PERTH OFFICE
Suite 4, 26 Railway Road
Subiaco
Western Australia 6008

P +61 8 9380 4988
F +61 8 9380 9636
emergeassociates.com.au

Emerge Environmental Services Pty Ltd ABN 57144772510 trading as Emerge Associates

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Emerge contact: [redacted]

26 March 2025

Attention: Native Vegetation Regulation
Department of Water and Environmental Regulation
Locked Bag 10
JOONDALUP WA 6919

Delivered by email to: info@dwer.wa.gov.au

Dear Sir/Madam,

CLEARING PERMIT APPLICATION: PEEL HEALTH CAMPUS EXPANSION – 110 (LOT 3001) LAKES ROAD, GREENFIELD ON DEPOSITED PLAN 43727

This letter correspondence supports the lodgement of an application for a new clearing permit application to clear native vegetation that is included as **Attachment A** (Clearing Permit Application Form) by the Department of Finance (DoF or 'the applicant') associated with proposed clearing of native vegetation associated with the Peel Health Campus Expansion.

Regarding the application and the summary provided in this supporting letter, please note the following key terms as they relate to the clearing permit application:

- **Project Area** – this encompasses the full extent of Lot 110 (3001) Lakes Road, Greenfield (see **Figure 1**). The Project Area comprises the Development Envelope and the Avoidance Area.
- **Development Envelope:** the boundary within which construction and development activities are proposed which is approximately 7.83 hectares (ha) (see **Figure 2**).
- **Avoidance Area:** refers to the areas that support native vegetation and associated values that have been avoided through proposal design process, which is approximately 9.68 ha (see **Figure 2**).
- **Application Area:** this refers to the area of native vegetation that is proposed to be cleared within the Development Envelope and is the subject of this clearing permit application. Up to 2.82 ha of native vegetation is proposed to be cleared to facilitate the construction of buildings and other works associated with the Peel Health Campus Expansion (see **Figure 3**).

This letter provides supporting information to be read in conjunction with the Clearing Permit Application Form and the following attachments:

- **Attachment B** – *Peel Health Campus Overall Redevelopment.*
- **Attachment C** – *Detailed Flora and Vegetation Assessment Peel Health Campus, Greenfields* (Emerge Associates 2024b).
- **Attachment D –** *Basic Fauna and Targeted Black Cockatoo Assessment - Peel Health Campus, Greenfields* (Emerge Associates 2024a).
- **Attachment E** – *Peel Health Campus Historic Aerial Imagery* (Landgate 2024).
- **Attachment F** – *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) *Referral Decision*.

- A shape (.shp) file of the native vegetation clearing area has been submitted to Department of Water and Environmental Regulation (DWER) as part of the application.

1 OVERVIEW

Emerge Associates (Emerge) was engaged by DoF to assist with the planning for the Peel Health Campus Expansion project, which initially involved undertaking a range of baseline ecological surveys and assessments and then guiding the planning of the Peel Health Campus Expansion proposal and to take into consideration the environmental conditions, values and required approvals. Most recently this has involved the preparation and lodgement of this clearing permit application, including supporting flora and vegetation and fauna assessments, for the proposed clearing of native vegetation within Lot 3001 Lakes Road, Greenfield (on Deposited Plan 43727) (Crown Reserve R 40505) (herein referred to as the 'Project Area') as shown on **Figure 1**.

A site plan illustrating the future building locations is included as **Attachment B**. From this the Development Envelope has been simplified and is shown on **Figure 2**. The Development Envelope includes within it up to 2.82 ha of native vegetation to be cleared, as shown on **Figure 3**, and is referred to herein as the **'**Application Area'. A summary of the characteristics and values of the native vegetation to be cleared within the Application Area is provided below in **Table 1**.

Table 1: Application Area native vegetation clearing summary and values

Vegetation Value	Application Area	
Native Vegetation	Vegetation Units	Vegetation condition
	Ap: 0.03 ha **BaEm:** 2.22 ha **Eg:** 0.02 ha **EgBa:** 0.16ha **Mixed:** 0.27 ha **Non-native:** 0.12 ha	**Completely Degraded**: 0.12 ha **Degraded**: 0.79 ha **Good**: 0.56 ha **Very Good**: 1.35 ha
	Total native vegetation (pursuant to the EP Act) to be cleared: 2.82 ha	
ESA (yes/no)	No	
TECs and PECs	**Banksia Woodland TEC:** 1.91 ha **Tuart Woodland TEC:** 0.07 ha	
Black cockatoo foraging habitat (ha)	**CBC**: 2.47 ha of primary native foraging habitat **FRTBC**: 2.47 ha of primary native foraging habitat	
Black cockatoo potential breeding trees (number)	Evidence of use: 0 Suitable hollows: 0 No Hollows: 29	
Vegetation within Peel Regionally Significant Nature Area (PRSNA)	1.15 ha	

In summary, of the 2.82 ha of native vegetation to be cleared, the following values will be impacted:

- 1.91 ha of 'Banksia Woodlands of the Swan Coastal Plain' Threatened Ecological Community (TEC)/Priority Ecological Community (PEC)
- 0.07 ha (comprising 3 individual trees) of 'Tuart (*Eucalyptus gomphocephala*) woodlands of the Swan Coastal Plain' Threatened Ecological Community (TEC)/Priority Ecological Community (PEC)
- 2.47 ha of primary native foraging habitat for Carnaby's, black cockatoo

- 2.47 ha of primary native foraging habitat for forest red-tailed black cockatoo
- 29 potential breeding trees for black cockatoo, none with suitable hollows that could be used for breeding
- 1.15 ha of native vegetation within the Greenfields Bushland Peel Regionally Significant Natural Area (PRSNA).

2 INTRODUCTION

2.1 Background

In 2020, the McGowan Labor Government publicly announced plans and a redevelopment budget of $152 million for a major expansion of the Peel Health Campus facility. Stage 1 works have commenced and are expected to be completed by May 2025, and Stage 2 'enabling' works are set to start late this year and completion is set for September 2027.

The project is a high priority State Government project, and proposes the expansion of healthcare facilities including beds, operating theatre, emergency centre, car parks and connecting roads, which will be directly connected to and integrated with the existing Peel Health Campus.

The Project Area is currently reserved for 'Public purposes – Hospital' under the Metropolitan Region Scheme (MRS), and 'Public purposes - Hospital' under the City of Mandurah Local Planning Scheme (LPS) No. 12 and is situated within a 'Public purposes' designation identified by the WA State Government in the South Metropolitan Peel Sub-Regional Planning framework (WAPC and DPLH 2018).

The applicant intends to lodge a Development Application and progress the enabling forward works and then development within the Development Envelope in accordance with the application once approved.

To implement the proposed extension, 2.82 ha of native vegetation will need to be cleared. The native vegetation clearing proposed under this permit application is for this area and is the entirety of the native vegetation clearing required to progress both the forward works and the ultimate development works for the Peel Health Campus Expansion project.

The proposed clearing will be undertaken within one land parcel, 110 Lakes Road, Greenfield, WA, 6210 (Lot 3001 on Deposited Plan 43727). The site is Crown Reserve 40505, for the purpose of 'Hospital and allied purposes'. A Management Order for the Crown Reserve is held by the Health Ministerial Body, with the Department of Health as the Responsible Agency.

2.2 Supporting documentation

A range of investigations have been undertaken within the site to support the relevant approval processes required for the proposed development. This includes the following:

- *Basic Fauna and Targeted Black Cockatoo Assessment - Peel Health Campus, Greenfields* (Emerge Associates 2024a) (see **Appendix C**).
- *Detailed Flora and Vegetation Assessment Peel Health Campus, Greenfields* (Emerge Associates 2024b) (see **Appendix D**).

2.3 Clearing application area

2.82 ha of native vegetation (as defined under the *Environmental Protection Act 1986* (EP Act)) is proposed to be cleared. The location and extent of the clearing area is shown in **Figure 3** and is referred to as the 'Application Area'. The ultimately proposed development layout is shown in **Attachment A**. While the Project Area contains 10.56 ha of native vegetation as defined under the EP Act, 2.83 ha is proposed to be cleared with 7.74 ha to remain and has been identified as the Avoidance Area as shown on **Figure 2**.

Consideration of the clearing principles in the context of the proposed clearing of native vegetation is provided in **Section 5**.

2.4 Historical land uses and clearing

The Project Area has been subject to historical disturbance, clearing and development works for the establishment of the existing Peel Health Campus. This includes cleared areas associated with car parks, infrastructure and associated built-up areas. Conversely, areas within the Project Area support intact native vegetation which has been subject to less historic disturbance.

Based on a review of historical aerial imagery, more than half of the Project Area was cleared by 2000 (Landgate 2024), with the eastern balance of the Project Area comprising of remnant native vegetation that has not been cleared (see **Attachment E**).

3 SUMMARY OF ENVIRONMENTAL CONDITIONS

3.1 Flora and vegetation assessment

Emerge undertook a flora and vegetation assessment across the Project Area. The assessment was completed to a 'detailed' survey standard in accordance with the EPA's *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016). Emerge completed the detailed flora and vegetation assessment with surveys conducted during spring 2021, 2022, 2023 and 2024, during which the composition and condition of vegetation was recorded. The assessment report is provided as **Attachment C**.

3.2 Regional vegetation complexes

Heddle et al. (1980) mapping shows the site as comprising the 'Yoongarillup complex', which is described as woodland to tall woodland of *Eucalyptus gomphocephala* with *Agonis flexuosa* in the second storey, and occasionally open forest of *Eucalyptus gomphocephala - Eucalyptus marginata -Corymbia calophylla*.

The Yoongarillup complex was determined to have 35.8% of its pre-European extent remaining on the Swan Coastal Plain in 2018, with 14.1% protected for conservation purposes (Government of Western Australia 2019).

3.3 Threatened or Priority Flora

The Protected Matters Search Tool (DCCEEW 2024) and DBCA's threatened and priority flora databases (reference no. 36-1121FL) identified 15 threatened and 46 priority flora occurring or potentially occurring within a 15 km radius of the site (refer to **Attachment C**). Based on a review of distribution and habitat preferences, *Caladenia huegelii* (CR) was considered to have a high likelihood of occurrence within the Project Area and Application Area, while four (4) were considered to have a moderate likelihood of occurrence, namely *Acacia benthamii (P2*), *Lasiopetalum membranaceum* (P3), *Caladenia speciosa* (P4) and *Jacksonia sericea (P4).*

No occurrences of threatened or priority flora species were recorded within the Project Area during the surveys. There was no confirmed suitable habitat for any threatened or priority flora species recorded within the Project Area during the surveys.

All the significant species identified in the desktop assessment are not considered likely to occur in the Project Area due to lack of suitable habitat and because they were not recorded during the field survey, including *C. huegelii*. This species' habitat is well-drained, deep sandy soils in lush undergrowth in a variety of moisture levels, and flowers in September to early November. The habitat in the Project Area does not represent *C. huegelii* habitat. Specifically targeted surveys during spring did not identify *C. huegelii* within the Project Area, and no further survey is required to confirm the absence of *C. huegelii* within the Project Area.

3.4 Plant communities and condition

The detailed flora and vegetation assessment (**Attachment C**) identified seven (7) vegetation units within the Project Area, as shown on **Figure 4**. The vegetation condition across the Project Area ranged from 'Very Good' to 'Completely Degraded' condition using methods from Keighery (1994) and as shown on **Figure 5**. Approximately 6.68 ha was mapped as 'Very Good' condition, 1.13 ha as 'Good', 2.31 ha as 'Degraded' and 7.36 ha as 'Completely Degraded' condition.

Vegetation units and condition within the Application Area are summarised below in **Table 2**.

Table 2: Vegetation values within the Application Area

Vegetation units and description	Vegetation condition (Keighery 1994)	Application Area (ha)
Ap (0.15 ha) - Shrubland of *Acacia pulchella var. glaberrima*	'Degraded'	0.03 ha
BaEm (7.81 ha) - Woodland *Banksia attenuata* and *Eucalyptus marginata* with scattered *Banksia grandis* over shrubland *Gompholobium aristatum, Hibbertia hypericoides* and *Macrozamia riedlei* over mixed native sedge/herbland over grassland **Ehrharta calycina*	'Very Good' (1.35 ha) 'Good' (0.56 ha) 'Degraded' (0.31 ha)	2.22 ha
Eg (0.63 ha) – Forest *Eucalyptus gomphocephala* and scattered planted trees over planted gardens, bare ground and hard stand	'Degraded'	0.02 ha
EgBA (0.84 ha) – Woodland *Eucalyptus gomphocephala* and *Banksia attenuata* over shrubland *Gompholobium aristatum* and *Jacksonia sternbergiana* over mixed native sedge/herbland over grassland **Ehrharta calycina*	'Degraded'	0.16 ha
Mixed (0.31 ha) – Open woodland native species such as *Eucalyptus gomphocephala, Eucalyptus marginata*, *Banksia attenuata* and *Jacksonia furcellata* with non-native species such as **Eucalyptus camaldulensis*, **Ehrharta calycina* and **Eragrostis curvula* in modified drainage landform	'Degraded'	0.27 ha
Non-native (0.67 ha) – Heavily disturbed areas containing predominantly non-native vegetation with scattered native plants	'Completely Degraded'	0.42 ha

The native vegetation to be cleared (and as defined by the Application Area) is based on the presence of native vegetation canopy cover and includes canopy cover that extends over the existing cleared and bare ground areas.

Avoidance of clearing and native vegetation retention within the Project Area is discussed in **Section 5**.

3.5 Threatened Ecological Communities and Priority Ecological Communities

Within the Project Area, 7.4 ha portion of the community BaEm and 0.6 ha of the community EgBa was considered representative of EPBC Act listed *Banksia Woodlands of the Swan Coastal Plain* (Banksia Woodlands TEC). Additionally, 2.01 ha of the *Tuart (Eucalyptus gomphocephala) woodlands of the Swan Coastal Plain* (Tuart woodlands TEC) was identified within the site associated with plant community EgBa and Eg as shown in **Figure 6**.

The DoEE (2019) conservation advice for Tuart woodlands TEC states that the boundary of a patch of the Tuart woodlands TEC is determined by applying a 30 m buffer to the canopy of each tuart tree that has a Diameter at Breast Height (DBH) greater than 150mm. Small areas without understory vegetation, such as bare ground or hardscape, are included in the determination of a patch if they do not significantly alter the overall function of the ecological community, but buildings and gardens do not represent the Tuart woodlands TEC or contribute to determination of patch size and condition (DoEE 2019).

Based on this, the majority of the 30 m buffer applied to the tuart trees within the Eg vegetation unit within the Project Area would not represent the Tuart woodlands TEC on its own as it wouldn't meet

condition thresholds applicable to smaller patch sizes. Inspection of adjacent areas during the flora and vegetation survey indicated that additional Tuart trees occur on the opposite side of Lakes Road within various private landholdings, outside of the Project Area. When buffered in accordance with the conservation advice these areas connect with the patch of Tuarts comprising the Eg vegetation units within the Project Area to form a larger patch that extends outside of the Project Area. The extent of this Tuart woodlands TEC patch within the Project Area consists largely of isolated tuart trees that are located above bare ground/ garden beds, and are atypical of Tuart understory, and as such does not represent high value Tuart woodlands TEC but would be considered as forming part of the Tuart woodlands TEC given the proximity of the adjacent and wider occurring Tuart woodlands TEC patch.

The Banksia woodlands TEC is also representative of the State listed Priority 3 Priority Ecological Community (PEC). The description, area and condition thresholds that apply to the EPBC-listed TEC of the same name, also apply to this PEC, but is not identified as a TEC pursuant to the Western Australian *Biodiversity Conservation Act 2016* (BC Act).

The Tuart woodlands TEC is also representative of the State listed Priority 3 Priority Ecological Community (PEC). The description, area and condition thresholds that apply to the EPBC-listed TEC of the same name, also apply to this PEC, but is not identified as a TEC pursuant to the BC Act.

3.6 Fauna

Emerge completed a Basic Fauna Survey and Targeted Black Cockatoo Assessment field survey of the Project Area on 6 September 2024, to the standards of the *Technical Guidance - Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA 2020) and the EPBC Act Black cockatoo referral guidelines (DAWE 2022). The fauna assessment report is attached as **Attachment D**.

