

22 December 2023



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Knightside Nominees Pty Ltd

RE: Millar Road Landfill Redevelopment –Vegetation Assessment

Following is our assessment of the vegetation in the area proposed for redevelopment on the Millar Road Landfill site in 2024. The redevelopment includes a new access road into the site. The alignment of the access road will require the clearing of native trees.

The area covered by this assessment is shown on the Engineering plan provided in Attachment 1.

1 Methodology

Dr Paul van der Moezel of PGV Environmental undertook a vegetation assessment on 11 December 2023. The assessment included recording any native vegetation (trees, shrubs, herbs) and assessing the native trees in the area prescribed in Attachment 1 marked as Existing Trees to be Removed. The trees assessed were those with a Diameter at Breast Height (DBH) of 30cm or more.

The following information was recorded for each tree assessed:

- Species
- Location
- Height
- DBH (1.3m above ground)
- Tree health
- Presence of hollows

2 Site Description

The site was found to contain native trees, either standing alone or in small clumps. The small clumps included mature trees as well as thin, younger trees. There were no native shrubs or herbs in the understorey. Therefore, the condition of the vegetation was rated as Completely Degraded.

3 Tree Assessment

A total of 40 trees were recorded with a DBH >30cm. Tree data are provided in Attachment 2. The species assessed included:

- Marri (*Corymbia calophylla*) – 18 trees
- Tuart (*Eucalyptus gomphocephala*) – 16 trees
- Jarrah (*Eucalyptus marginata*) – 5 trees
- Sheoak (*Allocasuarina fraseriana*) – 1 tree

Photographs of all trees are shown in Attachment 3.

The location of all trees assessed is shown in Attachment 4.

Most of the trees were rated in poor or average health. Nine trees were rated as healthy. Three of the healthy trees are old specimens and should be considered to be retained if possible. The three trees are Tree 5 (Plate 1), 6 (Plate 2) and 29 (Plate 3).

Plate 1- Tree 5

Plate 2 - Tree 6

Plate 3 - Tree 29



Tree 28 is a very old Tuart tree with a DBH of 164cm, however the top branches have been pruned on several occasions and overall the tree is in average condition (see photo in Attachment 3).

4 Black Cockatoo Habitat Trees

According to the EPBC Act Referral Guidelines for three species of Black Cockatoos, any Marri, Jarrah or Tuart tree with a DBH >50cm has the potential to be a breeding habitat tree for Black Cockatoos either currently, if there is a suitable hollow, or in the future if there is no hollow.

A total of 24 trees were recorded with a DBH of 50cm or greater. The location of the trees is shown in Attachment 5. The species recorded were:

- Tuart – 12 trees
- Marri – 10 trees

- Jarrah – 2 trees

Most (37) of the trees did not have any hollows. Two trees had small hollows and one tree (Tree 24) contained a large vertical hollow that is highly likely to be hollow through to the base of the tree and therefore not be suitable for a breeding hollow for cockatoos (Plate 4).

Plate 4: Large Vertical Hollow on Tree 24.



Evidence of foraging by Forest Red-tailed Black Cockatoos was observed under Tree 29 (Plate 5).

Plate 5: Black Cockatoo Foraging Evidence on Marri nuts



5 Clearing Permit

A clearing permit is required under the State *Environmental Protection Act 1986* (EP Act) unless an exemption applies through Schedule 6 of the EP Act or the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*. Clearing for the new access road does not appear to qualify for an exemption.

6 EPBC Act Referral Guidelines

The Marri, Tuart and Jarrah trees on the site provide foraging habitat and potential breeding habitat for Carnaby's Black Cockatoos and Forest Red-tailed Black Cockatoos. Some evidence of foraging was observed on a Marri tree on the site. While there is no current breeding on site, there are 24 trees that have the potential to form hollows in the future that could be used by Black Cockatoos for breeding.

Carnaby's Black Cockatoos and Forest Red-tailed Black Cockatoos are listed as Matters of National Environmental Significance (MNES) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 2000* (EPBC Act). A significant impact on MNES must be referred to the Commonwealth environment department (DCCEEW) to determine whether the proposed impact needs to be fully assessed or not.

