Native Vegetation Clearing Permit Application

Supporting Information

Wellard Road and Henley Boulevard, Wellard – New Roundabout Construction

5 June 2025

1. Background

The City of Kwinana is currently completing a range of Black Spot road projects within the area of Wellard to improve road safety and enhance transport efficiency on the local road network. The Wellard Road-Henley Boulevard intersection was identified in 2022-2023 as requiring improvement works to assist with the movement of traffic in and out of the Wellard area, due to increasing vehicle pressure from surrounding residential development and associated infrastructure (e.g. schools). The current intersection is a 'T' junction, which experiences severe delays and vehicle standing during peak periods (e.g. at the end of school days when vehicles in the area are increased as parents and caregivers congregate near the intersection to pick children up from school).

The City of Kwinana has engaged contractors to develop a detailed design for a roundabout at the intersection to alleviate traffic issues and concerns at this intersection. The design draft indicates that eleven (11) native trees require removal for the roundabout construction. This clearing application seeks approval for the removal of these 11 trees for the proposed works.

2. Proposal description

2.1. Proposal location

The location of the proposed clearing is within the suburb of Wellard, located 37km south of Perth Central Business District (CBD) at the intersection of Wellard Road and Henley Boulevard. The project is located within the City of Kwinana Local Government Area, within an existing urban area. The area proposed to be impacted is surrounded by existing and expanding residential premises to the north, an independent K-Year 12 school to the east and a main distributor road to the west. The road reserve also abuts the Henley Reserve (Reserve 50531) vested with the City of Kwinana for public recreation. The location of the proposed clearing in its local context is approximately shown in Figure 1.

Figure 1: Location of proposed works within local context (shown in red) (Nearmaps, 2024)

2.2. Proposed clearing

In preparing a detailed design for the intersection upgrade, tree retention has been considered as a high priority to retain the natural features of the area and significant trees. Unfortunately, the roundabout design identifies the need to remove eleven (11) trees from within the works area that cannot be avoided for the required roundabout construction and associated infrastructure. Three (3) of these trees are deceased.

The detailed design for the road construction is provided in Appendix 1 with an aerial overlay of the design works and the affected trees provided in Appendix 2. Further information about each individual tree requiring removal is provided in Section 3 of this report and the *Intersection of Henley Boulevard and Wellard Road, Wellard Preliminary Tree Report* (Arboribus, August 2024) attached to this application.

2.3 Land tenure, zoning and ownership

The clearing of the eleven identified trees will occur across three current cadastral lots:

1) Existing road reserve area of Henley Boulevard and Wellard Road
   Metropolitan Region Scheme (MRS) Zone: Urban
   Local Structure Plan (LSP): Wellard Village
   Henley Road: Sealed, Main roads, Local distributor
   Wellard Road: Sealed, Main roads, Distributor A
   Landowner: State of Western Australia, Management Order City of Kwinana

2) Lot 9500 on Plan 75385
   Landgate PIN: 12040637
   MRS Zone: Urban
   LSP: E26, Wellard Village, Future Investigation Area
   Landowner: State of Western Australia, DPLH, Management Order City of Kwinana

3) Lot 3001 on Deposited Plan 58626
   Landgate PIN: 11762758
   Reserve 50531 (Reserve for Recreation)
   MRS Zone: Urban
   LSP: Wellard Village
   Landowner: State of Western Australia, Management Order City of Kwinana
   Note: the portion of the reserve required for the road is currently being separated and changed to ‘road reserve’ with DPLH, from the ‘recreation’ land use. Refer to Appendix 3.

The location of the lots in the context of the area of works is shown in Figures 3, 4 and 5.

Figure 3: Area 1 (existing road reserve)

Figure 4: Area 2 (Lot 9500)

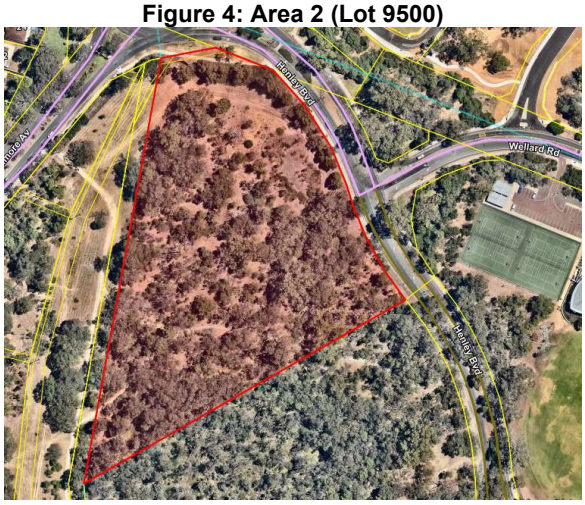


Figure 5: Area 3 (Reserve 50531)

