From:	Clarence General Mail User
Sent:	Tue, 17 Mar 2020 18:38:02 +1000
То:	City Planning;Dan Ford
Subject:	FW: Clarence Draft LPS
Attachments:	NS rep 1 Monique 170320.pdf

From: neilsh@bigpond.com <neilsh@bigpond.com>
Sent: Tuesday, 17 March 2020 5:35 PM
To: Clarence General Mail User <clarence@ccc.tas.gov.au>
Subject: Clarence Draft LPS

Please find attached a representation in respect of the Clarence Draft LPS.

Kind regards, Neil Shephard

Fellow of the Planning Institute of Australia Certified Practicing Planner



Mob: 0417 25 0232



Planning and Development Consultants

General Manager Clarence City Council PO Box 96 ROSNY PARK 7018 17 March 2020

Dear Sir,

RE: TASMANIAN PLANNING SCHEME – CLARENCE DRAFT LOCAL PROVISIONS SCHEDULE – REPRESENTATION – ZONING OF 1 MONIQUE STREET, HOWRAH

Background

During the preparation of the *Clarence Interim Planning Scheme 2015* (the interim scheme) the subject property at 1 Monique Street, Howrah obtained a dual zoning: a small area of General Residential (GR) in the lower western portion, with the majority being Environmental Living (EL) (see Figure 1 below).



Figure 1

It is not clear how the zone boundary arose, as it does not reflect the boundary that existed under the *Eastern Shore Planning Scheme 1963* or the *Clarence Planning Scheme 2007*. The owners AM and R McCreadie advise that they were not aware of the reduction in the area zoned Residential until they recently began contemplating development of the land.

This dual zoning has created difficulties in managing and planning for the future of the land, and its most efficient form of development. Application has recently been made to subdivide along the zone boundary, which will go some way to providing a sustainable future for the land. However, in pre-application discussions Council expressed a desire for the area shown as Area C in Figure 2 below, to be transferred to Council to expand the adjoining open space network. Unfortunately, this has not been possible owing to the dual zoning of the land and the creation of sub-minimum lots that would prevent approval of any subdivision. The solution is to restore

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the General Residential boundary to its approximate position under the 1963 and 2007 planning schemes, consistent with the boundary between Areas B and C in Figure 2. It is therefore proposed that Area B in Figure 2 be zoned General Residential under the Clarence LPS.



Figure 2

Subject land

A natural values assessment was undertaken, and that is attached to this submission (NORTH BARKER, 11 March 2020).

In summary, the natural values assessment describes the western areas corresponding approximately to Areas A and B as being largely cleared of understory, and of poor quality in comparison to the eastern area corresponding with Area C (the area sought by Council officers). In addition, it is stated that the provision of Area C as an extension to Glebe Hill Bushland Reserve POS is beneficial. The formal protection of this bushland and access for public management provides opportunity to tackle declared weeds and to buffer the forest upslope. The retention of additional E. risdonii contributes to the conservation of the species.

Area B is within the Urban Growth Boundary under the *Southern Tasmania Regional Land Use Strategy*, corresponding to its original zoning and the circumstances of the land and its location: notwithstanding the reduced natural values, the land is capable of being easily connected to all urban services, consistent with the adjoining land to the west and south. Rezoning and development would clearly qualify as infill.

The available evidence suggests that the EL zoning of Area B was either a mistake, or simply an oversight. It has created an anomaly that should be corrected under the Clarence LPS.

I look forward to assisting Council and the Commission in its consideration of this matter.

Neil Shephard & Associates, PO Box 273, Sandy Bay, Tasmania 7006, ph 0417 25 0232 email: neilsh@bigpond.com

Yours faithfully,

hil Shephand.

NEIL SHEPHARD BA, MTCP(Syd), FPIA, CPP

Obo A and R McCreadie

Attached: NORTH BARKER, Natural Values Assessment



1 Monique Street, Howrah

Natural Values Assessment

11 March 2020

For Neil Shephard SHE011

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File Control

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First Draft 0.1	11/03/2020	Andrew North



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Summary

Clarence Interim Planning Schem	Clarence Interim Plannina Scheme 2015			
Rezoning	General Residential and Open Space			
Current Zone	General Residential D10			
	Environmental Living D14			
Overlays	Biodiversity Protection Area			
	Bushfire Prone Area			
	Landslide hazard Area			
	Conforms to E27.9.1			
National Assats Carda	For a Negligible Impact P1			
Natural Assets Code	For a Minor Impact P1 through the minimisation of impact to priority vegetation and the provision of offsets.			
Threatened flora	Tall wallaby grass - Rytidosperma induta - Impacted but soon to be omitted from listing			
	Risdon peppermint – Eucalyptus risdonii – no impact			
Impacts	Some of R. induta - approx 40-50 plants			
Threatened fauna and habitat	None			
Threatened vegetation	None			
Native vegetation	E. amygdalina forest on mudstone (DAM)			
Impacts	0.37 ha DAM			
EPBC Act	No significant impact to MNES			
TSP Act	A permit to take required for Rytidosperma induta, until imminent delisting of species			
NCA Act	No permit to take product of wildlife required			
Weed Management Act	Declared weeds present in project area			

Contents

1	INTR	ODUCTION	1
	1.1	Background	1
	1.2	Study area	1
2	MET	HODS	2
	2.1	Botanical Survey	3
	2.2	Fauna survey	3
	2.3	Limitations	3
3	RESU	JLTS - BIOLOGICAL VALUES	3
	3.1	Vegetation communities	3
	3.2	Threatened Plants	5
	3.3	Declared weeds	.13
	3.4	Threatened Fauna and Habitat	.14
4	IMP/	ACT ASSESSMENT and MITIGATION	.18
	4.1	Vegetation communities	.18
	4.2	Threatened plants	.18
	4.3	Threatened fauna habitat	.18
	4.4	Mitigation	.18
5	LEG	ISLATIVE REQUIREMENTS	.18
	5.1	Commonwealth Environment Protection and Biodiversity Conservation Act 1999	.18
	5.2	Tasmanian Threatened Species Protection Act 1995	.19
	5.3	Tasmanian Nature Conservation Act 2002	.19
	5.4	Tasmanian Weed Management Act 1999	.19
	5.5	Clarence Interim Planning Scheme 2013	.19
R	EFEREN	CES	.29
A	PPEND	IX A: Plant species recorded in the study area	.30
A	ppend	ix B: Site surveys	.32

1 INTRODUCTION

1.1 Background

1 Monique Street extends over two zones under the Clarence Interim Planning Scheme 2015 (CIPS) – General Residential and Environmental Living. An application was made for a three lot subdivision of the land. This was deemed by Council to not be able to be approved on account of lot size provisions in the Environmental Living Zone. A revised application was submitted for 2 lots. Council has determined that the land would need a rezoning to comply or a change reflected in the Local Provision Schedule (LPS). The applicant is proposing to make a representation to the hearings for the LPS for a rezoning.

The lots have been variously referred to as Lots A-C and Lots 1-3. In this report we use Lots 1&2 for the proposed residential lots and Lot 3 for the POS¹.

This report provides ecological assessment of the property and considers implications for the Natural Assets Code of the CIPS to assist with the application.

1.2 Study area

The study area is in Howrah in south-eastern Tasmania (Figure 1). It is in the Tasmanian South East bioregion² in the Clarence City Council and is approximately 0.66 ha in extent. The site is zoned as General Residential and Environmental Living and is subject to the Natural Assets Code (E27) Under the Clarence Interim Planning Scheme 2015.

The site is at 70-100 m above sea level and is located on the mid-lower slopes of western face of Glebe Hill. The lower western section is gently sloping and west facing. The eastern portion is moderately steep with a more southerly aspect.



The geology is late Permian siltstone forming shallow infertile soils.

1 Monique Street Looking from the lower end of Lot 1 through to Lot 2

¹ Taken from the subdivision plan MCRIC01, 11974-01 2-10-2019 Rogerson & Birch

² IBRA 7 (2012)



Figure 1: 1 Monique Street Location and zoning

2 METHODS

The following sources were used for biological records for the region:

- TASVEG version 3.0 digital layer³,
- Natural Values Atlas (NVA) all threatened species records within 5 km of the study area and threatened fauna considered possible to occur in suitable habitat⁴,
- EPBCA Matters of National Environmental Significance database a 5 km buffer was used to search for potential values⁵.

