



## **Rosny Hill**

### **Hotel Development**

### **Car Park amendment and services realignment**

### **Natural Values Assessment**

20 November 2020

Development Application:

*12A Akuna Street, Rosny. Public Recreation Facilities, Visitor Accommodation & Food Services. PDPLANPMTD-2019/002428*

This application is before the Resource Management and Planning Tribunal (Ref 14/20P). An alternate car park layout has been proposed which is intended to reduce the footprint within potential high priority vegetation. An alternate alignment for the services has also been identified that will utilise the roadside of the lookout access road and firebreaks around the rear of lots on Akuna Street avoiding the need to bisect intact native vegetation on the northern slopes of Rosny Hill.

The amended design for the car parking protracts the approved car park and provides alternate spaces in a new car park to be located on the eastern side of the hilltop internal to the circular road.

A natural values assessment of the new car park area has been undertaken to inform the assessment process.

Figure 1 shows the location of the new car park.

The site was visited on 20 October 2020; the timing was chosen to maximise the chance of locating spring flowering orchids and other ephemeral species. Of particular relevance is the determination of whether or not any plants of the endangered *Thelymitra bracteata* were present, noting that the nominated location was specifically identified as it is generally within shrubby vegetation not suited to this species which prefers open grassland habitats.

The area was surveyed on foot following the Timed Meander Procedure whereby all perceivable habitats are inspected, coverage of the area is maximised and sampling continues until a period of 30 minutes when no more species are being identified.

Forty four vascular plant species were recorded including 24 native to Tasmania. (Appendix 1). No threatened flora species were recorded. One declared weed was recorded - canary broom *Genista monspessulana*. This is widespread across the crest of Rosny Hill with many seedlings establishing after the heavy winter rains. There has been a major infestation in recent years at this site which has been managed but plants continue to re-establish for soil stored seed which can survive for many decades.

The site is characterised by dense regrowth of tall shrubs under occasional eucalypts (just two white gums *E. viminalis* and a single coppicing black gum *E. ovata*). The dominant shrub is drooping sheoak *Allocasuarina verticillata*. Other prominent species include *Acacia mearnsii* black wattle, *Dodonaea viscosa* native hop bush and *Bursaria spinosa* prickly box. There is a dense ground layer of native perennial grasses mixed with a flourish

of annul and perennial weedy grasses. Other ground covers are infrequent and dominated by introduced herbs.

The western side of the footprint of the car park extends just into the open hilltop where the dominant grasses are spear grass *Austrostipa flavescens* and wallaby grass *Rytidosperma racemosum*.



Dense ground layer of weedy grasses under *Allocasuarina verticillata* in alternate car park site



Native grassland dominated by *Austrostipa flavescens* (GCL) north side (upper slope) of alternate car park site

### Vegetation

The vegetation can be attributed to DVG – *E. viminalis* grassy forest, NBA *Bursaria* -Acacia woodland and scrub and Lowland grassland complex (GCL), consistent with TASVEG4. The dominance of *Allocasuarina verticillata* suggest NVA may be more appropriate classification rather than NBA, the consistent presence of Acacia and *Bursaria* has erred the allocation to NBA in line with TASVEG 4. The consequence of this determination is immaterial as neither community is any more significant than the other.

None of these communities are listed in the *Nature Conservation Act 2002* as threatened vegetation.

There are no significant habitats for threatened fauna or flora. The likelihood of any threatened flora recorded elsewhere on Rosny Hill and overlooked during this survey is considered very unlikely. There are no significant structures supporting fauna habitats.

Table 1 compares the extent of threatened vegetation impacted by original and amended designs. The extent of *Themeda* grassland is derived from the area mapped by Duncan (2020). The areas for other non-priority vegetation are derived from TASVEG 4.

The total impact summary includes the development footprint, services corridor and 5m construction buffer.

**Table 1: Vegetation Impacts**

Vegetation Community	Status	Original layout	Amended layout
GTL <i>Themeda</i> grassland	Priority	0.31 ha	0.09 ha
GCL Lowland grassland complex	Non-priority		0.54 ha
NBA - <i>Acacia Bursaria</i> woodland	Non-priority		
NAV – <i>Allocasuarina verticillata</i> forest	Non-priority		
DVG – <i>E. viminalis</i> dry forest	Non-priority		
FUM - Urban miscellaneous	Non-priority		

No threatened vegetation communities will be impacted by the construction of the alternate car park or for the alternate services corridor. The impact to threatened vegetation of the overall development is reduced by this amendment. Direct footprint of impact is limited to a small area of Lowland *Themeda* grassland (GTL) in the vicinity of the cabins (Figure 2) and the northern end of the original, now reduced in size, car park.

