk of potential bird strike. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.

##### Grey Goshawk, Wedge-tailed eagle & White-bellied sea eagle

Site assessment found degraded DAS vegetation community occupying the northern boundary and Coastal Reserve does not represent suitable nesting habitat values. No nests have been recorded within 500m and no nests within 1km line-of-sight. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environmental Protection Biodiversity Conservation Act 1999*.

##### Masked Owl

Site assessment found potential nesting habitat values were limited to the large *Eucalyptus amygdalina* on the northern boundary however, no nesting hollows were recorded, I do not consider further assessment or referral for future development in this location is required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environmental Protection Biodiversity Conservation Act 1999*.

##### Eastern Quoll and Eastern-barred bandicoot

The mosaic of agricultural land and native vegetation within, and surrounding the site, represents potential foraging and refuge habitat for the Eastern-barred Bandicoot, recorded within 500m of the site, and the Eastern quoll. Assessment indicates the proposal will not impact potential refuge / denning habitat but is likely to result in the minor loss / modification of potential foraging habitat. However, it is expected these impacts will be limited to disturbance only and do not anticipate works and future occupation will result in a significant loss of core foraging or denning habitat for these species. Post construction pressure such as domestic pets can potentially cause further disturbance or displacement. Unlikely the proposal will trigger Significant Impact Guidelines issued by the Commonwealth for this species. No further assessment or permit required under Tasmania's *Threatened Species Protection Act 1995* or the *Commonwealth's Environment Protection and Biodiversity Conservation Act 1999*.

##### Forty-spotted pardalote

The proposed development site is within close proximity to documented populations of the critically endangered Forty-spotted Pardalote. Assessment found the site does not support potential core foraging

habitat (*Eucalyptus viminalis*). However, given proximity to known populations, eucalypt species exceeding 70cm DBH represent potential nesting habitat values for this endangered species. The proposed and future development sites are clear of native vegetation and will not require the removal of potential foraging and nesting habitat or for the Forty-spotted pardalote. Unlikely further assessment or referral is required under the Tasmanian *Threatened Species Protection Act 1995* or the Commonwealth's *Environmental Protection Biodiversity Protection Act 1999*.

Table 3 - Threatened fauna previously recorded within 5 km radius of the study area with discussion on likelihood of potential habitat within the study site and listed under the Tasmanian *Threatened Species Protection Act 1995* (TSP), and the Commonwealth's *Environmental Protection, Biodiversity Conservation Act 1999* (EPBC). Flora surveys was not limited to threatened flora species listed under TSP & EPBC but also included species considered within potential range and suitable habitat.

CONSERVATION STATUS			
SPECEIES	TSPA	EPBC	COMMENTS
<b>Threatened Fauna within 500 metres</b>			
<i>Antipodia chaostola</i> supsp <i>leucophaea</i> Chaostola skipper	endangered	Endangered	No previously recorded or at time of assessment. Previously recorded within 500m to the south. Potential habitat for the Chaostola Skipper is dry forest and woodland supporting <i>Gahnia radula</i> or <i>Gahnia microstachya</i> FPA Fauna Tech Notes. No potential habitat for this species was recorded within the allotment. It is unlikely the proposal will impact priority habitat or breeding activities. No further assessment or referral is required under the TSPA or EPBCA.
<i>Sarcophilus harrisii</i> Tasmanian Devil	endangered	Endangered	No previously recorded or at time of assessment. Two recorded observations within 500m of the site. Ground based assessment found surrounding environs are consistent foraging habitat. No dens recorded. Proposal is likely to impact potential foraging habitat but impacts are expected to lead to disturbance only and will not impact priority denning habitat or breeding activities. No further assessment or referral is required under the TSPA or EPBCA.
<i>Megaptera novaeangliae</i> Humpback whale	endangered	-	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSPA.
<b>Threatened Fauna within 5000 metres</b>			
<i>Accipiter novaehollandiae</i> Grey Goshawk	endangered	-	No previously recorded or at time of assessment. Ground based assessment found degraded DAS veg occupying the northern boundary and Coastal Reserve represents potential foraging habitat. Proposal will not impact potential vegetation. Desk top assessment indicates no nest recorded within 500m or 1 km line-of-sight of known nest sites. Not expected the proposal will impact priority habitat, nesting or breeding activities. No further assessment or referral is required under the TSPA.
<i>Antipodia chaostola</i> supsp <i>leucophaea</i> Chaostola skipper	endangered	Endangered	No previously recorded or at time of assessment. Previously recorded within 500m to the south. Potential habitat for the Chaostola Skipper is dry forest and woodland supporting <i>Gahnia radula</i> or <i>Gahnia microstachya</i> FPA Fauna Tech Notes. No potential habitat for this species was recorded within the allotment. It is unlikely the proposal will impact priority habitat or breeding activities. No further assessment or referral is required under the TSPA or EPBCA.
<i>Aquila audax fleayi</i> Tasmanian Wedge-tailed eagle	endangered	Endangered	Not previously observed or at the time of assessment. Proposed site represents a nil likelihood of supporting suitable nesting habitat values due topography and proximity to existing development and rural activities. Desk top assessment indicates no nest recorded within 500m or 1 km line-of-sight. It is unlikely the proposal will impact priority habitat or breeding activities. No further assessment or referral is required under the TSPA or EPBCA.