³ Kitchener and Harris (2013)

⁴ DPIPWE Natural Values Atlas Report (2020) report #: nvr_3_29-Jan-2020

⁵ Commonwealth of Australia, EPBC Protected Matters Search Tool Report (2020) report #: PMST_L297YT

2.1 Botanical Survey

This assessment was undertaken in accordance with the 'Guidelines for Natural Values Surveys – Terrestrial Development Proposals'⁶.

Native vegetation was mapped in accordance with units defined in TASVEG 3.17. Vascular plants were recorded in accordance with the current census of Tasmanian plants⁸. The site was mapped using a meandering area search technique⁹. Particular attention was given to habitats suitable for threatened species under the Tasmanian *Threatened Species Protection Act* 1995 (TSPA) and/or the Commonwealth *Environment Protection* and *Biodiversity* Conservation Act 1999 (EPBCA), and to 'declared' weeds under the Tasmanian Weed Management Act 1999 (WMA)¹⁰.

2.2 Fauna survey

The survey was carried out in accordance with DPIPWE's 'Guidelines for Natural Values Surveys – Terrestrial Development Proposals'¹¹.

The study area was searched for the potential presence, habitat, and sign (e.g. scats, tracks, nests), threatened fauna concurrently with the botanical survey.

2.3 Limitations

Due to various limitations (e.g. variations in species presence and detectability), no biological survey can guarantee that all species will be recorded during a single visit. The field survey was undertaken in summer, so seasonal and ephemeral species/habitat may have been overlooked or are seasonally absent, including summer flowering species or winter ponds. However, we are confident the surveys sufficiently captured community level diversity. We compensate for survey limitations in part by considering all listed threatened species from data from the Tasmanian Natural Values Atlas (NVA) and Commonwealth's EPBCA Protected Matters Search Tool (MNES)¹². These data include records of all threatened species known to occur, or with the potential to occur, up to 5 km from the study area.

3 RESULTS - BIOLOGICAL VALUES

A full inventory of all vascular plant species recorded on site is included in Appendix A. Two plots were recorded (Appendix B), one for the cleared western half (Lots 1 and 2) and one for the eastern half (Lot 3) - the proposed Public Open Space.

A total of 50 species were recorded including (32 native and 18 introduced).

3.1 Vegetation communities

TASVEGv3.0 identifies the western section as non-native with the eastern half classified as *E. amygdalina* on mudstone (DAM).

Our assessment has remapped the entire site as DAM noting variation across the site is reflective of a varied topography and management history (Figure 2).

⁶ DPIPWE (2015)

⁷ Kitchener and Harris (2013)

⁸ de Salas and Baker (2019)

⁹ Goff *et al.* (1982)

¹⁰ Tasmanian State Government 1995; Commonwealth of Australia 1999; Tasmanian State Government 1999 ¹¹ DPIPWE (2015)

¹² DPIPWE Natural Values Atlas Report (2020) report #: nvr_3_29-Jan-2020; Commonwealth of Australia, EPBC Protected Matters Search Tool Report (2020) report #: PMST_L297YT



E. amygdalina on mudstone (cleared understorey characteristic of Lots 1 and 2)



E. amygdalina on mudstone (DAM) Lot 3 - dense understorey

E. amygdalina on mudstone (DAM) is not listed as a threatened community under the Tasmanian Nature Conservation Act 2002.

The western portion of the site has been maintained in a low fuel state. It retains the canopy but has a cleared understorey. The ground surface is heavily disturbed incudes rubble and other introduced material dispersed across and through the topsoil especially towards the lower portion. Consequently, it has weedy ground layer with few remnant native ground covers. The dominant eucalypt is white gum *E. viminalis*, which is not untypical through the Howrajh Hills. This is well recognised facies of DAM.

E. amygdalina is present throughout and becomes more prominent towards the eastern side. *E. risdonii* is present on the uppermost section as a subdominant. The less disturbed eastern portion of the site retains the dense secondary layer of bull oak Allocasuarina littoralis with Acacia dealbata and Bursaria spinosa. Low shrubs include Ozothamnus obcordatus, Astroloma humifusum and Lissanthe strigosa at low density. The sparse ground layer is dominated by wallaby grasses Rytidosperma spp. with Lomandra longifolia and Dianella revoluta occasional. Herbs are sparse.

3.2 Threatened Plants

Two species of threatened flora listed on the Tasmanian Threatened Species Protection Act 1995 are present (Figure 2).

• Risdon peppermint Eucalyptus risdonii

13 plants of *Eucalyptus risdonii* were recorded within site. All are confined to the upper slopes in the north east corner of the lot. They vary from seedlings to large mature adult trees. All are in good condition with mature trees in fruit. *E. risdonii* is listed as rare on the TSPA. These are part of a large population which extends across the western slopes of Glebe Hill forming a pure stand on the driest northwest aspect.

• Tall wallaby grass Rytidosperma induta

This occurs in discrete patches throughout the site, with the largest extent on the eastern side of the cleared area. Identification requires flowering material which is most apparent where plants have regenerated post slashing. The eastern denser patch of forest includes many wallaby grasses though few are flowering. Three species were recorded from the site. It is likely the non flowering plants include a mixture of all three species. *R. induta* is likely to be more abundant in the eastern side of the property than our data suggest.

It is important to note that *R. induta* has been approved for delisting from the Schedules of the TSPA by the TSPA Scientific Advisory Committee¹³. This recommendation has just received Ministerial approval allowing a draft Order for the amendment to the Schedules of the TSP Act to be prepared for public comment prior to the Order being formally gazetted. This change is expected to occur sometime later this year.

R. induta is frequent throughout the Howrah Hills and has been shown to be widely dispersed through the adjacent Glebe Hill Bushland Reserve where the population estimated to be between 200 and 300 plants¹⁴.

¹³ Meeting 75 Minutes 12 Nov 2019

¹⁴ Glebe Hill Bushland Reserve Activity Plan 2014 – 2018



Tall wallaby grass Rytidosperma induta

Risdon peppermint Eucalyptus risdonii



Distinctive foliage of E. risdonii



Figure 2: Vegetation and Threatened Flora

Table 1: Flora species of conservation significance known to occur, or which may potentially occur based on range boundaries, within a 5 km radius of the study area¹⁵.

Species	Status TSPA / EPBCA ¹⁶	Potential to occur in study area	Observations and preferred habitat		
			Known from within 500 m		
Eucalyptus risdonii risdon peppermint	rare/ -	Present	<i>Eucalyptus risdonii</i> is restricted to the greater Hobart area (particularly the Meehan Range), with an outlying population at Mangalore and on South Arm. It occurs on mudstone, with an altitudinal range from near sea level to 150 m above sea level. It can occur as a dominant in low open forest with a sparse understorey on dry, insolated ridgelines and slopes (e.g. with a north-west aspect), and individuals can extend into other forest types typically dominated by <i>E. tenuiramis or E. amygdalina</i> (but occasionally by other species) on less exposed sites.		
Juncus amabilis gentle rush	rare/ -	Low	Juncus amabilis occurs in a variety of habitats, usually poorly-drained sites such as damp grasslands and grassy woodlands, wet pastures, roadside ditches and edges of still and slow- flowing waterbodies. As presently understood, the species is mainly confined to lowland areas in the eastern half of the State but there are potential higher elevation and more western records that require confirmation. No suitable habitat		
Rytidosperma indutum tall wallabyarassrare/ -PresentRytidosperm woodlands		Present	Rytidosperma indutum is relatively widespread on mudstone and dolerite in dry sclerophyll woodlands and associated lowland grasslands in drier parts of the State.		
	Known from within 5 km				
Acacia ulicifolia juniper wattle	rare/ -	Low	Acacia ulicifolia is found in sandy coastal heaths and open heathy forest and woodland in the north and east of Tasmania. Populations are often sparsely distributed, and most sites are near-coastal but it can occasionally extend inland (up to 30 km).		
Asperula scoparia subsp. scoparia prickly woodruff	rare/ -	Low	Asperula scoparia subsp. scoparia is widespread in Tasmania and is mainly found in native grasslands and grassy forests, often on fertile substrates such as dolerite-derived soils. Forested sites are usually dominated by <i>Eucalyptus globulus</i> and <i>E. viminalis</i> (lower elevations) and <i>E. delegatensis</i> (higher elevations).		

