

**Our ref: AU213008179.001 ARMSTR Kelmscott Snr H Sch Veg Clearing Referral**

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Date: 14 April 2023

Department of Water and Environmental Regulation  
Locked Bag 10  
Joondalup DC WA 6919

Dear Sir / Madam,

### **Clearing referral: Kelmscott Senior High School**

Please find attached a referral for the proposed clearing of up to 0.046 hectares (ha) of remnant native vegetation within the Kelmscott Senior High School to determine if a clearing permit is required to construct a new sports hall, new pumps and tanks and infill sections of fencing.

## **1 Background**

The Kelmscott Senior High School is located at 50 Third Avenue, Kelmscott (Lot 300 of Deposited Plan 411255; "the site"), in the City of Armadale (Figure A). The site is situated approximately 23 kilometres (km) to the south-east of the Perth Central Business District.

As part of the planned upgrades to the Kelmscott Senior High School, the Department of Education is proposing to construct a new sports hall over the existing basketball court and storage shed, new pumps and tanks in the existing student car park and infill sections of fencing to the north and south of the new sports hall.

The footprints of the new sports hall, new pumps and tanks and infill sections of fencing and their immediate surroundings ("study area") have been historically disturbed by the development of the Kelmscott Senior High School. This includes the construction of sport courts, a student car park and school buildings. The study area is comprised of scattered remnant native and planted trees over an understorey of grassy weeds and limited native vegetation (Figure B).

An aboriginal impact assessment of the study area was undertaken in August 2022 by Civica Pty Limited (Civica 2022)<sup>1</sup> to inspect 60 trees to support the Development Application of the new sports hall. The following tree species were identified within the study area:

- *Acacia* ssp. – dead tree
- *Banksia attenuata* (slender banksia)
- *Banksia grandis* (bull banksia)

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<sup>1</sup> Civica Pty Limited. 2022. Armstrong Collective Kelmscott Senior High School Third Avenue, Kelmscott WA Arboricultural Impact Assessment. Report prepared for the Armstrong Collective.

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- *Banksia menziesii* (firewood banksia)
- \**Callistemon* 'Kings Park Special' (Kings Park special bottlebrush)
- \**Corymbia maculata* (spotted gum)
- \**Eucalyptus grandis* (flooded gum)
- \**Eucalyptus leucoxylon* ssp. *leucoxylon* f. *rosea* (red-flowered yellow gum)
- *Eucalyptus marginata* (jarrah)
- *Xylomelum occidentale* (woody pear).

Most of these tree species are native, whereas the Kings Park special bottlebrush is a cultivated species, and the spotted gum, flooded gum and red-flowered yellow gum are introduced species to Western Australia (and hence these species are not considered to be native vegetation and have not been included in this assessment). A unique identification number was assigned to each tree ("tree number") by Civica. There are also several *Xanthorrhoea preissii* (grass trees) within the sports hall footprint which were not surveyed by the Armstrong Collective. Grass trees are a native species; however these plants will be transplanted within the site as part of the proposed works.

A targeted black cockatoo habitat assessment of the study area was undertaken in September 2022 by PGV Environmental (2022)<sup>2</sup> to describe the black cockatoo habitat and assess the proposal against the Commonwealth's *Significant Impact Guidelines 1.1 for black cockatoos* (Department of the Environment, Water, Heritage and the Arts [DEWHA] 2013<sup>3</sup>).

The scope of the clearing referral was amended in 2023, resulting in an unsurveyed native tree being located within the pumps and tanks footprint in January 2023. This footprint was originally located on the grassed lawn adjacent to Third Avenue. The tree was inspected by RPS' botanist, Martin Henson, on 31 January 2023 and it was recorded as a *Corymbia calophylla* (marri) tree with a diameter at breast height (DBH) greater than 500 mm and no visible hollows. It is referred to as Tree No. 61 in this letter. In response to identification of this tree, the pumps and tanks footprint was relocated to the student car park to retain the marri tree, which is discussed further in Section 5.2.

To support the clearing referral, the following figures and documents have been provided:

- Figures A to D
- Appendix A: Clearing referral
- Appendix B: Photographs of trees to be cleared. These photographs are sourced from the Arboricultural Impact Assessment (Civica 2022), therefore seven of the 21 trees to be cleared are illustrated
- Appendix C: Arboricultural Impact Assessment (Civica 2022)
- Appendix D: Black Cockatoo Habitat Assessment (PGV Environmental 2022)
- Appendix E: Certificate of title
- Shapefile data.

## 2 Landholder context

The Kelmscott Senior High School is located at 50 Third Avenue, Kelmscott (Lot 300 of Deposited Plan 411255), which is managed by the Western Australian Department of Education. The Certificate of Title for the site has been provided as Appendix E.

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<sup>2</sup> PGV Environmental. 2022. Kelmscott Senior High School Black Cockatoo Habitat Assessment. Report prepared for RPS.

<sup>3</sup> Department of the Environment, Water, Heritage and the Arts. 2013. Significant Impact Guidelines 1.1 - Matters of National Environmental Significance. [https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines\\_1.pdf](https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines_1.pdf). Accessed 30 January 2023.

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The Armstrong Collective intends to submit this clearing referral to support the development of a new sports hall, new pumps and tanks and infill sections of fencing for the Department of Education. The Department of Education will be undertaking the school upgrade works.

### 3 Proposed clearing area

Figure B shows the extent of native vegetation proposed to be cleared within the sports hall footprint. The construction of a new sports hall will require the removal of 0.046 ha of Completely Degraded native vegetation. The new pumps and tanks footprint has been previously disturbed and will not impact on native vegetation. The infill sections of fencing are not expected to impact adjacent native vegetation that is proposed to be retained.