<i>Arctocephalus forsteri</i> NZ fur seal	rare	-	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSPA or EPBCA.
<i>Dasyurus maculatus</i> Spotted-tailed Quoll	rare	Vulnerable	No previously recorded within proposed development site. Inhabits variety of habitats but prefers wet sclerophyll. Assessment indicates the proposal may impact potential foraging habitat for these species however, it is unlikely the proposal will result in a significant loss of habitat for this species. No further assessment or referral required under TSPA or EPBCA.
<i>Dasyurus viverrinus</i> Eastern Quoll	-	Endangered	No previously recorded within proposed development site. Proposed development and surrounding mosaic of bushland and agricultural land represents suitable habitat. Assessment indicates the proposal may impact potential foraging habitat for these species however, it is unlikely the proposal will result in a significant loss of habitat for this species. No further assessment or referral required under EPBC.
<i>Eubalaena australis</i> Southern right whale	endangered	Endangered	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSP or EPBC.
<i>Haliaeetus leucogaster</i> White-bellied sea eagle	vulnerable	-	Not previously observed or at the time of assessment. Proposed site represents a nil likelihood of supporting suitable nesting habitat values due topography and proximity to existing development and rural activities. Desk top assessment indicates no nest recorded within 500m or 1 km line-of-sight. It is unlikely the proposal will impact priority habitat or breeding activities. No further assessment or referral is required under the TSPA
<i>Hirundapus caudacutus</i> White-throated needletail	-	Vulnerable	Not previously observed or at the time of assessment. Optimum survey time his migratory species Dec-March. Proposal unlikely to impact potential habitat. No further assessment or referral is required under the EPBCA.
<i>Lathamus discolor</i> Swift parrot	endangered	Critically Endangered	Not previously recorded or at the time of assessment. Site within Swift parrot Important Breeding Area. No core foraging habitat recorded ( <i>Eucalyptus globulus</i> & <i>E.ovata</i> ). Assessment recorded potential nesting trees within allotment. The proposal will not result in the removal of potential foraging or nesting habitat (Pending Arborist's assessment of 3 high biodiversity value <i>E. ovata</i> ). Not expected collision avoidance mechanisms required. It is not expected further assessment or referral is required under the TSP or EPBC.
<i>Lissotes menalcas</i> Mt Mangana Stag beetle	vulnerable	-	Not previously recorded. The small pocket of forest occupying the shallow gully represents marginal potential habitat. No large logs in state of decay recorded. Not anticipated the proposal will result in a loss of habitat for this species. No further assessment or referral required under TSP.
<i>Megaptera novaeangliae</i> Humpback whale	endangered	-	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSP.
<i>Mirounga leonine</i> Southern elephant seal	endangered	Vulnerable	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSP or EPBC.
<i>Neophema chrysostoma</i> Blue-winged parrot	-	Vulnerable	Not previously recorded or at the time of assessment. Recorded within 500m. Assessment recorded potential nesting trees within allotment. The proposal will not result in the removal of potential foraging or nesting habitat. It is not expected further assessment or referral is required under the EPBC.
<i>Numerius madagascariensis</i> Eastern curlew	endangered	Critically Endangered	Generally a marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSPA or EPBCA.
<i>Pardalotus quadragintus</i> Forty-spotted pardalote	endangered	Endangered	Not previously recorded or at the time of assessment. No core foraging habitat ( <i>Eucalyptus viminalis</i> ) recorded within the allotment. Assessment found potential nesting trees within allotment are clear of proposed development site. The proposal will not result in the removal of potential foraging or nesting habitat for this species. It is not expected further assessment or referral is required under the TSPA or EPBCA.
<i>Parameles gunnii</i> Eastern-barred bandicoot	-	Vulnerable	Not previously recorded. Surrounding mosaic of residential / bushland represents potential foraging habitat . Proposal will impact potential habitat but unlikely to result in a significant loss of potential habitat. No further assessment



			or referral is required under the EPBC.
<i>Smilasterias tasmaniae</i> Bruny island seastar	endangered	-	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSP or EPBC.
<i>Thalassarche cauta</i> Shy albatross	vulnerable	Endangered	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSP or EPBC.
<i>Thalassarche melanophris</i> Black-browed albatross	endangered	Vulnerable	Marine species. Proposal will not impact potential habitat. No further assessment or referral is required under the TSP or EPBC.
<i>Thinornis cucullatus</i> Hoeder plover		PVU	Previously recorded within 500m. Potential habitat limited to littoral zone. Proposal will not impact potential habitat. No further assessment or referral is required under the EPBC.
<i>Tyto novaehollandiae</i> Tas Masked Owl	endangered	Vulnerable	Not previously recorded within study site. Desk top assessment indicates no nest recorded within 500m or 1 km line-of-sight of known nest sites. Generally favours mature forests. A survey recorded potential nesting habitat on the northern boundary, but no hollows recorded. Assessment indicates the proposal will not result in a loss of potential habitat values for this species. No further assessment or referral required under TSP or EPBC.

Note: Information outlined above is derived from Department of Natural Resources and Environment (NRE) *Natural Values Atlas*, *Forestry Practices Authority (FPA) Biodiversity Values Database*, *Threatened Species Unit* for potential habitat values and descriptions and Author's experience.