3. Tree clearing proposal detail

The proposal is to clear eleven (11) native trees within an area of approximately 0.6ha within and adjacent to the existing road reserve at the intersection of Wellard Road and Henley Boulevard, Wellard. These trees have been identified as requiring removal to accommodate the detailed design prepared for the new roundabout construction and associated infrastructure. Of these eleven trees, three are deceased (A00520, A00538 and A00546). Photographs of each tree are provided herein. Additional detail of each tree can be found in the Arboribus Consulting report *Intersection of Henley Bvd & Wellard Rd, Wellard Preliminary Tree Report* (August 2024), attached to this application.

The eleven trees identified for removal have been tagged by the Consulting Arborist and are identified by the following numbers:

- Tree 519 – *Corymbia calophylla* (Marri)
- Tree 520 – *Eucalyptus marginata* (Jarrah) (dead)
- Tree 521 – *Corymbia calophylla* (Marri)
- Tree 522 – *Corymbia calophylla* (Marri)
- Tree 523 – *Brachychiton populneus* (Kurrajong)
- Tree 524 – *Corymbia calophylla* (Marri)
- Tree 525 – *Brachychiton acerifolius* (Illawara Flame Tree)(planted)
- Tree 538 - *Eucalyptus marginata* (Jarrah) (dead)
- Tree 546 - *Eucalyptus marginata* (Jarrah) (dead)
- Tree 552 – *Eucalyptus gomphocephala* (Tuart)
- Tree 553 - *Eucalyptus marginata* (Jarrah)

3.1 Individual tree detail

Tree 1: A00519

Corymbia calophylla (Marri)

This specimen is approximately 13m high with a diameter at breast height of 0.44m. The overall health of the tree is poor with the tree health appearing to be in a state of decline. No hollows visible.

Tree 2: A00520

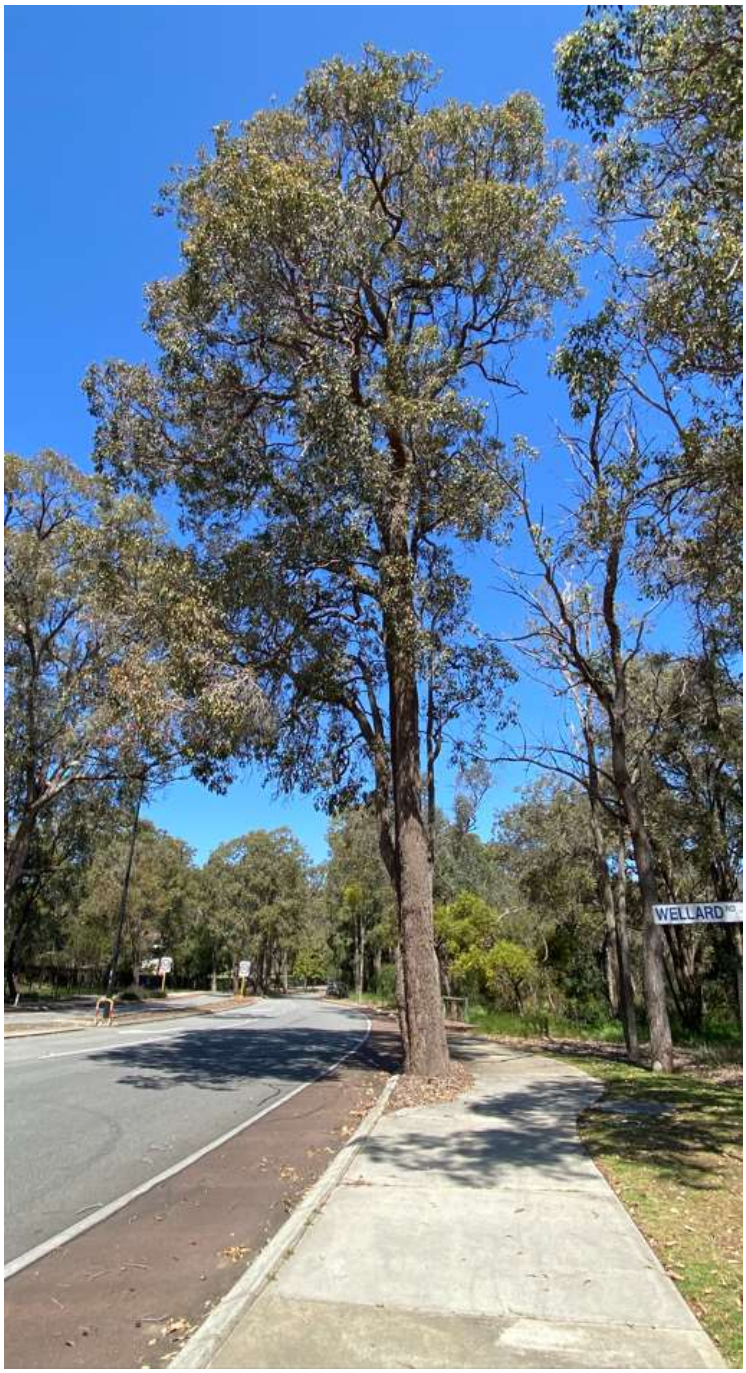
Eucalyptus marginata (Jarrah)