Two native understorey species have been recorded within the study area, Grass tree and *Caladenia latifolia* (fairy orchid) (Plate 1 and Plate 2) (PGV Environmental 2022). No grass trees are proposed to be permanently lost, any grass trees that are within the new sports hall footprint or less than 0.5 m from its edge are intended to be relocated prior to commencing clearing works. Fairy orchids may be subject to clearing within the sports hall footprint. The extent of fairy orchids present is not delineated in this clearing referral; however it is presumed that they are most likely to occur beneath tree canopies as:

- Areas outside of the tree canopies are predominantly comprised of grassy weeds and are highly disturbed (i.e. by mowing).
- Fairy orchids have been observed surrounded by dead leaves thought to have fallen from overhanging tree branches (PGV Environmental 2022, Plate 2).

Therefore, any fairy orchids occurring within the sports hall footprint are considered to be included within the 0.046 ha of native vegetation to be cleared. This species is not Threatened (Western Australian Herbarium 1998-)<sup>4</sup>.

A summary of the clearing referral is provided in Table 1.

**Table 1: Clearing referral summary**

<b>Location</b>	50 Third Avenue, Kelmscott
<b>Clearing area</b>	0.046 ha of native vegetation in Completely Degraded condition.
<b>Timing</b>	Clearing is proposed occur as one action between May 2023 and May 2025.
<b>Clearing method</b>	Native vegetation will be cleared mechanically.
<b>Purpose of clearing</b>	To facilitate the construction of a new sports hall, new pumps and tanks and infill sections of fencing at the Kelmscott Senior High School.
<b>Vegetation proposed to be cleared</b>	<ul style="list-style-type: none"><li>• Up to one dead <i>Acacia</i> sp. tree</li><li>• Up to one <i>Banksia attenuata</i> (slender banksia) tree</li><li>• Up to four <i>Banksia menziesii</i> (firewood banksia) trees</li><li>• Up to twelve <i>Eucalyptus marginata</i> (jarrah) trees</li><li>• Up to three <i>Xylomelum occidentale</i> (woody pear) trees</li><li>• Potentially <i>Caladenia latifolia</i> (fairy orchid)</li></ul>

<sup>4</sup> Western Australian Herbarium. 1998-. *Caladenia latifolia* R.Br. Pink Fairy Orchid. <https://florabase.dpaw.wa.gov.au/browse/profile/1599>. Accessed 10 March 2023.



**Plate 1: Grass tree observed within study area**



**Plate 2: Fairy orchids observed within study area**

## 4 Vegetation and flora

The key findings of the Arboricultural Impact Assessment (Civica 2022) and the Black Cockatoo Habitat Assessment (PGV Environmental 2022) of relevance to the vegetation and flora values proposed to be permanently lost through clearing are summarised as follows:

- A total of 60 native and planted trees were identified within the study area, whose species are listed in Section 1. The understorey of the study area consisted of grassy weeds including annual veldt grass (*Ehrharta longiflora*), wild oats (*Avena fatua*), Cape weed (*Arctotheca calendula*) and other common weed species and two native species, grass tree (Plate 1) and fairy orchid (Plate 2).
- All the native vegetation was in a Completely Degraded condition.
- No Threatened flora species listed under the state *Biodiversity Conservation Act 2016* (BC Act), or any species protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) were recorded. No Department of Biodiversity, Conservation and Attractions (DBCA) listed Priority species were recorded.
- The study area is within an Environmental Sensitive Area (ESA), which is associated with the buffered extents of three Threatened Ecological Communities (TECs) patches (Civica 2022, Landgate 2023<sup>5</sup>). The TEC patches likely relate to occurrences of the *Banksia attenuata* and/or *Eucalyptus marginata* woodlands of the eastern side of the Swan Coastal Plain, also known as Swan Coastal Plain floristic community type 20b (Department of Environment and Conservation 2012)<sup>6</sup>. These vegetated areas are located approximately 400 m to the east, 440 m to the south-west and 1.5 km to the east of the study area (Landgate 2023). The *Banksia attenuata* and/or *Eucalyptus marginata* woodlands is listed as Endangered under the BC Act and is part of the *Banksia* Woodlands of the Swan Coastal Plain ecological community, which is listed as Endangered under the EPBC Act and is a DBCA-listed Priority 3 ecological community (PEC). The vegetation on-site does not comprise these TECs and PECs, as summarised below.
- The native vegetation within the study area is not considered to be representative of the *Banksia attenuata* and/or *Eucalyptus marginata* woodlands TEC or the *Banksia* Woodlands TEC and PEC as:
  - It is in Completely Degraded condition, meaning that the vegetation structure is no longer intact, and the area is completely or almost completely without native flora
  - Therefore, the native vegetation is not considered to have a woodland structure (Department of the Environment and Energy 2016).

## 5 Black cockatoos

A targeted Black Cockatoo Habitat Assessment (PGV Environmental 2022) was undertaken in accordance with the *Referral guideline for 3 WA threatened black cockatoo species Carnaby's Cockatoo (Zanda latirostris), Baudin's Cockatoo (Zanda baudinii) and the Forest Red-tailed Black-cockatoo (Calyptorhynchus banksii naso)* (Department of Agriculture, Water and the Environment [DAWE] 2022<sup>7</sup>).

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<sup>5</sup> Landgate. 2023. Locate V5. <https://maps.slip.wa.gov.au/landgate/locate/>. Accessed 25 January 2023.

<sup>6</sup> Department of Environment and Conservation. 2012. Interim Recovery Plan 2012-2017 for *Banksia attenuata* and/or *Eucalyptus marginata* woodlands of the eastern side of the Swan Coastal Plain (Swan Coastal Plain community type 20b – Gibson et al. 1994). Interim Recovery Plan No. 328. Department of Environment and Conservation, Perth.

<sup>7</sup> Department of Agriculture, Water and the Environment. 2022. Referral guideline for 3 WA threatened black cockatoo species Carnaby's Cockatoo (*Zanda latirostris*), Baudin's Cockatoo (*Zanda baudinii*) and the Forest Red-tailed Black-cockatoo (*Calyptorhynchus banksii naso*). <https://www.dceew.gov.au/sites/default/files/documents/referral-guideline-3-wa-threatened-black-cockatoo-species-2022.pdf>. Accessed 27 January 2023.

