GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

ADVICE NOTE

Allocation of offset site

In relation to condition 9 of this permit, a combined 0.44 hectares within Lot 15445 on Deposited Plan 40340, Hillarys, Kallaroo and Ocean Reef (Reserve 47831), will be attributed to the offset for this project. The 0.44 hectares contains native vegetation growing within Bush Forever Area 325, which contains:

- 0.38 hectares of the permit holders banked offset within Reserve 47831, Hillarys and Kallaroo, including vegetation representative of the Priority 3 Ecological Community - *FCT 29a: Coastal shrublands on shallow sands* in addition to other environmental values, and
- 0.06 hectares within Reserve 47831, Ocean Reef, which contains Priority 3 Ecological Community - *FCT 29a: Coastal shrublands on shallow sands* in addition to other environmental values.

Purpose Permit number:	CPS 10956/1
Permit Holder:	City of Joondalup
Duration of Permit:	From 04 October 2025 to 04 October 2035

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of widening a Coastal Shared Path.

2. Land on which clearing is to be done

Lot 508 on Deposited Plan 417828 (R 47831)

Lot 506 on Deposited Plan 417825 (R 45122)

3. Clearing authorised

The permit holder must not clear more than 0.22 hectares of *native vegetation* within the combined area cross-hatched yellow in Figure 1 and Figure 2 of Schedule 1.

4. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 04 October 2030.

PART II – MANAGEMENT CONDITIONS

5. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

(a) avoid the clearing of *native vegetation*;

(b) minimise the amount of *native vegetation* to be cleared; and

(c) reduce the impact of clearing on any environmental value.

6. Weed and dieback management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:

(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;

(b) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and

(c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

7. Directional clearing

The permit holder must:

(a) conduct clearing authorised under this permit in one direction towards adjacent native vegetation; and

(b) allow a reasonable time for fauna present within the area being cleared to move into adjacent native vegetation ahead of the clearing activity.

8. Wind erosion management

The permit holder must commence construction no later than two (2) months after undertaking the authorised clearing activities to reduce the potential for wind erosion.

9. Offset – Rehabilitation

(a) Within 24 months of commencing clearing authorised under this permit, at an *optimal time* and no later than 04 October 2027, the permit holder must *revegetate* and *rehabilitate* the combined areas cross-hatched red on Figure 3 and Figure 4 of Schedule 2, by implementing and adhering to the "Coastal Shared Path Revegetation Plan for Ocean Reef to Burns Beach" (City of Joondalup, 2025), including but not limited to the following actions:

(i) deliberately *planting* and/or *direct seeding native vegetation* that will result in the minimum completion criteria detailed in Table 3 of Schedule 3 of this permit and ensuring only *local provenance* seeds and propagating material are used;

(ii) remove non-native planted vegetation prior to *planting* and/or *direct seeding*;

(iii) undertake *weed* control activities to achieve and maintain the minimum completion criteria specified on Table 3 of Schedule 3.

(iv) install temporary fencing around the perimeter of the revegetation sites;

(v) establish at least three 10 x 10 metre quadrat monitoring sites within rehabilitated areas; and

(vi) undertake monitoring of the areas *revegetated* and *rehabilitated* under condition 9 of this permit by an *environmental specialist* in accordance with Table 3 of Schedule 3 until the completion criteria listed in Table 3 of Schedule 3 have been met.

(b) The permit holder must undertake *remedial actions* for areas *revegetated* and *rehabilitated*, where monitoring indicates that the *revegetation* and *rehabilitation* has not met the completion criteria specified in Table 3 of Schedule 3, including:

(i) *revegetate/rehabilitate* the area by deliberately *planting* and/or *direct seeding native vegetation* that will result in the minimum completion criteria detailed in Table 3 of Schedule 3 and ensuring only *local provenance* seeds and propagating material are used;

(ii) additional *weed* control activities;

(iii) annual monitoring of the *revegetated* and *rehabilitated* areas by an *environmental specialist*, until the completion criteria are met; and

(iv) where an *environmental specialist* has determined that the completion criteria, outlined in Schedule 3 has been met, that determination shall be submitted to the *CEO* within three months of the determination being made by the *environmental specialist*.