The level of impact that is determined to be significant is assessed using either the *Significant Impact Guidelines 1.1* or the more specific guidelines for Black Cockatoos (Referral Guideline for 3 WA Threatened Black Cockatoo Species, 2022).

According to the Referral Guidelines the clearing of more than 1ha of quality foraging habitat could lead to a significant impact on Black Cockatoos and a Referral is recommended. The amount of foraging habitat proposed to be cleared (40 trees plus several young saplings) is estimated to be around 0.25ha, well under the 1ha threshold.

Also according to the Referral Guidelines the clearing of more than 1 breeding habitat tree could lead to a significant impact on Black Cockatoos and a Referral is recommended. There are 24 potential breeding habitat trees on the site. Technically, clearing only one of these trees could require a Referral under the EPBC Act. However, PGV Environmental is not aware of any projects that have been referred with less than 1ha of foraging habitat and a small number (24) of potential breeding habitat trees that have required a full assessment by DCCEEW. Therefore, it is unlikely that the clearing of the habitat trees on the site would lead to a significant impact according to DCCEEW.

A Referral under the EPBC Act can only be made by the Proponent for the proposed clearing, in this case the City of Rockingham. There are no third party referrals under the EPBC Act. Therefore, the City of Rockingham will need to make the decision whether to refer or not.

If a Referral were to be made, DCCEEW will make a decision whether to fully assess the proposed clearing or not probably within about 6 weeks, depending on whether DCCEEW required further information. If the decision were that no further assessment is needed, then the City will have met its obligations under the EPBC Act. If the decision were that a full assessment is required, the process to undertake the full assessment could take up to 12 months.

7 Conclusion

The assessment of the vegetation in the area proposed for redevelopment on the Millar Road Landfill site in 2024 resulted in the following findings:

- No intact native vegetation occurs on the site;
- A total of 40 native trees occur in the area proposed to be cleared and included 18 Marri, 16 Tuart, 5 Jarrah and 1 Sheoak tree;
- Most of the trees were in poor condition;
- Nine trees were rated as healthy. Three of the healthy trees are old specimens and should be considered to be retained if possible;
- The native trees provide around 0.25ha of foraging habitat for Carnaby's and Forest Red-tailed Black Cockatoos. Evidence of foraging by Forest Red-tailed Black Cockatoos was observed on a Marri tree;
- A total of 24 potential Black Cockatoo breeding habitat trees was recorded on the site;
- None of the 24 trees has a large hollow suitable for breeding by Black Cockatoos;
- A clearing permit will be required under the EP Act; and
- The clearing of any potential breeding habitat tree may need to be referred under the Commonwealth EPBC Act.