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This guideline indicates that habitat assessments should assess the extent, type and quality of the vegetation present, including the presence and extent of plants known to be used by black cockatoos. In assessing potential breeding habitat, measurements of the DBH of trees were made to determine whether the tree meets the definition of 'breeding habitat'.

Surveys for black cockatoo foraging habitat should be done in any vegetation containing foraging species. Any area within the range of the black cockatoos that contains known food or nesting plant species is considered to be potential habitat for the species.

The following actions are likely to result in significant impacts to black cockatoo species and would therefore be likely to require a referral under the EPBC Act:

1. Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister
2. Loss of greater than or equal to 1 ha of foraging habitat scoring 5–10 using the guideline's foraging quality scoring tool
3. Loss of greater than or equal to 10 ha of foraging habitat scoring 0–4 using the guideline's foraging quality scoring tool
4. Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape lilac trees and pine trees) known to be used by black cockatoos
5. Removal of any part of a known night roosting site.

PGV Environmental (2022) identified minimal evidence of black cockatoos having foraged on *Banksia* cones at the site, and no evidence of foraging on jarrah trees by black cockatoos. Evidence of breeding or roosting was not observed at the site. During RPS' site visit on 31 January 2023, a couple of forest red-tailed black cockatoos were observed flying overhead. No evidence of foraging was observed around the marri tree (Tree No. 61), noting that it is surrounded by lawn and regular mowing could mutilate any dropped marri nuts.

### 5.1 Potential foraging habitat

Tables 2 and 3 identify that a total of 0.046 ha of potential black cockatoo foraging habitat will be lost because of the proposed clearing within the sports hall footprint, as summarised below:

- Approximately 0.04 ha of potential black cockatoo foraging habitat comprising *Banksia attenuata*, *Banksia menziesii*, *Eucalyptus marginata* and *Xylomelum occidentale* will be permanently lost.
- Approximately 0.006 ha of potential black cockatoo foraging habitat is likely to be pruned from four trees to accommodate the sports hall footprint (Table 3). These trees are all proposed to be retained and therefore, reduction in foraging habitat will only be temporary.

Figure C presents the spatial extent.

**Table 2: Potential black cockatoo foraging habitat proposed to be cleared**

Tree species	Tree no.	No. of trees	Total canopy cover
<i>Banksia attenuata</i> (slender banksia)	23	1	0.04 ha
<i>Banksia menziesii</i> (firewood banksia)	19, 49, 50 and 56	4	
<i>Eucalyptus marginata</i> (jarrah)	21, 45, 46, 51–55 and 57–60	12	
<i>Xylomelum occidentale</i> (woody pear)	30, 44 and 47	3	

**Table 3: Potential black cockatoo foraging habitat proposed to be pruned**

Tree species	Tree no.	No. of trees	Total canopy cover
<i>Banksia menziesii</i> (firewood banksia)	14	1	0.006 ha
* <i>Eucalyptus grandis</i> (flooded gum)	3 and 6	2	
<i>Xylomelum occidentale</i> (woody pear)	15	1	

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The removal of approximately 0.046 ha of potential black cockatoo foraging habitat is not at variance with any of the foraging habitat referral thresholds for black cockatoos (DAWE 2022). This conclusion is supported by the PGV Environmental (2022) assessment of the referral guideline and the Significant Impact Guidelines 1.1 for the three black cockatoo species.

Furthermore, there is up to 0.21 ha of potential black cockatoo foraging habitat to be retained situated to the north, west and south of the sports hall footprint (Figure C). This is inclusive of the canopy of a:

- Marri tree (Tree No. 61), which was inspected on 31 January 2023 and provides potential black cockatoo foraging habitat. The project footprint was redesigned to avoid impacts to this tree.
- Spotted gum tree (Tree No. 41), which does not provide foraging habitat for black cockatoos, but was included as its canopy was indistinguishable from the surrounding canopies of suitable foraging tree species.

### **5.2 Potential breeding habitat**

Of the nine tree species identified within the study area by Civica (2022), only jarrah trees with DBHs greater than 500 mm were identified as potential black cockatoo breeding habitat by PGV Environmental (2022). No evidence of black cockatoo nesting was observed within the study area and none of the 12 jarrah trees proposed to be cleared had a DBH of greater than 500 mm. Therefore, there are no potential black cockatoo breeding trees within the sports hall footprint.

Outside of the sports hall footprint, PGV Environmental (2022) identified two potential black cockatoo breeding trees (jarrah) that had DBHs greater than 500 mm and no hollows, both of which are proposed to be retained (Tree Nos 7 and 33) (Figure C).

RPS inspected a marri tree on 31 January 2023, as it was located within the pumps and tanks footprint and recorded a DBH greater than 500 mm and no visible hollows (Plate 3 and Plate 4). The marri tree is considered to be a potential black cockatoo breeding tree. As this tree was originally proposed to be removed within the pumps and tanks footprint, advice was sought if the tree's removal would alter PGV Environmental's assessment of the project against the referral guideline (DAWE 2022) and the Significant Impact Guidelines 1.1 (DEWHA 2013). PGV Environmental noted that the referral guideline indicates that clearing of a potential nesting tree should be referred, however that their assessment would remain that the clearing would not be a significant impact to black cockatoos. This correspondence is in Appendix D.

To avoid impacts to the potential black cockatoo breeding tree (marri), the pumps and tanks footprint was relocated to the south into the student car park and the marri tree is proposed to be retained (Tree No. 61) (Figure C). As such, no potential black cockatoo breeding trees will be cleared as part of the proposal.

Table 4 lists the potential black cockatoo breeding habitat proposed to be retained within the study area.