The 24 native fauna species recorded within the Project Area are all generally common and widespread across the Swan Coastal Plain.

3.6.1 Fauna habitat

The Banksia woodland habitat (see **Figure 7**), in the eastern portion of the Project Area provides the greatest value to fauna as it provided a contiguous cover of native trees and shrubs. The habitat is relatively limited in extent for larger ranging fauna species and largely confined with little connectivity with other areas of remnant vegetation. Disturbance from regular human activity such as walking tracks has also reduced the value of this habitat.

The remaining habitats are likely to be predominantly used by common and widespread native and non-native fauna with non-specific habitat requirements, which enable them to persist in highly modified environments.

3.6.2 Likelihood of occurrence

Five State listed species were considered to have a moderate likelihood of occurrence within the Project Area including *Apus pacificus* (MI), *Falco peregrinus* (OS), *Synemon gratiosa* (P4), *Lerista lineata* (P3) and *Neelaps Calonotos* (P3). Despite not being recorded during the field survey, four species were considered to have a high likelihood of occurrence within the Project Area including *Zanda latirostris* (Carnaby's black cockatoo), *Zanda baudinii* (Baundin's black cockatoo), *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo) and *Isoodon fusciventer* (P4).

Carnaby's black cockatoo, Baudin's black cockatoo and forest red-tailed black cockatoo have a high likelihood of occurring within the Project Area. These species are discussed further in **Section 3.6.3**.

Of the remaining species with moderate and high likelihoods of occurrence, the Project Area provides limited habitat.

While quenda (P4) wasn't recorded during the survey, it is likely they utilise the banksia woodland habitat due to its dense ground cover. The Project Area isn't large enough to support multiple individuals, but

nearby adjacent residential gardens may provide a connection to the quenda record along the Serpentine River approximately 650 m away.

Perth slider (P3) and black-striped snake (P3) are both found within banksia woodlands on the Swan Coastal Plain and so the banksia woodland habitat would be suitable for these species. However, due to the relatively small extent of banksia woodland within the Project Area and its isolation, the likelihood of both species being present is moderate.

Pacific swift (MI) and peregrine falcon (OS) are highly mobile species that may opportunistically fly over or forage in the Project Area for short periods of time as part of a much larger home range. Neither of these species would breed within the Project Area. Any occurrence of pacific swift or peregrine falcon in the Project Area would likely be in the air space and largely independent from terrestrial habitat.

3.6.3 Black Cockatoos

3.6.3.1 Foraging Habitat

The Project Area contains native foraging habitat for all species of black cockatoo. The majority of the foraging habitat is associated with the Banksia woodland vegetation. This is considered primary native foraging habitat for Carnaby's black cockatoo due to the banksia species and jarrah. Jarrah is also considered a primary species for the forest red-tailed black cockatoo. This habitat is only categorised as secondary for Baudin's black cockatoo as these plants are only considered supplementary foraging sources for this species.

Marri in the south provides a primary foraging native source for all three species while tuart along Lakes Road provides secondary foraging habitat for both Carnaby's and forest red-tailed black cockatoos. *Agonis flexuosa* (peppermint tree) and *Jacksonia furcellata* also feature within the Project Area which provide secondary foraging habitat for Carnaby's, as well as *Allocasuarina fraseriana* (sheoak), which provides a secondary foraging habitat for all three species.

The total foraging habitat available within the site for Carnaby's black cockatoo is 10.08 ha, comprising 9.13 ha 'primary native foraging habitat' and 0.95 ha 'secondary native foraging habitat'. A total of 2.70 ha (2.47 ha 'primary native' and 0.30 ha 'secondary native') is proposed to be cleared as shown in **Figure 8**.

The total foraging habitat available within the Project Area for Baudin's black cockatoo is 9.38 ha, which comprises 0.38 ha of 'primary native foraging habitat' and 9.00 ha 'secondary native foraging habitat'. A total of 2.74 ha ('secondary native foraging habitat') is proposed to be cleared as shown in **Figure 9**.

The total foraging habitat available within the Project Area for forest red-tailed black cockatoo is 10.01 ha, which comprises 9.13 ha of 'primary native foraging habitat' and 0.88 ha of 'secondary native foraging habitat'. A total of 2.69 ha (2.47 ha 'primary native' and 0.30 ha 'secondary native') is proposed to be cleared as shown in **Figure 10**.

3.6.3.2 Breeding Habitat

Carnaby's and Baudin's black cockatoo would not be expected to breed in the Project Area as it occurs outside of their modelled breeding area. However, as forest red-tailed black cockatoo do not have defined breeding areas the Project Area has potential to support breeding of this species. The Project Area contains 114 trees of the appropriate species that are large enough to be considered potential breeding trees but wouldn't currently provide nesting habitat due to the lack of suitable hollows. These habitat trees have the potential to form suitable hollows in the future, however, it could take decades for hollows to form that are large enough to be suitable for use by black cockatoos for breeding. One suitable nesting tree was recorded within the Project Area containing a hollow potentially suitable for use by black cockatoos for nesting (see **Figure 11**), but this is not currently being used for breeding by black cockatoo and is not proposed to be cleared.

A total of twenty-nine (29) potential black cockatoo nesting trees would be removed during the clearing as shown in **Figure 11**. These black cockatoo potential nesting trees do not currently support suitable nesting

hollows for black cockatoos and therefore could not currently support black cockatoo breeding activity within the Project Area.

3.6.3.3 Roosting Habitat

There are no known black cockatoo roosting sites within the Project Area, and the nearest known black cockatoo roosting site is located approximately 0.83 km southwest from the Project Area. No secondary evidence of roosting such as branch clippings, droppings or feathers were observed within the Project Area.

Therefore, there is no reason to suspect that roosting by black cockatoos has recently occurred within the Project Area. Nevertheless, the Project Area contains many tall trees and groups of tall trees that have the potential to provide roosting habitat for black cockatoos.

3.7 Soils and Topography

The Project Area occurs on the Swan Coastal Plain, the geomorphic unit that characterises much of the Perth metropolitan area, and specifically within the 'Spearwood System', which is described as 'Sand dunes and plains: Yellow deep sands, pale deep sands and yellow/brown shallow sands' (DPIRD 2019). Fine scale soil landscape mapping by DPIRD (2022) shows the 'Spearwood S4A Phase' soil unit occurs across the entire site. This unit comprises a 'flat to gently undulating sandplain with deep, pale and sometimes bleached, sands with yellow-brown subsoils'.

The Project Area has generally undulating topography, with the elevation of the site ranges from 4 metres in relation to the Australian height datum (mAHD) in the southern portion to 7 mAHD on the western side adjacent to Lakes Road (DoW 2008) as shown on **Figure 12**.

3.8 Acid Sulfate Soils and Dewatering

Acid Sulfate Soils (ASS) mapping from DWER indicates that the site is not located in an area of ASS risk.

3.9 Hydrology

3.9.1 Groundwater

The DWER data indicates the historical maximum groundwater level under the Project Area has an elevation of around 2 m AHD which is approximately 3 m beneath the ground surface.

3.9.2 Surface Water

The DWER Hydrography Linear dataset (DWER 2020) does not show any surface water-related features within the Project Area. The nearest recorded surface water features are associated with the Serpentine River approximately 1km east of the Project Area (see **Figure 13**).

3.9.3 Wetlands

There are no streams, creeks or major drains that intersect the Project Area. No Ramsar wetlands occur within the Project Area.

No Geomorphic Wetlands of the Swan Coastal Plain (DBCA 2023) were identified within the Project Area. The nearest geomorphic wetland is UFI 14577 (Serpentine River), a Conservation Category Wetland is located approximately 0.5 km southeast of the Project Area (refer to **Figure 13**).

3.10 Aboriginal Heritage

The Project Area is located within an area under the traditional ownership of the Noongar people, the traditional owners of the south-west region of Western Australia. The Binjarup/Pinjarup People of the Gnaala Karla Booja region are the traditional owners whose lands extends across the City of Mandurah encompassing the Project Area.

The Department of Planning, Lands and Heritage (DPLH) maintains the Aboriginal Cultural Heritage Inquiry System (ACHIS), which is a directory containing locations and information about Aboriginal Cultural Heritage (ACH) in Western Australia. A desktop assessment of the ACHIS identified two dithered public sites extending across the Project Area, including Site 3582 associated with the Serpentine River and Site 17984 associated with Goegrup Lake.

The Department of Planning, Lands and Heritage (DPLH) confirmed that the actual, private boundaries of these two registered sites do not intersect the Project Area.

4 APPLICATION OF MITIGATION HIERARCHY

In accordance with *A guide to the assessment of applications to clear native vegetation* (DER 2014), the impact mitigation sequence has been considered as part of developing the Peel Health Campus Expansion project and the resultant proposed clearing, in order to ensure the environmental impacts associated with proposed clearing were minimised.

4.1 Avoidance

During the initial proposal development process for the Peel Health Campus that resulted in the Development Envelope, the Applicant considered a number of options for how the facility needs could be accommodated across the broader Project Area. While the layout intentions (i.e. extent of development) was initially greater than that associated with the final Development Envelope, this process started with baseline ecological surveys to fully understand the ecological considerations relevant for the Project Area.

Proposed options that were considered included further development to the east and south of the Development Envelope, which would have had a more substantial impact footprint and native vegetation clearing requirement.

Through refined design, the Application Area as presented in the clearing permit application has avoided impacts within the Project Area as delineated by the Avoidance Area. This includes the avoidance of:

- 7.38 ha of high-quality native foraging habitat for Carnaby's black cockatoo, of which 6.71 ha consists of primary native foraging habitat and 0.67 ha secondary native.
- 6.72 ha of high-quality native foraging habitat for Baudin's black cockatoo, of which 0.38 ha consists of primary native foraging habitat and 6.34 ha secondary native foraging habitat.
- 7.32 ha of high-quality native foraging habitat for forest red-tailed black cockatoo, of which 6.71 ha consists of primary native foraging habitat and 0.61 ha secondary native foraging habitat.
- 80 black cockatoo habitat trees, of which 79 were identified as 'potential nesting trees' and 1 identified as a 'suitable nesting tree'.
- 6.08 ha of Banksia woodlands TEC/PEC.
- 1.94 ha of Tuart woodlands TEC/PEC.

The overall impact avoidance outcome achieved as outlined above (i.e. the Avoidance Area), was the result of many iterations of the project development design and consideration of the project needs.

In addition to the broader Avoidance Area outlined above, additional avoidance of impacts was achieved through internal layout design in relation to bushfire management requirements. The siting for the chemotherapy and palliative care ward as vulnerable use buildings required a 30m setback distance from classified vegetation. Refined internal design reconsidered the positioning and shape of both of these buildings to minimise clearing of vegetation to achieve the necessary setback distances. This ultimately resulted in the relocation of the palliative care ward from south of the ring road to entirely avoid the need for clearing associated with this building location, and the chemotherapy building was removed from the development plan altogether.

Within the areas of vegetation that do need to be managed for bushfire setback purposes (that have been included in the Application Area), four (4) black cockatoo habitat trees will be retained, and can still achieve the necessary bushfire hazard reduction outcomes.

In regard to the clearing associated with the Application Area as presented in the application, it is important to note that:

- It is highly unlikely that vegetation clearing will be required for the water services route in the eastern portion of the Project Area that includes a 1m works area/impact into the adjacent intact native vegetation. This impact has been included in the Application Area on a conservative basis approach, in the unlikely event that additional clearing is required for water servicing installation. As such, further avoidance and reduction to the overall native vegetation clearing associated with the Application Area is likely.
- Further avoidance to Tuart Woodland TEC/PEC impacts are likely to be achieved given it is unlikely that the identified Tuart trees will need to be cleared. It is unlikely that the three (3) tuart trees (0.07 ha) included in the Application Area will need to be cleared.

The most material clearing required for bushfire mitigation purposes is associated with the Central Energy Plant (CEP), currently located to the east of the ring road. While there is vegetation clearing required to ensure that the radiant heat exposure at this structure does not exceed the equivalent of BAL-29, the potential locations for the CEP was explored in order avoid the need for any bushfire mitigation clearing but it was not possible to be located anywhere else within the Project Area due to technical requirements associated with the CEP. Notwithstanding this, the applicant has committed to retaining three (3) black cockatoo habitat trees that occur within this area, which can be done without compromising the bushfire risk mitigation requirements. The black cockatoo habitat trees intended to be retained are shown on **Figure 11**.

Given the impact avoidance that was accommodated into the consideration of the above options, and the operational needs for the expansion, there is no further opportunity to avoid clearing of native vegetation and still meet the operational needs of the facility.

4.2 Mitigation

Clearing activities will be managed in accordance with a Construction Environmental Management Plan (CEMP) to be prepared and implemented by the proponent to minimise potential impacts to native vegetation and fauna habitat. The CEMP will be enforced through the Development Approval process and include the following procedures:

- Clearly defining the extent of the clearing area before any clearing activities commence, and vehicle and personnel access limitations to within the Development Envelope.
- Clearly defining habitat trees to be retained within the Application Area.
- A pre-clearing fauna inspection to identify potential fauna interactions, including an inspection of trees for hollows and signs of use one (1) to two (2) days before clearing occurs.
- A pre-works trapping program to capture and translocate small to medium sized (translocatable) native fauna, if such fauna is present and translocation is possible.
- A fauna spotter to be present during clearing works to direct and manage works to avoid direct impacts to fauna.
- Implementation of hygiene protocols during the clearing and construction process to appropriately manage construction to prevent potential spread of weeds, dieback and feral animals into areas of retained vegetation. This will include:
    - Vehicles, machinery, and personnel to be free of mud/soil and plant material upon entering the site. Inspections to be completed prior to works commencing.
    - Minimising clearing and earthworks during wet conditions.
    - Using landscaping species not identified as weeds.

- Ensuring the project is maintained in a clean and tidy manner to ensure feral and other species are not attracted to the site. Waste material is to be disposed of appropriately through waste services and/or to licenced landfill during construction and as part of ongoing operation.

4.3 Offsets

The implementation of the avoidance and mitigation measures eliminate the need for any offsets given the residual impacts are not expected to be significant, as was the case with the consideration of impacts pursuant to the EPBC Act and the associated referral and NCA decision (see **Attachment F**).

Therefore, offsets have not been considered further for the purposes of this clearing permit application.

5 PLANNING INSTRUMENTS AND OTHER ENVIRONMENTAL APPROVALS

The Applicant is submitting two Development Approval applications under the *Planning and Development Act* 2005 (PD Act) to progress the intended development across the Project Area. The proposed use is in accordance with the planning framework and in particular the reservation for public purposes that extends over the Proposal Area.

A portion of the application area is situated within PRSNA 'Greenfields Bushland'. *Environmental Protection Bulletin No. 12 Swan Bioplan – Peel Regionally Significant Natural Areas* (EPB 12) (EPA 2013) is used to inform strategic land use planning in the Peel Region by identifying PRSNA which are expected to have significant flora, vegetation and landform values that represent the original landscape of the Peel Region. Development proposals which may potentially impact upon a PRSNA require detailed flora, vegetation and fauna investigations to be undertaken. Based on the outcomes of these investigations, development proposals should firstly aim to avoid, and then minimise, potential impacts on identified PRSNA.

The avoidance and mitigation measures proposed for the Peel Health Campus Expansion will reduce the overall impact on the 'Greenfields Bushland' area, with a proposed avoidance area of 9.25 ha within the Project Area, and direct and indirect impacts to the adjoining bushland to be identified and managed though a CEMP.

The proposed action that is associated with the ultimate development footprint for the Peel Heath Campus Expansion has been referred for consideration by the Commonwealth Minister for the Environment pursuant to the EPBC Act. This referral was progressed on the basis that there will be impacts to Matters of National Environmental Significance (MNES) arising from the progression of the proposed action arising from clearing required within the Application Area, and specifically black cockatoo in accordance with the *EPBC Act black cockatoo referral guidelines* (DAWE 2022) and EPBC Act listed communities in accordance with the Banksia Woodland TEC conservation advice (DoEE 2016) and Tuart woodlands TEC Conservation Advice (DoEE 2019).