## Planning implications

### E10.7 Biodiversity Code – Building and Development Standards

The study site is within Kingborough Council's Biodiversity Protection Area and in accordance with KIPS2015 E10. Table 1, the environs within the study site zoned Low Density Residential supports 'Moderate' to 'High' biodiversity priority values. Site plans show the proposed development and associated wastewater infrastructure will not impact threatened DAS vegetation communities and clear of the tree protection zones of 3 'high' biodiversity value *Eucalyptus amygdalina* located on the northern boundary. Whilst works are within the Biodiversity Protection Area, the proposal will not impact or require the removal of native vegetation and therefore unlikely to trigger provisions within the Biodiversity Code and Council's Biodiversity Offset Policy 6.10 V2 and '*Guidelines for the use of Biodiversity Offsets in the local planning approval process*'.

The proposal does not satisfy A1 Acceptable Solutions E10.7.1 Building and Works. However, it appears the proposed works complies with alternative solution Performance Criteria P1 (b) 'Moderate' biodiversity values, in that:

- (i) *Development is designed and located to minimise impacts, having regard to constraints such as topography or land hazard and the particular requirements of the development -*  
The proposed access, development site, and wastewater infrastructure, have been positioned within existing disturbance on land classified as Urban / Modified and will avoid impacting adjacent degraded threatened DAS vegetation community,
- (ii) *Impacts resulting from bushfire hazard management measures are minimised as far as reasonably practicable through siting and fire-resistant design of habitable buildings -*  
The proposed development and associated have been positioned within land classified as Urban / Modified to avoid impacting adjacent high priority and potential threatened species habitat DAS veg community.
- (iii) *Remaining moderate priority biodiversity values on the site are retained and improved through implementation of current best practice mitigation strategies and ongoing management measures designed to protect the integrity of these values –*

In accordance with best practice, the proposal has been positioned clear and will retain threatened DAS vegetation community. Best practice includes where necessary, implement tree protection measures (AS4970-2009) for the very high biodiversity value *Eucalyptus amygdalina* during the access construction phase. Implement best practice hygiene protocols during the construction phase to mitigate accidental spread of weed seeds and propagules including management of the construction site and designing appropriate soil and water management plan, and managing post construction landscaping works.

- (iv) *Residual adverse impacts on moderate priority biodiversity values not able to be avoided or satisfactorily mitigated are offset in accordance with the Guidelines for the use of Biodiversity Offsets in the local planning approval process, Southern Tasmanian Councils Authority, April 2013 and Kingborough Council Biodiversity Offset Policy 6.10 V2.0,*

The proposed development site and wastewater infrastructure has been positioned clear of threatened vegetation communities DAS and the tree protection zones of the very high biodiversity value *Eucalyptus amygdalina* on the northern boundary.

#### E11.7.1 Buildings and Works within Waterways and Coastal Protection Area.

It appears the proposed development does not satisfy Acceptable Solutions A1 of E11.7.1 Development Standards for Buildings and Works. However, the proposal appears meets alternative solutions in Performance Criteria P1,

*'Building and works within a Waterway and Coastal Protection Area must satisfy all of the following:*

- a) *'avoid or mitigate impacts on natural values –*  
Assessment indicates the proposed development footprint is clear of the modified 40m wide WCPA. Site plans indicate the proposed wastewater land application area is within the WCPA utilising land consistent with TASVEG 4.0 classification of Urban / Modified land as it is significantly altered from its natural state. The proposal and associated works will not result in a loss of riparian / littoral vegetation and will not impact the tree protection zone (TPZ) of adjacent very high biodiversity value eucalypts.
- b) *Mitigate and manage adverse erosion, sedimentation and runoff impacts on natural values –*  
Providing works are limited to the area identified in design plan, and appropriate mechanisms to mitigate the mobilisation of sediments recommended in the Department of Natural Resources and Environment Tasmania *Waterways and Wetland Works Manual 2003* are implemented prior to commencement of future works and remain in place for duration of works, it is anticipated activities that result in potential disturbance of the substrate can be successfully mitigated and unlikely to adversely impact the ecology of the adjacent riparian vegetation or result in an increase in erosion or mobilization of sediments.
- c) *Avoid or mitigate impacts on riparian or littoral vegetation –*  
Site assessment found the proposed development footprint including the on-site wastewater system, will not impact riparian or littoral vegetation. Site plan provided by Hobart Engineering Design – Proposed Visitor Accommodation 117 Coningham Road, Coningham for Marc Trendall Job No. H2816, Issue: Dev Applic.). The proposed wastewater system (Cromer, W. C. (2024). *Site and Soil Evaluation Report, and System Design for On-site Wastewater Management, proposed visitor accommodation at 117 Coningham Road, Coningham*. Unpublished report for M. Trendall by William C. Cromer Pty. Ltd., 16 September 2024) indicates the wastewater land application area will not impact riparian vegetation or the tree protection zones of adjacent very high biodiversity value eucalypts. Not expected an Arborists assessment required.

- d) *Maintain natural stream bank and streambed condition (where exists) – Not applicable.*
- e) *Maintain in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation – Not applicable.*
- f) *Avoid significantly impeding natural flow and drainage - Not applicable.*
- g) *Maintenance of fish passage- Not applicable.*
- h) *Avoid landfilling of wetlands – Not applicable.*
- i) *Works are undertaken generally in accordance with 'Wetlands and Waterways Works Manual (DPIWE)' and 'Tasmanian Coastal Works Manual' (DPIPWE, December 2010) and the unnecessary use of machinery within watercourses or wetlands is avoided –*  
Prior to commencement of any works, implement best practice outlined in Environmental Best Practice Guidelines 1 - for Protecting Waterways and Wetlands when Undertaking Works and Environmental Best Practice Guidelines 2. Construction Practices in Waterways and Wetlands. Where required, implement appropriate Soil & water Management Plan prior to commencement of construction and remain in place for duration of works and for a period post construction. Include hygiene mechanisms to mitigate the accidental introduction of declared weed species whilst pasture grasses are established, and substrate consolidates.