¹⁵ DPIPWE Natural Values Atlas Report (2020) report #: nvr_3_29-Jan-2020; Commonwealth of Australia, EPBC Protected Matters Search Tool Report (2020) report #: PMST_L297YT

¹⁶ Tasmanian Threatened Species Protection Act 1995 and Commonwealth Environmental Protection and Biodiversity Conservation Act 1999

Species	Status TSPA / EPBCA ¹⁶	Potential to occur in study area	Observations and preferred habitat	
Asperula subsimplex water woodruff	ıla subsimplex woodruff None		Asperula subsimplex occurs in sites with impeded drainage including damp grasslands, floodplains and sometimes in grassy forest and woodland along drainage depressions (even at the outfall of artificial dams).	
Austrostipa bigeniculata Double jointed speargrass	rare/ -	None	Austrostipa bigeniculata is found mainly in the south-east and Midlands in open woodlands and grasslands on fertile soils, where it is often associated with Austrostipa nodosa.	
Austrostipa blackii crested speargrass	rare/ -	None	The habitat of Austrostipa blackii is poorly understood because of confusion with other species. In its "pure" form (i.e. long coma), A. blackii is a species of very near-coastal sites such as the margins of saline lagoons, creek outfalls and vegetated dunes. Further inland, where it seems to grade into other species, it occurs in open grassy woodlands.	
Caladenia caudata tailed spider-orchid	vulnerable/ VULNERABLE	Caladenia caudata has highly variable habitat, which includes the central north: Eucal obliqua heathy forest on low undulating hills; the north-east: E. globulus grassy/heathy conforest, E. amygdalina heathy woodland and forest, Allocasuarina woodland; and the seast: E. amygdalina forest and woodland on sandstone, coastal E. viminalis forest on sands. Substrates vary from dolerite to sandstone to granite, with soils ranging from windblown sands, sands derived from sandstone and well-developed clay loams developed clay loams developed.		
Caladenia filamentosa daddy longlegs	rare/ -	Low	Caladenia filamentosa occurs in lowland heathy and sedgy eucalypt forest and woodland on sandy soils and finer grained sediments such as mudstones.	
Calocephalus citreus lemon beautyheads	rare/ -	None	Calocephalus citreus inhabits disturbed dry grasslands and is found from a few locations in the south-east of the State.	
Carex longebrachiata drooping sedge	rare/ -	None	Carex longebrachiata grows along riverbanks, in rough grassland and pastures, in damp drainage depressions and on moist slopes amongst forest, often dominated by <i>Eucalyptus</i> viminalis, <i>E.</i> ovata or <i>E.</i> rodwayi.	
Comesperma defoliatum leafless milkwort	rare/ -	None	The habitat of Comesperma defoliatum includes wet heathland/sedgeland, buttongrass moorland, coastal low scrub and on the crests of dunes. It has also been recorded from flat alkaline pans. The predominant substrates include peat, quartzite and sand.	
Damasonium minus starfruit	rare/ -	None	Damasonium minus occupies swampy habitat and farm dams and prefers slow-flowing or stationary water.	
Dianella amoena grassland flaxlily	rare/ ENDANGERED	None	Dianella amoena occurs mainly in the northern and southern Midlands, where it grows in native grasslands and grassy woodlands	
Eryngium ovinum blue devil	vulnerable/ -	None	<i>Eryngium ovinum</i> occurs in a range of lowland vegetation types most often on fertile heavy clay soils derived from dolerite. Vegetation types include open grasslands usually dominated by <i>Themeda triandra</i> (kangaroo grass), grassy forests and woodlands on slopes, ridges and broad flats, and also roadside verges (representing remnant populations),	

Species	Status TSPA / EPBCA ¹⁶	Potential to occur in study area	Observations and preferred habitat	
Haloragis heterophylla variable raspwort	rare/ -	None	Haloragis heterophylla occurs in poorly-drained sites (sometimes only marginally so), which are often associated with grasslands and grassy woodlands with a high component of <i>Themeda triandra</i> (kangaroo grass). It also occurs in grassy/sedgy <i>Eucalyptus ovata</i> forest and woodland, shrubby creek lines, and broad sedgy/grassy flats, wet pasture and margins of farm dams.	
Isolepis stellata star clubsedge	rare/ -	None	Isolepis stellata has been recorded from near-coastal areas in the State's north and east, and also in the Northern Midlands near Conara. Habitat includes the margins of sedgy wetlands, wet soaks and seasonally inundated heathy sedgelands; the altitude of recorded sites in Tasmania ranges from close to sea level to elevations of 240 m above sea level.	
Lepidium hyssopifolium soft peppercress	endangered/ ENDANGERED	Low	The native habitat of <i>Lepidium hyssopifolium</i> is the growth suppression zone beneath large trees in grassy woodlands and grasslands (e.g. over-mature black wattles and isolated eucalypts in rough pasture). <i>Lepidium hyssopifolium</i> is now found primarily under large exotic trees on roadsides and home yards on farms. It occurs in the eastern part of Tasmania between sea-level to 500 metres above sea level in dry, warm and fertile areas on flat ground on weakly acid to alkaline soils derived from a range of rock types. It can also occur on frequently slashed grassy/weedy roadside verges where shade trees are absent.	
Olearia hookeri crimsontip daisybush	rare/ -	Very low	Olearia hookeri is found on dry hills around Hobart in the State's south and also along the central east coast. It grows within eucalypt woodlands with a mixed grassy-shrubby understorey, favouring north-north-westerly slopes on mudstone (except for an atypical occurrence on dolerie at Templestowe flats near Seymour). In the south of the State the habitat is dominated by <i>Eucalyptus amygdalina</i> , <i>Eucalyptus risdonii or Eucalyptus tenuiramis</i> ; in the central east near Mt Peter the habitat is dominated by <i>Eucalyptus sieberi</i> over a very sparse understorey.	
Ruppia megacarpa largefruit seatassel	rare/ -	None	<i>Ruppia megacarpa</i> occurs in estuaries and lagoons along the east and south-east coasts, and brackish lagoons in the Midlands; there is also an historic record from the Tamar estuary in the States' north.	
Scleranthus diander tufted knawel	vulnerable/ - Non		Scleranthus diander is found from the Central Midlands area to Hobart with most of the records from the Ross and Tunbridge areas. This species inhabits grassy woodland and is associated with dolerite and basalt substrates.	
Scleranthus fasciculatus spreading knawel	vulnerable/ -	None	Scleranthus fasciculatus is only recorded from a few locations in the Midlands and south-east. The vegetation at most of the sites is Poa grassland/grassy woodland. Scleranthus fasciculatus appears to need gaps between the tussock spaces for its survival and both fire and stock grazing maintain the openness it requires. Often found in areas protected from grazing such as fallen trees and branches.	

Species	Status TSPA / EPBCA ¹⁶	Potential to occur in study area	to Observations and preferred habitat	
Senecio squarrosus leafy fireweed	rare/ -	Low	Senecio squarrosus occurs in a wide variety of habitats. One form occurs predominantly in lowland damp tussock grasslands. The more widespread and common form occurs mainly in dry forests (often grassy) but extends to wet forests and other vegetation types.	
Sirophysalis trinodis three-node seaweed	rare/ -	None	Marine environments	
Stenopetalum lineare narrow threadpetal	endangered/ -	Very low	The prime habitat for Stenopetalum lineare appears to be grass-covered low dunes but it also extends to scrub-covered dunes (coast wattle) and there is one inland site on a rocky outcrop in dry sclerophyll forest.	
Thelymitra bracteata leafy sun-orchid	endangered/ -	None	Thelymitra bracteata occurs in open grassy and heathy forest/woodland on mudstone and sandstone. At Rosny Hill site, Thelymitra bracteata is most abundant on the top of the hill on open ground with dense exotic grasses and sparse in a remnant patch of native grass close to Allocasuarina verticillata woodland. At Conningham, the species occurs in a canopy gap created by a rough track amongst heathy Eucalyptus amygdalina forest on Triassic sandstone.	
Velleia paradoxa spur velleia	vulnerable/ -	None	Velleia paradoxa is known from the Hobart and Launceston areas, and the Midlands and the Derwent Valley, where it occurs in grassy woodlands or grasslands on dry sites. It has been recorded up to 550 m above sea level at sites with an annual rainfall range of 450-750 mm.	
Vittadinia cuneata var. cuneate fuzzy new-holland-daisy	rare/ -	None	Vittadinia cuneata var. cuneata occurs in native grassland and grassy woodland on fertile soils, typically overlying baslat. It is confied to the Derwent Valley, Central Midlands and central East Coast on areas of lowest rainfall in Tasmania.	
Vittadinia gracilis woolly new-holland-daisy rare/ - Very		Very low	Vittadinia gracilis occurs in dry grassy habitats, often in relatively degraded grasslands and grassy woodlands. It has been found to occur in low- rainfall areas, on a range of substrates.	
Vittadinia muelleri narrowleaf new-holland- rare/ - Low daisy		Low	Vittadinia muelleri occurs in dry native grasslands and grassy woodlands particularly in open areas with lighter grass cover and patches of bare ground such as rock plates. It fereely colnises disturbed sites such as raodside cuttings. It is widely dispersed through the Midlands and South East.	