An EPBC Act referral was lodged to the Department of Climate Change, Energy, the Environment and Water (DCCEEW) in November 2024, and in March 2025 the decision was made that the referred proposed action was not a controlled action (NCA) and there are no further obligations or requirements on the proponent in order to be able to implement the proposed action. The referral decision notice has been attached as **Attachment F**.

The Proponent is not proposing to refer the proposal to the WA Environmental Protection Authority (EPA), pursuant to Section 38 of the EP Act on the basis the proponent is of the view that the proposal is not a significant proposal.

6 RESPONSE TO EP ACT CLEARING PRINCIPLES

A total of 2.82 ha of native vegetation is proposed to be cleared within the Application Area.

Under Section 51C of the EP Act, clearing of native vegetation is an offence unless a clearing permit has been obtained, or an exemption applies. When assessing clearing permit applications, DWER has regard to the ten clearing principles contained in Schedule 5 of the EP Act so far as they are relevant to the clearing permit application under consideration.

In support of this clearing permit application, the ten clearing principles have considered and responded to in the following sections.

6.1 Principle (a) – Native vegetation should not be cleared if it comprises a high level of biological diversity.

Native vegetation is described and mapped at different scales to illustrate patterns in its distribution. At a continental scale the Interim Biogeographic Regionalisation for Australia (IBRA) divides Australia into floristic subregions (Environment Australia 2000).

The site is located within the Swan Coastal Plain Biogeographic Regionalisation for Australia (IBRA) region. The Swan Coastal Plain IBRA region has approximately 39.84% of its pre- European (1750) vegetation extent remaining, of which 10.77% is protected. (Government of Western Australia 2019).

Variations in native vegetation can be further classified based on regional vegetation mapping. Heddle et al. (1980) mapping shows the site as comprising the 'Yoongarillup complex', which is described as woodland to tall woodland of *Eucalyptus gomphocephala* with *Agonis flexuosa* in the second storey, and occasionally open forest of *Eucalyptus gomphocephala - Eucalyptus marginata - Corymbia calophylla*.

The 'Yoongarillup Complex', was determined to have an estimated 35.81% of its original pre-European vegetation extent remaining on the Swan Coastal Plain in 2018, with 14.1% protected for conservation purposes (Government of Western Australia 2019).

The vegetation proposed to be cleared is not considered to be part of a significant regional ecological linkage in the local area.

Based on the results of the flora and vegetation assessment undertaken by Emerge in 2024, the Application Area has been disturbed through historic activities. The Application Area contains plant communities and cleared areas ranging from 'Very Good' to 'Completely Degraded' condition, and the Development Envelope has specifically targeted areas already cleared or in 'Degraded' or 'Completely Degraded' condition, and the 7.73 ha Development Envelope contains 2.82 ha of native vegetation.

Approximately 63% of the Development Envelope comprises existing cleared or non-native vegetation (5.16 ha) and is generally void of native of vegetation, comprising predominantly of bare ground, hardstand/ buildings and non-native vegetation with weeds. Of the native vegetation proposed to be cleared, 0.79 ha is in 'Degraded' condition, 0.56 ha in 'Good' condition and 1.35 ha in 'Very Good' condition.

No threatened or priority flora species, have been identified within the project area.

The Banksia woodlands TEC/PEC was identified within the Project Area. The Application Area includes 1.91ha of this TEC/ PEC. This clearing is considered minor in an absolute sense when considering the extent of this TEC/PEC in the wider local area (see **Figure 16**). The impact to the TEC/PEC is not likely to be significant in the context of the impact to the TEC/PEC in a local and regional context. Potential indirect impacts to the adjoining patch will be identified and managed though a CEMP.

Additionally, the application proposes the clearing of 0.07 ha (three (3) individual trees), of Tuart woodlands TEC/PEC. The Tuart woodlands TEC/PEC patch within the site consists largely of isolated Tuart trees that are located above bare ground/ garden beds, and are atypical of Tuart woodland TEC/PEC understory, and as such does not represent high value Tuart woodlands TEC/PEC, but would still be considered as representing the Tuart woodlands TEC/PEC, given its connection to the adjacent Tuart woodlands TEC/PEC patch. There are larger continuous patches of the Tuart woodlands TEC/PEC in the wider local area, as shown in **Figure 17**.

The impact to the Tuart woodland TEC/PEC has been included in this application as a conservative approach, and it is unlikely that the three (3) Tuart trees that represent the impact will need to be cleared. These trees have been included in the Application Area in the event that they are unable to be retained due to design or construction requirements.

Due to the level of historical disturbance and the limited fauna habitat present within the Application Area (particularly compared to the broader locality), the clearing area does not support a high level of biological diversity. Areas with higher biological diversity within the Project Area have been avoided and are retained within the Avoidance Area.

The proposed clearing is therefore not likely to be at variance with Principle (a).

6.2 Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Quenda, Carnaby's cockatoo, Baudin's cockatoo and forest red-tail black cockatoo have a high likelihood of occurrence within the application area.

Quenda habitat

Quenda are commonly encountered in urban and suburban areas in the southwest of Western Australia (DBCA 2017). Habitat is generally dense scrubby, often swampy, vegetation with dense cover up to one metre high (DEC 2012). While quenda (P4) wasn't recorded during the survey, it is likely they utilise the banksia woodland habitat due to its dense ground cover. The site isn't large enough to support multiple individuals, but nearby adjacent residential gardens may provide a connection to the quenda record along the Serpentine River approximately 650 m away.

Additionally, given that quenda are known to persist within the Perth metropolitan region, it is unlikely that the Application Area specifically provides significant habitat for the species, given the size of the site and the abundance of better-quality vegetation within the broader local area.

Potential impacts related to Baudin's, Carnaby's and the forest red-tailed black cockatoo, is outlined further below.

6.2.1 Black cockatoo foraging habitat

The native vegetation to be cleared provides foraging habitat for the three black cockatoo species. Foraging habitat was classified as either native 'primary' or 'secondary' foraging habitat based on black cockatoo foraging preferences. Primary food plants were defined as those with historical and contemporary records of regular consumption by a black cockatoo species. Secondary food plants were defined as plants that black cockatoo species have been recorded consuming occasionally or that, based on their limited extent or agricultural origin, should not be considered a sustaining resource.

The extent of foraging habitat proposed to be cleared within the Application Area is summarised below in **Table 3**.

Table 3: Black Cockatoo foraging habitat clearing

Potential Impacts	Application Area (ha)	Avoidance Area (ha)
Carnaby's Black Cockatoo		
Foraging habitat - Primary native (ha)	2.47	6.71
Foraging habitat - Secondary native (ha)	0.30	0.67
Baudin's Black Cockatoo		
Foraging habitat - Primary native (ha)	0	0.38
Foraging habitat - Secondary native (ha)	2.74	6.34
Forest Red-tailed Black Cockatoo		
Foraging habitat - Primary native (ha)	2.47	6.71
Foraging habitat - Secondary native (ha)	0.30	0.61
Habitat Trees		
Potential nesting tree	29	80
Suitable nesting tree	0	1

The Application Area contains 2.47 ha of primary native foraging habitat for Carnaby's, black cockatoo, 2.47 ha of primary native foraging habitat for forest red-tailed black cockatoo and 29 potential breeding trees for black cockatoo, none with suitable hollows that could be used for breeding.

The foraging habitat within the Application Area does not represent a significant area of habitat for any of the three black cockatoo species. There are extensive areas of potential foraging habitat located immediately adjacent to the Application Area and across the wider local area and region as shown on **Figure 15**.

6.2.2 Potential black cockatoo breeding and roosting habitat

The Project Area contains (114) black cockatoo habitat trees (trees with diameter at breast height (DBH) ≥ 50 cm), of which 29 are proposed to be cleared. A targeted black cockatoo hollow inspection determined that none of the habitat trees within the Application Area contain hollows that were potentially suitable for use by breeding black cockatoos.

As none of the habitat trees contain hollows suitable for use by black cockatoos for breeding, the Application Area does not currently provide breeding habitat for any of the three species of black cockatoo. The habitat trees within the Application Area have the potential to form suitable hollows in the future. However, it is likely to take many decades for hollows to form that are large enough to be suitable for use by black cockatoos.

No evidence of roosting such as branch clippings, droppings or feathers were observed within the Application Area. There are known roost sites within 6km of the Application Area, as shown on **Figure 14**. These known roost sites occur near or in closer proximity to large areas of remnant native vegetation.

More broadly, there are known roost sites and confirmed and potential Carnaby's breeding sites within 12 km of the Application Area as shown on **Figure 15**. While the Application Area contains potential black cockatoo foraging habitat, there are large areas of Carnaby's, Baudin's and forest red-tailed black cockatoo foraging habitat surrounding the Application Area to support the known breeding and roosting activity.

The removal of native vegetation within the Application Area as proposed in this application, is unlikely to result in a significant residual impact to the three black cockatoo species. Based on a review of publicly

available native vegetation data there is significant areas of foraging, roosting and breeding habitat for the three black cockatoo species within 12 km of the Application Area, as shown on **Figure 15**.

Notwithstanding this, clearing of foraging habitat within the Application Area may be at variance to this Principle (b).

6.3 Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

No threatened or priority flora species were recorded in the Application Area during a field survey conducted in autumn and spring 2024. The survey spanned the optimal seasonal period to detect flora in the southwest of WA and so is not subject to sessional limitation.

Accordingly, as the Application Area was searched thoroughly it is considered that threatened or priority flora are absent, and the proposed clearing is not at variance with Principle (c).

6.4 Principle (d) – 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.

6.5 Banksia Woodland TEC/PEC

The proposed clearing will have a direct impact on an EPBC Act TEC and State listed PEC through the clearing of 1.91 ha of the Banksia woodlands TEC/PEC. This impact within the application area is part of a larger patch of Banksia woodlands TEC/PEC, which currently covers approximately 8.01 ha within the Project Area with the remainder in the Avoidance Area. The proposed clearing will not fragment this larger patch of Banksia woodlands TEC/PEC to the east into multiple patches or cause additional fragmentation losses.

The potential impacts to the EPBC Act Banksia woodlands TEC have been specifically considered as part of an EPBC Act referral, which deemed that the potential impacts to the Banksia woodlands TEC was not likely to be significant.

The Banksia woodland PEC is listed as a Priority 3 community in WA, and therefore the provisions of the BC Act are not applicable, and it is not considered a listed TEC pursuant to the BC Act.

The proposed clearing therefore may be at variance with Principle (d), however residual impacts are not considered significant given there are no significant residual impacts to a listed threatened ecological community.

6.6 Tuart Woodland TEC/PEC

The proposed clearing will have a direct impact on 0.07ha of Tuart woodlands TEC/PEC which comprises three (3) Tuart trees, with a planted garden bed understorey. While this is atypical of Tuart woodland TEC/PEC understorey, it is still considered Tuart woodlands TEC/PEC in accordance with the conservation advice.

The condition and quality of the proposed Tuart woodlands TEC/PEC to be cleared is low, will not modify or destroy abiotic factors necessary for the ecological community's survival. The Tuart woodland TEC/PEC being impacted within the Application Area comprises of isolated Tuart trees within atypical understory and is separated to the adjacent broader Tuart woodlands TEC patch by hardscape and Lakes Road, therefore the clearing of three tuart trees will pose no risk of impact to the broader Tuart woodlands TEC/PEC patch.

A separate patch of Tuart woodlands TEC/PEC is situated within the Avoidance Area and is separated from the Application Area and surrounded by intact Banksia woodland TEC vegetation that is being retained so the proposed clearing will not pose any risk of modification to abiotic factors necessary for the ongoing viability of this patch.

The potential impacts to the EPBC Act listed Tuart woodlands TEC has been specifically considered as part of an EPBC Act referral, which deemed that the potential impacts to the Tuart woodlands TEC was not likely to be significant.

The Tuart woodland PEC is listed as a Priority 3 community in WA, and therefore the provisions of the BC Act are not applicable, and it is not considered a listed TEC pursuant to the BC Act.

The proposed clearing therefore may be at variance with Principle (d), however residual impacts are not considered significant given there are no significant residual impacts to a listed threatened ecological community.

6.7 Principle (e) – Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

The vegetation within the Application Area is representative of Yoongarillup Complex, which retains 35 percent of its pre-European extent, which is above the 30 per cent threshold outlined in the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia 2001).

The proposed clearing is not at variance with Principle (e) given the small area being cleared in the context of the remaining vegetation.

6.8 Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

No Ramsar wetlands or defined rivers/waterways were identified within or near the Application Area.

A review of the Geomorphic Wetlands on the Swan Coastal Plain dataset (DBCA 2020) indicates no wetlands within or in the vicinity of the Application Area.

Given no water courses or wetlands are recorded within or adjacent to the Application Area, the proposed clearing is unlikely to impact an environment associated with a watercourse or wetland.

The proposed clearing is not at variance with Principle (f).

6.9 Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

A review of soil landscape mapping (DPIRD 2019) indicates that the native vegetation under application is within the 'Spearwood System', which is described as 'Sand dunes and plains: Yellow deep sands, pale deep sands and yellow/brown shallow sands' (DPIRD 2019).

Fine scale soil landscape mapping (DPIRD 2023) shows the 'Spearwood S4A Phase' (211 Sp_S4a) soil unit occurs across the entire site. This unit comprises a 'flat to gently undulating sandplain with deep, pale and sometimes bleached, sands with yellow-brown subsoils'.

The Spearwood system soil unit is generally of low risk of land degradation. The highest risk factor is wind erosion with 70 percent of the mapped soil unit having a high to extreme risk.

Salinity mapping (DPIRD-09) indicates the application area and surrounding area is mapped as a moderate to high salinity risk or is presently saline, salinity hazard category with<3% of the area having a moderate to high surface salinity risk.

Any risk of land degradation will be mitigated through controls applied during clearing and construction processes (such as dust suppression, mulching and erosions control as required), and will be adopted through the preparation and implementation of a CEMP.

The proposed clearing is therefore not likely to be at variance to Principle (g).

6.10 Principle (h) – 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.

The site is not located within a Bush Forever site nor is it within the vicinity of any nearby Bush Forever sites or conservation areas.

A portion of the application area is situated within PRSNA 'Greenfields Bushland'. *Environmental Protection Bulletin no. 12 Swan Bioplan – Peel Regionally Significant Natural Areas* (EPB 12) (EPA 2013) is used to inform strategic land use planning in the Peel Region by identifying PRSNA. PRSNA are expected to have significant flora, vegetation and landform values that represent the original landscape of the Peel Region. Development proposals which may potentially impact upon a PRSNA require detailed flora, vegetation and fauna investigations to be undertaken. Based on the outcomes of these investigations, development proposals should firstly aim to avoid, and then minimise, potential impacts on identified natural areas.

The avoidance and mitigation measures proposed will aim to reduce the overall impact on the 'Greenfields Bushland' area, with an avoidance area of 9.25 ha, and indirect impacts to the adjoining bushland will be identified and managed though a CEMP.

The proposed clearing is not at variance to Principle (h).

6.11 Principle (i) – 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.

The Application Area is located within an area classified as having no known risk of Acid Sulfate Soils occurring within 3m of the surface.

Issues that could cause a deterioration in water quality in relation to the clearing footprint have been considered as part of the design and can be managed, and therefore the proposed clearing of vegetation is not likely to cause deterioration in the quality of surface or underground water and is not likely at variance with Principle (i).

6.12 Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Given no water courses or wetlands are recorded in or adjacent to the Application Area, the proposed clearing is unlikely to contribute to flooding.

The proposed clearing is not likely to be at variance with Principle (j).

7 SUMMARY

The Application Area contains:

- 2.82 ha of 'native vegetation' as defined by the EP Act.
- 1.91 ha of the Banksia woodlands TEC/PEC.
- 0.07 ha (comprising three (3) individual Tuart trees) of the Tuart woodlands TEC/PEC.
- 2.47 ha of primary native foraging habitat for Carnaby's, black cockatoo.
- 2.47 ha of primary native foraging habitat for forest red-tailed black cockatoo.
- 29 potential breeding trees for black cockatoo, none with suitable hollows that could be used for breeding.
- 1.15 ha of native vegetation within the Greenfields Bushland PRSNA.