This specimen is approximately 13 metres in height. However, the tree is dead and shows no signs of regeneration. No hollows visible.

Tree 3: A00521

Corymbia calophylla (Marri)

This specimen is approximately 20 metres in height and in good health. The diameter at breast height is 0.94m. No hollows visible.



Tree 4: A00522

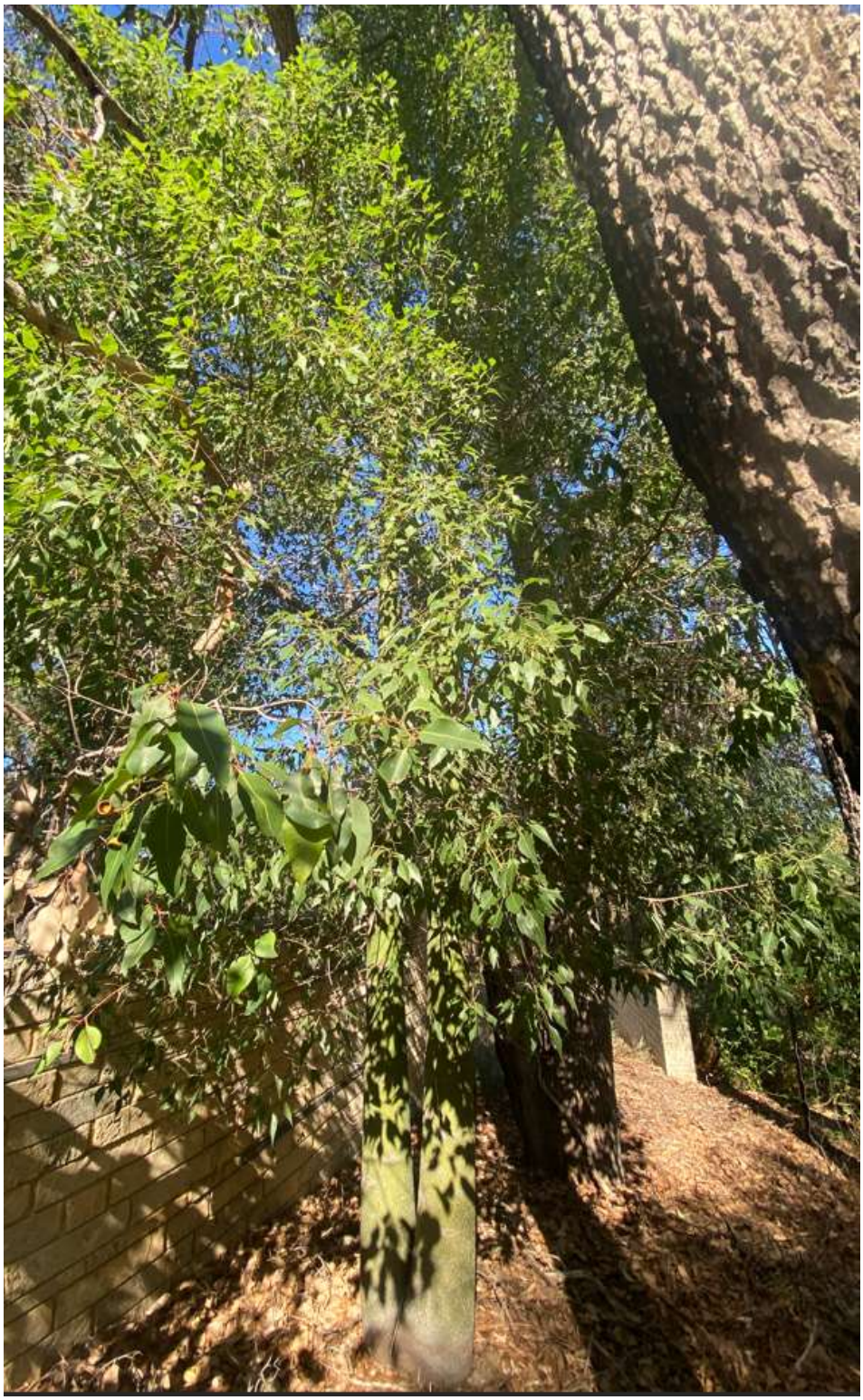
Corymbia calophylla (Marri)

This specimen comprises two trunks, is approximately 20 metres in height and in reasonable health. The diameter at breast height is 0.61m. No hollows visible.