PART III - RECORD KEEPING AND REPORTING

10. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	(a) the species composition, structure, and density of the cleared area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was cleared; (d) the size of the area cleared (in hectares); (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5; and (f) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 6; (g) actions taken in accordance with condition 7;

No.	Relevant matter	Specifications
		and (h) actions taken in accordance with condition 8.
2.	In relation to *revegetation* and *rehabilitation* pursuant to condition 9 of this permit	(a) a description of the *revegetation* and *rehabilitation* activities undertaken each year, once commenced, outlined in a report produced by an *environmental specialist*; (b) the location and size of the areas *revegetated* and *rehabilitated* (in hectares) recorded using a GPS unit set to GDA 2020, expressing the geographical coordinates in Eastings and Northings or decimal degrees; (c) the date that *revegetation* and *rehabilitation* works began; (d) the baseline data recorded for the area to be *revegetated/rehabilitated*, including species richness, species density, vegetation structure and *weed* cover; (e) the species composition, structure, density of the areas *revegetated/rehabilitated* recorded annually; (f) results of annual monitoring against the completion criteria (g) the date completion criteria area considered to have been met; and (h) any other actions in accordance with condition 9.

11. Reporting

The permit holder must provide to the *CEO* the records required under condition 10 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table have the meanings defined.

Table 2: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*.
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
dieback	means the effect of *Phytophthora* species on native vegetation.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the

Term	Definition
	administration of the EP Act, which includes Part V Division 3.
environmental specialist	means a person who holds a tertiary qualification in environmental science or equivalent, and has a minimum of two (2) years' work experience relevant to the type of environmental advice that an environmental specialist is required to provide under this permit, or who is approved by the CEO as a suitable environmental specialist.
EP Act	*Environmental Protection Act 1986* (WA)
fill	means material used to increase the ground level, or to fill a depression.
local provenance	means native vegetation seeds and propagating material from natural sources within 25 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
optimal time	means the period between April and July
planting	means the re-establishment of vegetation by creating soil conditions and planting seedlings of the desired species.
remedial action/s	remedial action/s means for the purpose of this permit, any activity that is required to ensure successful re-establishment of understorey to its pre-clearing composition, structure and density, and may include a combination of soil treatments and revegetation.
revegetate/revegetated/ revegetation	means the re-establishment of a cover of local provenance native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting so that the species composition, structure and density is similar to pre-clearing vegetation types in that area
rehabilitate/rehabilitated/ rehabilitation	means actively managing an area containing native vegetation in order to improve the ecological function of that area.
weeds	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS

C Robertson
10.09.2025
11.15AM

Caron Robertson
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

10 September 2025

Schedule 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1 and Figure 2).

Figure 1: Map of the boundary of the area within which clearing may occur.

Figure 2: Map of the boundary of the area within which clearing may occur.

Schedule 2

The boundary of the areas subject to conditions is shown in the maps below (Figure 3 and Figure 4).

Figure 3: Map of the boundary of the area within which condition 9 applies.

Figure 4: Map of the boundary of the area within which condition 9 applies.

Schedule 3

Table 3: *Revegetation* and *rehabilitation* completion criteria for condition 9.