A summary of the clearing principles has been provided in **Table 4**, and in summary the potential variances to the clearing principles are:

- Principle (b) may be at variance, given the application area contains 29 potential habitat trees for black cockatoos and 2.47 ha of primary native foraging habitat for Carnaby's and forest red-tailed black cockatoo. Residual impacts to black cockatoo are not considered significant.
- Principle (d) may be at variance, given the application area contains 1.91 ha of Banksia woodlands TEC/PEC and 0.07 ha of Tuart woodlands TEC/PEC, although the residual impacts to these are not considered significant.

Table 4: Summary of consideration and response to each clearing principle

Clearing principle	Levels of variance	Summary of relevant response to clearing permit principle
Principle (a)	Not at variance	With the small extent of the clearing in its broader context, the Application Area is not considered to represent a high level of biological diversity, and the higher value vegetation with higher biodiversity values has been avoided in the Avoidance Area..
Principle (b)	May be at variance	While no evidence of Black cockatoos was found, vegetation in the Application Area provides habitat for the three black cockatoo species. The native vegetation to be cleared includes 2.47 ha of primary native foraging habitat for Carnaby's, black cockatoo, 2.47 ha of primary native foraging habitat for forest red-tailed black cockatoo and 29 potential breeding trees for black cockatoo, none with suitable hollows that could be used for breeding. The residual impacts are not considered to be significant.
Principle (c)	Not at variance	No State or Commonwealth listed threatened or priority flora species have been recorded within the Application Area and are considered unlikely to occur. There are no impacts likely to occur.
Principle (d)	May be at variance	Vegetation in the clearing area comprises of Banksia woodlands TEC/PEC and Tuart woodlands TEC/PEC. The proposed clearing therefore may be at variance with Principle (d), however residual impacts are not considered to be significant given an EPBC Act referral determined that potential impacts to the EPBC Act listed TECs are not likely to be significant, and the PECs are not considered TECs pursuant to the BC Act..
Principle (e)	Not at variance	The vegetation within the Application Area is representative of Yoongarillup Complex, which retains 35 percent of its pre-European extent, which is above the 30 per cent threshold outlined in the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia 2001). Therefore, the Application Area is not considered to be within an extensively cleared landscape.
Principle (f)	Not at variance	There are no wetlands or watercourses within the Application Area, and riparian vegetation was not recorded during the Survey. Therefore, the proposed clearing is unlikely to impact on an environment associated with a watercourse or wetland.
Principle (g)	Not at variance	The Application Area is mapped as the Spearwood S4A Phase (211 Sp_S4a) soil unit, which is mapped as having a low risk of water erosion, land degradation and salinity. Therefore, the proposed clearing is not likely to result in appreciable land degradation. A CEMP will ensure that any risk of land degradation is managed and avoided.
Principle (h)	Not at variance	The Application Area is not located immediately adjacent to Bush Forever or conservation reserves. A portion of the application area is situated within PRSNA 'Greenfields Bushland'. The avoidance and mitigation measures proposed will aim to reduce the overall impact on the 'Greenfields Bushland' PRSNA, with a proposed avoidance area of 9.25 ha, and indirect impacts to the adjoining bushland to be identified and managed though a CEMP.
Principle (i)	Not at variance	Given no watercourses or wetlands are recorded within or adjacent to the Application Area, the proposed clearing is unlikely to impact on surface or groundwater quality.
Principle (j)	Not at variance	The proposed clearing is not likely to cause or exacerbate a risk of flooding given the extent of works and design measures to be implemented to manage surface water.

Should you have any questions regarding the content of this letter, please do not hesitate to contact the undersigned on [redacted].

Yours sincerely
Emerge Associates

[redacted]
PRINCIPAL ENVIRONMENTAL CONSULTANT

Encl: **Figure 1**: Clearing Permit Application Location
Figure 2: Clearing Extent and Avoidance Area
Figure 3: EP Act Native Vegetation Extent
Figure 4: Vegetation Units
Figure 5: Vegetation Condition
Figure 6: Threatened and Priority Ecological Communities
Figure 7: Fauna Habitat
Figure 8: Carnaby's Black Cockatoo Foraging Habitat
Figure 9: Baudin's Black Cockatoo Foraging Habitat
Figure 10: Forest Red-tailed Black Cockatoo Foraging Habitat
Figure 11: Black Cockatoo Habitat Trees
Figure 12: Soils and Topography
Figure 13: Hydrography and Environmental Features
Figure 14: Black Cockatoo Foraging Habitat Local Context
Figure 15: Black Cockatoo Habitat Context
Figure 16: Known Distribution of Banksia Woodlands PEC
Figure 17: Known Distribution of Tuart Woodlands PEC

Attachment A – *Clearing Permit Application Form*
Attachment B - *Peel Health Campus Overall Redevelopment.*
Attachment C - *Detailed Flora and Vegetation Assessment Peel Health Campus, Greenfields (Emerge Associates 2024b).*
Attachment D - *Basic Fauna and Targeted Black Cockatoo Assessment - Peel Health Campus, Greenfields (Emerge Associates 2024a).*
Attachment E - *Peel Health Campus – Historic Aerial Imagery (Landgate 2024)*
Attachment F – *EPBC Act Referral Decision Notice*

General References

Department of Agriculture, Water and the Environment (DAWE) 2022, *Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black-cockatoo*, Canberra.

Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2024, *Protected Matters Search Tool*, <https://pmst.awe.gov.au/>.

Department of Environment Regulation (DER) 2014, *A guide to the assessment of applications to clear native vegetation under Part V Division 2 of the Environmental Protection Act 1986*, Perth.

Department of the Environment and Energy (DoEE) 2016, *Modelled distribution for Carnaby's Cockatoo (Calyptorhynchus latirostris)*, Canberra.

Department of Primary Industries and Regional Development (DPIRD) 2022, *Soil Landscape Mapping - Systems (DPIRD-064)*.

Emerge Associates 2024a, *Basic Fauna and Targeted Black Cockatoo Assessment - Peel Health Campus, Greenfields*, EP24-094(03)--005 NAW, 1.

Emerge Associates 2024b, *Detailed Flora and Vegetation Assessment Peel Health Campus, Greenfields*, EP21-128(04)--008A TDP, 2.

Keighery, B. 1994, *Bushland Plant Survey: A guide to plant community survey for the community*, Wildflower Society of WA (Inc), Nedlands.

Landgate 2024, *Landgate Locate V5*, Western Australia Land Information Authority, <https://maps.slip.wa.gov.au/landgate/locate/>.

Western Australian Planning Commission and Department of Planning, Lands and Heritage (WAPC and DPLH) 2018, *South Metropolitan Peel Sub-regional Planning Framework*, Perth.

Online References

Department of Water and Environmental Regulation (DWER) 2020c, Perth Groundwater Map, viewed December 2024, https://maps.water.wa.gov.au/#/webmap/g

Figure 1: Clearing Permit Application Location

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F47

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	21/03/2025

N

0 100 200
Metres

Scale: 1:6,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

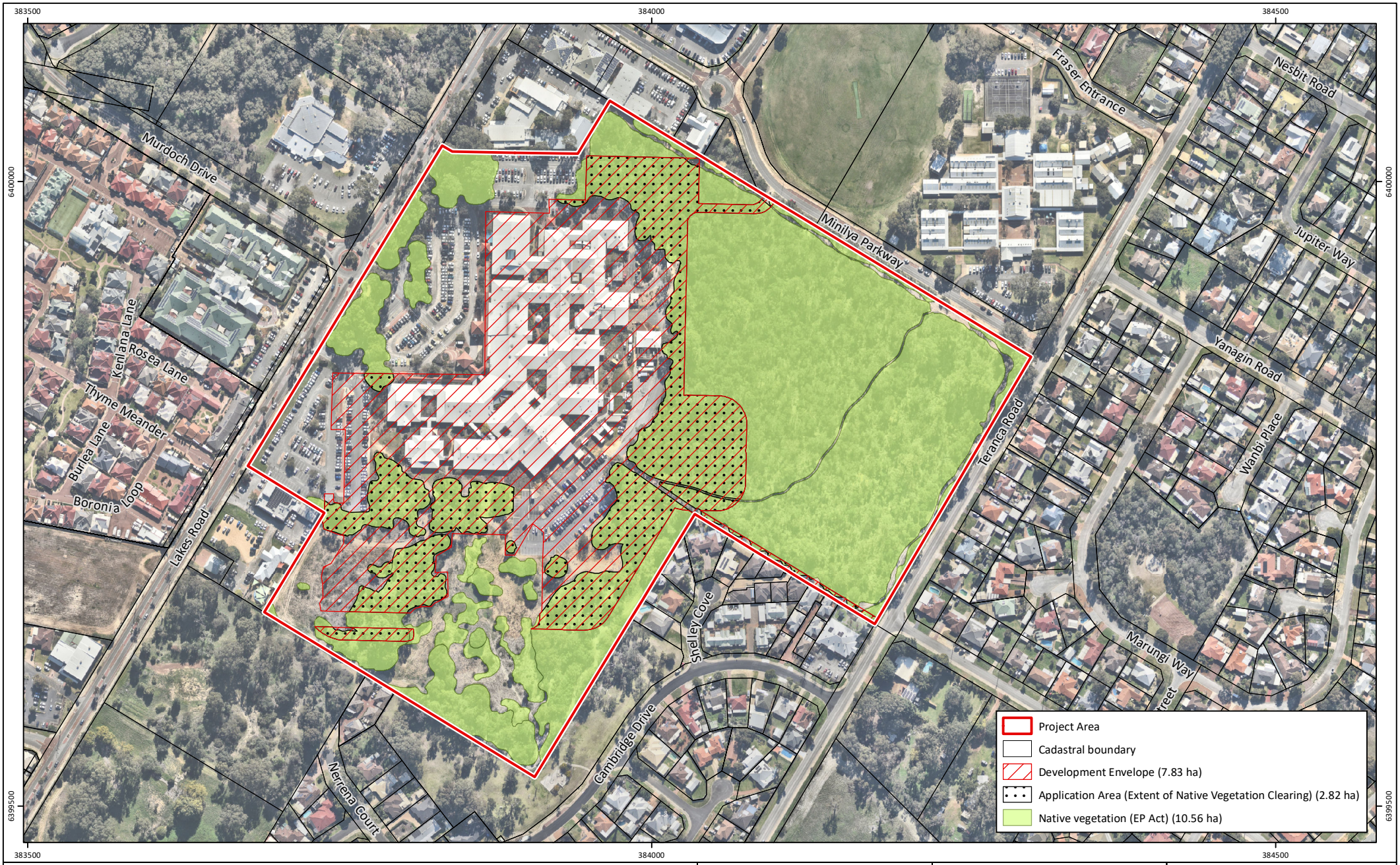


Figure 3: EP Act Native Vegetation Extent

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F49a
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 26/03/2025

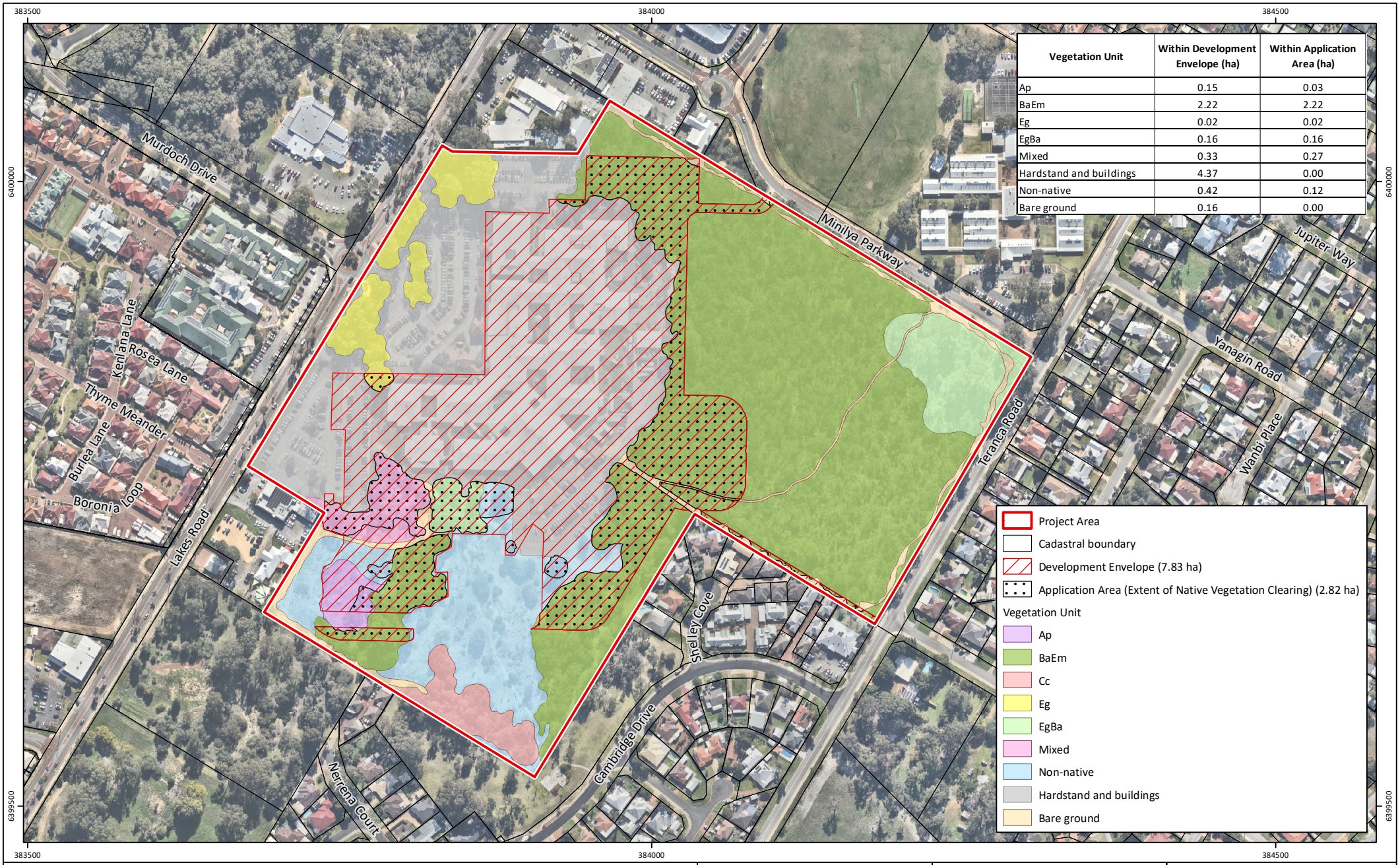
N

0 50 100 150
Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES



Vegetation Unit	Within Development Envelope (ha)	Within Application Area (ha)
Ap	0.15	0.03
BaEm	2.22	2.22
Eg	0.02	0.02
EgBa	0.16	0.16
Mixed	0.33	0.27
Hardstand and buildings	4.37	0.00
Non-native	0.42	0.12
Bare ground	0.16	0.00

Figure 4: Vegetation Units

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F50a
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 26/03/2025