#### Acceptable Solutions A2

It appears the proposal satisfies Acceptable Solutions A2 of E11.7.1 Buildings and Works Acceptable solutions as assessment indicates the proposed development and wastewater infrastructure are not within an area identified as future coastal refugia area.

#### Acceptable Solutions A3

It is anticipated the works complies with Acceptable Solutions A3 of E11.7.1 Development Standards, as research indicates the proposal is not within a Potable Water Supply Area. No further assessment required under this provision.

#### Acceptable Solutions A4

It is anticipated the proposed works complies with Acceptable Solutions A4 of E11.7.1 Development Standards, that states,

*'Development must involve no new stormwater point discharge into a watercourse, wetland or lake.'*

It is anticipated the proposed development will not feature a new stormwater runoff, and therefore meets Acceptable Solutions A4 of E11.7.1 Buildings and Works Acceptable solutions as no new stormwater discharge point will be generated (see below). No further assessment required under this provision.

#### E7.0 Stormwater Management Code

Stormwater quantity requirements must always comply with requirements of the local authority including catchment-specific standards. All stormwater flow management estimates should be prepared according to methodologies described in Australian Rainfall and Runoff (Engineering Australia 2004) or through catchment modelling completed by a suitably qualified person. The proposal does not comply with Acceptable Solutions E7.7.1 A1 however, it appears the proposal satisfies alternative solution Performance Criteria P1 in that:

*'Stormwater from new impervious surfaces must be managed by any of the following'*

- c) *Collected for re-use on the site.* Site plans indicate the stormwater will be collected on-site for re-use in 225000L collection tanks. Overflow point will implement mechanisms to mitigate erosion and mobilisation of sediments.

E23.0 On-site Wastewater Management Code

Site plans provided by Cromer, W. C. (2024). *Site and Soil Evaluation Report, and System Design for On-site Wastewater Management, proposed visitor accommodation at 117 Coningham Road, Coningham.* Unpublished report for M. Trendall by William C. Cromer Pty. Ltd., 16 September 2024, indicates the proposed wastewater management system and split 360m<sup>2</sup> land application area is contained within land classified as Urban / Modified and positioned clear of the TPZ of adjacent very high biodiversity value eucalypts located on the northern boundary. Providing the on-site wastewater system and infrastructure is appropriately designed to geotechnical specifications by approved manufactures and implemented by certified operators, it is not anticipated the wastewater will impact groundwater quality down-slope from the facility.