Figure 3: Weeds

3.3 Declared weeds

Four species of declared weeds listed under the Tasmanian Weed management Act 1999 were recorded (Figure 3).

• Boneseed Chrysanthemoides monilifera

This is frequent across the lower slopes of the site. Most plants are seedlings that have germinated since the last clearing event. The very lowest section supports large older plants. Estimated to number in the hundreds on site there is likely to be a significant seed bank in these disturbed sections.

• Blackberry Rubus fruticosus agg

Recorded as a single plant, potentially more in the cleared areas.

• Serrated tussock Nassella trichotoma

Single plant observed. Opportunity was taken to grub out and leave in situ. No evidence of seeding.

• Pampas grass Cortaderia selloana

One large flowering tussock and smaller tussock nearby occur on the edge of the hard stand in Lot 3.





Boneseed





Serrated tussock



Pampas grass

3.4 Threatened Fauna and Habitat

All species known from within a 5 km radius (or considered likely to have potential habitat), as identified in the Natural Values Atlas and EPBC Protected Matters Search Tool reports, are discussed¹⁷. Coastal, marine, cave-dwelling and wetland species (e.g. Right Whale, Eastern Curlew) included in these reports are excluded from the table as they have no chance of occurring in the study area.

No threatened fauna habitat or species were recorded on site. Although wide ranging species may occasionally pass through only one is likely to be resident in the vicinity.

• Eastern barred bandicoot Perameles gunnii.

This is not listed under State legislation (TSPA). Its inclusion on the EPBC listing is due to its extreme rarity on mainland Australia where it has suffered predation to European foxes. Bandicoots are not uncommon in urban bushlands around Greater Hobart. Animals may stray onto the property and may also utilise cover in the upper slopes. They most likely range through Glebe Hill utilising more fertile grassy sites elsewhere in the area.

One large white gum is present close to the southern boundary of Lot 2. The tree does not as yet support hollows for nesting birds but as it matures further it is likely to develop them.



white gum rear of Lot 2

¹⁷ DPIPWE Natural Values Atlas Report (2020) report #: nvr_3_29-Jan-2020; Commonwealth of Australia, EPBC Protected Matters Search Tool Report (2020) report #: PMST_L297YT

Table 2: Fauna species of conservation significance previously recorded, or which may potentially occur, within 5 km of the study area¹⁸

Species	Status ¹⁹ TSPA/EPBCA	Potential to occur in study area	Observations and preferred habitat ²⁰	
			Known from 500 m	
			MAMMALS	
Dasyurus viverrinus Eastern quoll	Dasyurus viverrinus Eastern quoll Eastern quoll Comparison quoll Comparison quoll Comparison quoll Comparison quoll Comparison quoll Comparison quol Comparison quol Compariso			
			Known from 5 km	
			MAMMALS	
Perameles gunnii gunnii Eastern-barred bandicoot	-/ VULNERABLE	High	Inhabits grassy woodlands, native grasslands, and mosaics of pasture and shrubby ground cover favouring open grassy areas for foraging with thick vegetation cover for shelter and nesting. It has a widely dispersed range with concentrations in SE, NE and NW Tasmania and some areas of the State from where it is absent or in very low densities. It extends into the urban fringe where it can survive in large gardens and bushland reserves. It favours a mosaic of open grassy areas for foraging and thick vegetation cover for shelter and nesting.	
Sarcophilus harissii Tasmanian devil	Endangered/ ENDANGERED	Low	The Tasmanian devil occupies a wide range of habitats across Tasmania and exploits landscapes with a mosaic of pasture and forest with elevated prey densities and is attracted to roadkill hotpots with concentrated scavenging resource. Populations have declined substantially since the first observations of the infectious cancer Devil Facial Tumour Disease (DFTD). DFTD has now spread across much of Tasmania. The reduced population is also likely to be more sensitive to additional threats such as death by roadkill, competition with cats and foxes, and loss or disturbance of areas surrounding traditional dens where young are raised. The protection of breeding opportunities is particularly important for the species due to the mortalities from demographic pressures.	

¹⁸ DPIPWE Natural Values Atlas Report (2020) report #: nvr_3_29-Jan-2020; Commonwealth of Australia, EPBC Protected Matters Search Tool Report (2020) report #: PMST_L297YT

²⁰ Bryant & Jackson 1999

¹⁹ Tasmanian *Threatened Species Protection Act 1995* and Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*, which includes ROKAMBA, JAMBA, CAMBA and Migratory species.

Species	Status ¹⁹ TSPA/EPBCA	Potential to occur in study area	Observations and preferred habitat ²⁰	
			BIRDS	
Accipiter novaehollandiae Grey goshawk	Endangered/ -	Low	Inhabits large tracts of wet forest and swamp forest, particularly patches with closed canopies above an open understorey, but with dense stands of prey habitat nearby. Mature trees provide the best nesting sites. Most nests have been recorded from blackwoods and occasional myrtle beech.	
Aquila audax fleayi Wedge-tailed eagle	Endangered/ ENDANGERED	Low	Wedge-tailed eagles nest in a range of old growth native forests and the species is dependent on forest for nesting. Territories can contain up to five alternate nests usually close to each other but may be up to 1 km apart where habitat is locally restricted. Wedge-tailed eagles prey and scavenge on a wide variety of faung including fish reptiles birds and mammals	
Haliaeetus leucogaster White-bellied Sea Eagle	Vulnerable/-	Low	Requires large trees for nesting and is sensitive to disturbance during the breeding season. Occurs in coastal habitats and large inland waterways.	
Hirundapus caudacutus White-throated needletail	- / VULNERABLE	Low	An aerial species most likely unaffected by terrestrial habitat alteration outside of its Northern Hemisphere breeding range. Uncommonly recorded but widespread in Tasmania.	
Lathamus discolour Swift parrot	Endangered/ CRITICALLY ENDANGERED	Low	The Swift Parrot spends its winter in south-eastern mainland Australian before migrating to Tasmania in late winter/early spring to breed. During the breeding season, nectar from Tasmanian blue gum (<i>Eucalyptus globulus</i>) and black gum (<i>Eucalyptus ovata</i>) flowers is the primary food source for the species. These eucalypts are patchily distributed and their flowering patterns are erratic and unpredictable, often leading to only a small proportion of Swift Parrot habitat being available for breeding in any one year. Swift Parrots breed in tree hollows in mature eucalypts within foraging range of a flower source.	
Tyto novaehollandiae castanops Tasmanian masked owl	Endangered/ VULNERABLE	Low	Found in a range of habitats which contain some mature hollow-bearing forest, usually below 600 m altitude. This includes native forests and woodlands as well as agricultural areas with a mosaic of native vegetation and pasture. Significant habitat is limited to large eucalypts within dry eucalypt forest in the core range.	
			AMPHIBIAN	
Litoria raniformis Green and gold frog	Vulnerable/ VULNERABLE	Low	In Tasmania is found in lowland areas, primarily coastal. They require permanent or temporary water bodies for survival and tend to inhabit ones containing emergent plants such as <i>Triglochin</i> procera or species of <i>Juncus</i> or sedge. They are rarely seen in open water and spend most of their time in vegetation at the water's edges. They depend upon permanent fresh water for breeding, which occurs in Spring and Summer. The green and gold frog is not known to occur in the very low fertility habitats to be found in wetlands associated with the western moorland of quartzite derivation. They generally prefer more fertile habitats	

Species	Status ¹⁹ TSPA/EPBCA	Potential to occur in study area	Observations and preferred habitat ²⁰	
		Poten	tial to occur based on habitat mapping only ²¹	
			MAMMALS	
Dasyurus maculatus maculatus Rare/ VULNERABLE Low This naturally rare forest-dweller most commonly inhabits rainforest, wet forest and bloc swamp forest. It forages and hunts on farmland and pasture, travelling up to 20 km ar shelters in logs, rocks or thick vegetation. Important habitat includes large patches of containing adequate denning sites and high densities of mammalian prev.		This naturally rare forest-dweller most commonly inhabits rainforest, wet forest and blackwood swamp forest. It forages and hunts on farmland and pasture, travelling up to 20 km at night, and shelters in logs, rocks or thick vegetation. Important habitat includes large patches of forest containing adequate denning sites and high densities of mammalian prey.		
			BIRDS	
Pardalotus quadragintus Forty-spotted pardalote	Endangered/ ENDANGERED	Nil	Restricted to dry grassy forest and woodland along the east coast containing mature white gum (E. Viminalis).	
			INVERTEBRATES	
Antipodia chaostola subsp. Leucophaea Chaostola skipper	Endangered/ ENDANGERED	Low	The Chaostola skipper is restricted to dry forest and woodland supporting sedges of the Gahnia genus, and occurs in isolated populations in south-eastern and eastern Tasmania	
Chrysolarentia decisaria Tunbridge looper moth	Endangered/ -	Nil	No records within 5 km and no suitable saltmarsh habitat in study area. No potential impacts associated with the proposal.	
Amelora acontistica Chevron looper moth	Vulnerable/ -	Nil	No records within 5 km and no suitable saltmarsh habitat in study area. No potential impacts associated with the proposal.	
			REPTILES	
Pseudemonia pagenstecheri Tussock skink	Vulnerable/ -	Low	A ground-dwelling lizard, occurring in grassland and grassy woodland habitats at a range of elevations. Records in Tasmania a few disconnected patches of habitat from Midlands, inland Cradle Coast, and eastern Bass Strait islands.	