**Plate 3: Marri tree observed within study area, facing south-west**



**Plate 4: Marri tree observed within study area, facing north**



**Table 4: Potential black cockatoo breeding habitat proposed to be retained**

Tree species	Tree no.	No. of trees	Notes
<i>Corymbia calophylla</i> (marri)	61	1	DBH greater than 500 mm and no visible hollows
<i>Eucalyptus marginata</i> (jarrah)	7 and 33	2	DBHs greater than 500 mm and no hollows

### 5.3 Potential roosting habitat

A potential roosting tree is defined as a tall tree of any species within close proximity to water (DAWE 2022), and PGV Environmental (2022) noted that roosting habitat is generally in tall trees that have relatively thick trunks (average DBH of 1 m). As such, the trees with a DBH of greater than 500 mm of the species particularly preferred by black cockatoos for night roosting were considered to be potential roosting trees.

The study area is situated near natural and artificial permanent water sources, including the Canning River, approximately 1.3 km to the east, and Wright Lake, approximately 1.9 km to the north-west, and is within 500 m of a Carnaby's cockatoo confirmed roost site (Landgate 2023).

Within the study area there are no known roosting sites for black cockatoos and no evidence of black cockatoo roosting (PGV Environmental 2022). Five potential black cockatoo roosting trees are present within the study area, including:

- Two jarrah trees (Tree Nos 7 and 33)
- Three flooded gum trees with DBHs greater than 500 mm (Tree Nos 3, 5 and 6) (Civica 2022, PGV Environmental 2022)
- One marri tree (Tree No. 61) inspected by RPS on 31 January 2023.

None of these potential roosting trees are located within the footprints of the new sports hall, new pumps and tanks and infill sections of fencing and therefore, all of the potential black cockatoo roosting trees are proposed to be retained, as listed in Table 5.

**Table 5: Potential black cockatoo roosting habitat proposed to be retained**

Tree species	Tree no.	No. of trees	Notes
* <i>Eucalyptus grandis</i> (flooded gum)	3, 5 and 6	3	DBHs greater than 500 mm
<i>Eucalyptus marginata</i> (jarrah)	7 and 33	2	DBHs greater than 500 mm
<i>Corymbia calophylla</i> (marri)	61	1	DBH greater than 500 mm

## 6 Assessment against the clearing referral criteria

Table 6 provides an assessment of the proposed clearing activities against all criteria listed in Section 51DA(4) of the *Environmental Protection Act 1986* (EP Act) to determine whether the clearing activities would have a very low environmental impact.

Table 6: Assessment of the proposed clearing against the clearing referral criteria