### Threatened Flora

The amended layout of the car park and services reduces the impact to pale (grassland) flax lily *Dianella amoena* from seven patches to three with significant reduction in area and number of plant tufts (ramets).

**Table 2: Impacts to *Dianella amoena***

Impact	No. patches (plants?)	No. ramets	Area sqm
Original design	7	215	7.2
Amended design	3	85	5.1
Total on Rosny Hill	21	Several thousands	172



The extent of impact<sup>1</sup> to leafy sun orchid *Thelymitra bracteata* primary habitat is reduced by 27% from 0.31ha to 0.22 ha out of a total area of 1.1 ha. Impact to secondary habitat is reduced by 42% from 1.56 to 0.91 ha. Out of a total of 3.9ha.

It is worth noting that there is now considerable uncertainty regarding the taxonomy of *Thelymitra bracteata*. Mark Waspstra is a local authority on orchids and is currently reviewing the entire Orchidaceae flora of Tasmania in collaboration with the Tasmanian Herbarium. He has recently re-assessed the specimens held at the Tasmanian Herbarium and on the basis of his findings has reclassified all of his records of *T. bracteata* at Rosny Hill to *Thelymitra* sp. Placing considerable doubt on the data for this species. Assessment of flowering *Thelymitra* at the time of this assessment identified plants as either *T. arenaria*, *T. exigua* and *T. pauciflora*. No plants meeting the exclusive size parameters of *T. bracteata* were observed.

#### Clarence Interim Planning Scheme 2015 - Natural Assets Code

No additional priority vegetation will be impacted by the construction of the alternate car park or for the alternate services corridor. The impact to priority vegetation by any measure (threatened vegetation or threatened flora species) from the overall project is reduced by this amendment.

#### Statement of Evidence Impact Summary

The Impact summary tables included in the Response Statement of Evidence (Andrew North 31 Augusts 2020; 3.4.2 and 3.4.6) has been updated. Opportunity has been taken to correct an error in the original calculations which did not exclude the 5m construction buffer from the 10m buffer. The former represents the extent of impact anticipated by the proponent. The 10m buffer represents a wider buffer that has been identified as being indirectly impacted by other parties. Table 3 and 4 show the recalculated impact of the original proposal and the impact assessment for the amended design. Tables 5 and 6 express these as percentages.

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<sup>1</sup> This includes a conservative 10m buffer around the development footprint

**Table 3: Areas from Original Design**

Impact	Development Footprint	Services	Construction Buffer 5 m	10 m buffer	Rosny Hill total
Area of TNLG Tasmanian Native Lowland Grassland					
Agreed TNLG ha	0.14	0.14	0.03	0.14	1.45
No. plants Leafy sun orchid <i>Thelymitra bracteata</i>					
M Wapstra 2009	0	0	0	14	75
M Wapstra 2016	3	4	2	20	122
J Quarmby 2016	19	16	23	17	195
NBES 2018	1	2	2	10	66
Primary habitat	0.06	0.05	0.03	0.17	1.1
Secondary habitat	0.62	0.27	0.17	0.50	3.9
Pale flax lily <i>Dianella amoena</i> A. North 2020					
No. patches	7	1	0	5	21
Area sqm	7.2	1	0	10.6	172

**Table 4: Areas from Amended Design**

Impact	Development Footprint	Services	Construction Buffer 5 m	10 m buffer	Rosny Hill total
Area of TNLG Tasmanian Native Lowland Grassland					
Agreed TNLG ha	0.045	0.04	0.022	0.11	1.45
No. plants Leafy sun orchid <i>Thelymitra bracteata</i>					
M Wapstra 2009	0	0	0	14	75
M Wapstra 2016	1	0	0	20	122
J Quarmby 2016	8	23	0	17	195
NBES 2018	0	0	1	10	66
Primary habitat	0.05	0.045	0.01	0.12	1.1
Secondary habitat	0.05	0.29	0.11	0.45	3.9
Pale flax lily <i>Dianella amoena</i> A. North 2020					
No. patches	3	0	0	5	19
Area sqm	5.1	0	0	3.6	172