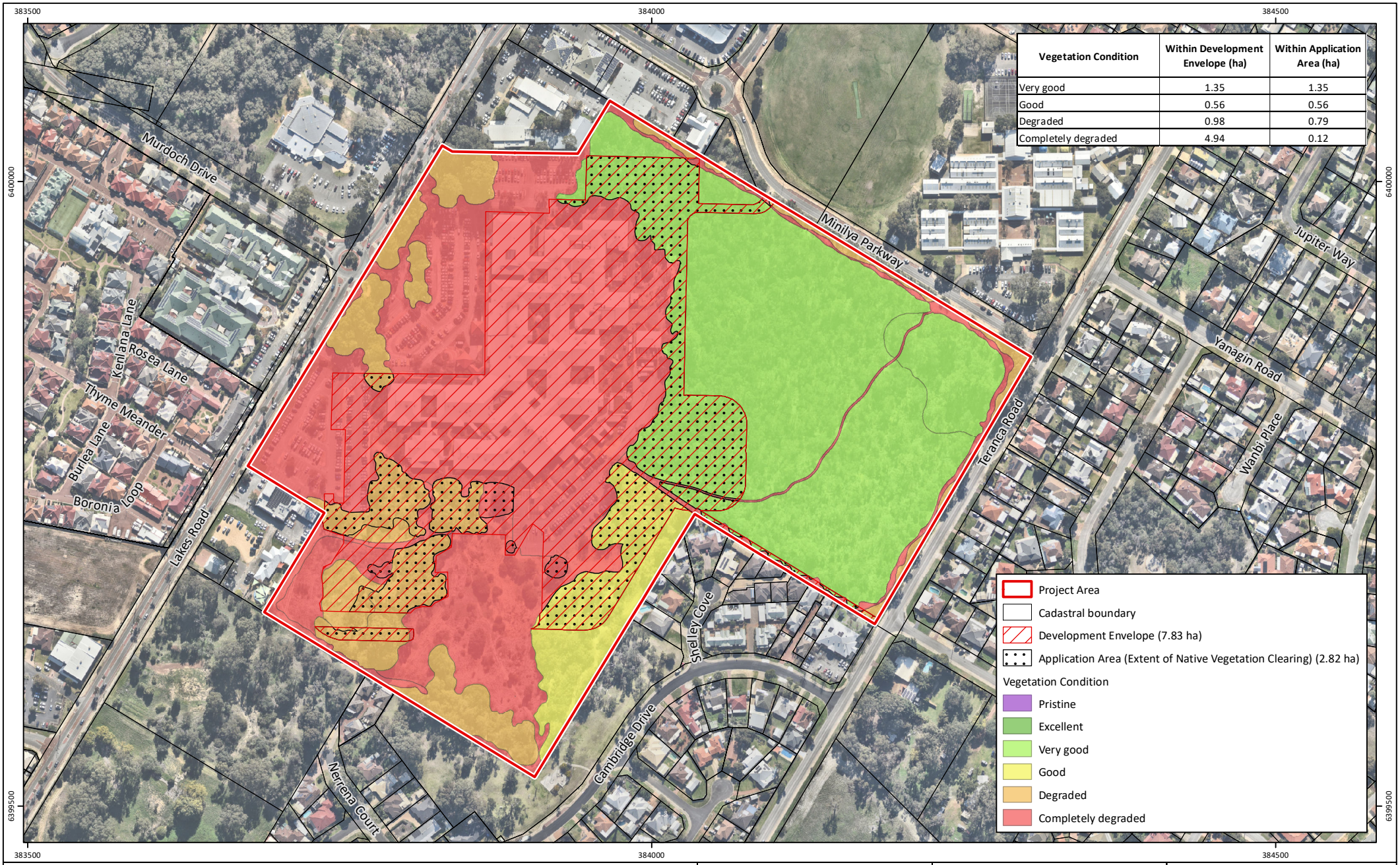
N

0 50 100 150
Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES



Vegetation Condition	Within Development Envelope (ha)	Within Application Area (ha)
Very good	1.35	1.35
Good	0.56	0.56
Degraded	0.98	0.79
Completely degraded	4.94	0.12

Figure 5: Vegetation Condition

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F51a
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 26/03/2025

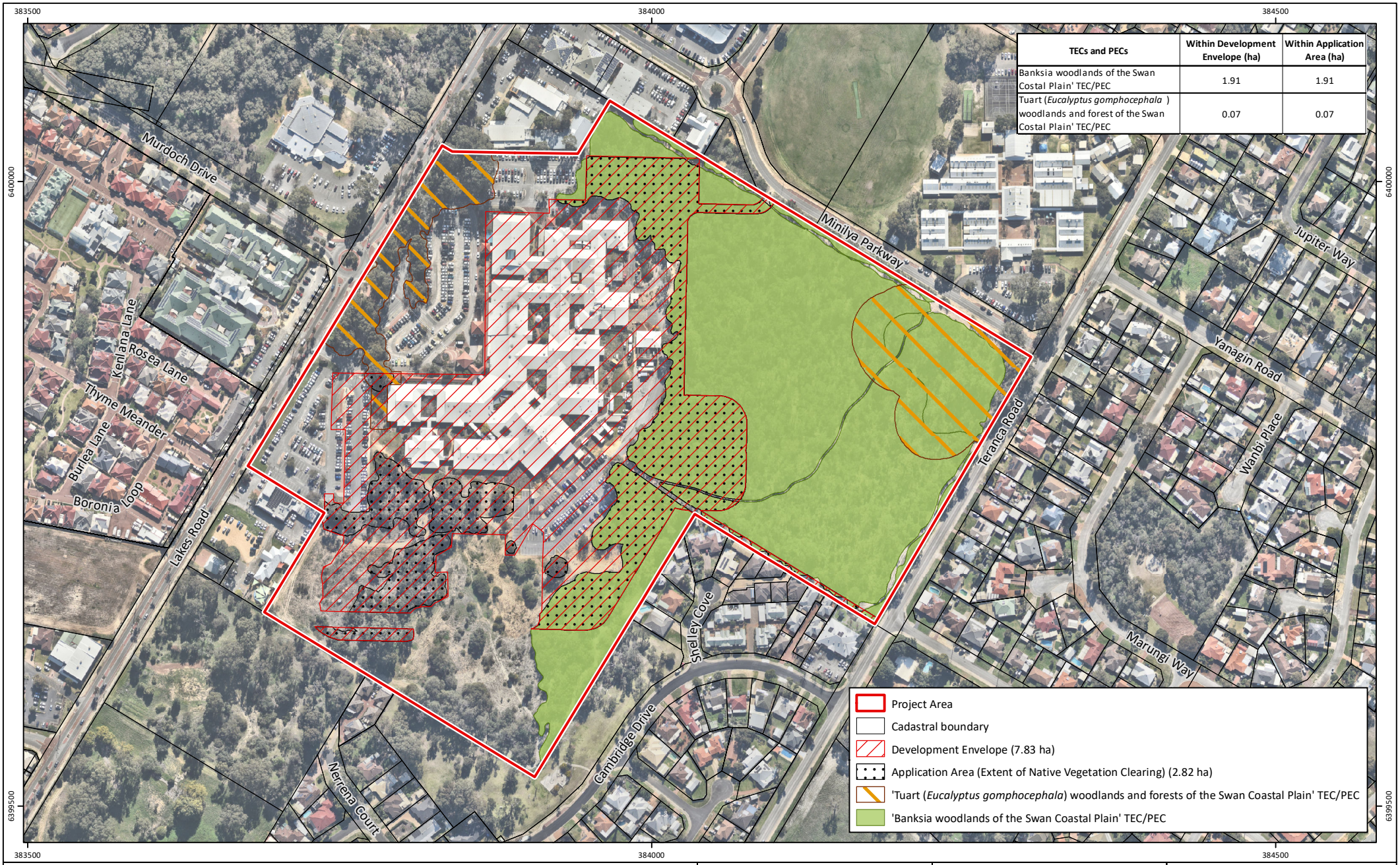
N

0 50 100 150
Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES



TECs and PECs	Within Development Envelope (ha)	Within Application Area (ha)
Banksia woodlands of the Swan Costal Plain' TEC/PEC	1.91	1.91
Tuart (*Eucalyptus gomphocephala*) woodlands and forest of the Swan Costal Plain' TEC/PEC	0.07	0.07

Figure 6: Threatened and Priory Ecological Communities

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F52a
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 26/03/2025

N

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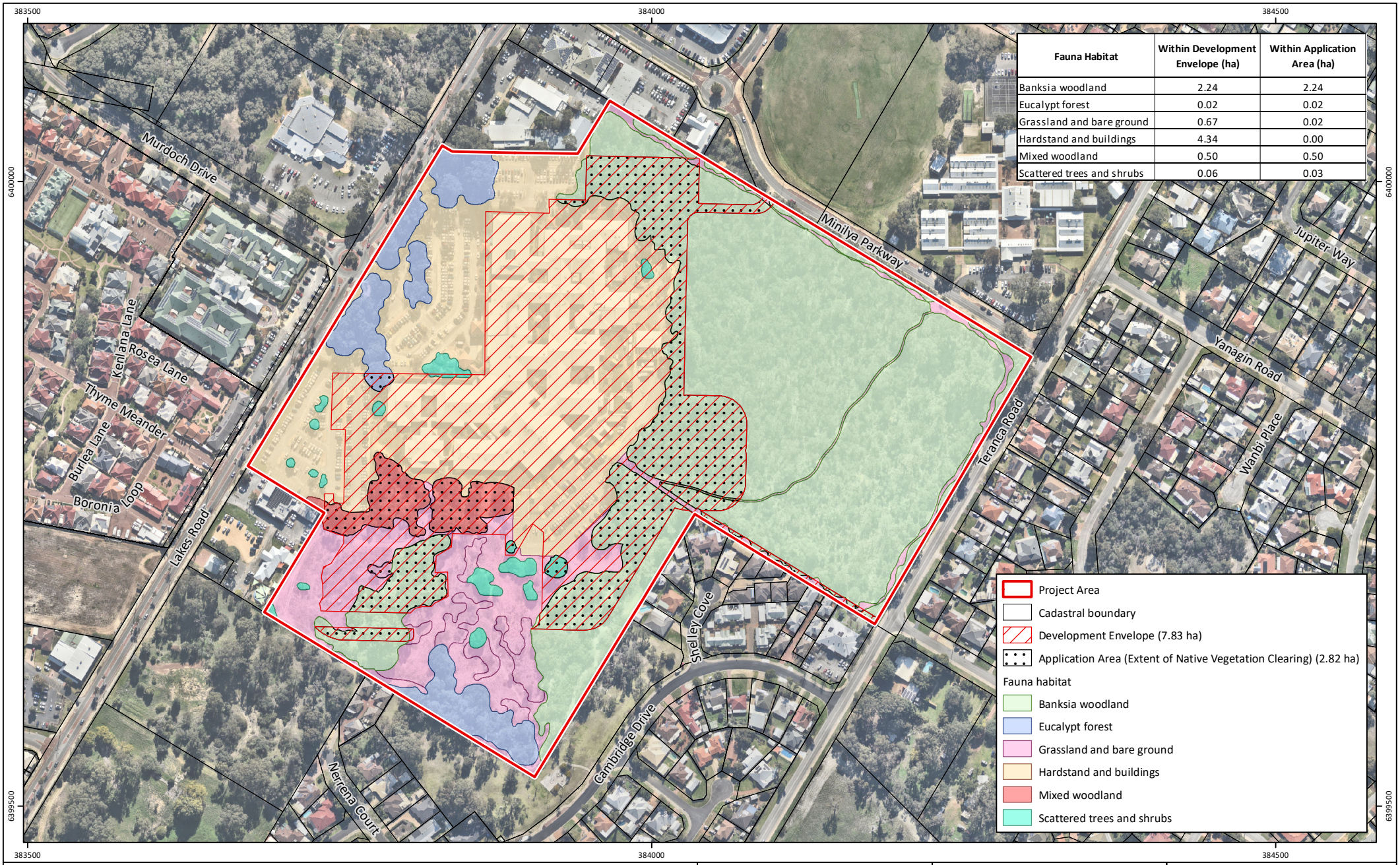
Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES



Fauna Habitat	Within Development Envelope (ha)	Within Application Area (ha)
Banksia woodland	2.24	2.24
Eucalypt forest	0.02	0.02
Grassland and bare ground	0.67	0.02
Hardstand and buildings	4.34	0.00
Mixed woodland	0.50	0.50
Scattered trees and shrubs	0.06	0.03

Figure 7: Fauna Habitat

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F53a
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 26/03/2025

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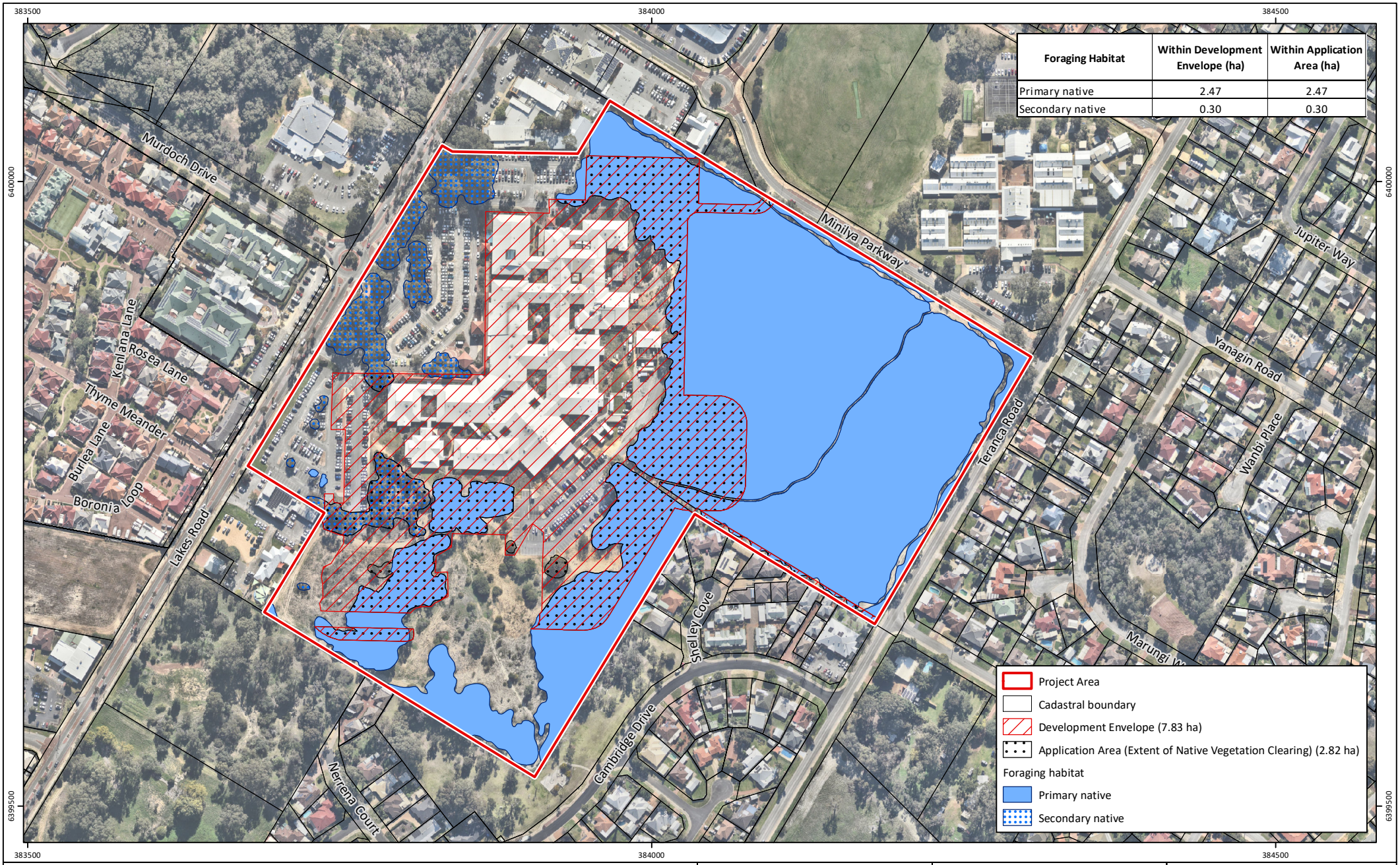
Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES



Foraging Habitat	Within Development Envelope (ha)	Within Application Area (ha)
Primary native	2.47	2.47
Secondary native	0.30	0.30

Figure 8: Carnaby's Black Cockatoo Foraging Habitat

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F54a
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 26/03/2025

N

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Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