Measure	Completion Targets	Completion Criteria	Monitoring
Native diversity	Minimum of 60% of native species returned.	A minimum of 7 native species per quadrat.	Native diversity will be counted annually in years 2 and 3.
Weed density	Weed cover at the site is 10% or less (minor non-competitive weeds).	Weed cover is to be 10% or less of minor, non-competitive weeds.	Weed cover percentage will be assessed annually in years 2 and 3.
Native density	Survival rate of 2 plant/m^2.	A survival rate of 2 plant/m^2 is to be achieved after 3 years. All planted species that have not survived will be replanted within 12 months and monitored for a further 2 years.	The number of surviving plants will be counted annually in years 2 and 3. Further monitoring will be conducted if replanting is required.
Watering	Watering of tubestock over summer months.	Watering to be conducted 5 times over the summer months each year for 3 years.	Watering of tubestock to be conducted 5 times in years 1, 2 and 3
Weed control	Quarterly weed control events with the first event to be undertaken prior to planting.	Weed control events to be conducted quarterly each year for 3 years.	Quarterly weed control events to be conducted in years 1, 2 and 3.
Vegetation condition	The vegetation within the area cross-hatched red in figure 3 is a minimum of excellent (Keighery, 1994) condition.	Vegetation meets the definition of 'excellent condition' as outlined in the Keighery (1994) scale after 3 years. If not met, *remedial actions* must be taken within 12 months and monitored for a further 2 years.	Vegetation condition will be assessed annually until met.
	The vegetation within the area cross-hatched red in figure 4 is a minimum of very good (Keighery, 1994) condition.	Vegetation meets the definition of 'excellent condition' as outlined in the Keighery (1994) scale. If not met, *remedial actions* must be taken within 12 months and monitored for a further 2 years.	Vegetation condition will be assessed annually until met.

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10956/1
Permit type:	Purpose permit
Applicant name:	City of Joondalup
Application received:	19 February 2025
Application area:	0.22 hectares of native vegetation
Purpose of clearing:	Shared path upgrades
Method of clearing:	Mechanical
Property:	Lot 508 on Deposited Plan 417828 (R 47831) Lot 506 on Deposited Plan 417825 (R 45122)
Location (LGA area/s):	Joondalup
Localities (suburb/s):	Iluka and Ocean Reef

1.2. Description of clearing activities

The application is for the purpose of widening and upgrading an existing coastal shared path. The vegetation proposed to be cleared is a narrow strip of vegetation along a 4.9-kilometre stretch of existing shared path (see Figure 1, Section 1.5).

The application footprint was reduced from 1.37 hectares to 1.29 hectares during the assessment process to avoid an existing offset area. The area applied to clear (0.22 ha) remains unchanged.

1.3. Decision on application

Decision:	Granted
Decision date:	10 September 2025
Decision area:	0.22 hectares of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and five submissions were received. Consideration of matters raised in the public submissions is summarised in Appendix B.

In making this decision, the Delegated Officer had regard for the:

- site characteristics (see Appendix C),
- relevant datasets (see Appendix G.1),
- the findings of biological surveys (see Appendix F),
- the clearing principles set out in Schedule 5 of the EP Act (see Appendix D), and
- relevant planning instruments and any other matters considered relevant to the assessment (see Section 3).

The Delegated Officer also took into consideration that the proposed clearing is a part of the project that will be delivered through the Western Australian Bicycle Network (WABN) Grants Program, which is an initiative of the State Government, administered by the Department of Transport.

The assessment identified that the proposed clearing will result in:

- the loss of up to 0.22 hectares of native vegetation composed of priority ecological communities (PEC), namely:
    - Coastal shrublands on shallow sands, southern Swan Coastal Plain (FCT29a) (Priority 3), and
    - Northern Spearwood shrublands and woodlands (FCT24) (Priority 3)
- the loss of up to 0.22 hectares of native vegetation growing in association with a Bush Forever Area
- the loss of up to 0.22 hectares of native vegetation that forms part of an ecological linkage,
- the potential to harm fauna that may be present during clearing activities,
- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values and
- potential land degradation in the form of wind erosion.

After consideration of the available information, the Delegated Officer determined that the impacts of the proposed clearing in a Bush Forever area is significant. In accordance with the Government of Western Australia's *Environmental Offsets Policy* (2011), *Environmental Offsets Guidelines* (2014) and State Planning Policy 2.8 (SPP 2.8), the Delegated Officer determined that a revegetation offset is required to address the significant residual impacts to Bush Forever site 325, namely:

- revegetation and rehabilitation in two locations, including 0.38 hectares within primarily good condition vegetation within Hillarys Foreshore Reserve and 0.06 hectares within the Ocean Reef Foreshore Reserve (City of Joondalup, 2025b) which are both within Bush Forever Area 325.