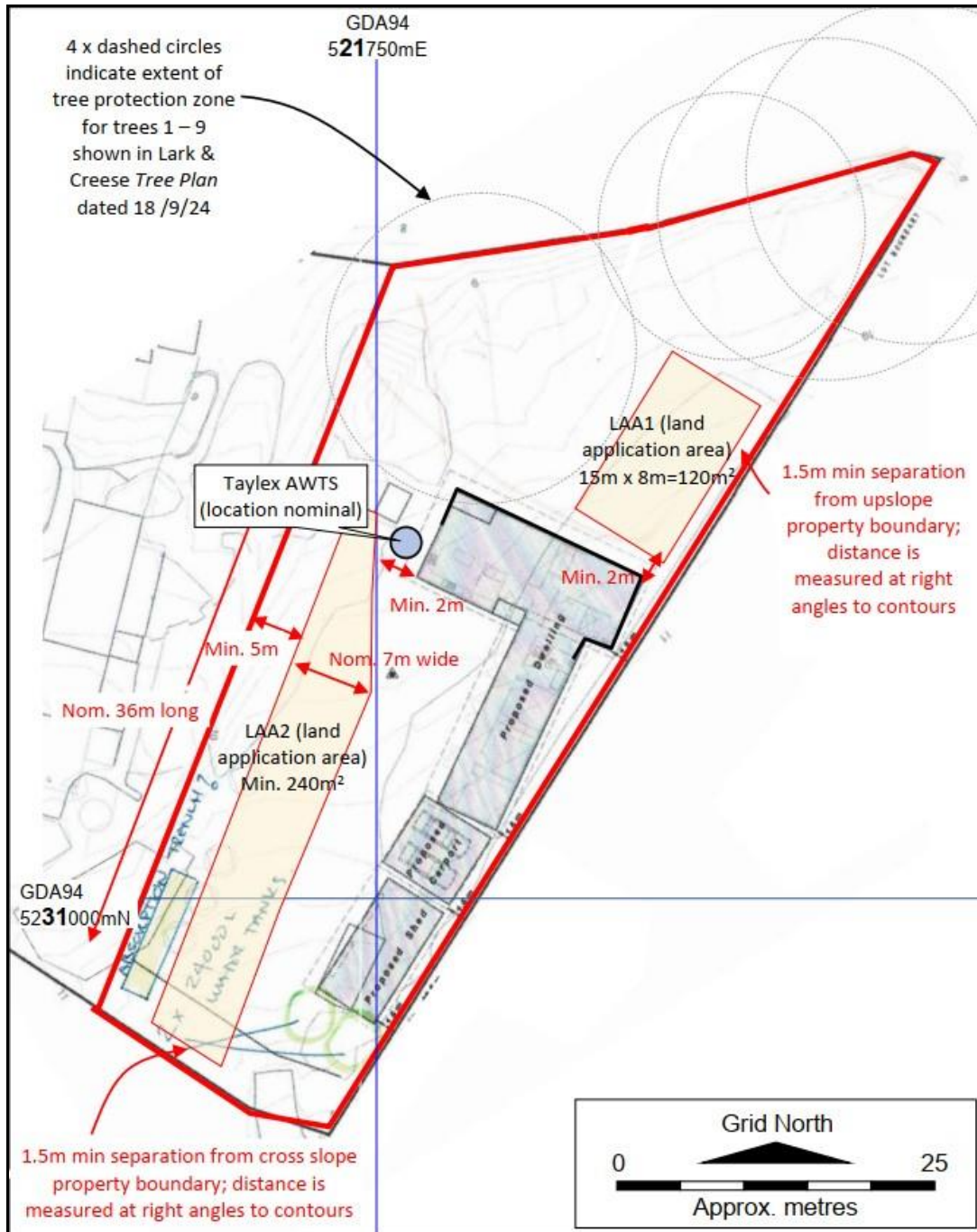


Figure 13 – Image of proposed wastewater system and split 360m<sup>2</sup> land application area. Northern 120m<sup>2</sup> LAA1 has been positioned clear of the very high biodiversity values eucalypts located on the northern boundary (See Appendix B: Tree plan).

Individual trees

Site plans provided by Cromer, W. C. (2024). *Site and Soil Evaluation Report, and System Design for On-site Wastewater Management, proposed visitor accommodation at 117 Coningham Road, Coningham.* (Unpublished report for M. Trendall by William C. Cromer Pty. Ltd., 16 September 2024) indicates the proposed on-site wastewater system and the split 360m<sup>2</sup> land application area will not impact adjacent threatened native vegetation communities positioned clear of the tree protection zones of 1 *Eucalyptus obliqua* & 3 *E. amygdalina* trees classified as ‘very high’ biodiversity value (Kinborough Council’s Biodiversity Offset Policy 6.10 V2.1, Table 2: Conservation Value of Individual Trees (See below).

Description	Characteristics	Rationale	Conservation Value	Value	Definition	Replacement ratio*
<i>Eucalyptus globulus</i> or <i>E. ovata</i>	DBH >70cm	Significant or potential swift parrot foraging habitat	Very high	Very high priority values	<ul style="list-style-type: none"> <li>Native vegetation/ecological communities listed as endangered or critically endangered under the <i>Nature Conservation Act 2002</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i></li> <li>Significant habitat for and/or areas known to contain threatened species listed under the <i>Threatened Species Protection Act 1995</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> that are:                             <ol style="list-style-type: none"> <li>Recognised as endangered or critically endangered; or</li> <li>Largely confined in their total distribution to the municipal area; or</li> <li>Have most of their range within the municipal area.</li> </ol> </li> </ul>	6:1
<i>E. viminalis</i>	DBH >25cm and within or directly adjacent to significant forty-spotted pardalote habitat	Significant forty-spotted pardalote habitat	Very high			
Native trees with known or potential nesting hollows	Hollows present; and/or, DBH > 70cm in dry forests or cleared settings; or, DBH >100cm in wet forests	Potential or significant habitat for hollow dependent species	Very high			
<i>Eucalyptus globulus</i> or <i>E. ovata</i>	DBH >40cm and <70cm	Potential swift parrot foraging habitat	High			
<i>E. viminalis</i> <sup>2</sup>	DBH >25cm and: <ul style="list-style-type: none"> <li>on Bruny Island; or</li> <li>within 5,000m of significant forty-spotted pardalote habitat or within potential forty-spotted pardalote habitat</li> </ul>	Potential forty-spotted pardalote habitat	High	High priority biodiversity values	<ul style="list-style-type: none"> <li>Native vegetation communities listed as vulnerable under the <i>Nature Conservation Act 2002</i> and <i>EPBC</i></li> <li>Significant habitat for and/or areas known to contain threatened species listed under the <i>Threatened Species Protection Act 1995</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> that are recognised as vulnerable.</li> <li>Native vegetation communities with a distribution on a bioregional basis having contracted to less than 10% of its former area.</li> <li>Native vegetation communities with a total area on a bio-regional basis generally being less than 1,000 ha.</li> <li>Remnants occurring on land systems components which have been more than 90% cleared of their native vegetation.</li> </ul>	5:1
A species that is listed in the <i>Threatened Species Protection Act 1995</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (C'th)	N/A	Listed threatened species	High			

Table 4 – LH Table 2: Kinborough Council’s Biodiversity Offset Policy 6.10 V2.1, RH Table 3: Biodiversity Value and (Ref: Kinborough Council’s Biodiversity Offset Policy 6.1, V2.1).

## Conclusions

### Threatened flora

Assessment indicates the proposed development is unlikely to impact potential critical habitat values for threatened flora recorded within 5km of the site. No further assessment, or a permit is required under Section 51 of Tasmania's *Threatened Species Protection Act 1995*. No formal referral to the Commonwealth's Department of Environment under *Significant Impact Guidelines* is required.

### Vegetation communities

Assessment indicates the proposed development will not impact degraded dry *Eucalyptus amygdalina* woodland / forest on sandstone (DAS) vegetation community on the northern boundary. DAS is listed as threatened communities under Schedule 3A of Tasmania's *Nature Conservation Act 2002*. Given the proposal will not impact this degraded DAS remnant, no further assessment or referral under Tasmania's *Nature Conservation Act 2002* or the *Land Use Planning and Approvals Act 1993*.