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

Yours sincerely



Paul van der Moezel
Managing Director

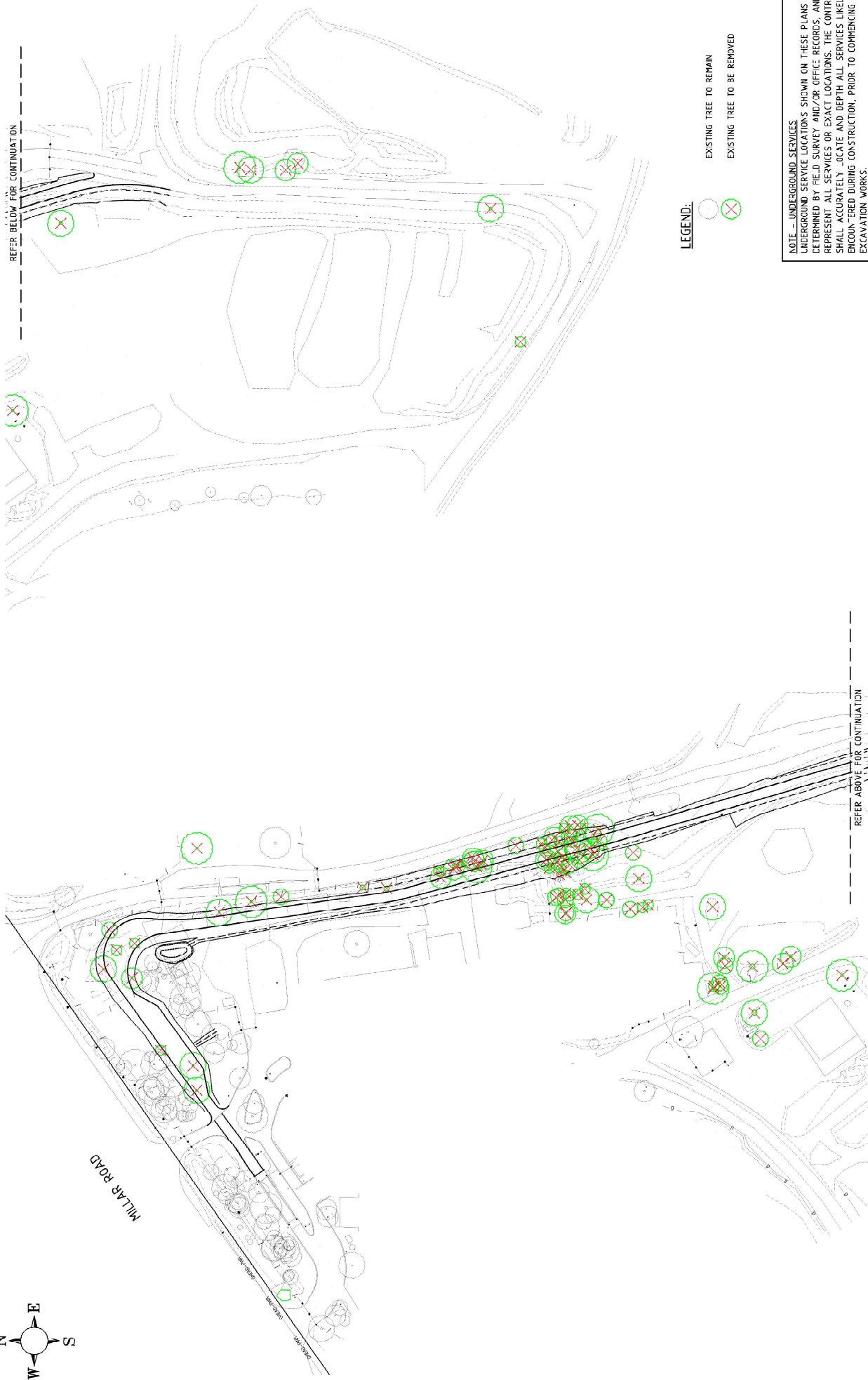
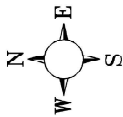
Attachment 1: Proposed Site Access Road Tree Removal Plan

Attachment 2: Tree Data

Attachment 3: Tree Photographs

Attachment 4: Workplan 1 - All Trees >30cm DBH

Attachment 5: Workplan 2 - Black Cockatoo Habitat Trees

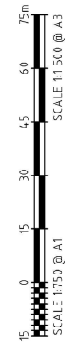


REFER BELOW FOR CONTINUATION

REFER ABOVE FOR CONTINUATION

LEGEND:
 EXISTING TREE TO REMAIN
 EXISTING TREE TO BE REMOVED

NOTE - UNDERGROUND SERVICES
 UNDERGROUND SERVICE LOCATIONS SHOWN ON THESE PLANS HAVE BEEN DETERMINED BY FIELD SURVEY AND/OR OFFICE RECORDS, AND MAY NOT REPRESENT ALL SERVICES OR EXACT LOCATIONS. THE CONTRACTOR SHALL ACCURATELY LOCATE AND DEPTH ALL SERVICES LIKELY TO BE ENCOUNTERED DURING CONSTRUCTION, PRIOR TO COMMENCING ANY EXCAVATION WORKS.



