

4 April 2022



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Knightside Nominees Pty Ltd

Dear Lyall,

RE: Cockburn Resource Recovery Park Clearing Permit 8766/1 – Additional Area Assessment

Following is our assessment and advice regarding the proposed additional area of clearing to construct the access road to a new Community Recycling Centre within the Resource Recovery Park on Lot 235 Dalison Avenue.

1 Background

A clearing permit (CPS 8766/1) was granted on 20 December 2021 to clear 0.08ha of native vegetation to construct an entry road off Dalison Avenue into the new facility. The native vegetation approved for clearing includes two Tuart trees and several Grass Trees (*Xanthorrhoea preissii*). A revision of the engineering design of the access road has shown that 5-6m high retaining walls would be required to construct the access road which is not an ideal outcome. Batters are considered a better option than retaining walls, however the designed batters would encroach further into the area of native vegetation than is currently approved for clearing by the clearing permit. The attached plan shows the extent of the proposed batter into areas containing native vegetation.

PGV Environmental was commissioned to undertake an environmental assessment of the additional area proposed to be cleared and to provide advice on the best method of obtaining approval to clear the additional area.

2 Environmental Assessment

The clearing permit report for CPS 8766/1 contains a description of the vegetation to be cleared as assessed by the City's environmental officer as well as a description of the broader strip of vegetation along the southern part of Lot 235 as assessed by DWER for the clearing permit.

PGV Environmental undertook a site inspection to assess the environmental values in the additional area of vegetation proposed to be cleared (the site) on 24 March 2022. The assessment included:

- A description of the vegetation type and condition;
- Recording the location and size of all native trees;
- Assessment of the significance of any flora and vegetation on the site; and
- Assessing the fauna values of the vegetation.

2.1 Vegetation Type

The additional area of native vegetation proposed to be cleared is around 0.2ha. The native vegetation is mostly Tuart Woodland (Plate 1) with a small clump of Grass Trees (*Xanthorrhoea preissii*) close to Dalison Avenue (Plate 2). Some WA Peppermint trees (*Agonis flexuosa*) occur at the eastern end of the site among the Tuarts. The Peppermints are not considered locally native to the area.

Plate 1: Tuart Woodland



Plate 2: Grass Trees (*Xanthorrhoea preissii*) near Dalison Avenue



2.2 Vegetation Condition

The condition of the vegetation on the site was rated as Completely Degraded using the Keighery scale in Bush Forever. The understorey was almost completely weeds including Annual Veldtgrass (*Ehrharta longiflora*), Fountain Grass (*Cenchrus setaceus*), Wild Oats (*Avena fatua*), Hare's Tail Grass (*Lagurus ovatus*), Century Plant (*Agave americana*), Castor Oil (*Ricinus communis*), Victorian Teatree (*Leptospermum laevigatum*), Olive (*Olea europaea*), Fennel (*Foeniculum vulgare*), Asphodelus (*Asphodelus fistulosus*) and Japanese Pepper (*Schinus terebinthifolius*). The condition rating of Completely Degraded is the same as assessed by DWER in the clearing permit report.

One 10m x 10m quadrat was sampled in the Tuart woodland area to provide a representative sample of the condition of the understorey (Attachment 2).

2.3 Flora

Very few native plant species and individual native plants were observed on the site. Following is a list of all the species recorded in March 2022. No additional species are expected to occur in spring due to the Completely Degraded understorey.

- *Acacia saligna*
- *Eucalyptus gomphocephala*
- *Grevillea crithmifolia*
- *Hardenbergia comptoniana*
- *Jacksonia sternbergiana*
- *Xanthorrhoea preissii*

2.4 Tuart Trees

A total of 19 Tuart trees were recorded on the site. The total includes the two Tuart trees contained in the current clearing permit. Data on Tuart tree size, diameter and location are provided in Attachment 3.

Most (15) of the trees had a diameter at breast height (dbh) less than 50cm. Of the four with a dbh >50cm, three were 52-59cm and the largest was 75cm. This is considered young for Tuart trees. Examination of historic aerial photography shows that the site was completely cleared between 1970 and 1974 as part of sand and limestone extraction works immediately to the north of the site. The Tuart trees have either regenerated naturally since then or were planted as part of a rehabilitation program.

The previous clearing of the site also explains the Completely Degraded condition of the understorey.

Plate 3: Aerial Photograph 1974 (Landgate Map Viewer Plus)



The vegetation in the balance of the area along the southern boundary is similar to the proposed additional clearing area, with many Tuart trees over weeds. The non-native tree species Rose Gum (*Eucalyptus grandis*) is very common at the eastern end.