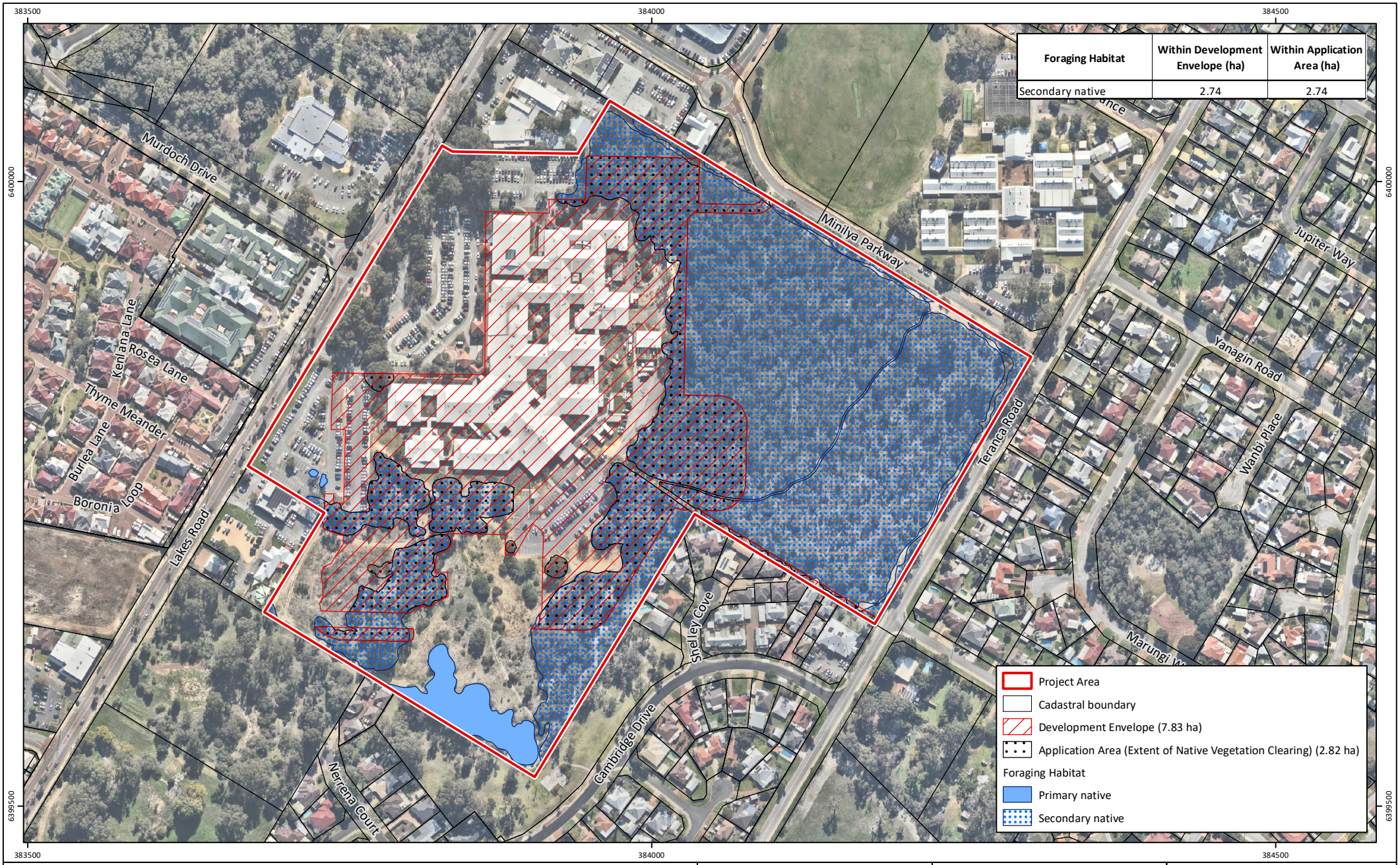

Figure 9: Baudin's Black Cockatoo Foraging Habitat

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F55a

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	26/03/2025

N

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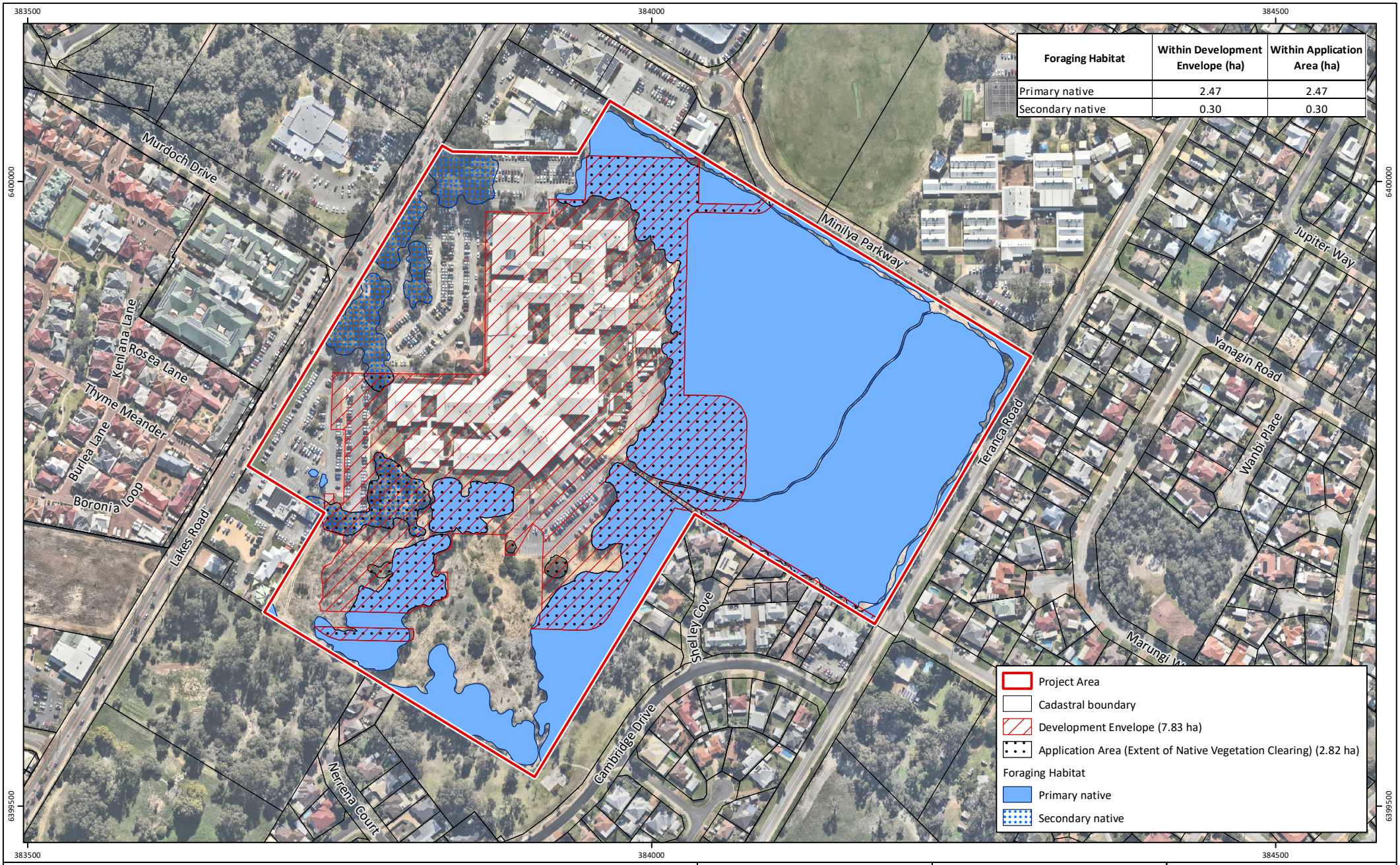
Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES



Foraging Habitat	Within Development Envelope (ha)	Within Application Area (ha)
Primary native	2.47	2.47
Secondary native	0.30	0.30

Figure 10: Forest Red-tailed Black Cockatoo Foraging Habitat

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F56a
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 26/03/2025

N

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Metres
Scale: 1:4,000@A4
GDA2020 MGA Zone 50

emerge ASSOCIATES

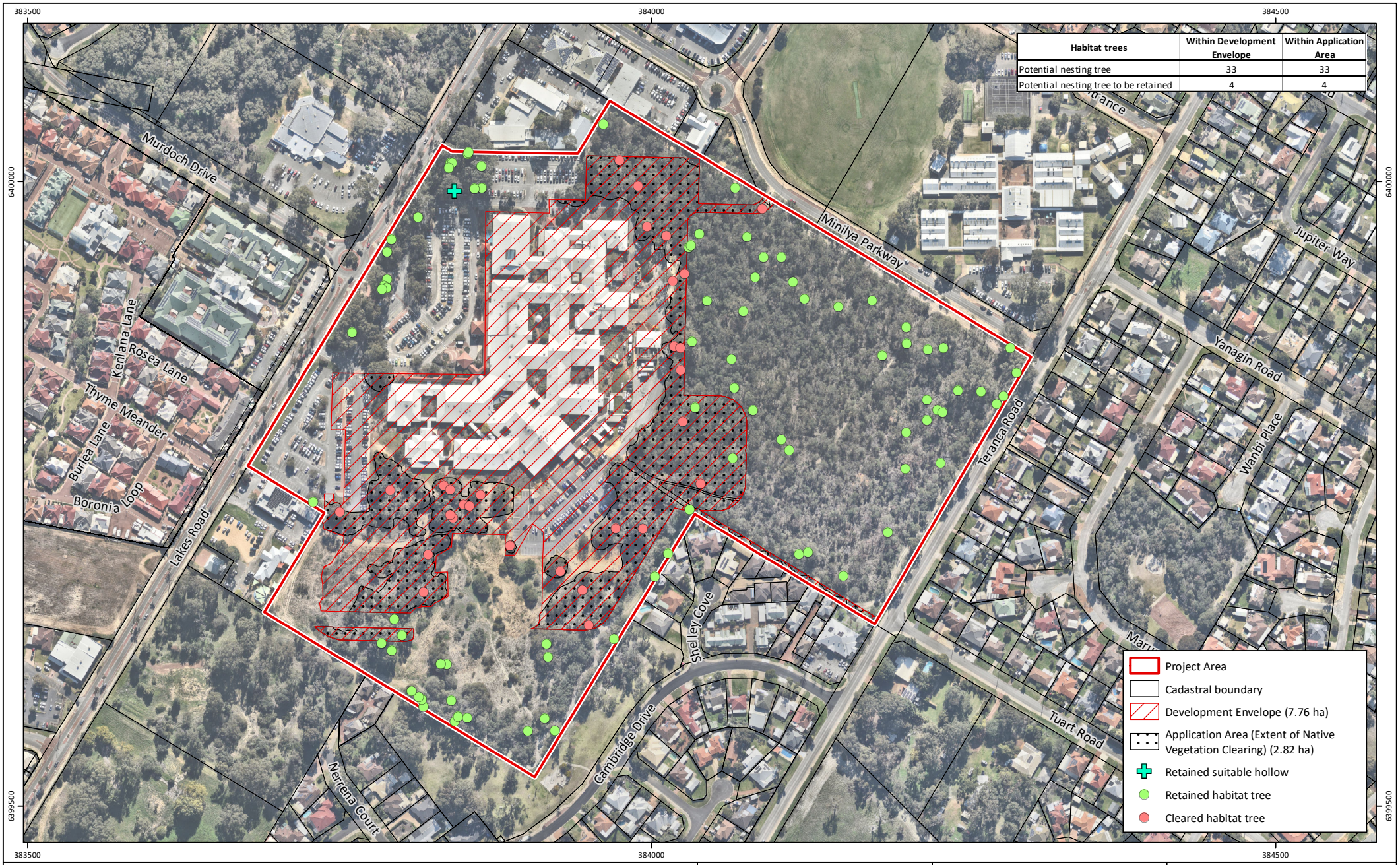

Figure 11: Black Cockatoo Habitat Trees

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F57a

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	26/03/2025

N

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Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