LAYOUT PLAN
 SCALE 1 : 750 (A1)

FOR APPROVAL
 22 NOVEMBER 2023

REVISIONS		TECHNICALLY APPROVED:		CITY OF ROCKINGHAM		SCALE	
No.	BY	DATE	DESCRIPTION	DESIGN	DATE	SCALE	AS SHOWN
1	S.B.Y.	22/11/23	PRELIMINARY ISSUE FOR REVIEW	DESIGN	11/23	SHEET	
				DRAWN	11/23		
				DES. CHK.			
				JWG. CHK.			
				MILLAR ROAD WASTE MANAGEMENT FACILITY		SHEET	
				STAGE 1A - PROPOSED SITE ACCESS ROAD		DRG No.	
				TREE REMOVAL PLAN		REVISION 1A	
						MILL-S1-20	

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 Website - 0422 309 291
 Address - 6 Anembo Close, Duncraig 6023

Tree #	Species	Easting	Northing	Height (m)	Diameter (cm)	2nd Branch (cm)	3rd Branch (cm)	Comments
1	Jarrah	388720	6427415	11	59			poor tree, no hollows
2	Jarrah	388710	6427409	11	41			healthy small tree, no hollows
3	Jarrah	388702	6427398	12	57			average tree, no hollows
4	Jarrah	388701	6427394	12	40			average tree, no hollows
5	Marri	388726	6427364	20	61			healthy tree, no hollows
6	Tuart	388735	6427349	25	73	70		healthy tree, no hollows
7	Tuart	388736	6427341	13	37			healthy tree, no hollows
8	Marri	388743	6427275	22	59			upright tree, some dead branches, no hollows
9	Marri	388749	6427259	19	61			healthy tree, no hollows
10	Marri	388762	6427228	18	37			one sided tree, poor condition, no hollows
11	Marri	388757	6427226	9	35			one sided tree, poor condition, no hollows
12	Marri	388751	6427226	12	43			poor tree, no hollows
13	Marri	388767	6427219	15	52			poor tree, no hollows
14	Marri	388766	6427219	12	42			poor tree, no hollows
15	Marri	388763	6427211	17	58			average tree, no hollows
16	Jarrah	388754	6427213	12	49			average tree, no hollows
17	Marri	388732	6427220	16	87			average tree, dead branches, no hollows
18	Marri	388730	6427225	17	53			chlorotic tree, poor condition, no hollows
19	Marri	388735	6427204	18	40			very poor, dead branches, no hollows
20	Marri	388741	6427199	16	35			very poor, dead branches, no hollows
21	Marri	388738	6427208	14	31			poor tree, no hollows
22	Tuart	388744	6427195	22	61	57		dead top, poor health, no hollows
23	Tuart	388735	6427167	21	103			average tree, dead branches, no hollows
24	Tuart	388714	6427163	25	138			large vertical hollow, probably no base. Old tree
25	Tuart	388710	6427171	18	40			healthy tree, no hollows
26	Tuart	388707	6427164	18	52			poor tree, dead top, no hollows
27	Tuart	388703	6427166	18	52	27		poor tree, leaning, no hollows
28	Tuart	388692	6427151	22	164			Very old tree, has been pruned top branches, small hollows, spout
29	Marri	388689	6427173	18	60			healthy tree, no hollows, foraging by Fores Red-tails
30	Tuart	388695	6427173	19	46			average tree, leaning, no hollows
31	Tuart	388705	6427114	20	74	61	30	average tree, no hollows
32	Tuart	388716	6427133	12	124			Dead main trunk, small hollows
33	Tuart	388782	6427095	19	99			average tree, no hollows
34	Tuart	388805	6427024	18	51			healthy tree, no hollows
35	Tuart	388807	6427023	15	45			healthy tree, no hollows
36	Marri	388807	6427005	15	38			average tree, no hollows
37	Tuart	388790	6426921	21	86			average tree, dead branches no hollows
38	Marri	388718	6427305	14	93			poor health, no hollows
39	Sheoak	388659	6427371	10	45			average tree, no hollows
40	Marri	388667	6427374	15	51			poor health, no hollows

Tree 1



Tree 2 (right), 3 (middle) 4 (left)



Tree 4



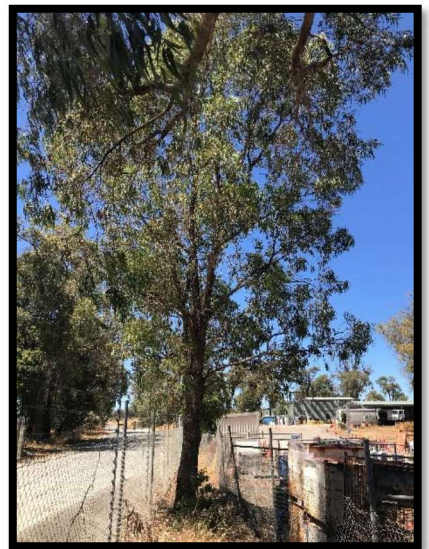
Tree 5



Tree 6



Tree 7



Tree 8



Tree 9



Trees 10-16



Tree 17 (centre)