The Delegated Officer determined that the above offset was sufficient to counterbalance the significant residual impacts associated with this project. Further information on the suitability of the offset provided is summarised in Section 4.

The Delegated Officer determined that the proposed clearing is unlikely to have long-term adverse impacts on PECs, flora, fauna habitat, and land degradation, and that application of the mitigation hierarchy (management, mitigation and offset measures) conditioned on the permit will mitigate short term impacts.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity
- commence the construction of the pathway and conservation fencing no later than two (2) months after undertaking the authorised clearing activities to reduce the potential for wind erosion; and
- revegetate a minimum of 0.44 hectares of native vegetation within Bush Forever site 325, in alignment with Bush Forever requirements set out in SPP 2.8.

1.5. Site maps

Figure 1.1. Map of the application area.

The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

Figure 1.2. Map of the application area.

The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the polluter pays principle
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005* (WA) (P&D Act)

Relevant policies considered during the assessment include:

- *Environmental Offsets Policy* (2011)
- *State Planning Policy 2.8 - Bushland policy for the Perth Metropolitan Region* (2010) (SPP 2.8)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- *Environmental Offsets Guidelines* (August 2014)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

Avoidance

The City's Environmental Development team and Natural Environment team provided environmental advice to the project team on 7 April 2021. To inform project planning activities an environmental planning desktop assessment was conducted on 27 June 2022. The project team received recommendations to avoid and mitigate the clearing of native vegetation (City of Joondalup, 2025a).

The initial scope of the City's grant application and supporting business case included an alternative alignment and additional new paths. Extensive consultation from internal and external stakeholders resulted in a 0.122ha reduction in the overall clearing area. This was an outcome from the removal of a 275m long connecting path within Iluka Foreshore Reserve to O'Mara Blvd in Iluka (0.110ha), and minor revisions to the path alignment (0.012ha). These changes have resulted in a reduced clearing area and prevented potential habitat fragmentation within the Iluka Coastal Foreshore Reserve (City of Joondalup, 2025c).

The works will prioritise widening into existing cleared spaces such as turfed landscaping and carparks where possible to limit the clearing of native vegetation. The City investigated the use of existing turfed areas for the upgraded path width at Iluka Beach Park, however due to the path alignment, widening into the adjacent vegetation is required to facilitate safe movement angles and sight lines.

Additionally, locations which have existing infrastructure such as drinking fountains are unable to be relocated within the scope and budget of this development and require the path to be widened away from these structures. Pruning and trimming of vegetation will be favoured over clearing to reduce the total area cleared and associated environmental impacts. Clearing for vehicle access is not required, with intersections and parks to be utilised for access and manoeuvring of machinery.

Mitigation

Contractor and Personnel Management

The City has ensured that the appointed Contractor will avoid and minimise clearing and conduct environmental management through compliance with their Safety, Health and Environment Management Plan. The City will include relevant clauses, specifications and requirements within the Request for Tender to ensure the Contractor makes all practicable efforts to mitigate impacts to native vegetation and complies with the conditions of the clearing permit (City of Joondalup, 2025a).

The clearing works will either be undertaken by the City's Tree Services team or experienced contractors, which are highly experienced in vegetation management and removal. The City staff and contractors will ensure implementation of its Pathogen Hygiene Procedure during the vegetation removal and path construction (City of Joondalup, 2025a).

The City's staff and contractors will ensure implementation of its Pathogen Hygiene Procedure during the clearing and path upgrade works. Dead and felled wood will be relocated to adjacent bushland patches to continue to provide habitat for fauna.

Clearing will be conducted in a directional manner with time given to facilitate the relocation or movement of fauna into the surrounding vegetation. Construction will occur within two months of clearing to reduce impacts to uncleared vegetation from wind erosion.