²¹ DPIPWE Natural Values Atlas Report (2020) report #: nvr_3_29-Jan-2020; Commonwealth of Australia, EPBC Protected Matters Search Tool Report (2020) report #: PMST_L297YT

4 IMPACT ASSESSMENT and MITIGATION

It is anticipated that the proposal will result in the loss of virtually all remaining trees on the lower section (Lots 1 &2), although there may be opportunity to retain the odd tree that is located on or close to the boundaries. This is evident from the retention of occasional trees on residential lots to the south.

Full retention of vegetation within Lot 3 is anticipated subject to the set back of structures on Lot 2 and the size of the bushfire hazard management area (BHMA), noting that 8-10m is already cleared along the western side of Lots 3.

4.1 Vegetation communities

No high priority vegetation communities are present.

The native vegetation (*E. amygdalina* forest on mudstone DAM) within Lots 2 and 3 is in very poor condition other than the presence of some healthy eucalypts. The ground layer is modified and very weedy. Impact to DAM is insignificant. The most intact remnant of DAM community occurs in Lot 3 which will not be impacted.

4.2 Threatened plants

Two threatened plants are present. *Eucalyptus risdonii* is entirely restricted to Lot 3 and so not subject to any clearance requirements (subject to BHMA). *Rytidosperma induta* barely warrants consideration due to its imminent delisting. It is worth noting that slashing such as that required for bushfire is beneficial to this species increasing light availability and removing competition. Its occurrence through disturbed parts of the site demonstrate its capacity to tolerate moderate levels of disturbance.

4.3 Threatened fauna habitat

No threatened fauna habitat on Lots 1 and 2, so no impact anticipated. The large white gum on the boundary of Lot 2 currently does not contain hollows that could provide nesting habitat for threatened birds.

4.4 Mitigation

The provision of Lot 3 as an extension to Glebe Hill Bushland Reserve POS is beneficial. The formal protection of this bushland and access for public management provides opportunity to tackle declared weeds and to buffer the forest upslope. The retention of additional *E. risdonii* contributes to the conservation of the species.

Any development project would benefit from a weed management plan that:

- Treats all occurrences of declared weeds prior to works.
- Ensures best practice construction hygiene is practiced to prevent the spread of weed propagules in contaminated soil. This should involve cleaning all machinery before leaving the works area, as well as not bringing dirty machinery into the site.
- Follows up weed control implemented 6-12 months after works to treat any individuals that have colonised/recolonised the area.
- Includes provision to eradicate the pampas grass from Lot 3.

5 LEGISLATIVE REQUIREMENTS

5.1 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The EPBCA is structured for self-assessment; the proponent must determine whether or not the project is likely to have a significant impact on a matter of national environmental significance (MNES) such as a listed threatened species or community. If this is likely then the Department

of Environment and Energy may consider the proposed activity is a 'controlled action' which would require approval from the Commonwealth Minister.

No MNES will be impacted and so there is no reason to assess this proposal under the EPBCA.

5.2 Tasmanian Threatened Species Protection Act 1995

Until the formal delisting of tall wallaby grass *Rytidosperma induta* from the TSPA, a permit to take will need to be applied for prior to the clearing of the site for development. Given the presence of the species within the Lot 3 this is likely to be little more than a formality. There is a very strong likelihood that it will be delisted before works are likely to commence.

5.3 Tasmanian Nature Conservation Act 2002

Threatened vegetation communities are listed under Schedule 3A on the NCA.

E. amygdalina forest on mudstone (DAM) is not listed as a threatened community.

The NCA does not regulate impacts to these communities but informs relevant criteria in some of the local Planning Schemes (refer 5.5).

5.4 Tasmanian Weed Management Act 1999

Clarence is a Zone B municipality for three of the species of declared weed observed on site (blackberry, serrated tussock and boneseed). According to the provisions of the Weed Management Act 1999, Zone B municipalities are those which host widespread infestations where control and prevention of spread is the principle aim. The containment principles of this Act should be sufficiently met with best practice construction hygiene that prevents the transport of contaminated material off site.

Clarence is Zone A for pampas grass for which the principle aim is eradication

5.5 Clarence Interim Planning Scheme 2013



CIPS Zoning

To achieve the intended subdivision the zoning of General residential could be extended to capture all of lots 1 and 2. Lot 3 would best be zoned Open Space, consistent with the land to its immediate south.



Biodiversity Protection Area overlay

Natural Assets Code E27 of the Clarence Interim Planning Scheme 2015

A portion of the site falls within the area covered by the Biodiversity Protection Area overlay and as such triggers a requirement to address the Natural Assets Code (E27) of CIPS. The general purpose of the provision of the E27 is to:

- (a) protect identified threatened native vegetation communities and threatened flora species;
- (b) conserve threatened fauna by minimising habitat clearance and managing environmental impact; and
- (c) protect other native vegetation recognised as locally significant by the Planning Authority.

Specifically, the proposal must meet the standards relating to development (E27.8.1), to ensure that:

- (a) Priority vegetation is adequately protected
- (b) Loss of vegetation is minimised;.
- (c) Long term management plans are implemented; and
- (d) Impacts from construction and development activities are minimised and residual impacts appropriately managed.

Impacts are classified as either being Major, Minor or Negligible depending on their impact to 'priority vegetation'

Priority vegetation means vegetation that has high biodiversity value because it:

(a) forms an integral part of threatened vegetation;

no The vegetation is mapped as DAM and as such is not a threatened community and so is not priority vegetation.

(b) is a threatened flora species;

yes Two threatened flora species occur on site. Although one likely to persist in the future is confined to part of the property (Lot 3)

(c) provides habitat for a threatened fauna species; or

no Threatened fauna habitat is limited although eastern barred bandicoot may utilise some habitat it is suboptimal. Some question on applicability of this species given its absence from Tasmanian TSPA.

(d) is otherwise identified by the Planning Authority as locally significant.

no No locally significant sites or values have been identified in this area by Council

E27.6 Impact Classification

The vegetation on site is priority vegetation based on one criterion (threatened flora).

For an Impact to be deemed negligible it must fulfil the following:

(a) No priority vegetation will be cleared;

(b) The use or development (including construction activities) will not involve blasting or significant noise or vibration impacts; and

(c) Any subdivision works or the future development upon the proposed lots are unlikely to cause an impact upon priority vegetation.

This proposal cannot strictly be deemed to have a negligible impact whilst *Rytidosperma induta* remains listed as a threatened flora. However, given the scientific case for its delisting has been accepted it should be recognised that before too long the amendment to the schedule of the TSPA will result in the vegetation no longer qualifying as a 'priority' vegetation.

Impact is deemed to be **negligible.** However, should that interpretation not be accepted then the impact could be considered **minor** as:

(a) The use or development, including the likely need to clear for bushfire hazard reduction, is likely to only result in a negligible impact on priority vegetation

Clearance requirements for bushfire hazard reduction are not known. Should they require clearance to vegetation on Lot 3, this will not have an adverse impact to *Rytidosperma induta* as it prefers cleared habitats.

(b) Mitigation measures, including biodiversity offsets, are proposed which reduce the impact on priority vegetation to a minor level

The significant balance of priority vegetation (all forest supporting *Eucalyptus risdonii* (threatened flora) will be retained in Lot 3 which is intended for POS. This will also include some of habitat for *R. induta*. Impact to priority vegetation affected by development of Lots 2 and 3 is minor.