**Table 5: Proportion of Areas from Original Design**

Impact	Development Footprint	Services	Construction Buffer 5 m	10 m buffer
Area TNLG Tasmanian Native Lowland Grassland				
Agreed TNLG	9.7	9.7	2.1	9.6
Proportion % plants Leafy sun orchid <i>Thelymitra bracteata</i>				
M Wapstra 2009	0	0	0	18.7
M Wapstra 2016	2.4	3.2	1.6	15.9
J Quarmby 2016	9.7	8.2	11.8	8.7
NBES 2018	1.5	3.0	3.0	15.2
Primary habitat	5.5	4.5	2.7	14.6
Secondary habitat	15.9	6.9	4.4	12.3
Proportion % patches matted flax lily <i>Dianella amoena</i> (A. North 2020)				
No. patches	33.3	4.8	0	23.8
Area of patches	4.2	4.8	0	6.1

**Table 6: Proportion of Areas from New Design**

Impact	Development Footprint	Services	Construction Buffer 5 m	10 m buffer
Area TNLG Tasmanian Native Lowland Grassland				
Agreed TNLG	3.3	2.2	3.9	4.3
Proportion % plants Leafy sun orchid <i>Thelymitra bracteata</i>				
M Wapstra 2009	0	0	0	16.4
M Wapstra 2016	0.8	0	1.6	17.5
J Quarmby 2016	4.1	11.8	0	8.7
NBES 2018	0	0	1.5	15.2
Primary habitat	4.5	4.1	0.9	10.9
Secondary habitat	1.0	5.8	2.2	9.0
Proportion % patches matted flax lily <i>Dianella amoena</i> (A. North 2020)				
No. patches	14.3	0	0	9.5
Area of patches	2.9	0	0	2.1