Tree 5: A00523

Brachychiton populneus (Kurrajong)

This specimen is approximately 9 metres in height and in good condition. The diameter at breast height is 0.40m.



Tree 6: A00524

Corymbia calophylla (Marri)

This specimen is approximately 11 metres in height and in good health. The diameter at breast height is 0.40m. No hollows visible.

Tree 7: A00525

Brachychiton acerifolius (Illawarra Flame Tree)

This specimen is approximately 10 metres in height and in good health. The diameter at breast height is 0.35m.

Tree 8: A00538

Eucalyptus marginata (Jarrah)

This specimen is approximately 3m in height. However, the tree is dead and shows no signs of regeneration.

Tree 9: A00546

Eucalyptus marginata (Jarrah)

This specimen is approximately 10 metres in height. However, the tree is dead and shows no signs of regeneration.

Tree 10: A00552

Eucalyptus gomphocephala (Tuart)

This specimen is approximately 22m high, is in good overall health with a maximum diameter trunk of 1.7m (two stemmed).

Tree 11: A00553

Eucalyptus marginata (Jarrah)

This specimen is approximately 8m in height and is in poor condition with evidence of canopy decline. No hollows visible.

4. Avoidance, Impacts and Mitigation

4.1. Avoidance

Tree and biodiversity retention is at the forefront of the City of Kwinana's work and programs. The City of Kwinana's Strategic Community Plan 2021-2031 identifies the City's vision as being 'A unique and liveable City, celebrated for and connected by its diverse community, natural beauty and economic opportunities'. Our strategic outcomes and objectives focus on enhancing and protecting the City's natural environment, to 'Retain and improve our streetscapes and open spaces, preserving the trees and greenery that makes Kwinana unique'.

To achieve our strategic goal, the clearing proposed for the intersection upgrade is only what is absolutely necessary to accommodate the roundabout and associated relocated infrastructure. This is demonstrated in the Design Detail of the project (shown in Appendix 1), which shows the 11 trees sought for removal, and the location of all remaining trees in the project area.

4.2. Impacts

The proposed clearing is located within a highly modified urban environment and current road reserve area. On review of the site's environmental assets through a desktop survey and assessment against the clearing principles, the primary potential impact is to local fauna populations. Specifically, the loss of individual trees that provide suitable foraging habitat for the City's Black Cockatoo populations.

Henley Reserve has been identified as a known foraging and roosting location for Carnaby's Black Cockatoos (*Zanda latirostris*) (Threatened) (Murdoch University, 2024). Forest Red Tailed Black Cockatoos (FRTBC) (*Calytporrhynchus banksii naso*) are also likely to use the local area and greater Henley Reserve for foraging and perching due to the presence of suitable habitat trees.

Whilst the clearing is limited to individual trees and the works are within a road reserve and subject to high vehicle traffic, any loss of potential foraging and roosting trees should be avoided or mitigated to prevent further habitat decline for these vulnerable species.

Ground dwelling fauna such as the Southern Brown Bandicoot (*Isoodon obesulus fusciventer*) (Priority 4) and reptiles are unlikely to be utilising the area due to a lack of suitable habitat and high volume of traffic on the existing road network.

Clearing for the road construction is currently anticipated to occur over the summer school holidays, to reduce the impact on local traffic. Due to the timing of the clearing, it is highly unlikely that fauna will be impacted during the clearing works.

4.3. Mitigation

A recent weed and condition survey of Henley Reserve undertaken on behalf of the City (Emerge, 2022) shows that the current condition of the reserve is predominantly in a degraded condition with high levels of weed infestation (see Appendix 4).

The City has some funding available for revegetation and weed management within the Reserve that can be used to provide an offset for the clearing proposed, pending further advice from the Department during the assessment of this clearing permit application.

5. Assessment of the proposal against the Clearing principles

The clearing proposed for the construction of the Wellard Road and Henley Boulevard roundabout construction has been assessed against the ten clearing principles in Table 1.