Reserve Management

Iluka and Ocean Reef Foreshore Reserves are major conservation areas within the City and are managed for conservation purposes under the Iluka - Burns Beach Foreshore Reserve Management Plan and the Ocean Reef Foreshore Management Plan (City of Joondalup, 2025a). These management plans support and enable the ongoing conservation management and maintenance of these coastal foreshore reserves (e.g. weed management, revegetation and fire management).

The City's Natural Environment team conduct regular maintenance works within the City's reserves and bushlands in accordance with the relevant management plans. The City facilitates the collection of local provenance cuttings and seeds for propagation and use in City revegetation projects or to support the Friends' groups associated with the City of Joondalup.

The City frequently engages external consultants to conduct ecological assessments of its reserves and bushlands. These ecological assessments include the Iluka and Ocean Reef Foreshore Reserves associated with this application. Continued ecological assessment of the reserves will allow the City to monitor the impacts of the proposed clearing works, and to monitor the health of revegetation offsets.

The Delegated Officer was satisfied that the applicant has adequately applied the mitigation hierarchy to the project and that they have made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values. The Delegated Officer determined that the impacts of the proposed clearing in a Bush Forever area will have a significant residual impact after avoidance and mitigation measures are applied. In accordance with the Government of Western Australia's *Environmental Offsets Policy* (2011), *Environmental Offsets Guidelines* (2014) and State Planning Policy 2.8 (SPP 2.8), the Delegated Officer determined that it was appropriate to consider an environmental offset to counterbalance the significant residual impacts of the proposal.

Revegetation Offset

Revegetation offsets for the Stage 2 works are set to be conducted in the Hillarys Foreshore Reserve (Lot 15445 on Deposited Plan 40340), and the Ocean Reef Foreshore Reserve (Lot 15445 on Deposited Plan 40340). The total area of revegetation is 0.44ha (4426m2) consisting of 0.38ha (3,846m2) from the Hillarys Foreshore Reserve under the Stage 1 banked revegetation offset detailed in clearing permit CPS 10219/1, and 0.06 ha (580m2) from the Ocean Reef Foreshore Reserve.

The City will undertake revegetation in accordance with the provisions outlined in the department's *Guide to Preparing Revegetation Plans for Clearing Permits* via planting or direct seeding with local provenance species in the revegetation sites following the completion of works. The City have provided revegetation completion targets and criteria and the species selected for the revegetation of each site (City of Joondalup, n.d.) which have been incorporated into the clearing permit conditions under Table 3 of Schedule 3 (Clearing permit CPS 10956/1). The Delegated Officers consideration of the suitability of the offset provided is summarised in Section 4.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix C) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix D) identified that the impacts of the proposed clearing present a risk to biological values (fauna, flora and vegetation), conservation areas, and land resources. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (ecological communities) - Clearing Principle (a)

Assessment

Although available mapping and spatial data did not indicate that conservation significant ecological communities were located within the application area or immediate surrounds, surveys undertaken within and surrounding the application footprint (Eco Logical Australia, 2021 & 2024) identified two priority ecological communities (PEC), namely:

- Coastal shrublands on shallow sands, southern Swan Coastal Plain (FCT 29a) (Priority 3) - Mostly heaths on shallow sands over limestone close to the coast. No single dominant but important species include *Spyridium globulosum*, *Rhagodia baccata*, and *Olearia axillaris*, and
- Northern Spearwood shrublands and woodlands (FCT 24) (Priority 3) - Heaths with scattered *Eucalyptus gomphocephala* occurring on deeper soils north from Woodman Point. Most sites occur on the Cottesloe unit of the Spearwood system. The heathlands in this group typically include *Banksia sessilis*, *Calothamnus quadrifidus,* and *Schoenus grandiflorus*.