### Threatened fauna

#### Chaostola skipper

This species of butterfly has been recorded within 500m to the south however, no potential core habitat and/or larval food source / habitat for the Chaostola Skipper (*Gahnia radula* or *Gahnia microstachya*) was recorded within the allotment. As the proposal will not result in a loss of potential habitat, no further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Tasmanian Devil, Eastern Quoll & Eastern-barred bandicoot

The site is within range boundaries of the Tasmanian Devil, Eastern quoll and Eastern-barred bandicoot. Site assessment indicates the proposal is likely to result in the minor loss of potential foraging habitat for these species. However, given the small scale of the development, it is expected works will result in disturbance only and not considered a threatening process for these species under the Significant Impact Guidelines issued by the Commonwealth agency. No further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Swift parrot

This species has been recorded with 1km of the site however no core foraging habitat was recorded within the allotment. Large *Eucalyptus amygdalina* & *E. obliqua* on the northern boundary represent potential nesting habitat but no visible hollows recorded. The proposed wastewater and split land application area has been positioned clear of the tree protection zones of 3 high biodiversity value *E. amygdalina* trees. Given the distance between potential nesting habitat it is not expected collision avoidance mechanism are required to be incorporated into the design. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Forty-spotted pardalote

Site assessment found the proposed development site does not support potential core foraging habitat values for the endangered Forty-spotted pardalote. Proposal will not impact the large *Eucalyptus amygdalina* on the northern boundary that represent potential nesting habitat for this species. Given the proposal will not impact potential foraging or nesting habitat no further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Masked owl

Proposal will not impact the large *Eucalyptus amygdalina* & *E. obliqua* on the northern boundary that represent potential nesting habitat. No recorded observations of Masked owls within 500m or nests within 1km line-of-sight. Not expected further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Grey Goshawk, Tasmanian Wedge-tailed eagle & White-bellied sea eagle

A Grey Goshawk have previously been recorded within 2km to the west. Assessment found the proposed development site is not consistent with preferred nesting habitat suitability categories for this species and including the Tasmanian Wedge-tailed eagle & White-bellied sea eagle. No nest recorded within 500m or nest within 1km line-of-sight and unlikely to disturb nesting or breeding activities. No further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

#### Introduced plant species

The landowners have implemented, and undertaken management works in accordance with the respective Statutory weed Management Plans for Canary broom and Blackberry including a 5 year management plan to meet the management objectives for these weed species. No additional management prescriptions required under the *Weed Management Act 1995*.

#### Conclusions

Providing development is consistent with plans provided by Hobart Engineering Design and the proposed wastewater system and northern #1 land application area is installed in accordance with W. C. Cromer recommendations, including the additional management prescriptions outlined in this report are complied with, it is anticipated the proposed development will not result in a significant loss of remaining potential threatened habitat values or compromise the existing ecological systems and functions within the site and surrounding environs. Under Significant Impact Guidelines issued by the Commonwealth Dept of the Environment to determine if referral to the department is required, indicates the proposal will not:

- Impact native vegetation or a native vegetation community,
- Directly impact potential threatened species habitat,
- Lead to a long-term decrease in the size of populations, reduce area of occupancy of a significant population, fragment an existing population or destroy habitat critical to the survival of species,
- Disrupt the breeding cycle of an important population,
- Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline,
- Result in invasive species that are harmful to a threatened species becoming established in the threatened species habitat.

Therefore, it is unlikely the proposal will result in "significant impacts" as described in the EPBC Act. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or Commonwealth's *Environmental Protection Biodiversity Conservation Act 1999*.

Management prescriptions to address the construction phase of the development and potential future works or land use should include:

- Prior to commencement of works implement a hygiene management plan including in accordance with *Tasmanian Washdown Guidelines for Weed and Disease Control: Machinery, Vehicles and Equipment (Edition 1, 2004)* ensuring contractors have washed down vehicles and machinery to prevent accidental importation of new weed species and *Phytophthora cinnamomi* and other plant pathogens during the construction phase,
- Limit movement of machinery and vehicles to the proposed development footprint and prohibit movement of vehicles where weeds have been identified to mitigate accidental transportation of weed seeds and plant propagules,

- Prior to commencement of works implement a Soil & Water management plan following guidelines set out in Environmental Best Practice Guidelines for all development
- Given the likelihood the site supports a Canary Broom seed bank, retain excavated waste material on site detailing location of temporary stockpile sites for waste material, construction material and parking.