(c) Any subdivision works or the future development upon the proposed lots is likely to only cause a minor impact on priority vegetation

Development of Lots 1 and 2 will remove *Rytidosperma induta*. However, in the context of the status of the species (imminent delisting) and the occurrence in the Balance (Lot 3) and extensive occupancy of Glebe Hill Bushland Reserve confirm that any impact is minor.

In conclusion the proposed activity is considered to accord to a 'negligible impact' if the imminent delisting of *Rytidosperma induta* from the TSPA can allow for the interpretation that this is not a threatened flora.

Alternatively, if the current listing of *Rytidosperma induta* needs to be recognised the proposed activity accords to a minor impact' to 'priority vegetation'.

27.9 Subdivision standards

There is no Acceptable Solution for Negligible or Minor Impacts A1.

The current proposal must therefore meet the "Performance Criteria" P1 for Negligible or Minor Impact clearance or disturbance of vegetation.

Negligible /Minor

(a) Subdivision works, including accesses, fences and service locations are designed to minimise the clearance of native vegetation; and

All necessary infrastructure to create the subdivision, including roads, accesses and services are located outside the native vegetation.

(b) Lots must be designed to contain a building envelope which reduces clearance of native vegetation to the minimum extent necessary to contain the anticipated use and any clearance required for bushfire management.

Dependent on BHM plan but opportunity with adequate setbacks to avoid ongoing clearance requirements in Lot 3.

Minor only

(c) No burning, blasting or construction works involving excavators or multiple truck movements are to occur within 500 m (or 1 km if in line-of-sight) of an active raptor nest during the breeding season between July to January inclusive.

There are no raptor nests within 1km of the subject land

(d) Additional mitigation measures are proposed to ensure that the development will satisfactorily reduce all remaining impacts on priority vegetation.

The boundary of Lot 3 (Public Open Space) could be defined on site. Fencing of this boundary will reduce any risk of inadvertent damage, especially during the period of civil works.

(e) Conservation outcomes and long term security of any offset is consistent with the Guidelines for the use of Biodiversity Offsets in the local planning approval process, Southern Tasmanian Councils Authority 2013.

See below

Tasmanian Councils Authority 2013. The Offset guidelines referred to in 27.9 (e) include a set of principles which can be applied to the proposal. Each principle is considered below.

1. Offsets are the final component of a mitigation hierarchy

1.1 Offsets should only be pursued where all opportunities to avoid and minimise adverse effects on biodiversity values have been exhausted. This approach suggests that:

 $\Box\Box$ Impacts should be avoided to obviate the need for an offset.

□□ The extent of impact should be limited to the maximum degree possible, thus reducing the scale of any offset.

Opportunities for rectification and repair such as site rehabilitation following the impact should be investigated.

 $\Box \Box$ Only offset the residual impact (provided that all other principle are met).

The allocation of the most significant and best sustainable and ongoing area of priority vegetation has been allocated to POS. The area identified for residential development avoids impacting this.

The layout of Lots 1 and 2 ensure all building envelopes can avoid the most significant areas of priority vegetation and clearance required for bushfire hazard minimisation can also largely avoids impact to priority vegetation.

Weed management of the entire property mitigate for any impact to priority vegetation.

1.2 The offsetting of impacts of Threatened Vegetation Communities as listed in Schedule 3A of the Nature Conservation Act 2002 (Tas) is to be avoided in preference to no-impact except:

 \Box The planning authority is satisfied there are 'special circumstances';

□ The patch of affected vegetation is of poor or very poor condition, that despite ecological restoration works us unlikely to be viable in the long term; and

□□ The patch of vegetation is limited in extent in proportion to the total area remaining of that vegetation community on the site.

No impact to threatened native vegetation is incurred.

2. Offsets must deliver a net benefit for biodiversity conservation

2.1 The impact must be properly estimated taking into account both direct and indirect impacts brought about by the action:

 \Box \Box Direct impact is the 'footprint of the development'.

□□ Indirect impact includes associated outcomes resulting from the action. For example subdivision in a residential area implies future housing development with changes to land management associated with permanent human occupancy.

This assessment has considered both direct and indirect impacts taking into account the footprint of the development, likely fire management requirements and consequence of the subdivision resulting in likely need for boundary fencing to avoid unnecessary impacts to Lots 3 (POS).

Additional residences will not significantly later the scale of human presence in the area given the site is imbedded in a residential area.

2.2 If the offset is unlikely to result in a net positive gain then the development application should not be approved.

The offset will result in net positive gain if the management of the area can be formalised ensuring degrading processes, eg weeds and illegal dumping of garden waste, can be controlled and informal public use is regulated.

2.3 Offsets should be consistent with the State principles and policies and should aim to contribute to comprehensive, adequate and representative (CAR) reserve system.

The purpose of CAR Reserve system aims to increase the extent and protection of under reserved vegetation communities. The offset has the potential to contribute protection of one community (*E. amygdalina* forest on mudstone), the reservation of which currently doesn't meet CAR Reserve targets.

2.4 Use established standards (such as the Protected Areas on Private Land criteria) and reservation targets to identify where an offset can contribute to the (CAR) reserve system.

The proposed offset occupies 2850 sqm, of an under reserved community. It can be incorporated as an extension to the existing Glebe Hill Bushland Reserve GHBR. However, as a Council Reserve it can only be recognised as part of the CAR Reserve system if it is secured under a covenant through the *Nature Conservation Act 2002*, which is the case for Glebe Hill BR. The small size of this offset is unlikely to justify the administrative costs of adding this land to the existing covenant although it may be worth consulting Protected Areas Program at DPIPWE for comment.

2.5 Offsets should be of a size to ensure that they are ecologically viable and can be managed effectively in the long term.

Land to be protected through covenants is assessed by the Protected Areas on Private Land Advisory Committee. As a general rule covenants for protection of forest communities are a minimum of 10ha. However in this case this forms an adjunct to Glebe Hill Bushland Reserve covenant which occupies 22 ha.

2.6 To deliver a net benefit, a direct offset should exceed the impact in value of environmental service as a minimum. As a guide the offset ratio should aim for the conservation of an area:

 \Box 1:1 of similar value for non-threatened vegetation communities;

 $\Box \Box$ 3:1 to 5: 1 for threatened vegetation communities; or

□ or other ecological values determined to be of significant by the planning authority within the planning area (such as threatened species habitat).

The offset area is 2850 sqm. The impact is 3685 sqm, a ratio of 0.8:1, less than the recommended ratio of 1:1. However, the much more significant values attributed to the offset relative to the impact suggest there is a net benefit as interpreted in this clause. The threatened species *Eucalyptus risdonii* is only present in the offset.

2.7 The management of the offset is as important as the security of the offset:

Offsets should include costed management actions which are compared with the equivalent management costs of the impacted area.

□ Offset should include financial contribution or commitment to management costs for a minimum of 5 years.

The proposed offset will be included within an extension of the Glebe Hill Bushland Reserve, the management of which is governed by the GHBR Activity Plan.

Management costs will need to cover initial weed and rubbish removal, along with follow up management. The specifics of the funding will be determined in the Council permit.

2.8 Where the planning authority believes a proposed offset has a high risk of failing to return a 'net benefit' over time due to such things as the effort and cost involved in managing the offset, consideration should be given to:

 $\Box \Box$ Not allowing the use or development to proceed; or

□□ Incorporating multipliers that reduce the risk such as higher offset ratios that provide some redundancy or additional direct actions that are complementary to indirect offset.

There is no reason to think the offset has a high risk of failing to return a net benefit.

2.9 Offsets that are largely reliant upon the future success of actions may include:

- □ Replacement of loss through additional planting and revegetation works.
- □ Restoration of existing secured area that requires management actions.
- □□ Fencing of degraded areas to improve habitat condition.

The viability of the offset is not reliant on any specific management actions, other than fencing of the boundary with Lot 2.

2.10 An offset should include a suite of actions designed to minimise risk and create a net benefit for biodiversity conservation. These actions may be direct or indirect and include a combination of some or all of the following: protection in situ, protection offsite, restoration, rehabilitation, research, monitoring and financial contributions. When taken as a whole, the benefit of the offset actions must be greater than the scope of the adverse impacts on biodiversity value.

The offset provides the most preferred mechanism of *protection in situ* supplemented with weed management and control of degrading activities (rubbish dumping etc). An outcome of the proposal will be increased surveillance that will reduce the likelihood of degrading activities such as illegal public activities.