Criterion	Assessment	Outcome
1. The area proposed to be cleared is small relative to the total remaining vegetation – Relative to the total remaining vegetation in the region where the proposed clearing is located – Relative to the total remaining vegetation of the ecological community that the vegetation proposed to be cleared forms a part of (as each ecological community has its own unique characteristics, this is assessed on a case-by-case basis).	<p>The proposed clearing area is located within the Metropolitan Region Scheme (MRS) constrained area, as it is situated within the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) bioregion portion of the MRS (Department of Water and Environmental Regulation [DWER] 2021<sup>8</sup>, Australian Government 2023<sup>9</sup>).</p> <p>The guideline for native vegetation clearing referrals outlines the following thresholds and criteria for proposed clearing activities within the MRS constrained area:</p> <ul style="list-style-type: none"> <li>• If more than 1 ha is proposed to be cleared, a permit is required.                             <ul style="list-style-type: none"> <li>– The proposed clearing would involve the removal of 0.046 ha of native vegetation, which does not exceed this threshold. The proposed clearing is expected to have a very low environmental impact. The remaining native and introduced vegetation surrounding the new sports hall, new pumps and tanks and infill sections of fencing will be retained.</li> </ul> </li> <li>• If less than 10% of that native vegetation association or complex is remaining within the relevant IBRA bioregion, a permit is required.                             <ul style="list-style-type: none"> <li>– The proposed clearing area is located on the Forrestfield Complex, which is described as ranging from “open forest of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus wandoo</i> (Wandoo) - <i>Eucalyptus marginata</i> (Jarrah) to open forest of <i>Eucalyptus marginata</i> (Jarrah) - <i>Corymbia calophylla</i> (Marri) - <i>Allocasuarina fraseriana</i> (Sheoak) - <i>Banksia</i> species. Fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) in the gullies that dissect this landform.” (Heddlle et al. 1980<sup>10</sup>).</li> <li>– The Forrestfield Complex has 12.29% of its original extent remaining compared to the pre-1750 extent of this vegetation complex within the Swan Coastal Plain IBRA bioregion (Government of Western Australia 2019<sup>11</sup>). Therefore, the proposed clearing does not exceed this threshold.</li> </ul> </li> <li>• If less than 10% native vegetation is remaining within a 5 km buffer of the proposed clearing, a permit is required.                             <ul style="list-style-type: none"> <li>– There is approximately 1837.58 ha (23%) of native vegetation estimated to be remaining within a 5 km buffer of the proposed clearing area, as illustrated in Figure D. Therefore, the proposed clearing does not exceed this threshold.</li> </ul> </li> </ul>	The proposal is not at variance with the criterion.
2. There are no known or likely significant environmental values within the area – Biological values (e.g. flora, fauna, ecological communities) – Conservation values (e.g. impact to ecological linkages, conservation areas, heritage values) – Land and water resource values (e.g. wetlands and watercourses, water resources, land and soil quality).	<p>All the native vegetation within the study area was in a Completely Degraded condition. No Threatened flora species listed under the BC Act, or any species protected under the EPBC Act were recorded within the study area. No DBCA listed Priority flora species were recorded within the study area. No TECs listed under the BC Act or the EPBC Act were recorded within the study area. No DBCA listed PECs were recorded within the study area.</p> <p>Approximately 0.046 ha (18% of the foraging habitat identified within the survey area) potential foraging habitat suitable for black cockatoos will be removed within the proposed clearing area. However, the following black cockatoo habitat within the study area will be retained:</p> <ul style="list-style-type: none"> <li>• Up to 0.21 ha (82% of the overall habitat identified) potential foraging habitat</li> <li>• Three potential nesting trees (100% of the overall habitat identified)</li> <li>• Six potential roosting trees (100% of the overall habitat identified).</li> </ul> <p>Furthermore, there is more than 8,700 ha of potential foraging, breeding and roosting habitat for black cockatoos within a 12 km radius of the study area in secure reserves (PGV Environmental 2022). Given the minor extent of potential black cockatoo foraging habitat proposed to be removed and the presence of over 8,700 ha of potential foraging, breeding and roosting habitat within a 12 km radius, the proposed clearing area is not considered to represent significant habitat for black cockatoos.</p> <p>There are no ecological linkages, conservation areas (i.e. Bush Forever sites, Regional Open Spaces, DBCA managed land) or heritage values (i.e. Aboriginal Registered Sites, Other Heritage Places, or heritage places under the State Register or City of Armadale Heritage List) within or in close proximity to the proposed clearing area (Department of Planning, Lands and Heritage 2023<sup>12</sup>, Landgate 2023).</p> <p>There are no watercourses, wetlands or Public Drinking Water Source Areas within the proposed clearing area. The nearest watercourse is the Canning River, located approximately 1.2 km to the east, which is associated with multiple Conservation Category wetlands and Multiple Use wetlands, known as the Canning River Floodplain (Landgate 2023). The proposed clearing area is situated up-hydraulic gradient of the Canning River (DWER 2023<sup>13</sup>).</p> <p>There are no registered sites from DWER’s Contaminated Sites Database within or in close proximity to the proposed clearing area (Landgate 2023). The site is identified as having a moderate to low risk of acid sulfate soils occurring within 3 m of the natural soil surface and is mapped as having a high to moderate wind erosion risk, a moderate phosphorus export risk and low waterlogging, water erosion, flood and salinity risks. Given the minor area of native vegetation to be cleared, its Completely Degraded condition and its highly modified urban setting where soils have been altered, it is considered that the proposed clearing is not likely to cause appreciable land degradation.</p>	The proposal is not at variance with the criterion
3. The state of scientific knowledge of native vegetation within the region is adequate	<p>The proposed clearing area is situated within the Swan Coastal Plain, for which there are several databases, spatial datasets and readily available information relevant to this region. The site was also inspected in person by an arborist (Civica) for an aboriginal impact assessment and by environmental consultants (PGV Environmental) for a targeted black cockatoo habitat assessment.</p> <p>The state of scientific knowledge about native vegetation within the region, as referenced in the referral and sourced from databases, spatial datasets and readily available information, is considered adequate.</p>	The proposal is not at variance with the criterion
4. Conditions will not be required to manage environmental impacts	<p>The design and approach have been developed to avoid impacts to native vegetation where possible. This included:</p> <ul style="list-style-type: none"> <li>• Siting the majority of the footprints with previously disturbed areas</li> <li>• Relocating any grass trees within the sports hall footprint or less than 0.5 m from its edge so that none are permanently lost</li> <li>• Relocating the pumps and tanks footprint to retain a marri tree (Tree No. 61) that was identified as a potential nesting tree and potential roosting tree for black cockatoos</li> <li>• Moving the southern-most infill section of fencing closer to the cadastral boundary to avoid running through a stand of trees proposed to be retained</li> <li>• A requirement in the fence specifications to protect the trees proposed to be retained.</li> </ul> <p>Due to the anticipated very low environmental impact resulting from the proposed clearing, it is not expected that any conditions will be required to minimise, mitigate, offset or otherwise manage effects on the environmental impacts.</p>	The proposal is not at variance with the criterion

<sup>8</sup> Department of Water and Environmental Regulation. 2021. Guideline Native vegetation clearing referrals. [https://www.wa.gov.au/system/files/2021-10/Guideline\\_Native\\_vegetation\\_clearing\\_referrals.pdf](https://www.wa.gov.au/system/files/2021-10/Guideline_Native_vegetation_clearing_referrals.pdf). Accessed 27 February 2022.

<sup>9</sup> Australian Government. 2023. NationalMap. <https://nationalmap.gov.au/>. Accessed 27 February 2022.

<sup>10</sup> Heddlle, E. M., Loneragan, O.W., and Havel, J.J. 1980. Vegetation of the Darling System. IN: DCE 1980 Atlas of Natural Resources, Darling System, Western Australia. Department of Conservation and Environment, Perth, Western Australia.

<sup>11</sup> Government of Western Australia. 2019. 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth, <https://catalogue.data.wa.gov.au/dataset/dbca>.

<sup>12</sup> Department of Planning, Lands and Heritage. 2023. PlanWA. <https://espatial.dplh.wa.gov.au/PlanWA/Index.html?viewer=PlanWA>. Accessed 27 February 2023.

<sup>13</sup> Department of Water and Environmental Regulation. 2023. Groundwater map. <https://maps.water.wa.gov.au/Groundwater/>. Accessed 30 January 2023.

## 7 Assessment against the 10 clearing principles

Table 7 provides an assessment of the proposed clearing activities against the “10 clearing principles” as outlined in Schedule 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 to determine whether the proposed clearing is at variance to the principles.