The presence of FCT 24 is part of a section of the '*Melaleuca cardiophylla* Closed Heath' vegetation type which was identified as being a mosaic of both FCT 29a and FCT 24 that was difficult to distinguish from each other (Eco Logical Australia, 2024). Less than 0.01 hectares of this area overlaps with the proposed clearing area. All other patches of the '*Melaleuca cardiophylla* Closed Heath' vegetation type are identified as being FCT 29a only (Eco Logical Australia, 2024).

The removal of 0.22 hectares of native vegetation, which occurs as narrow, linear areas of vegetation located in high disturbance areas alongside an existing pathway, is unlikely to significantly reduce the occurrence of the abovementioned PECs, nor result in a significant residual impact. In addition, the clearing is unlikely to sever or additionally impact on the functionality of the PECs, due to the existing impacts of path edge effects already in place. Calculations indicate that the proposed clearing will remove 0.43 percent of the total occurrence of the PECs within the broader survey area, leaving 99.57 percent of the PECs intact. Both PECs impacted by the proposed clearing have occurrences that occur outside of the survey area, including other sections of Bush Forever site 325, with numerous larger patches occurring within the local area (10-kilometre radius of the application area) and regionally, including within other areas of conservation estate. The upgrading of the conservation fencing along the pathway is likely to safeguard against further degradation of the existing adjacent vegetation.

Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on priority ecological communities does not constitute a significant residual impact.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- hygiene steps to minimise the risk of the introduction and spread of weeds and dieback into adjacent vegetation.

3.2.2. Biological values (fauna) - Clearing Principles (a) and (b)

Assessment

A fauna survey of the native vegetation surrounding the existing path in the northern section of the proposal identified the following habitat types within the proposed clearing area (Eco Logical Australia, 2021):

- Dunes and swales
- Low limestone coastal heath
- Melaleuca shrubland over heath

While the southern survey did not identify specific habitat types, based on the vegetation mapping of both surveys compared to the habitat mapping, the southern section of the proposed clearing is likely representative of the abovementioned habitat types (Eco Logical Australia, 2021 & 2024).

The preliminary assessment identified 47 fauna species of conservation significance in the local area (10-kilometre radius from the application area). The fauna surveys concluded that the proposed clearing area contains suitable habitat for numerous conservation significant fauna (Eco Logical Australia, 2021 & 2024). Based on the results of the preliminary assessment and fauna surveys, it was determined that the following species have suitable habitat within the proposed clearing area:

- Carnaby's cockatoo (*Zanda latirostris*) (EN)
- flesh-footed shearwater (*Ardenna carneipes*) (VU)

- graceful sunmoth (*Synemon gratiosa*) (P4)
- osprey (*Pandion haliaetus*) (MI)
- quenda (*Isoodon fusciventer*) (P4)

Carnaby's cockatoo (EN)
According to available mapping, the proposed clearing is mapped within the known distribution for the Carnaby's cockatoo. According to available databases, there are 21 known breeding sites in the local area, the nearest being 4 kilometres (km) away and there are 20 recorded roosting sites within the local area, the nearest being 0.95 km from the proposed clearing.

The Iluka-Burns Beach fauna survey recorded an observation of Carnaby's cockatoo within the vegetation adjacent to the proposed clearing area (Eco Logical Australia, 2021). According to available databases, there are 627 records of the Carnaby's cockatoo in the local area, the nearest being 0.12 km from the proposed clearing.

Breeding habitat for species of black cockatoos is described as trees species known to support breeding which either, have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest and critical night roosting habitat includes any tall trees (DAWE, 2022). For most tree species, suitable DBH is 50 centimetres. Both biological surveys identified that the vegetation within the proposed clearing area is dominated by shrubland and heathland with no tall trees suitable for breeding or roosting (Eco Logical Australia, 2021 & 2024). Therefore, the proposed clearing is not likely to impact on roosting or breeding habitat for the Carnaby's cockatoo.

The preferred foraging habitat for Carnaby's cockatoo includes native shrubland, kwongan heathland and woodland containing seeds, flowers and nectar of native proteaceous plant species (Banksia spp., Hakea spp. and Grevillea spp.), as well as Callistemon spp. and Marri (DAWE, 2022).