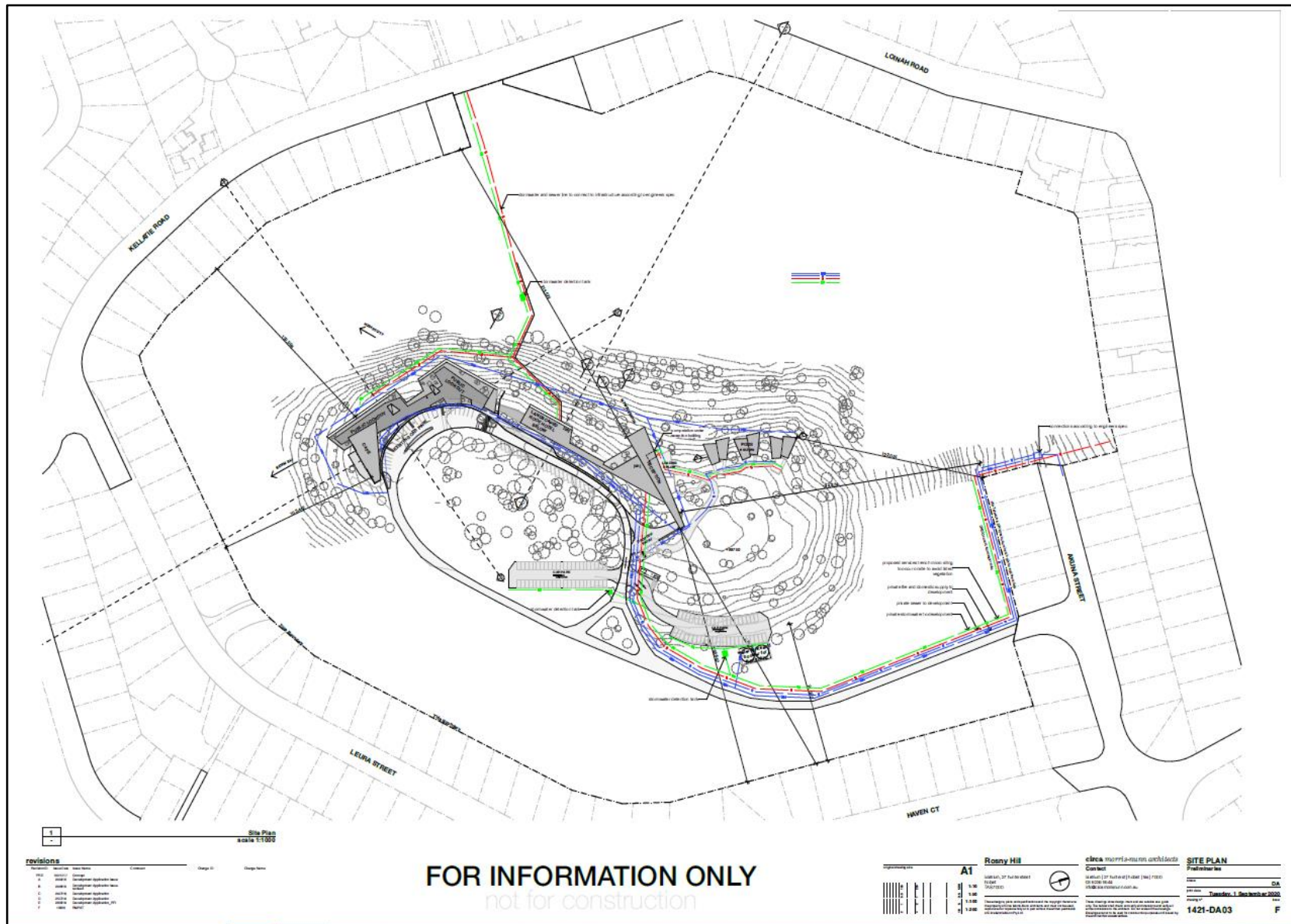


Figure1: Preliminary Car Park and Services Plan (indicative locations)