The Tuart trees on the site, and along the southern boundary of the Lot, have the potential to be part of the Tuart Woodlands and Forests of the Swan Coastal Plain ecological community which is a Priority Ecological Community at State level and a Threatened Ecological Community (TEC) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). For a patch of Tuart trees to be the Tuart Woodland TEC it must meet a set of criteria. The criteria most relevant to the assessment of the Tuart patch on the site are size and condition. The Tuarts at the southern end of the Lot are considered one patch which does not extend off-site due to the distance between the closest Tuart trees at the eastern end and some trees south of Dalison Avenue being greater than 60m. The size of the Tuart patch is around 1.0ha (the area shown as remnant vegetation in Figure 1 of the clearing permit report includes introduced Rose Gum and Victorian Teatree and is not all native). The condition of the Tuart patch assessed using the specific condition rating scale for the Tuart Woodland TEC is rated as Poor due to the weedy nature of the understorey and less than 4 native species per 100m². A patch of Tuarts in Poor condition needs to be at least 5ha to be the Tuart Woodland TEC. The Tuart patch on the Lot is around 1ha and is therefore too small to be the TEC. This assessment agrees with that of DWER in the clearing permit report.

2.5 Fauna Values

The fauna values of the site are very limited due to the Completely Degraded nature of the understorey. The Tuart trees provide some habitat for birds and some reptiles are likely to occur in the weedy understorey.

The Tuart trees are low quality foraging habitat for Carnaby's Black Cockatoos and are not used for foraging by Forest Red-tailed Black Cockatoos. According to the DWER clearing permit report there are no nearby roosting sites for Carnaby's Black Cockatoos that might use the site for foraging.

None of the Tuart trees contained a hollow large enough for Black Cockatoos to breed in and no breeding by Black Cockatoos has been recorded in the area. Four of the Tuart trees have a dbh greater

than 50cm and are therefore considered as potential future breeding habitat. Given the young age of the trees, and the absence of breeding in the region, the four trees are not considered to be significant in terms of future breeding potential.

3 Clearing Permit Advice

An application to amend an existing clearing permit can be made using Form C4 'NV-F04 Application for an amendment'. The application must be made at least 90 days prior to the expiry of the existing licence to ensure there is sufficient time to assess the application. CPS 8766/1 expires on 13 January 2027 which gives sufficient time to apply for the amendment.

The application will need to include a revised IBSA package (Part 6 of the Form) for the additional area of native vegetation to be cleared.

Please contact me if you would like to discuss any aspects of this assessment.

Yours sincerely

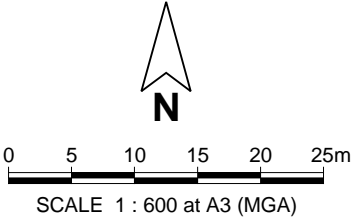
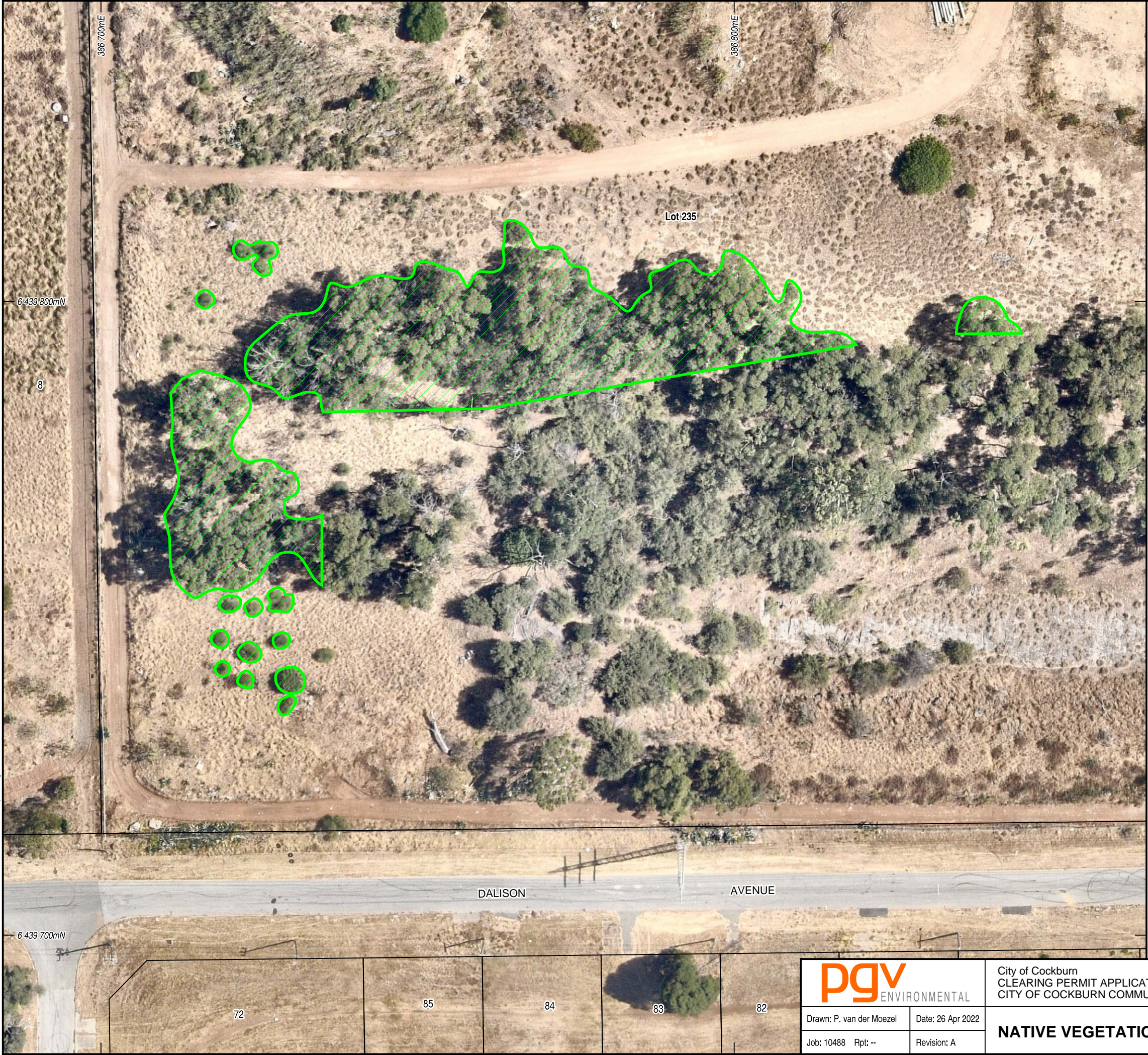