Table 1: Assessment of the proposal against the ten clearing principles

Clearing principle	Detail	Assessment	Outcome
Native vegetation should not be cleared if it comprises a high level of biological diversity.	The proposal is to clear eleven trees (including 3 deceased), comprising of four species - Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree). The area is parkland cleared. No remnant middle or understorey specimens are present, apart from planted landscaping specimens of *Dianella revoluta* (Flax Lily).	The clearing of eleven individual trees, comprising of four species, does not constitute an area of high biological diversity.	The proposed clearing is not at variance to this principle.
Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	The proposal is to clear eleven trees (3 deceased), comprising of Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree). The area is parkland cleared. No remnant middle or understorey specimens are present, apart from planted landscaping specimens of *Dianella revoluta* (Flax Lily).	No rare flora are recorded within the project area, which comprises of a highly modified road reserve.	The proposed clearing is not at variance to this principle.

Clearing principle	Detail	Assessment	Outcome
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.	The trees proposed to be cleared are located within and adjacent to an existing road reserve. Seven (7) of the trees requiring clearing for the works are located within the current Henley Reserve (Reserve 50531) boundary or current road verge abutting Henley Reserve. As part of the proposed works, the area of land required for the road works will be changed from a 'Parks and recreation land use' to a 'road reserve' land use.	The proposal is to clear 11 trees within and adjacent to, a current road reserve. Of the 11 trees to be cleared, 6 trees are Jarrah, Marri or Tuart that provide some local foraging habitat to local Black Cockatoo (Carnaby's and Forest Red Tailed) populations. Five of these potential foraging trees are located on the southern side of Henley Road abutting the Henley Reserve. Henley Reserve is a known local foraging and roost site for Black Cockatoos with the entire reserve providing suitable foraging trees (Tuart, Marri, Jarrah and Banksia) and recorded roosting areas within the central and southern portion of the reserve (Murdoch University, 2024). The reserve is approximately 28ha in size and provides a north-south bushland corridor and ecological linkage through the suburb of Wellard. Whilst individual trees affected by the proposal along the boundary of the Henley Reserve are suitable for foraging by Black Cockatoos, the trees are not considered to be necessary for maintaining the foraging and roosting value of the larger Henley Reserve area. In addition, no hollows have been observed within the identified trees. However, noting the clearing proposed includes suitable foraging trees for local Black Cockatoo populations, the proposal may be at variance to this principle.	The proposed clearing may be at variance to this principle.

Clearing principle	Detail	Assessment	Outcome
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	The proposal is to clear eleven trees (3 deceased), comprising of Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree). The area is parkland cleared. No remnant middle or understorey specimens are present, apart from planted landscaping specimens of *Dianella revoluta* (Flax Lily).	The area of the proposed works is associated with the buffer of critically endangered TEC, Tuart woodlands of the Swan Coastal Plain. One large Tuart forms part of the proposed clearing for the roundabout construction. However, this tree is located on the northeastern verge of the existing road reserve in a modified road reserve setting (surrounded by planted landscaping specimens and a footpath). Therefore, the removal of this specimen is not considered to be representative of, or necessary for the maintenance of, the Tuart woodlands of the Swan Coastal Plain TEC.	The proposed clearing is not at variance to this principle.
Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland	The proposal is to clear eleven trees (3 deceased), comprising of four species, Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree). The only understorey being cleared comprises several landscaping planted *Dianella revoluta* (Flax Lily).	Of the 11 trees proposed to be cleared, seven (7) occur along the boundary of Henley Reserve (Bushland) within or adjacent to the current road reserve. Henley Reserve comprises a Resource Enhancement Wetland area, which at its closest mapped point to the proposal area is approximately 180m to the south of the proposal. The proposed trees to be cleared are located outside the mapped REW and buffer area (50m). There are no mapped watercourses within the proposal area. None of the trees proposed to be cleared are wetland dependent. Given their distance to the mapped REW and the depth to groundwater within the project area, the trees are not considered to be growing in, or in association with, a watercourse or wetland.	The proposal is not at variance to this principle.

Clearing principle	Detail	Assessment	Outcome
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 proposal is to clear eleven trees (3 deceased), comprising of four species, Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree). The only understorey being cleared comprises several landscape planted *Dianella revoluta* (Flax Lily).	The area of the proposed works is associated with the following Pre-European vegetation communities: Pre-European Vegetation Complex (Heddle et al, 1980): Cottesloe Central and South, described as a 'Mosaic of woodland of *Eucalyptus gomphocephala* (Tuart) and open forest of *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) – *Corymbia calophylla* (Marri); closed heath on the Limestone outcrops'. The most recent figures available to the City indicate that approx. 32.16% of this vegetation complex remains on the Swan Coastal Plain, and approximately 33.51% pf this vegetation complex remains within the City of Kwinana. Pre-European Vegetation Complex (Beard, 1990): Spearwood Complex 998, described as 'Medium woodland, Tuart'. The City's most recent data indicates that approximately 36.35% of the Pre-European extent of this vegetation community remains on the Swan Coastal Plain, with 34.34% remaining within the City of Kwinana. Whilst the vegetation proposed to be cleared occurs within an extensively cleared urban area, the majority of the 11 trees proposed to be cleared are not considered to be representative of the Pre-European vegetation communities identified.	The proposal is not likely to be at variance to this principle.