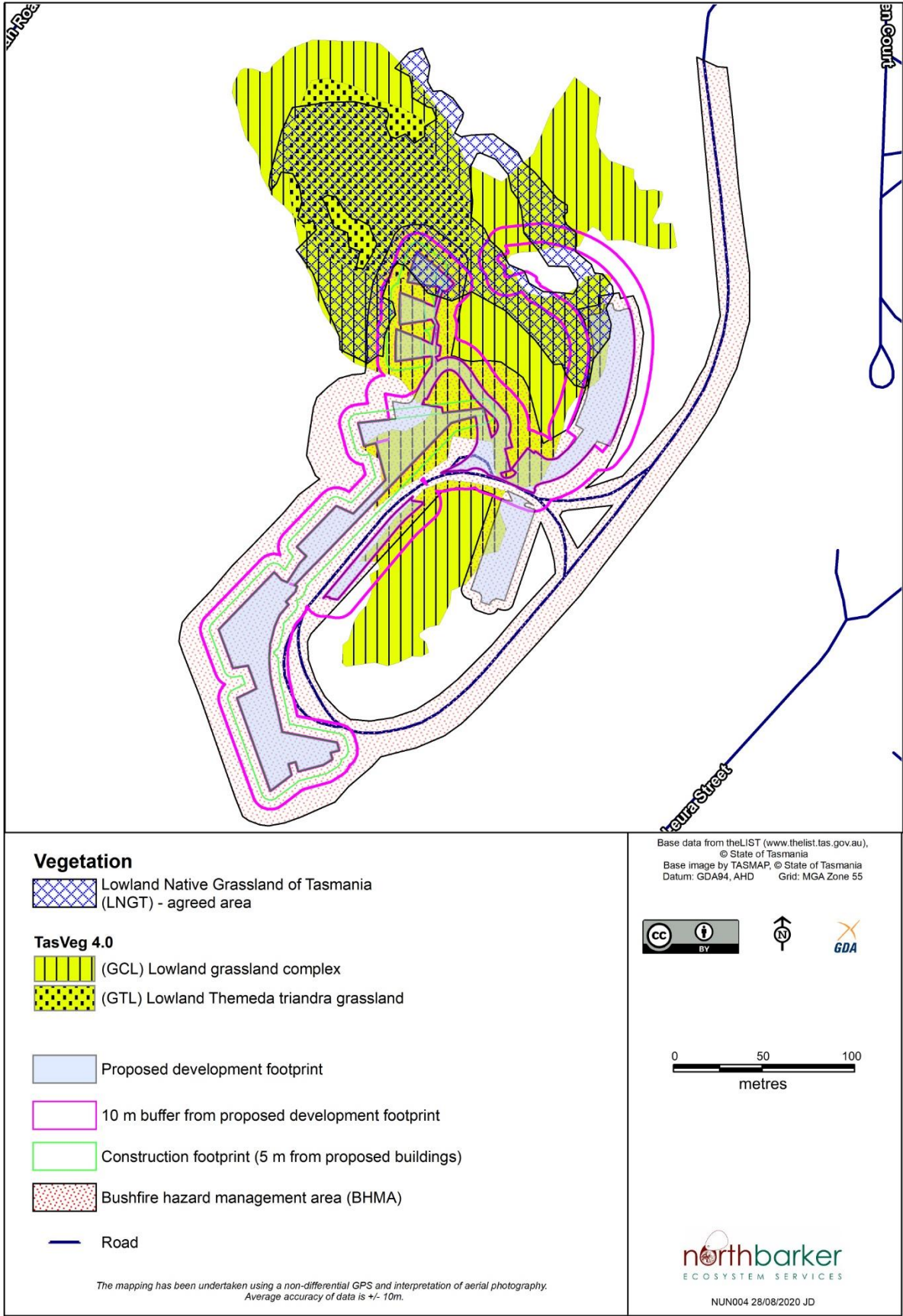


Figure 2: Native vegetation



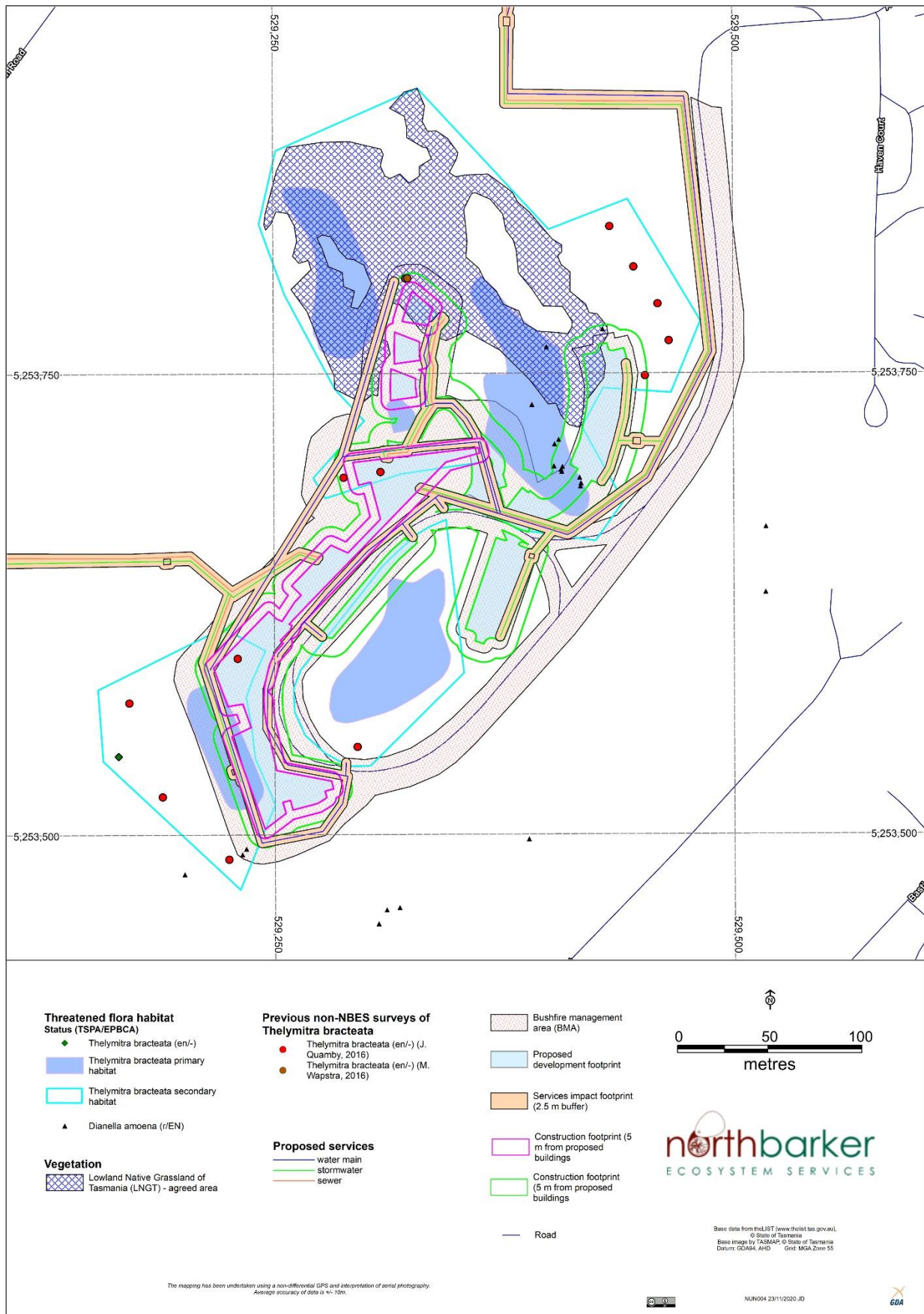


Figure 3: Amended design and priority vegetation



## Species list – Rosny Hill Car Park amendment

### 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

Site: DVG - E529382, N5253630 20/10/2020 Andrew J. North

Name	Common name	Status
<b>DICOTYLEDONAE</b>		
<b>ASTERACEAE</b>		
<i>Arctotheca calendula</i>	capeweed	i
<b>BORAGINACEAE</b>		
<i>Cynoglossum suaveolens</i>	sweet houndstongue	
<b>BRASSICACEAE</b>		
<i>Hirschfeldia incana</i>	hoary mustard	i
<b>CARYOPHYLLACEAE</b>		
<i>Polycarpon tetraphyllum</i>	fourleaf allseed	i
<i>Silene gallica</i> var. <i>gallica</i>	french catchfly	i
<i>Silene gallica</i> var. <i>quinquevulnera</i>	french catchfly	i
<i>Stellaria media</i>	garden chickweed	i
<b>CASUARINACEAE</b>		
<i>Allocasuarina verticillata</i>	drooping sheoak	
<b>CHENOPODIACEAE</b>		
<i>Einadia nutans</i> subsp. <i>nutans</i>	climbing saltbush	
<b>CONVOLVULACEAE</b>		
<i>Convolvulus angustissimus</i> subsp. <i>angustissimus</i>	blushing bindweed	
<i>Dichondra repens</i>	kidneyweed	
<b>FABACEAE</b>		
<i>Acacia dealbata</i> subsp. <i>dealbata</i>	silver wattle	
<i>Acacia mearnsii</i>	black wattle	
<i>Genista monspessulana</i>	canary broom	d
<i>Trifolium dubium</i>	suckling clover	i
<i>Trifolium</i> sp.	clover	i
<b>FUMARIACEAE</b>		
<i>Fumaria muralis</i> subsp. <i>Muralis</i>	wall fumitory	i