**Table 7: Assessment of the proposed clearing against the 10 clearing principles**

Principle	Assessment	Outcome
Native vegetation should not be cleared if it comprises a high level of biological diversity	Up to 21 native trees will be cleared to construct the new sports hall. No clearing is required to construct the new pumps and tanks or infill sections of fencing. All the native vegetation within the proposed clearing area was in a Completely Degraded condition. No Threatened flora species listed under the BC Act, or any species protected under the EPBC Act were recorded within the proposed clearing area. No DBCA listed Priority flora species were recorded within the proposed clearing area. No TECs listed under the BC Act or the EPBC Act were recorded within the proposed clearing area. No DBCA listed PECs were recorded within the proposed clearing area. Consequently, the biological diversity values associated with the native trees proposed to be cleared is low.	The proposal is not at variance with the principle
Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia	Potential foraging habitat suitable for black cockatoos has been identified within the new sports hall footprint. No foraging, breeding or roosting habitat suitable for black cockatoos has been identified within the new pumps and tanks footprint or infill sections of fencing. Up to 0.046 ha of potential foraging habitat is proposed to be cleared (and pruned) in the sports hall footprint (comprising 0.04 ha that will be permanently lost and 0.006 ha that will be temporarily lost due to pruning). There is more than 8,700 ha of potential foraging, breeding and roosting habitat for black cockatoos within a 12 km radius of the study area in secure reserves (PGV Environmental 2022). Given the minor extent of potential black cockatoo foraging habitat proposed to be removed (0.0005% of potential foraging, breeding and roosting habitat within a 12 km radius), the proposed clearing area is not considered to represent significant habitat for black cockatoos.	The proposal is not at variance with the principle
Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora	No Threatened flora species listed under the BC Act, any species protected under the EPBC Act or DBCA listed priority flora species were noted by Civica (2022) or PGV Environmental (2022) within the proposed clearing area.	The proposal is not at variance with the principle
Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community	No TECs listed under the BC Act or EPBC Act were present within the proposed clearing area. No DBCA listed PECs were present within the proposed clearing area.	The proposal is not at variance with the principle
Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared	Vegetation within the proposed clearing area has been highly modified and was classified as Completely Degraded. Five native and four planted tree species were recorded by Civica (2022) within the study area. The native tree species included <i>Banksia attenuata</i> (slender banksia), <i>Banksia grandis</i> (bull Banksia), <i>Banksia menziesii</i> (firewood banksia), <i>Eucalyptus marginata</i> (jarrah) and <i>Xylomelum occidentale</i> (woody pear). The vegetation understorey was described as consisting of grassy weeds including annual veldt grass ( <i>Ehrharta longiflora</i> ), wild oats ( <i>Avena fatua</i> ), Cape weed ( <i>Arctotheca calendula</i> ) and other common weed species with two native species, <i>Xanthorrhoea preissii</i> (grass tree) and <i>Caladenia latifolia</i> (fairy orchid) (PGV Environmental 2022). The National Objectives and Targets for Biodiversity Conservation 2001–2005 and the Environmental Protection Authority (EPA) recognise that 30% or more of the pre-clearing extent of each ecological community is needed to adequately protect Australia’s biodiversity (Department of Environmental Regulation 2014 <sup>14</sup> ). The EPA has a modified objective of retaining 10% or more of the pre-clearing extent of ecological communities in the constrained areas on the Swan Coastal Plain (EPA 2008 <sup>15</sup> ). The proposed clearing area is located on the Forrestfield Complex, which is described as ranging from “open forest of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus wandoo</i> (Wandoo) - <i>Eucalyptus marginata</i> (Jarrah) to open forest of <i>Eucalyptus marginata</i> (Jarrah) - <i>Corymbia calophylla</i> (Marri) - <i>Allocasuarina fraseriana</i> (Sheoak) - <i>Banksia</i> species. Fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) in the gullies that dissect this landform.” (Heddle et al. 1980). The Forrestfield Complex has 12.29% of its original extent remaining compared to the pre-1750 extent of this vegetation complex within the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) bioregion. Informed by the above description and given that the vegetation structure is no longer intact considering its Completely Degraded condition, the native trees are not considered to be representative of the Forrestfield Complex.	The proposal is not at variance with the principle
Native vegetation should not be cleared if it is growing in or in association with a watercourse or wetland	There are no watercourses or wetlands within the proposed clearing area. The nearest watercourse is the Canning River, located approximately 1.2 km to the east, which is associated with multiple Conservation Category wetlands and Multiple Use wetlands, known as the Canning River Floodplain (Landgate 2023). The proposed clearing area is situated up hydraulic gradient of the Canning River (DWER 2023). Given the minor area of native vegetation to be cleared and the distance from the Canning River, it is considered that the proposed clearing is not likely to impact on Canning River.	The proposal is not at variance with the principle
Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation	Land degradation can be caused or exacerbated by uncontrolled run-off and wind or water erosion. The underlying soils of the proposed clearing area are mapped as Sand, described as very light grey at surface, yellow at depth, fine to medium-grained, sub-rounded quartz, moderately well sorted of eolian origin (Landgate 2023). These soils are mapped as having a high to moderate wind erosion risk, a moderate phosphorus export risk and low waterlogging, water erosion, flood and salinity risks. Clearing associated with the proposal has been minimised to reduce potential impacts on land values. Given the minor area of native vegetation to be cleared and the highly modified urban setting where soils have been altered, it is considered that the proposed clearing is not likely to cause appreciable land degradation.	The proposal is not at variance with the principle
Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area	There are no conservation areas within or proximate to the proposed clearing area. The nearest conservation area is the Canning River, protected as a River Reserve under the <i>Swan and Canning Rivers Management Act 2006</i> and located approximately 1.2 km to the east (Landgate 2023). Given the distance from this conservation area, the proposed clearing is not likely to impact upon its environmental values.	The proposal is not at variance with the principle
Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water	There are no watercourses or wetlands within the proposed clearing area. Given the distance from the nearest watercourse (Canning River), the minor area of native vegetation to be cleared and the highly modified urban setting, it is considered that the proposed clearing is not likely to cause deterioration in the quality of surface or underground water.	The proposal is not at variance with the principle
Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the intensity of flooding	The soils beneath the proposed clearing area are mapped as having low waterlogging, water erosion and flooding risks and it is more than 1 km from the Canning River’s 1 in 100 (1%) annual exceedance probability floodway and flood fringe area (Landgate 2023). Given the minor area of native vegetation to be cleared and its highly modified urban setting, it is considered that the proposed clearing is not likely to impact cause, or exacerbate, the intensity of flooding.	The proposal is not at variance with the principle

<sup>14</sup> Department of Environmental Regulation. 2014. A guide to the assessment of applications to clear native vegetation. [https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2\\_assessment\\_native\\_veg.pdf](https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf). Accessed 30 January 2023.