Clearing principle	Detail	Assessment	Outcome
Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation	The proposal is to clear eleven trees (3 deceased), comprising of Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree) within an adjacent to an existing road reserve.	The soils associated with the area proposed to be cleared are those of the Spearwood Dune soil system, described as 'yellow deep sands, pale deep sands and yellow/brown shallow sands' (DataWA Soil Landscape Mapping – Systems, DPIRD-064). There is no known ASS risk within the proposal area (City of Kwinana, Intramaps). Given the small area of clearing proposed (11 individual trees across 0.6ha) and the nature of the works involved for the road construction, the proposed clearing is not considered likely to lead to land degradation at a local or regional scale.	The proposed clearing is not at variance to this 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	The proposal is to clear 11 trees, of which seven (7) occur along the boundary of local conservation area Henley Reserve (Bushland).	Seven trees subject to this application occur within the existing road reserve along the boundary of the Henley Reserve (Reserve 50531). Henley Reserve is approximately 28ha in size and provides a north-south bushland corridor and ecological linkage through the suburb of Wellard. As the trees proposed to be cleared are within the existing road reserve and are already delineated from Henley Reserve by a fenceline and firebreak, the proposed clearing is not considered likely to have an impact on the values of Henley Reserve.	The proposal is not at variance to this principle.

Clearing principle	Detail	Assessment	Outcome
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 proposal is to clear eleven trees (3 deceased), comprising of Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree) within and adjacent to an existing road reserve.	The closest mapped water body to the proposal area is the Resource Enhancement Wetland (REW) mapped within Henley Reserve. The proposal is approximately 150m away from the boundary of this mapped REW, to the north. Maximum depth to groundwater across the project area is approximately 5-6m below ground level (DataWA, Maximum groundwater levels DWER-096, 27/5/25). The proposed clearing of 11 individual trees for the roundabout construction is not likely to impact the quality of surface water within the Henley Reserve REW. Given the depth to groundwater across the project area, the quality of groundwater is also not expected to be impacted from the removal of 11 trees for the road construction.	The proposal is not at variance to this principle.
Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding	The proposal is to clear eleven trees (3 deceased), comprising of Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), Tuart (*Eucalyptus gomphocephala*), *Brachychiton populneus* (Kurrajong) and *Brachychiton acerifolius* (Illawarra Flame Tree) within and adjacent to an existing road reserve.	Soils within the proposal area are mapped as 'Coastal sand dunes and calcarenite. Late Pleistocene to Recent age. Calcareous and siliceous sands and calcarenite. (Quindalup and Spearwood Systems) (DataWA, Soil landscape mapping zones, DPIRD 2017) These soils are free draining and not prone to flooding. Further, no flooding risk is identified within the proposal area. Given the small amount of clearing proposed, the incidence or intensity of flooding in the local area is not likely to change. Any additional run-off generated by the construction of the roundabout will be managed through existing roadside drainage infrastructure (drains and culverts).	The proposal is not at variance to this principle.

6. Conclusion

The City of Kwinana has assessed the proposed clearing area of 11 trees (over 0.6ha) within the project area against the ten clearing principles and has found that the clearing is unlikely to be at variance to the majority of the clearing principles.
However, the proposal does require the removal of 6 (six) potential foraging trees for local Black Cockatoos, and therefore the clearing proposal may be at variance to principle (b).

7. References

1. Arboribus Consulting (2024) *Intersection of Henley Boulevard and Wellard Road, Wellard Preliminary Tree Report.* Prepared for Porter Engineering.