2.11 The condition of the biodiversity value(s) potentially impacted and the condition of any biodiversity value(s) proposed to be protected or enhance must be considered and compared when determining whether a proposed offset will achieve a net benefit.

The condition of the offset vegetation is in much better condition that the impacted vegetation. The offset clearly achieves a net benefit.

2.12 The existing vulnerability of any biodiversity value(s) proposed to be protected or enhanced must be considered when determining whether a proposed offset will achieve a net benefit.

A mechanism that protects and prescribes appropriate management of the offset will ensure net positive conservation outcome in the long term. The provision of signs demarking the change of tenure will promote this awareness to the general public to cease misuse.

3. Offsets must aim to be permanent

3.1 All proposed offset measures must be included as a condition on the permit authorising the use or development causing the impact. The condition should:

- \Box Identify the location of the offset by title reference.
- $\Box\Box$ Identify what and how values are to be conserved.
- \Box \Box Identify the means to secure that offset.

The identity, location, values and means of security can be easily defined in the planning permit.

3.2 Legally enforceable mechanisms to secure, monitor and enforce any offset must be provided. Preferred mechanism in descending order:

© Covenant under Nature Conservation Act 2002—subject to acceptance from State Government, and where the offset is greater than 10ha in area.

© Conservation Agreement under Environment Protection and Biodiversity Conservation Act 1999.

□ Part 5 Agreement under Land Use Planning and Approvals Act 1993 (where a Part 5 Agreement is used, it must be recorded on the title of the offset site).

 $\Box\Box$ Condition of approval on the planning permit.

Covenant between Council and the title holder.

□ Term Management Agreement under Nature Conservation Act 2002.

The incorporation of the land into Public Open Space will mean its transfer to Council ownership will provide confidence in the likely outcome of the land being managed in accordance with the principles of management of Glebe Hill Bushland Reserve. This equates to Condition of Approval in the list above. A higher ranked mechanism in this hierarchy is not appropriate and justifiable in this situation.

3.3 Management of the offset is usually necessary to ensure it delivers a permanent conservation outcome;

□□ Implementation of offset should be audited by the applicant/developer and reported to those party to the offset agreement.

□ Management of the offset should be subject to reporting after Year 1, 2, 5 and 10.

□ Management of the offset should be available to the broader community where the land is provided for public use.

Generally, responsibility for management of the offset falls to the landowner. With handover to Council this level of reporting falls with Council. The Reserve Activity Plans are updated every 5 years.

3.4 Implementation and management of the offset over time must be demonstrated. This may require funding and contractual agreements to be in place prior to the approval.

The small scale and management requirements to maintain biodiversity values within the offset suggest that there is no need for funding or contractual agreements in this situation.

3.5 Consideration should be given to the transfer of the offset site to the Council or other public authority, where significant management measures are not required or where funding is available to the public authority to cover the cost of the required management action. Examples include:

□ Acquisition of the offset site as a public open space contribution for subdivision approved under the Local Government (Building and Miscellaneous Provisions) Act 1993

□ Incorporation of the offset site into an existing Council or State reserve or other component of an existing open space network, provided that public use of the land will not jeopardise the biodiversity value(s) intended to be protected.

The proposed outcome for the offset accords to the second dot point by adhering it to Glebe Hill Bushland Reserve. Public use is likely to involve access utilising an existing track which will not jeopardise any biodiversity values.

4. Offsets must aim to be 'like for like'

4.1 Offsets should generally be for the same species, habitat or vegetation community that is being impacted.

The vegetation impacted and being used for the offset are the same - DAM.

4.2 The Vegetation Condition Assessment Method is to be used as a basis for categorising and comparing the condition of vegetation communities.

Detailed condition assessment has not been undertaken and is deemed unnecessary given the significant and obvious value of the offset.

4.3 Offsets that are not 'like for like' are only appropriate where:

□□ No suitable offset that provides 'like for like' is available or appropriates;

 \Box An offset will provide a net benefit for a biodiversity value of equal or greater ecological significance in the bioregion; and

 \Box It is in accordance with a Council endorsed biodiversity conservation strategy for the planning area

The offset is like for like.

4.4 Offsets are designed to assist in the conservation of biodiversity values. However, where consistent with this principle, consideration can be given to offsets that also conserve other 'social values' that may be impacted upon such as:

□ Offsets that also conserve important skyline or hill face areas

□ Offsets that conserve biodiversity values in the same neighbourhood, suburb or catchment as that within which the impact is proposed

□□ Offsets that provide some recreational or other open space value to the local community.

This offset will provide recreational value through enhancing exiting open space track networks

4.5 Offsets that are not like for like should be subject to third party validation, by the State or other peer review body, to ensure their appropriateness.

Not applicable

5. Indirect offsets (financial contributions) are acceptable in limited circumstances where direct offsets are unachievable

Not applicable

6. Retention of native vegetation onsite is preferred.

6.1 Preference should be given to offsets that secure the formal protection and management of conservation values on the same property that is subject to the impact, except where a greater biodiversity benefit can be gained through an offsite offset.

The offset secures the formal protection and management of conservation values on the same property that is subject to the impact.

6.2 In circumstances where there is a limited opportunity for an adequate offset to be implemented onsite, then off-site offsetting should be pursued.

Not applicable

6.3 Where offsite offsetting is pursued, preference is given to:

- □ Offsets that are contiguous with, or near to, other reserved or managed habitat; or
- \Box Offset in the same neighbourhood, suburb or catchment as the impact.

Not applicable.

6.4 Unless the offset forms part of a package developed at the State or Federal level, the offset must be within the planning area of the relevant planning authority.

The offset falls within Clarence Council.

6.5 The location of an offset, being either onsite or offsite, is a balance between implementation and management of the offset, and the best location where conservation gains can be made within the planning area.

The chosen location for the offset provides a good opportunity to consolidate existing conservation area boundaries and is the best location for an offset on site.

7. Offsets are formulated and approved in the context of the established planning system.

7.1 Recognise where native vegetation clearance is regulated by other 'authorities':

□□ Ensure planning schemes avoid unnecessary duplication of assessment; and

□ Where there are dual assessment responsibilities between a local planning authority and other authority, avoid duplication in the development of offset packages.

The offset forms part of the development application thus complying with this principle. Clearance undertaken prior to the delisting of tall wallaby grass *Rytidosperma induta* will require dual assessment as a permit to take will need to be applied for under the Tasmanian *TSPA*. However, it is most likely the delisting would have gone through avoiding dual assessment. The loss of some plants of this species would not require offsetting.

7.2 Provided a planning scheme controls native vegetation clearance, planning authorities should regulate non-threatened native vegetation clearance based on local biodiversity values.

The vegetation is non threatened and the regulation and offsetting of the clearance forms part of the process.

7.3 Local planning authorities may set thresholds for loss of non-threatened native vegetation (where is does not contain habitat for threatened species) in some areas, or for some communities, below which approval may either not be required or may be 'permitted'.

Offset packages should not be developed for impacts that are below these thresholds. In other words use or development subject to offset packages, are identified as 'discretionary' applications.

Not applicable as the vegetation includes habitat for threatened species.

7.4 For threatened species and significant habitat for threatened species:

□ Impacts to State and Commonwealth threatened species and habitat are best addressed by the appropriate regulating authority. The proponent should inform the planning authority of the advice/determination made by the relevant authority to help inform appropriate planning decisions. The mechanisms for approval and offsetting in these instances are addressed outside of the Land Use Planning and Approvals Act 1993.

□ Recognise however the Threatened Species Protection Act 1995 is limited to regulating direct impacts and cannot regulate impacts to habitat.

The proponent can apply for a permit under the *Threatened Species Protection Act* 1995 should tall wallaby grass *Rytidosperma induta* retain its listing as a threatened species. Considering the imminent delisting and anticipated progress of the development of the site consultation of Policy and Conservation Advice Branch (PCAB) DPIPWE, who are the relevant authority, is deemed unnecessary.

7.5 All proposed offsets must form part of the development application resulting in the adverse impact.

The offset is part of the application.

7.6 All consents required to facilitate a proposed offset should be obtained prior to the approval of the development application.

The offset requires consent of the future landowner of the offset, which in this case is Clarence Council. It is understood that Council are supportive of the process.

7.7 Where an off-site offset is proposed, the development application must be treated (and advertised) as relating to both the site of the use or development and the offset site.

The offset is NOT offsite. As the offset is part of the application it will form part of the advertised application

In conclusion, it is considered that the proposed development meets the performance criteria of the E10 Biodiversity Code in relation to negligible or minor impacts to priority biodiversity values.