## 7. References

- Brereton, R and Mooney, NJ 1994, 'Conservation of the nesting habitat of the grey goshawk *Accipiter novaehollandiae* in Tasmanian State forests', *Tasforests* 6: 79-91.
- Cromer, W. C. (2024). *Site and Soil Evaluation Report, and System Design for On-site Wastewater Management, proposed visitor accommodation at 117 Coningham Road, Coningham*. Unpublished report for M. Trendall by William C. Cromer Pty. Ltd., 16 September 2024
- Department of Primary Industries, Parks, Water and Environment. *Threatened Native Vegetation Communities 2014*, Released May 2015. Tasmanian Vegetation Monitoring and Mapping Program, Natural and Cultural Heritage Division.
- de Salas, M.F & Baker, M.L. (2019). *A Census of the Vascular Plants of Tasmania, including Macquarie Island*. Tasmanian Herbarium, Tasmanian Museum and Art Gallery, Hobart
- Duncan, F. (1996). 'A field key to Tasmanian species of Eucalyptus' *Tasforests* vol. 8, Forestry Tasmania. Tasmanian State Government, Government Printer, Hobart, Tasmania.
- Forest Practices Authority 2014. 'Identifying swift parrot breeding Habitat', Fauna Technical Note No. 3 Forest Practices Authority, Hobart.
- Forest Practices Authority 2014. '*Wedge-tailed Eagle Nesting habitat model*' Fauna Technical Note No. 6, Forest Practices Authority, Hobart.
- Forest Practices Authority 2022. 'Management of *Phytophthora cinnamomi* in production forest', Flora Technical Note No. 8. Forest Practices Authority, Hobart.
- Forest Practices Authority 2010, '*Goshawk habitat categories*', Fauna Technical Note No. 12, Forest Practices Authority, Hobart.
- Forest Practices Authority 2010.' *Nest identification*', Fauna Technical Note No. 14 'Forest Practices Authority, Hobart.
- Forest Practices Authority (2005). *Forest Botany Manual: Module 6 – D'Entrecasteaux Region*. Forest Practices Authority.
- Forest Practices Authority (2013), 'Wedge-tailed Eagle Nest Monitoring Project 2007–12: Nest site use, timing of breeding, and a review of the nesting habitat model', Report to Roaring 40s, Threatened Species and Marine Section (DPIPWE), April 2013, Forest Practices Authority Scientific Report.
- Forest Practices Authority 2012, *Biodiversity landscape planning guideline: a framework for managing biodiversity values, including RFA priority species, across the landscape in areas covered by the Tasmanian forest practices system - a report to the Commonwealth Government and the Forest Practices Authority*, July 2012.
- Forest Practices Authority (2010) *Interim Species Habitat Planning Guideline for the conservation management of *Lathamus discolor* (Swift Parrot) in areas regulated under the Tasmanian Forest Practices System*. Internal report to the Forest Practices Authority, Hobart, Tasmania.
- Forest Practices Act* (1985). Tasmanian State Government, Government Printer, Hobart, Tasmania.
- Koch, A. 'Tree hollows in Tasmania: A Guide' FPA Hollows Project Officer

CRC for Forestry and the Forest Practices Authority, November 2009.

Goff, F.G, Dawson, G.A. and Rochow, J.J. (1982). 'Site Examination for Threatened and Endangered Plant Species'. Environmental Management 6 (4) pp 307-316.

Harris, S & Kitchener, A. eds (2005). From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation. Department of Primary Industries, Water and Environment, Printing Authority of Tasmania, Hobart.

Hobart Engineering Design – Proposed Visitor Accommodation - 117 Coningham Road, Coningham for Marc Trendall Job No. H2816, Issue: Dev Application.

Kingborough Council. *Kingborough Interim Planning Scheme, 2015.*

Kingborough Council (2022). *Biodiversity Offset Policy 6.10 V2.0*

*Land Use Planning and Approvals Act* (1993). Tasmanian State Government, No. 70 of 1993. Government printer, Hobart, Tasmania.

Nicolle, D. 2006, 'Eucalypts of Victoria and Tasmania' Blooming Books, Melbourne, Australia.

Schrammeyer, E., 2005. Southern Tasmanian Weed Strategy, Management Regional Committee (NRM South) NRM South, Hobart

Tasmanian State Government (1993). *Land Use Planning and Approvals Act 1993*. No. 70 of 1993. Government Printer, Hobart, Tasmania.

Tasmanian State Government (2002). *Nature Conservation Act 2002*. No. 63 of 2002. Government Printer, Hobart, Tasmania.

Tasmanian State Government (1995). *Threatened Species Protection Act 1995*. No. 83 of 1995. Government Printer, Hobart, Tasmania.

Tasmanian State Government (1999). *Tasmanian Weed Management Act 1999*. Government Printer, Hobart, Tasmania.

Threatened Species Unit; Threatened Flora of Tasmania. DPIPWE, 2003

HYPERLINK "<http://www.dpiw.tas.gov.au/inter>" <http://www.dpiw.tas.gov.au/inter>

Wapstra, M., Wapstra, A., Wapstra. H. 2010. 'Tasmanian Plant Names Unravelling' Fullers Books, Launceston, Tasmania.

Young, D. (2020) Conservation of the 'endangered' Grey Goshawk in south-east Tasmania. *Interim Nesting Habitat Technical Note.*

8. Appendix A – Vascular plant species list.

**VASCULAR PLANT SPECIES LIST**  
**117 Coningham Road, Coningham, Bruny Island**

I = Introduced; E = Endemic; D = Declared weed under Tas *Weed Management Act 1999*; e = Environmental weed

**DICOTYLEDON**

**AIZOACEAE**

I *Carpobrotus aequilaterus* Angled pigface

**ASTERACEAE**

*Cassina aculeata* subsp *aculeata*  
I *Cirsium vulgare* Spear thistle e  
*Euchiton collinus / involucratum*  
*Helichrysum luteoalbum*  
*Senecio minimus*

**CASUARINACEAE**

*Allocasuarina littoralis* Black sheoak  
*Allocasuarina verticillata* Drooping sheoak

**EPACRIDACEAE**

*Astroloma humifusum* Native cranberry  
*Leucopogon ericoides* Pink beardheath

**ERICACEAE**

*Sprengelia incarnata*

**FABACEAE**

*Acacia longifolia* Coast wattle  
*Acacia suaveolens* Sweet wattle  
*Acacia terminalis* Sunshine wattle  
I *Genista monspessulana* Canary broom D  
*Pultenaea juniperina* Bush pea