<b>GERANIACEAE</b>		
<i>Geranium</i> sp. <i>pale pink flowers</i>	geranium	
<b>HEMEROCALLIDACEAE</b>		
<i>Dianella brevicaulis</i>	shortstem flaxlily	
<b>MYRTACEAE</b>		
<i>Eucalyptus ovata</i> var. <i>ovata</i>	black gum	
<i>Eucalyptus viminalis</i> subsp. <i>viminalis</i>	white gum	
<b>OXALIDACEAE</b>		
<i>Oxalis radicata</i>	stoutroot woodsorrel	

**PITTOSPORACEAE**

*Bursaria spinosa subsp. spinosa* prickly box

**PLANTAGINACEAE**

*Plantago lanceolata* ribwort plantain i  
*Plantago varia* variable plantain

**ROSACEAE**

*Acaena ovina* hairy sheepsburr

**RUBIACEAE**

*Asperula conferta* common woodruff  
*Galium aparine* cleavers i

**SANTALACEAE**

*Exocarpos cupressiformis* common native-cherry

**SAPINDACEAE**

*Dodonaea viscosa subsp. spatulata* broadleaf hopbush

**MONOCOTYLEDONAE**

**CYPERACEAE**

*Lepidosperma laterale* variable swordspike

**POACEAE**

*Aira caryophylla* silvery hairgrass i  
*Anthosachne scabra* rough wheatgrass  
*Austrostipa flavescens* yellow speargrass  
*Austrostipa mollis* soft speargrass  
*Avena sp.* oat i  
*Bromus diandrus* great brome i  
*Bromus hordeaceus* soft brome i  
*Dactylis glomerata* cocksfoot i  
*Ehrharta erecta* panic veldtgrass i  
*Holcus lanatus* yorkshire fog i  
*Poa pratensis* kentucky bluegrass i  
*Rytidosperma racemosum var. racemosum* stiped wallabygrass

**PTERIDOPHYTA**

**ADIANTACEAE**

*Adiantum aethiopicum* common maidenhair