2. Beard, J. S. (1990) Plant Life of Western Australia. Kangaroo Press, Kenthurst NSW.

3. City of Kwinana (2021) Strategic Community Plan 2021 – 2031. Unpublished document prepared by the City of Kwinana.

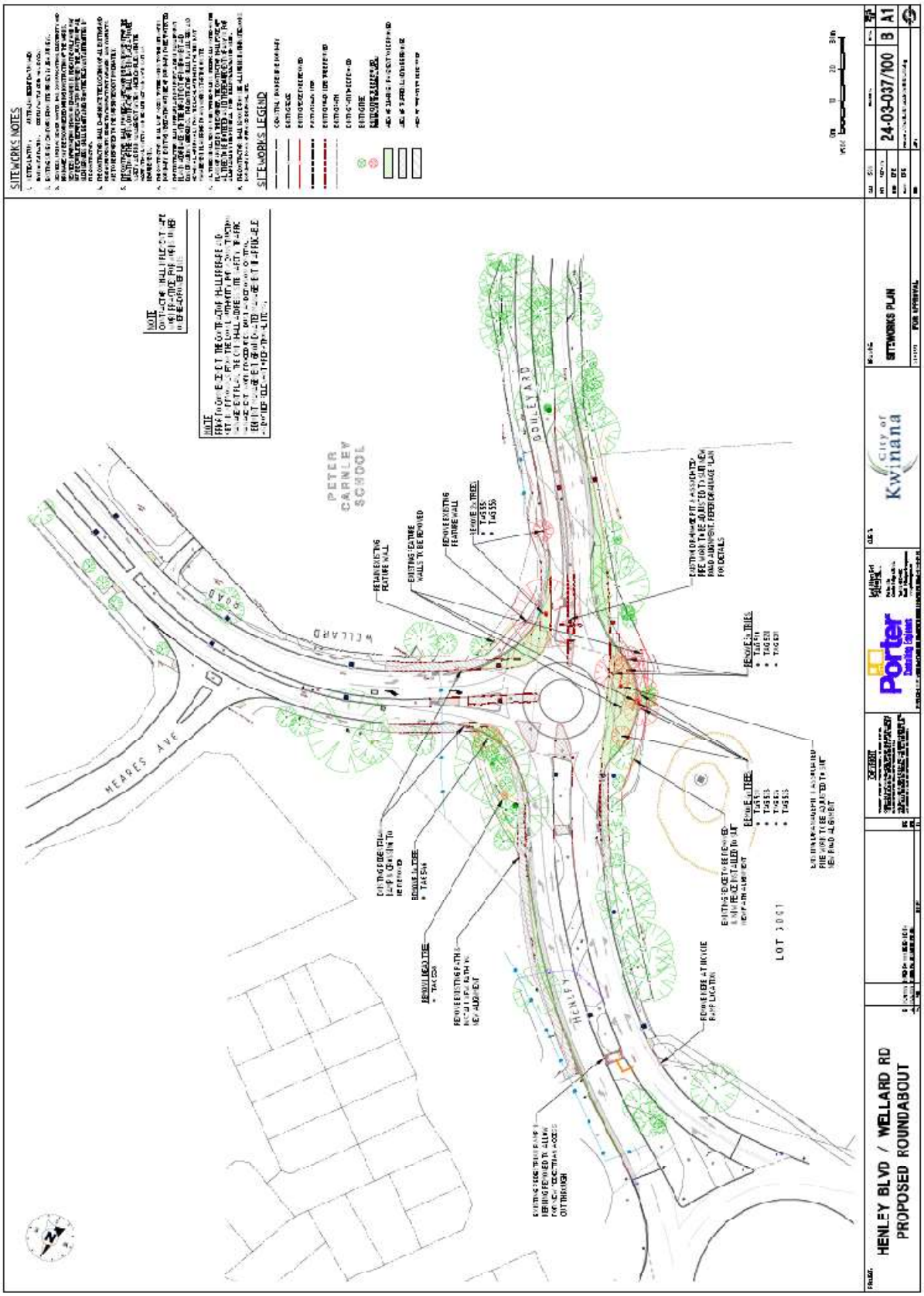
4. City of Kwinana Intramaps (2025), layers accessed October 2024 and May 2025 include:
   - Threatened and Priority Flora (DBCA-036)
   - TEC/PEC Boundaries and buffers (2021)
   - Environmentally Sensitive Areas
   - Vegetated Areas by Complex
   - Pre-European Vegetation
   - Hydrological Data (Wetland Management Categories, DBCA)
   - Reserves

5. Government of Western Australia (2025) DataWA data catalogues, accessed May 2025
   - Soil Landscape Mapping – Systems, DPIRD-064
   - Maximum groundwater levels DWER-096
   - Soil landscape mapping zones, DPIRD 2017