**FUMARIACEAE**

I *Fumaria muralis*

**GENTIANACEAE**

I *Centaurium erythraea* Century plant

**GOODENACEAE**

*Goodenia ovata* Hop-Native primrose

**HALORAGACEAE**

*Gonocarpus tetragynus* Common raspwort

**HEMEROCALLIDACEAE**

*Dianella brevicaulis* Shortstem flaxlily

**MYRTACEAE**

*Eucalyptus amygdalina*  
*Eucalyptus obliqua*  
*Eucalyptus tenuiramis*  
*Leptospermum scoparium*  
*Leptospermum lanigerum*  
*Melaleuca ericifolia*

Common Teatree  
Wooly teatree

OXALIDACEAE

*Oxalis spp*

Oxalis

PLANTAGINACEAE

I *Plantago coronopus*  
I *Plantago lanceolata*

Buckshorn plantain  
Ribwort plantain

POLYGONACEAE

I *Acetosella vulgaris*

Sheep sorrel

RHAMNACEAE

*Pomaderris apetala*

Dogwood

ROSACEAE

*Acaena novae-zelandiae*

RANUNCULACEAE

*Ranunculus spp*

SAPINDACEAE

*Dodonaea viscosa* Subsp. *spatulata*

Broadleaf hopbush

SCROPHULARIACEAE

I *Digitalis purpurea*

Foxglove

e

SANTALACEAE

*Exocarpos cupressiformis*

Native cherry

THYUMELAEACEAE

*Pimelea humilis*

**MONOCOTYLEDONAE**

LOMANDRACEAE

*Lomandra longifolia*

Sagg

POACEAE

*Agrostis spp*  
*Anthoxanthum odoratum*  
*Aira caryophylla*  
*Dactylis glomerata*  
*Deyeuxia quadriseta*  
I *Holcus lanatus*  
*Poa labillarderei* var. *labillardierei*  
*Rytidosperma sp*

Cocksfoot  
Reed bentgrass  
Fog grass  
Silver tussock grass  
Wallabygrass

**PTERIDOPHYTA**

DEMMSTAEDTIACEA

*Pteridium esculentum*

Bracken

9. Appendix B: Tree plan & register.



Table 5 – Tree register, 117 Coningham Road, Coningham. Conservation Value of Individual Trees Table 2: Kinborough Council’s Biodiversity Offset Policy 6.10 V2.1. All trees measured using Trimble R12(i) RTK GNSS, with coordinates in GDA2024, MGA55.

#ID	Species	Diameter at Breast Height (cm)	Tree Protection Zone (m)	Conservation Value	Action / Comments
1	<i>Eucalyptus obliqua</i>	100	12.00	Very High	Retain. Wastewater land application area clear of TPZ.
2	<i>Eucalyptus amygdalina</i>	27	3.24		Retain. Wastewater land application area clear of TPZ.
3	<i>Eucalyptus amygdalina</i>	34	4.08		Retain. Wastewater land application area clear of TPZ.
4	<i>Eucalyptus amygdalina</i>	34	4.08		Retain. Wastewater land application area clear of TPZ.
5	<i>Eucalyptus amygdalina</i>	86	10.30	Very High	Retain. Wastewater land application area clear of TPZ.
6	<i>Eucalyptus amygdalina</i>	51	6.12		Retain. Wastewater land application area clear of TPZ.
7	<i>Eucalyptus amygdalina</i>	41	4.92		Retain. Wastewater land application area clear of TPZ.
8	<i>Eucalyptus amygdalina</i>	110	12.24	Very High	Retain. Wastewater land application area clear of TPZ.
9	<i>Eucalyptus amygdalina</i>	102	4.45	Very High	Retain. Wastewater land application area clear of TPZ.

10. Appendix C - Supporting documentation.

Author	Description / Summary
Cromer, W. C. (2024).	<i>Site and Soil Evaluation Report, and System Design for On-site Wastewater Management, proposed visitor accommodation at 117 Coningham Road, Coningham.</i> Unpublished report for M. Trendall by William C. Cromer Pty. Ltd., 16 September 2024
Hobart Engineering Design	Proposed Visitor Accommodation - 117 Coningham Road, Coningham for Marc Trendall Job No. H2816, Issue: Dev Application.

Definitions of terms

Term / Acronym	Definition
BHA	Bushfire Hazard Assessment
C.T.	Certificate of Title
DOV	Dry <i>Eucalyptus ovata</i> woodland/forest veg community
DTD	Dry <i>Eucalyptus tenuiramis</i> woodland/forest veg community
DTO	Dry <i>Eucalyptus tenuiramis</i> woodland/forest veg community
EPBC	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
FUR	Agricultural / Modified land
FPA	Forestry Practices Authority
FPP	Forestry Practices Plan
HMA	Hazard Management Area
KIPS2015	Kingborough Interim Planning Scheme 2015
LUPA	Tasmania <i>Land Use Planning and Approvals Act 1993</i>
NCA	Tasmanian <i>Nature Conservation Act 2002</i>
NRE	Department of Natural Resources and Environment
Pc	<i>Phytophthora cinnamomi</i>
TSPA	Tasmanian <i>Threatened Species Protection Act 1995</i>
WMA	Tasmanian <i>Weed Management Act 1995</i>
WCPA	Waterways & Coastal Protection Area

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