Tree 18

Tree 19 (Right), 20 (Left)



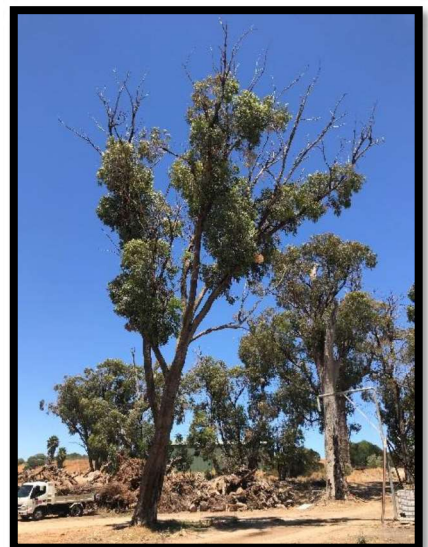
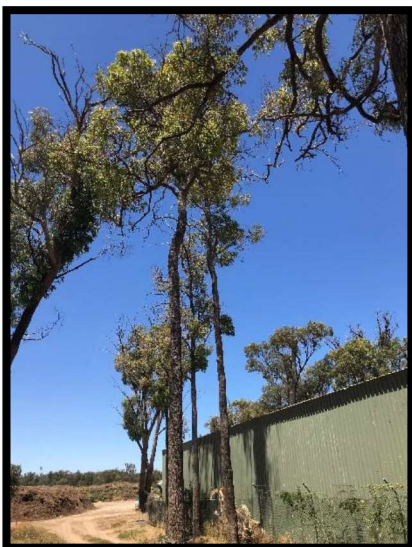
Tree 21



Tree 22



Tree 23



Tree 24



Tree 25



Tree 26 (Left), 27 (Right)



Tree 28



Tree 29



Tree 30



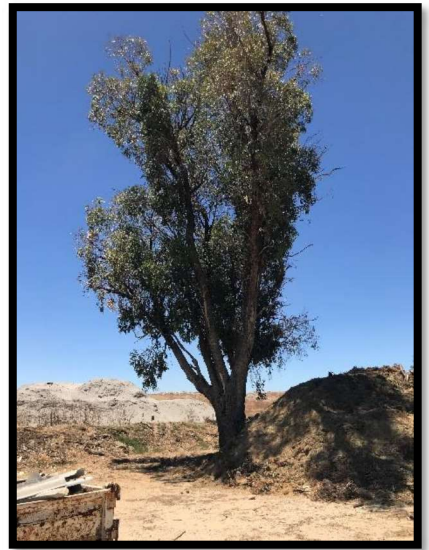
Tree 31



Tree 32



Tree 33



Tree 34 (Right), 35 (Left)