<sup>15</sup> Environmental Protection Authority. 2008. Environmental Guidance for Planning and Development Guidance Statement No. 33. [https://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/GS33-270508.pdf](https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/GS33-270508.pdf). Accessed 30 January 2023.

## 8 Concluding remarks

Approximately 0.046 ha of native vegetation, including 21 native trees, is proposed to be cleared to construct a new sports hall, new pumps and tanks and infill sections of fencing at the Kelmscott Senior High School. The proposed clearing is expected to have a very low environmental impact as it is not a variance with any of the four criteria for clearing referrals or the 10 clearing principles, it will not impact on black cockatoo potential breeding or roosting habitat and the removal of 0.046 ha of potential foraging habitat is unlikely to have a significant impact on black cockatoos.

We trust this information is sufficient for your purposes, however, should you require further details or clarification, please do not hesitate to contact the undersigned.

Yours sincerely,

[Redacted signature]

[Redacted name and contact information]

att:                    Figures  
                         Appendix A: Clearing referral  
                         Appendix B: Photographs of trees to be cleared  
                         Appendix C: Arboricultural Impact Assessment (Civica 2022)  
                         Appendix D: Black Cockatoo Habitat Assessment (PGV Environmental 2022)  
                         Appendix E: Certificate of title  
enc:                    Shapefile data

## Figures



**LEGEND**

- Site boundary
- Existing fence line
- Infill sections of fencing
- Proposed site plan

INFILL SECTIONS OF FENCING

NEW PUMPS AND TANKS LOCATION

NEW SPORTS HALL

INFILL SECTIONS OF FENCING

Figure A

Site location





**LEGEND**

- Site boundary
- Existing fence line
- Infill sections of fencing
- Proposed site plan
- Native vegetation to be removed (0.04 ha)
- Trees to remain – 40 (Tree No.'s 1 – 18, 20, 22, 24 – 29, 31 – 43; Civica Pty Limited 2022) (Tree No. 61; RPS 2023)
- Trees to be removed – 21 (Tree No.'s 19, 21, 23, 30, 44 – 60; Civica Pty Limited 2022)

**Figure B**

**Proposed clearing**

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**LEGEND**

- Site boundary
- Cadastre
- Potential foraging habitat likely to require pruning (0.006 ha)
- Potential foraging habitat to be removed (0.04 ha)
- Potential foraging habitat to be retained (0.21 ha)
- Existing fence line
- Infill sections of fencing
- Proposed site plan
- Trees to remain – 40 (Tree No.'s 1 – 18, 20, 22, 24, 28, 29, 31 – 43; Civica Pty Limited 2022) (Tree No. 61; RPS 2023)
- Trees to be removed – 21 (Tree No.'s 19, 21, 23, 30, 44 – 60; Civica Pty Limited 2022)