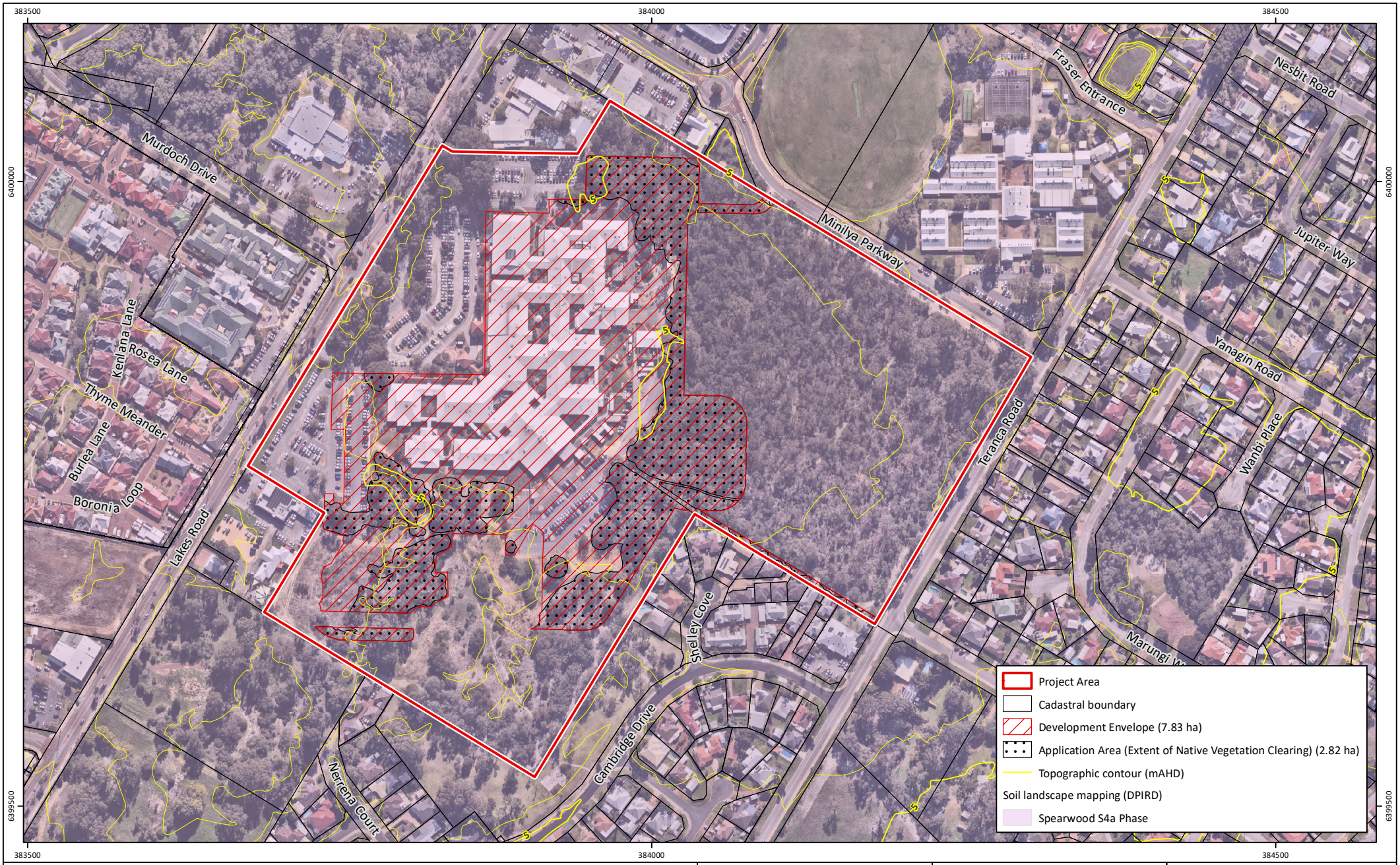

Figure 12: Soils and Topography

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F58a

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	26/03/2025

N

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Metres

Scale: 1:4,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

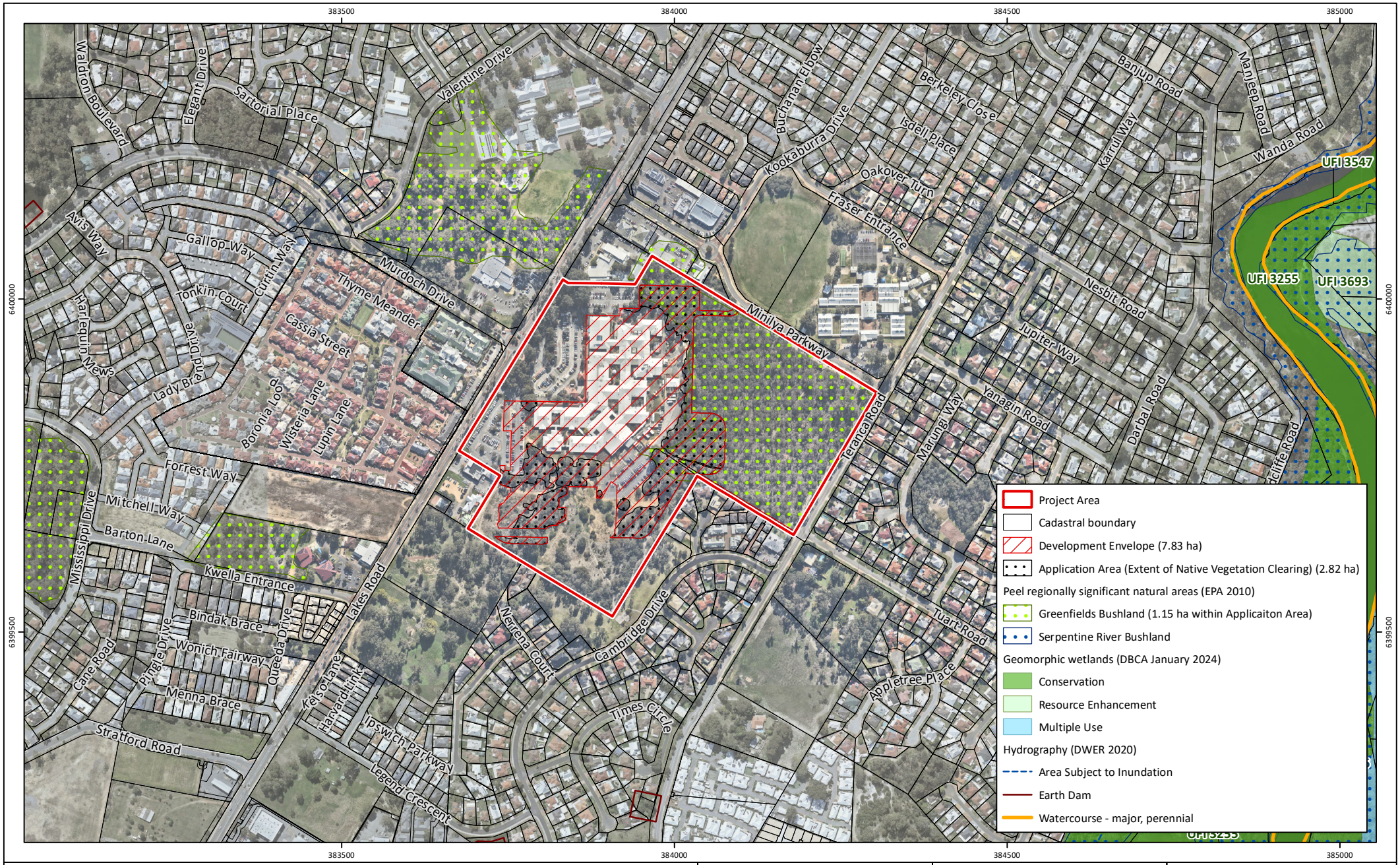

Figure 13: Hydrography and Environmental Features

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F59a

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	26/03/2025

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Scale: 1:7,500@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

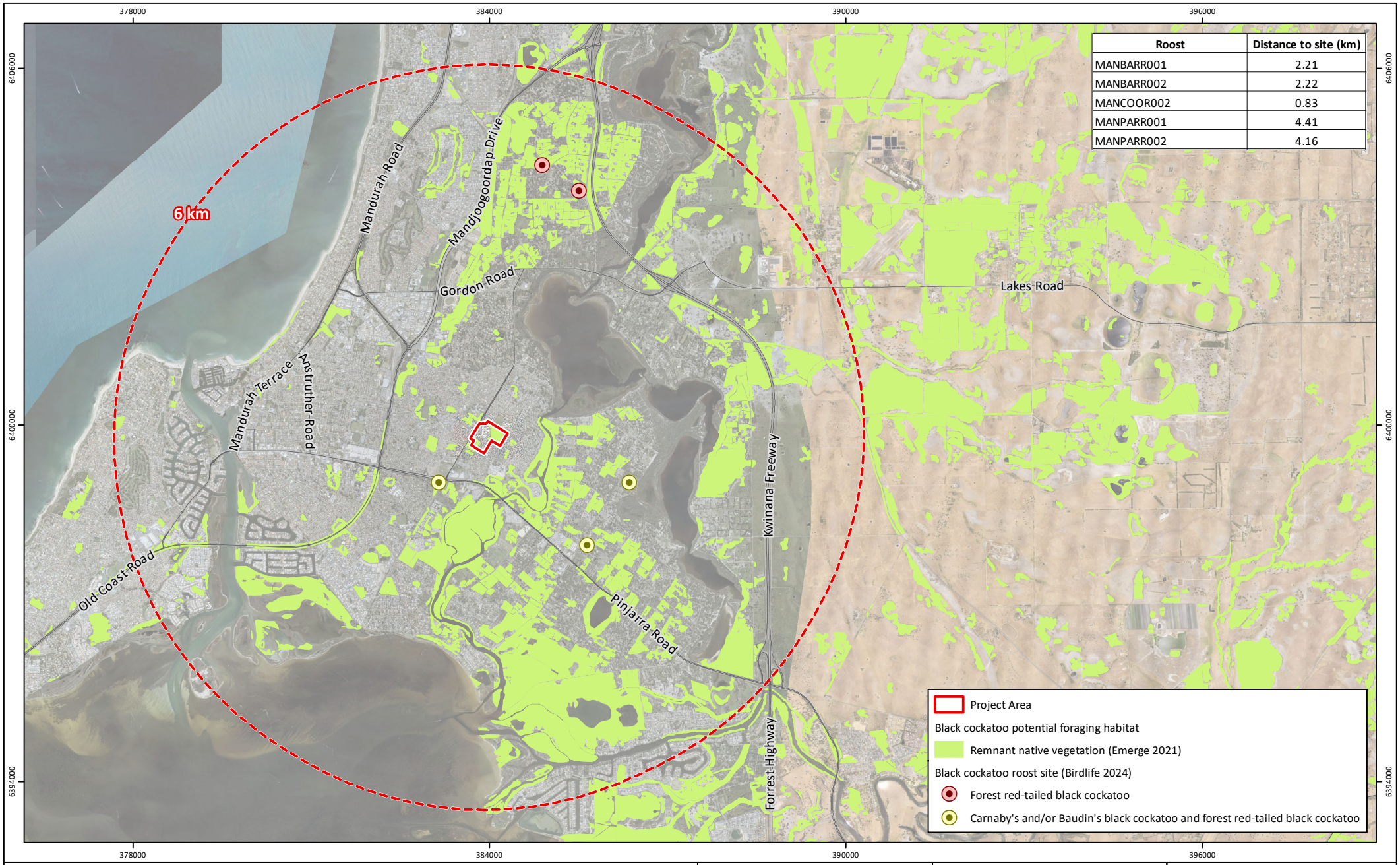

Figure 14: Black Cockatoo Foraging Habitat Local Context

Project: Clearing Permit Application
Peel Health Campus Expansion
Client: Department of Finance

Plan Number:
EP24-094(06)--F60
Drawn: GAR
Date: 17/01/2025
Checked: JDH
Approved: JDH
Date: 21/03/2025

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Kilometers
Scale: 1:84,000@A4
GDA 2020 MGA Zone 50