Paul van der Moezel
Managing Director

Attachment 1: Proposed clearing area

Attachment 2: Quadrat Data

Attachment 3: Tuart Tree Data



- Legend**
- Site Boundary
 - Cadastral Boundary
 - Proposed Clearing Area

CADASTRAL SOURCE: Landgate, April 2022.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown January 2022.

		City of Cockburn CLEARING PERMIT APPLICATION CITY OF COCKBURN COMMUNITY RECYCLING CENTRE	
Drawn: P. van der Moezel	Date: 26 Apr 2022	NATIVE VEGETATION EXTENT TO BE CLEARED	
Job: 10488 Rpt: --	Revision: A		

QUADRAT CW1

50 386745 E 6439796 N

Vegetation: *Eucalyptus gomphocephala* Woodland over weeds
Condition: Completely Degraded
Soil Type: Orange-brown sand
Landform: Flat
Date: 24.3.22
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Eucalyptus gomphocephala</i>	12	10
* <i>Olea europaea</i>	2.2	1
* <i>Foeniculum vulgare</i>	1.7	5
<i>Xanthorrhoea preissii</i>	1.6	1
* <i>Ehrharta longiflora</i>	0.8	25
* <i>Avena fatua</i>	0.8	20
* <i>Lagurus ovatus</i>	0.6	20
* <i>Euphorbia terracina</i>	0.6	1
* <i>Trifolium arvense</i>	0.5	2
* <i>Pelargonium capitatum</i>	0.2	<1
* <i>Trifolium campestre</i>	0.1	20
<i>Hardenbergia comptoniana</i>	Climber	1

* introduced species

Attachment 3

Cockburn Resource Recovery Centre

Tree #	Species	Easting	Northing	Height (m)	Diameter (cm)			Notes
					1	2	3	
1	Tuart	386723	6439764	14	45	38	36	no hollows
2	Tuart	386728	6439773	12	49			no hollows
3	Tuart	386716	6439773	11	32	24	16	no hollows
4	Tuart	386720	6439775	12	33	27		no hollows
5	Tuart	386721	6439784	12	75	20		no hollows
6	Tuart	386730	6439791	9	36	27		no hollows
7	Tuart	386734	6439799	9	40	25		no hollows
8	Tuart	386736	6439795	10	36			no hollows
9	Tuart	386742	6439791	12	49			no hollows
10	Tuart	386745	6439799	12	52	40		no hollows
11	Tuart	386752	6439793	13	37			no hollows
12	Tuart	386757	6439800	12	46	37		no hollows
13	Tuart	386769	6439801	13	52			no hollows
14	Tuart	386772	6439798	10	42			no hollows
15	Tuart	386793	6439801	9	35	29		no hollows
16	Tuart	386798	6439799	14	59	42	33	no hollows
17	Tuart	386794	6439794	7	21			no hollows
18	Tuart	386800	6439789	8	19			no hollows
19	Tuart	386805	6439796	12	40	30	28	no hollows