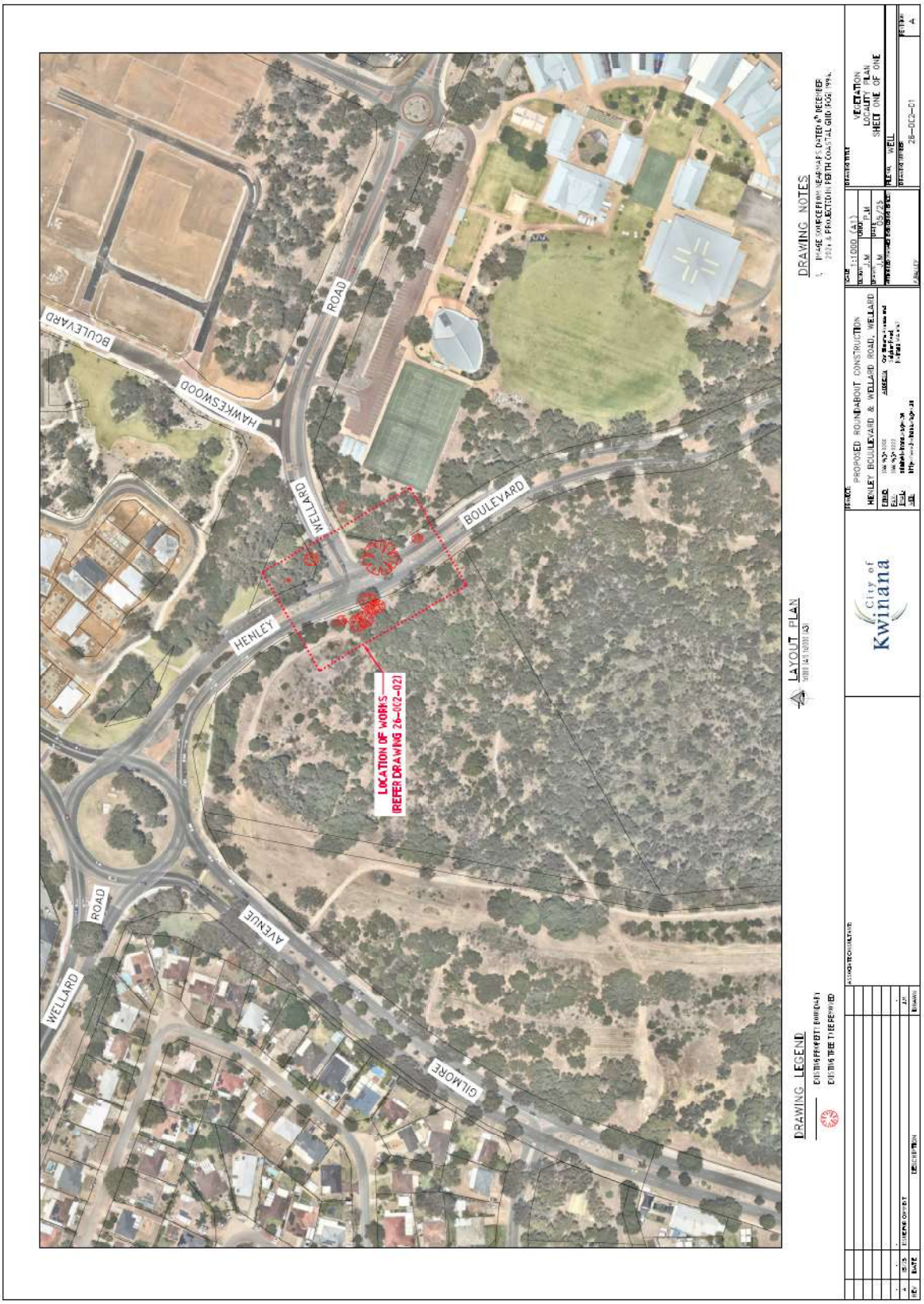
6. Heddle E.M., Lonergan O.W. and Havel J.J. (1980) Vegetation of the Darling System. IN: DCE 1980 *Atlas of Natural Resources, Darling System, Western Australia*. Department of Conservation and Environment, Perth, Western Australia.

7. Murdoch University Black Cockatoo Conservation Management Project (2024) *City of Kwinana Black Cockatoo Conservation Action Plan, Keep Carnaby's Flying – Ngoorlarks Forever* project, Murdoch University.

Appendix 1: Construction Design



Appendix 2: Tree removal aerial overlay



Appendix 3: Amendment of landuse Reserve 50531 status

Rebecca Rosa

From: Kwinana Property Management
Sent: Wednesday, 21 May 2025 8:00 AM
To: Jeremy Madrigal; Rebecca Rosa; Ruban Ganesha; Prad Mahalingam
Subject: Reserve dedication to Road - Henley Blvd

Good morning
I have followed up on the lodgement of the survey and the current status of the road dedication. MNG informed me today that they plan to lodge the survey plans with DPLH by the end of this week. Allowing approximately 7–10 days for DPLH's review, I will then follow up on its lodgement with Landgate.

I will keep you all informed once this has been completed.

With thanks
Karina

Kwinana Property Management
City of Kwinana

P 08 9439 0260

Appendix 4: Henley Reserve condition assessment (Emerge, 2022)