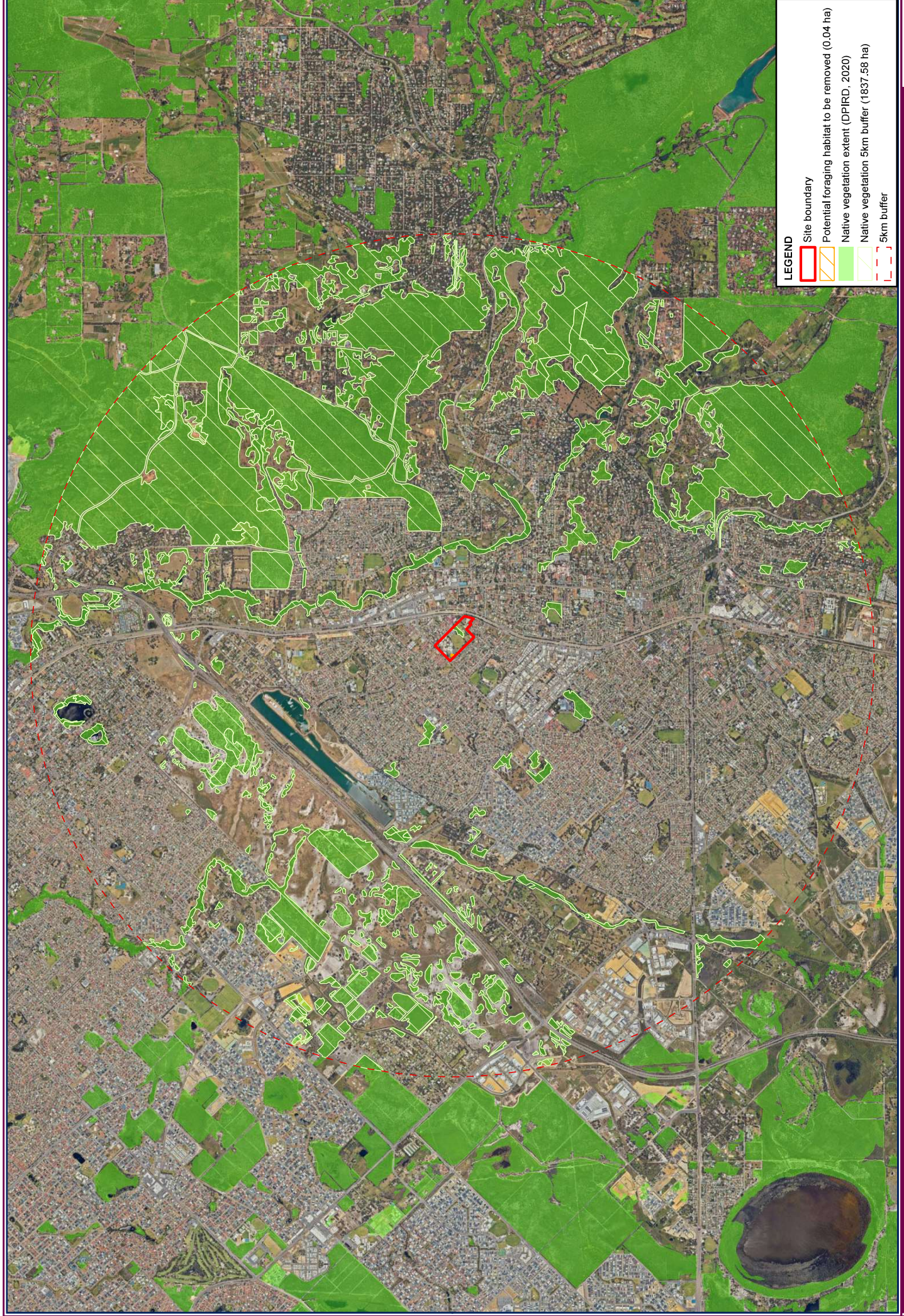


Figure D

Local native vegetation extent

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Project Number: EP719\_001

Date: 17/02/2023

Scale: 1:500 @ A3

Source: Cadastre - Landgate, 2023

Orthophoto - Landgate, 2023



## **Appendix B**

### **Photographs of trees to be cleared**

## APPENDIX B: Photographs of trees to be cleared



Plate B-1: *Xylomelum occidentale* tree (Tree No. 30) (Civica Pty Limited 2022)

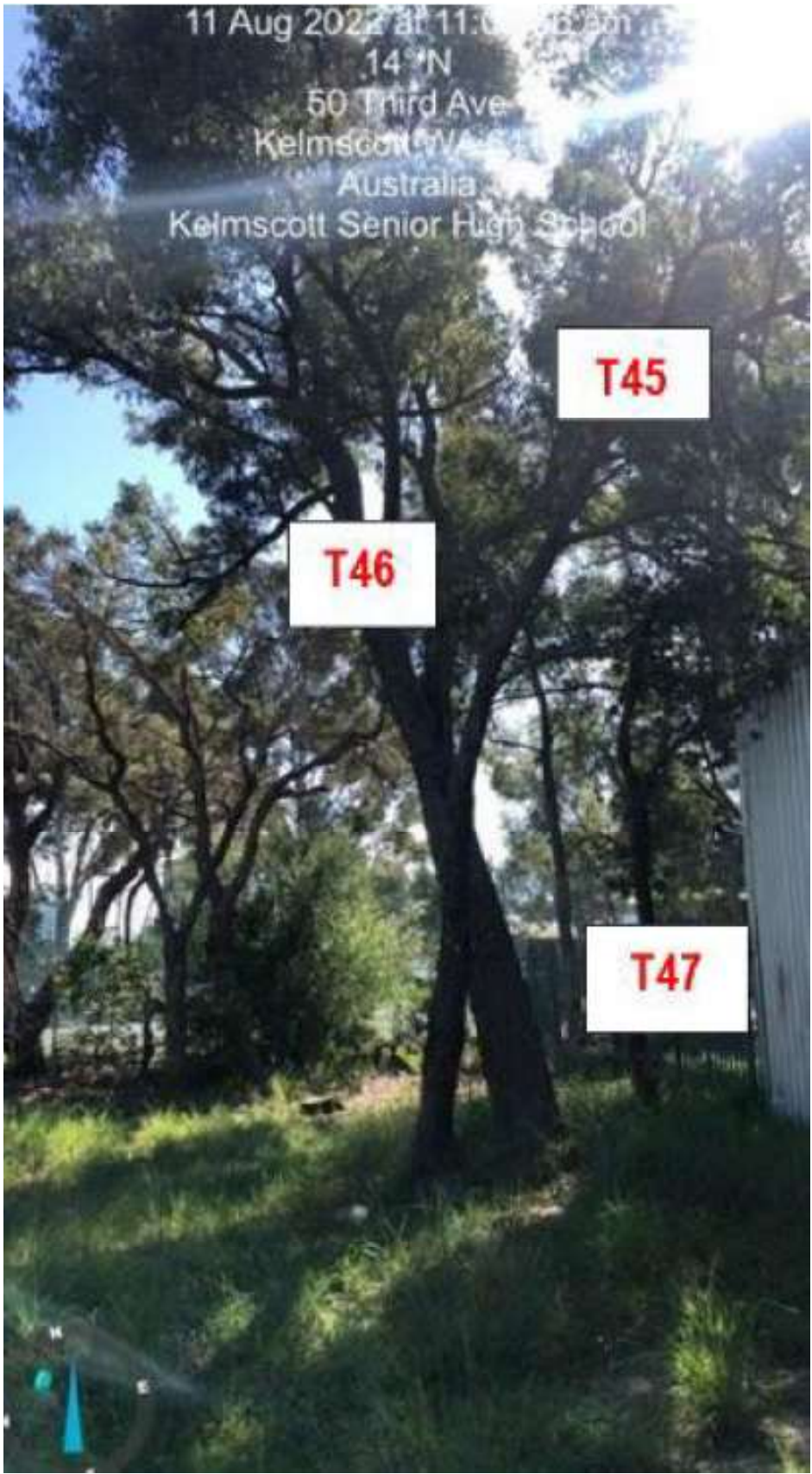


Plate B-2: *Eucalyptus marginata*, *Eucalyptus marginata* and *Xylomelum occidentale* trees (Tree Nos 45, 46 and 47) (Civica Pty Limited 2022)



Plate B-3: *Eucalyptus marginata*, *Eucalyptus marginata* and *Eucalyptus marginata* trees (Tree Nos 51, 53 and 54) (Civica Pty Limited 2022)