REFERENCES

- Bryant, S. & Jackson, J. (1999) Tasmania's Threatened Fauna Handbook: what, where and how to protect. Threatened Species Unit, Parks & Wildlife Service, Hobart.
- Commonwealth of Australia (1999) Environment Protection and Biodiversity Conservation Act 1999. No. 91, 1999.
- Commonwealth of Australia (2020) Protected Matters Search Tool, www.environment.gov.au. Report – PMST_L297YT.
- de Salas, M.F. & Baker, M.L. (2018) A Census of the Vascular Plants of Tasmania, Including Macquarie Island. (Tasmanian Herbarium, Tasmanian Museum and Art Gallery. Hobart) Available from: is also clealrya significant seedbansk.
- DPIPWE (2020) Natural Values Report nvr_3_29-Jan-2020, Natural Values Atlas, Threatened Species Section, Department of Primary Industries and Water, Hobart.
- DPIPWE (2015) Guidelines for Natural Values Survey Terrestrial Development Proposals. Version 1.0. 16th April 2015. Policy and Conservation Advice Branch. Department of Primary Industries, Parks, Water and Environment, Hobart.
- Goff, F.G, Dawson, G.A. & Rochow, J.J. (1982) Site examination for threatened and endangered plant species. Environmental Management 6 (4) pp 307-316.
- IBRA 7 (2012) Interim Biogeographic Regionalisation for Australia, Version 7. Map produced by Environment Resources Information Network (ERIN), Australian Government Department of the Environment and Energy, Canberra, Commonwealth of Australia.
- Kitchener, A & Harris, S. (2013) From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation. Department of Primary Industries, Water and Environment, Printing Authority of Tasmania, Hobart.
- Tasmanian State Government (1995) Threatened Species Protection Act 1995. No.83 of 1995. Government Printer, Hobart, Tasmania

APPENDIX A: Plant species recorded in the study area

Status codes: ORIGIN i - introduced d - declared weed WM Act en - endemic to Tasmania t - within Australia, occurs only in Tas.		NATIONAL SCHEDULE EPBC Act 1999 CR - critically endangered EN - endangered VU - vulnerable	STATE SCHEDULE TSP Act 1995 e - endangered v - vulnerable r - rare
Sites: 1 2	Lots 1 and 2 - E533800, N5252100 Lot 3 - E533870, N5252090		2-03-2020 Andrew J. North 3-03-2020 Andrew J. North
Site	Name	Common nam	ne Status
	DICOTYLEDONAE		
	ASTERACEAE		
1	Chrysanthemoides monilifera	boneseed	d
1	Cirsium vulgare	spear thistle	i
1 1 2 1	Dimorphotheca fruticosa Ozothamnus obcordatus Senecio glomeratus	trailing daisy yellow everlastir shortfruit purple	i ngbush fireweed
1	Vellereophyton dealbatum	white cudweed	i
	BRASSICACEAE		
1	Lepidium africanum	common pepper	cress i
	CARYOPHYLLACEAE		
1	Spergula arvensis	corn spurrey	i
1	CASUARINACEAE Allocasuarina littoralis	black sheoak	
	CHENOPODIACEAE		
1 1	Atriplex prostrata Einadia nutans subsp. nutans	creeping orache climbing saltbus	i h
	CRASSULACEAE		
1	Crassula tetragona subsp. robu	<i>ista</i> miniature pine tr	ree i#
	ERICACEAE		
1 2 2	Astroloma humifusum Lissanthe strigosa subsp. subu	native cranberry lata peachberry heat	th
1 2 2 1 2 2	FABACEAE Acacia dealbata subsp. dealbat Acacia genistifolia Acacia pycnantha Daviesia ulicifolia Pultenaea pedunculata	ta silver wattle spreading wattle golden wattle spiky bitterpea matted bushpea	; i
1	HALORAGACEAE Gonocarpus tetragynus	common raspwo	ort
1	HEMEROCALLIDACEAE Dianella revoluta LAURACEAE	spreading flaxlily	
2	Cassytha pubescens	downy dodderla	urei
	MYRTACEAE		
12	Eucalyptus amygdalina	black peppermin	nt en
1 2 1 2	Eucalyptus ovala var. ovala Eucalyptus risdonii Eucalyptus viminalis subsp. vin	risdon peppermi ninalis white gum	nt en r
	OXALIDACEAE		
1	Oxalis perennans	grassland woods	sorrel

PITTOSPORACEAE i Billardiera heterophylla bluebell creeper 1 2 Bursaria spinosa subsp. spinosa prickly box i 2 Pittosporum undulatum sweet pittosporum PRIMULACEAE i Lysimachia arvensis scarlet pimpernel 1 ROSACEAE i Cotoneaster glaucophyllus var. serotinus largeleaf cotoneaster 1 Rubus fruticosus blackberry d 1 SANTALACEAE 2 Exocarpos cupressiformis common native-cherry SAPINDACEAE Dodonaea viscosa subsp. spatulata broadleaf hopbush 12 SOLANACEAE Solanum laciniatum kangaroo apple 1 blackberry nightshade i 1 Solanum nigrum MONOCOTYLEDONAE ASPARAGACEAE 12 Lomandra longifolia sagg **CYPERACEAE** Lepidosperma gunnii narrow swordsedge 2 variable swordsedge 12 Lepidosperma laterale POACEAE Anthosachne scabra rough wheatgrass 1 soft speargrass 1 Austrostipa mollis Austrostipa rudis subsp. australis southern speargrass 1 2 Cortaderia selloana silver pampasgrass d Cynosurus echinatus rough dogstail i 1 1 Ehrharta erecta panic veldtgrass i Nassella trichotoma serrated tussock d 1 12 Rytidosperma caespitosum common wallabygrass 12 Rytidosperma indutum tall wallabygrass r 1 Rytidosperma setaceum bristly wallabygrass Vulpia sp. fescue i 1

Appendix B: Site surveys

	Site: 1	LOTS 1, 2 (A, B)	- heavily clear	ed E. amygdalina fo	orest on mudstone
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Grid Reference:	533800E, 5252100N
Accuracy:	within 100 metres
Recorder:	Andrew J. North
Date of Survey:	2 Mar 2020
Trees:	Eucalyptus amygdalina, Eucalyptus ovata var. ovata, Eucalyptus viminalis subsp. viminalis
Tall Shrubs:	Acacia dealbata subsp. dealbata, Allocasuarina littoralis, Dodonaea viscosa subsp. spatulata
Shrubs:	Ozothamnus obcordatus, Solanum laciniatum
Low Shrubs:	Astroloma humifusum
Herbs:	Dianella revoluta, Einadia nutans subsp. nutans, Gonocarpus tetragynus, Oxalis perennans, Senecio glomeratus
Graminoids:	Lepidosperma laterale, Lomandra longifolia
Grasses:	Anthosachne scabra, Austrostipa mollis, Austrostipa rudis subsp. australis, Rytidosperma caespitosum, Rytidosperma indutum, Rytidosperma setaceum
Weeds:	Acacia pycnantha, Atriplex prostrata, Billardiera heterophylla, Chrysanthemoides monilifera, Cirsium vulgare, Cotoneaster glaucophyllus var. serotinus, Crassula tetragona subsp. robusta, Cynosurus echinatus, Dimorphotheca fruticosa, Ehrharta erecta, Lepidium africanum, Lysimachia arvensis, Nassella trichotoma, Rubus fruticosus, Solanum nigrum, Spergula arvensis, Vellereophyton dealbatum, Vulpia sp.

Site: 2 LOT 3 (C) – Intact *E. amygdalina* forest on mudstone

Grid Reference:	533870E, 5252090N
Accuracy:	GPS (within 10 metres)
Recorder:	Andrew J. North
Date of Survey:	3 Mar 2020
Trees:	Eucalyptus amygdalina, Eucalyptus risdonii, Eucalyptus viminalis subsp.
Tall Shrubs:	Acacia dealbata subsp. dealbata, Bursaria spinosa subsp. spinosa, Dodonaea viscosa subsp. spatulata, Exocarpos cupressiformis
Shrubs:	Acacia genistifolia, Daviesia ulicifolia, Ozothamnus obcordatus
Low Shrubs:	Astroloma humifusum, Lissanthe strigosa subsp. subulata, Pultenaea
Graminoids:	Lepidosperma gunnii, Lepidosperma laterale, Lomandra longifolia
Grasses:	Rytidosperma caespitosum, Rytidosperma indutum
Climbers:	Cassytha pubescens
Weeds:	Cortaderia selloana, Pittosporum undulatum