Tree 36



Tree 37



Tree 38

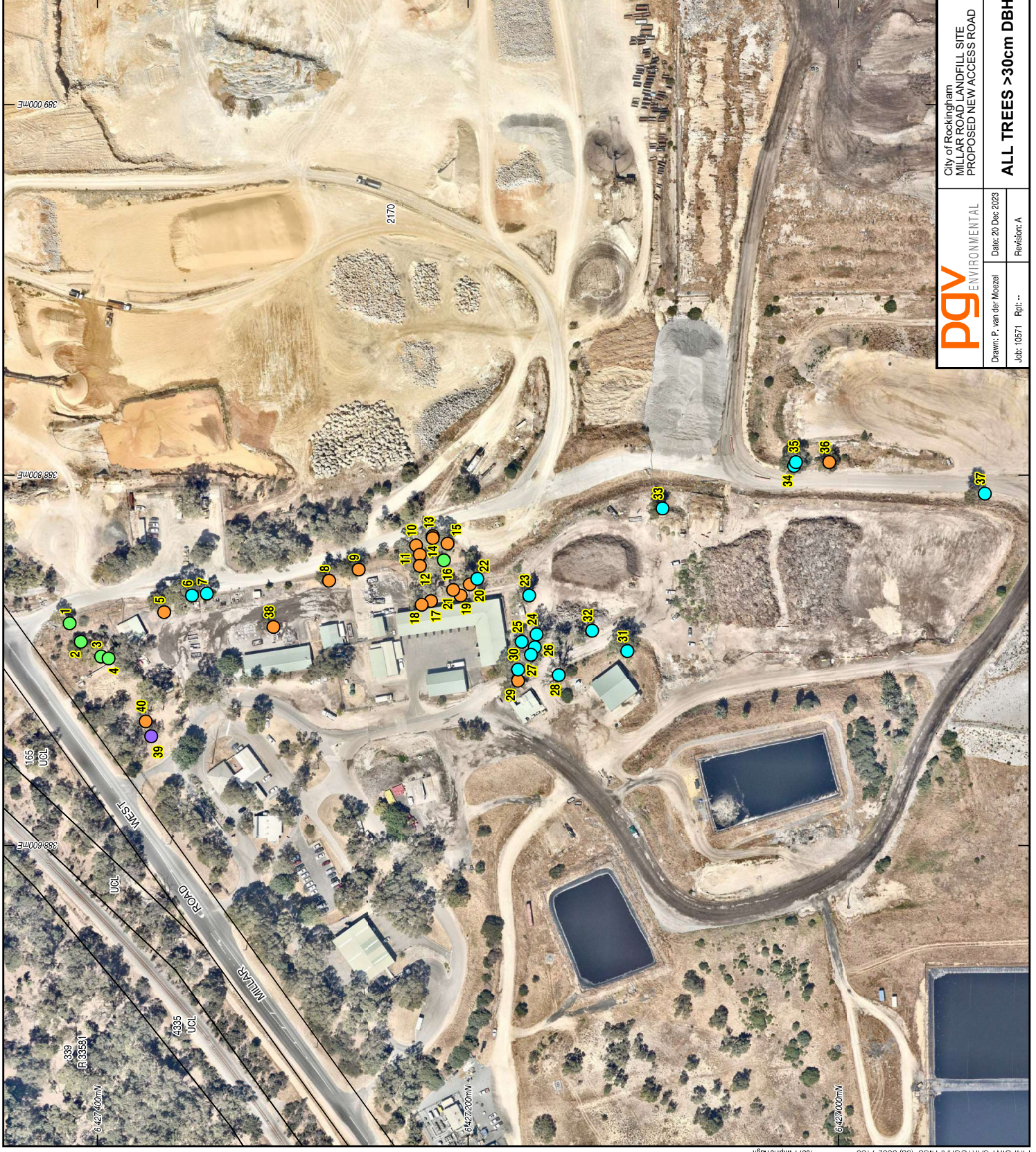


Tree 39



Tree 40





0 20 40 60 80 100m
 SCALE 1 : 2 000 at A3 (MGA)

- Legend**
- Cadastral Boundary
 - 18** Tree Number
 - Significant Trees**
 - Jarrah
 - Marri
 - Tuart
 - Sheoak

Workplan 1

PGV ENVIRONMENTAL

City of Rockingham
 MILLAR ROAD LANDFILL SITE
 PROPOSED NEW ACCESS ROAD

Drawn: P. van der Meezel	Date: 20 Dec 2023
Job: 10571	Revision: A
Rpt: --	

ALL TREES >30cm DBH



0 20 40 60 80 100m
 SCALE 1 : 2 000 at A3 (MGA)

- Legend**
- Cadastral Boundary
 - 18** Tree Number
 - Significant Trees**
 - Jarrah
 - Marri
 - Tuart

CITY of Rockingham
 MILLAR ROAD LANDFILL SITE
 PROPOSED NEW ACCESS ROAD

PGV ENVIRONMENTAL
 Drawn: P. van der Meezel
 Date: 20 Dec 2023

Job: 10571 Rpt: --
 Revision: A

BLACK COCKATOO HABITAT TREES