emerge ASSOCIATES

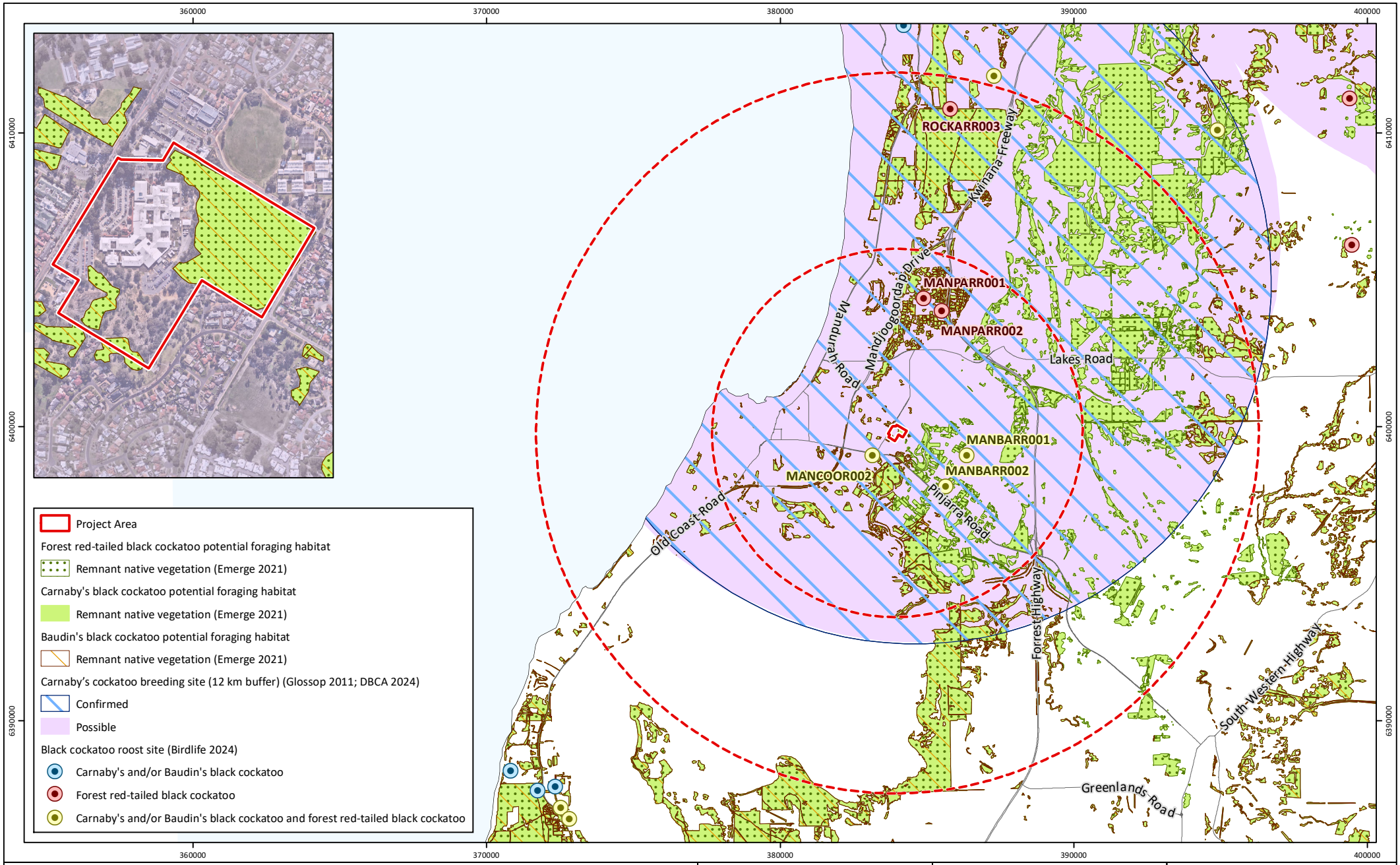

Figure 15: Black Cockatoo Habitat Context

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F61

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	21/03/2025

N

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Kilometers

Scale: 1:170,000@A4

GDA 2020 MGA Zone 50

emerge ASSOCIATES

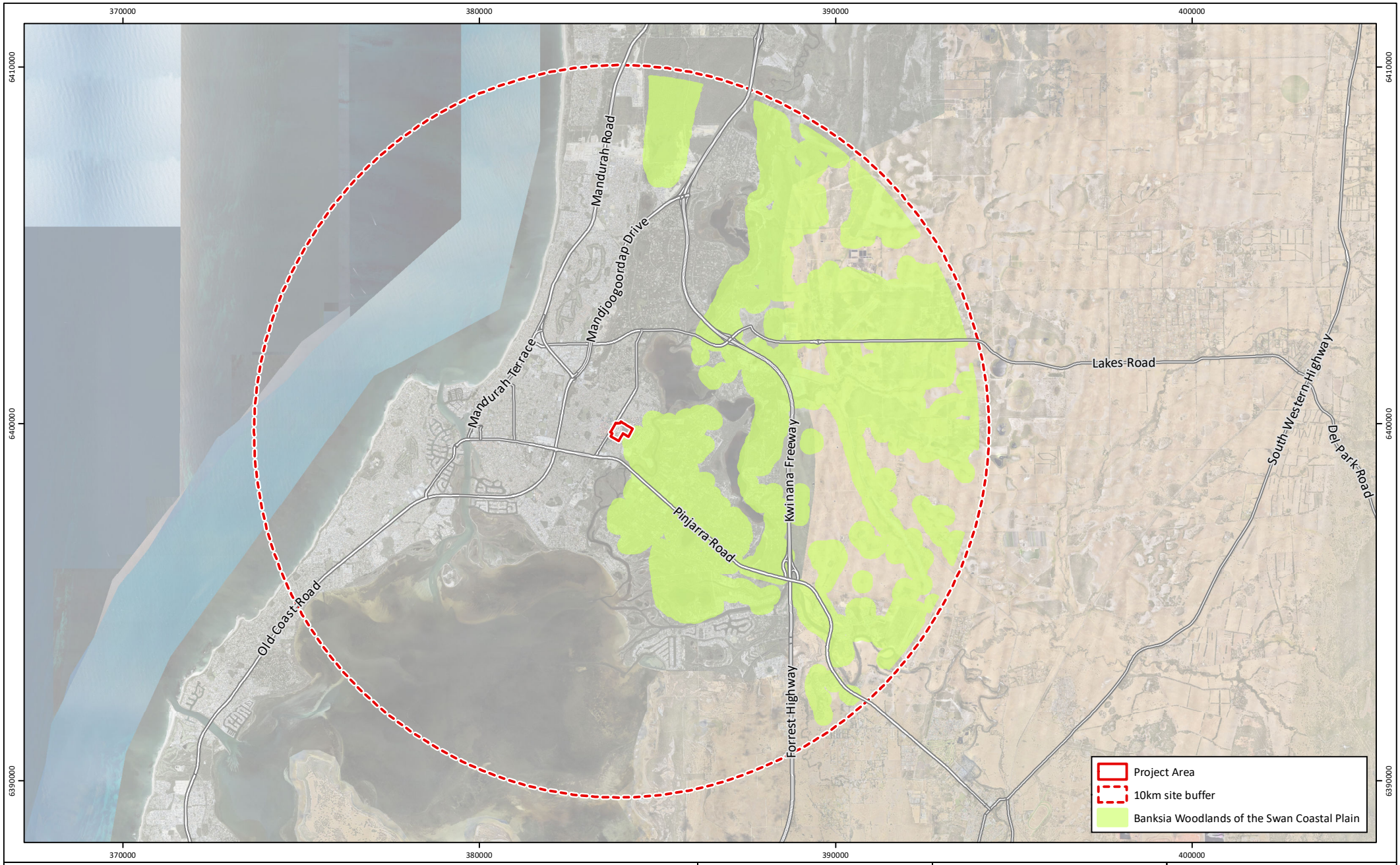

Figure 16: Known Distribution of Banksia Woodlands PEC

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F62

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	21/03/2025

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Scale: 1:140,000@A4

GDA2020 MGA Zone 50

emerge ASSOCIATES

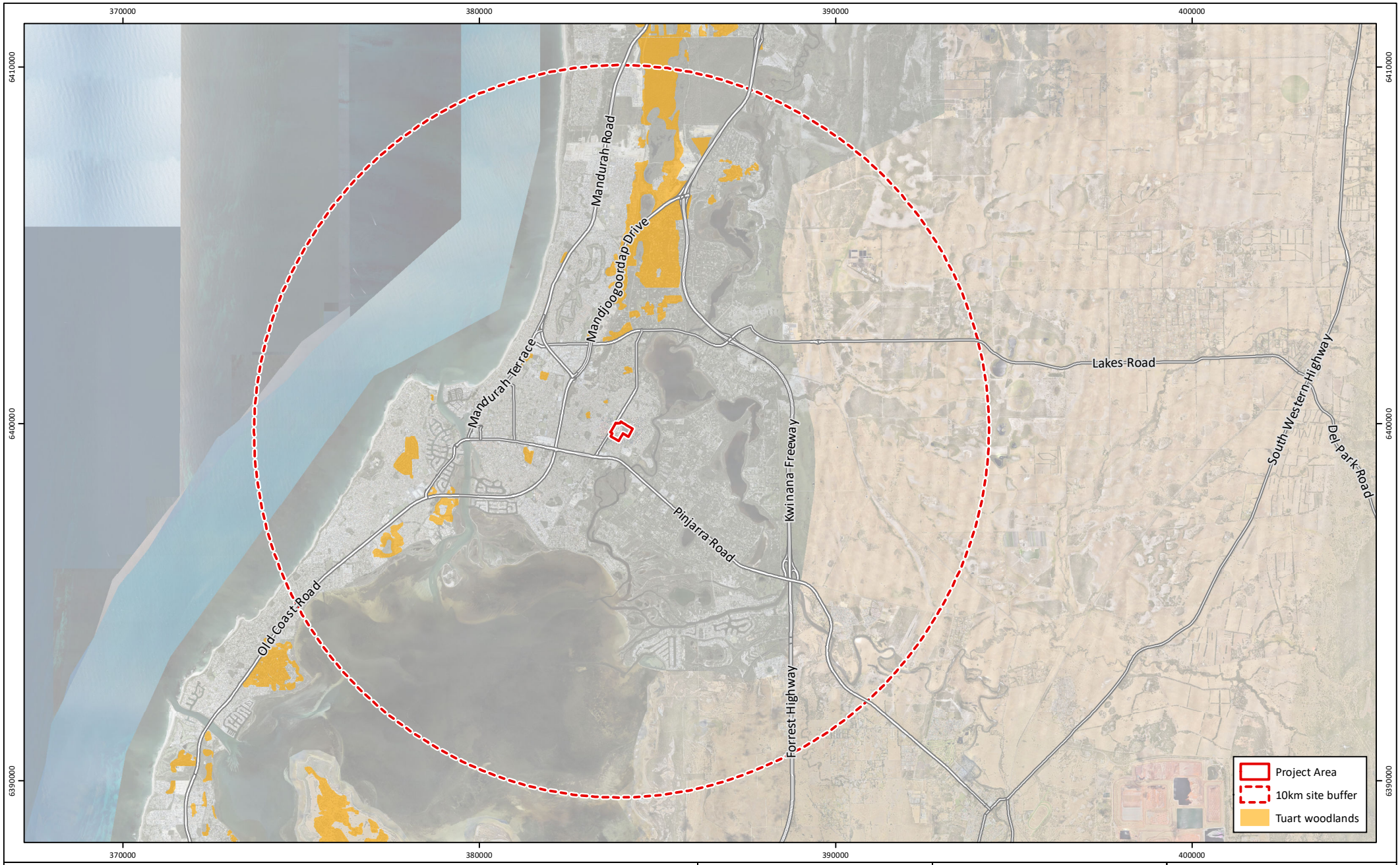

Figure 17: Known Distribution of Tuart Woodlands PEC

Project:	Clearing Permit Application Peel Health Campus Expansion
Client:	Department of Finance

Plan Number:
EP24-094(06)--F63

Drawn:	GAR
Date:	17/01/2025
Checked:	JDH
Approved:	JDH
Date:	21/03/2025

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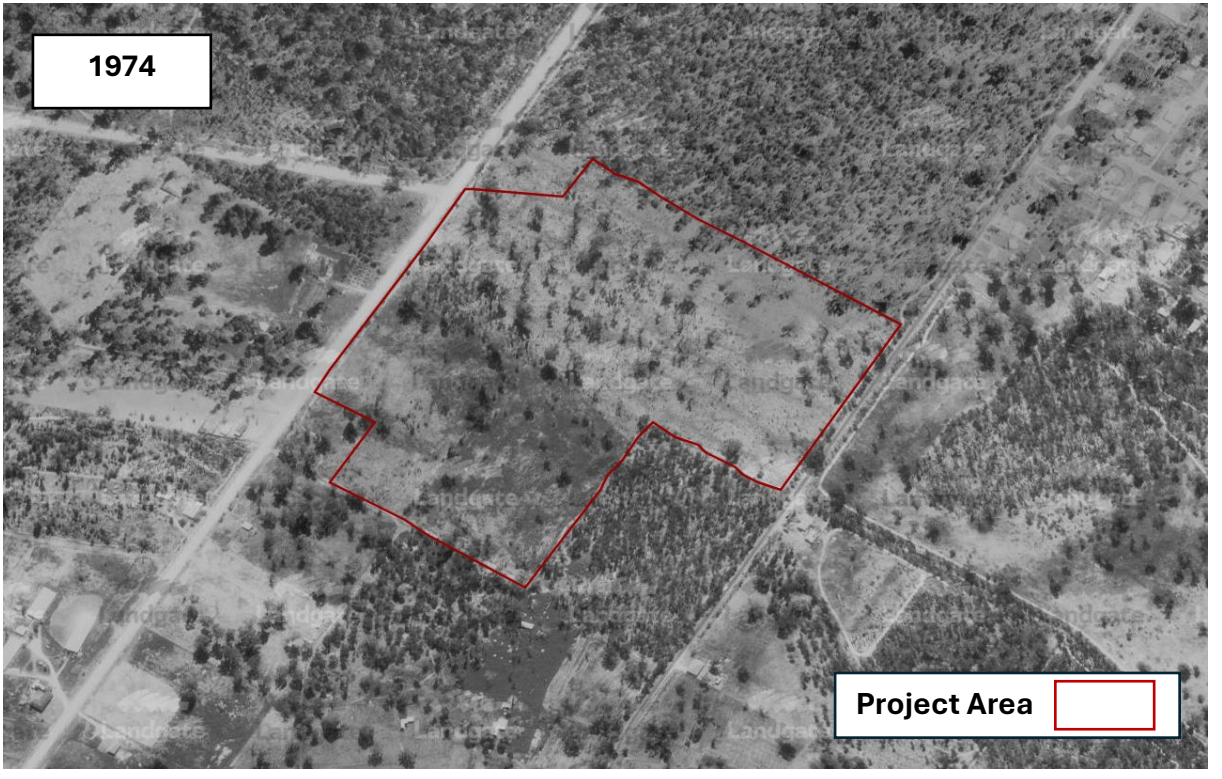
Kilometers

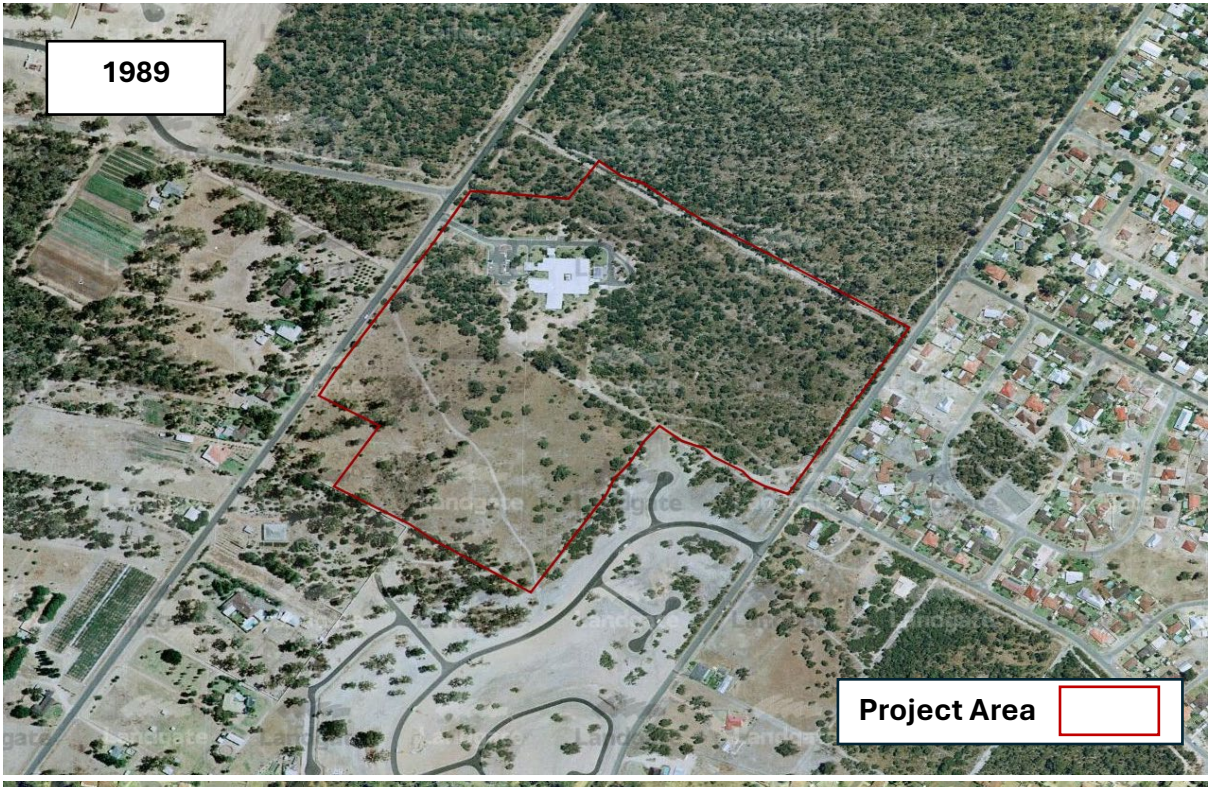
Scale: 1:140,000@A4

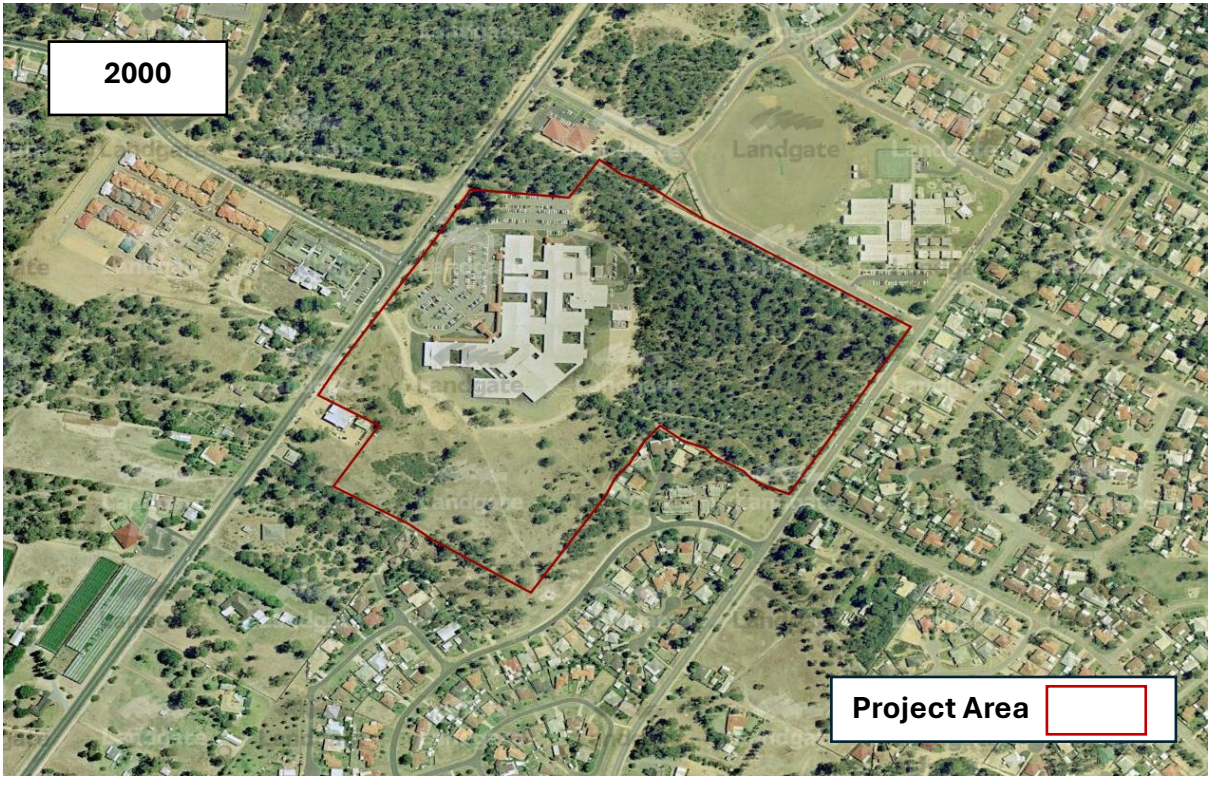
GDA2020 MGA Zone 50

emerge ASSOCIATES

Peel Health Campus - Historical Aerial Imagery (Landgate 2024)




1989
Project Area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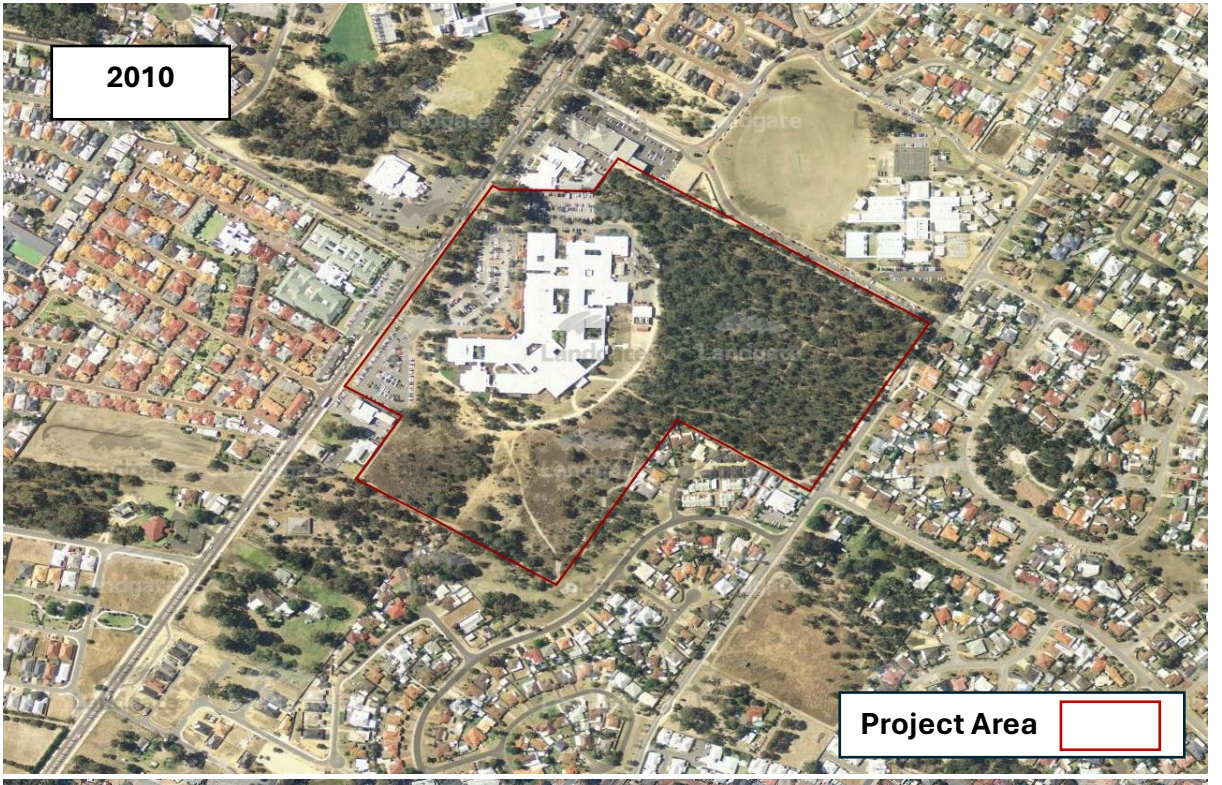
2010
Project Area


2024
Project Area