Two of the surveyed vegetation types within the proposed clearing area may be suitable foraging habitat for Carnaby's cockatoo, namely the 'SgMhAr' vegetation type which contains and dominant understorey of *Grevillea preissii* within the Iluka-Burns Beach Survey area and the '*Melaleuca cardiophylla* Closed Heath' vegetation type which contains (but is not dominated by) *G. preissii* and *Banksia sessilis* (Eco Logical Australia, 2021 & 2024). The proposed clearing will result in the loss of up to 0.028 hectares of these vegetation types. One vegetation type within the Iluka-Burns Beach survey area was dominated by banksia species (BsArSg), however, this vegetation type was not recorded within the proposed clearing area (Eco Logical Australia, 2021). Based on the above information, with consideration for the extent of available feeding resource locally, the proposed clearing is not likely to result in the loss of significant foraging habitat for Carnaby's cockatoo or likely to significantly impact the survival of this species in the local area.

Quenda (P4)
Quenda are ground-dwelling marsupials, typically associated with forest or woodlands near watercourses, where understorey consists of dense scrub and leaf litter is abundant (DBCA, 2017). According to available databases, there are 143 records in the local area, including nine previous records within the application area as recent as 2025. Quenda were observed by both biological surveys (Eco Logical Australia, 2021 & 2024) with the Iluka-Burns Beach survey also recording a female with young. These observations were recorded within adjacent native vegetation.

Quenda likely traverse through the area under application while moving through the landscape. Given the nature of the clearing, being narrow linear portions of vegetation along a highly utilised pathway, the application area is not likely to constitute core habitat for quenda. Preferred habitat is likely to exist within the adjacent conservation area, which provides more suitable, protected habitat for the species.

Graceful sunmoth (P4)
The graceful sun moth is most common in sedgelands, heathlands, woodlands and occasionally within open parts of forest where their 'foodplants' (various grasses, sedges and mat-rushes) are found. Within Quindalup dunes associated with coastal heath, where the application area is located, the graceful sun moth's feeding is restricted to their preferred host plants, including *Lomandra maritima* (DEC, 2011). There are 97 records of the graceful sunmoth in the local area, the nearest being directly adjacent to the proposed clearing area.

Given *Lomandra maritima* was identified in several survey quadrats undertaken in both surveys (Eco Logical Australia, 2021 & 2024), this species may occur in the proposed clearing area. Habitat for this species is locally abundant in adjacent to remnant vegetation. Based on this, and given that adjacent habitat is in a more protected location, the vegetation within the application is not likely to comprise significant habitat for this species or be critical for the persistence of this species at this site.

Osprey (MI)
The osprey is a migratory bird which occurs in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia (DCCEEW, 2025). They may occur over atypical habitats such as heath, woodland or forest when travelling to and from foraging sites (DCCEEW, 2025). The Iluka-Burns Beach survey recorded one opportunistic sighting of the osprey flying over the area (Eco Logical Australia, 2021). According to available databases, there are five records of the osprey in the local area, the nearest observation being 3.90 km from the proposed clearing.

Noting the above, the osprey individual may have been travelling between roost sites when observed. Ospreys create large and distinctive nests which are often used for multiple years (DCCEEW, 2025), meaning that if breeding habitat was present, it likely would have been recorded during the surveys. In addition, given the nature of the clearing, being narrow linear portions of vegetation along a highly utilised pathway, the application area is not likely to contain essential habitat for osprey.

Ecological linkage
The application area is within a linkage (ID 1 – coastal linkage) mapped under the Perth Regional Ecological Linkages (WALGA, 2004). This ecological linkage dataset represents the first step in the process of identifying patches of native vegetation that can act as stepping stones to form Regional Ecological Linkages. This linkage corresponds with a conceptual linkage identified by the ecological linkages proposed for the Gnangara Groundwater System (Brown et al, 2009). Conceptual linkages are described by Brown et. al. (2009) as “proposed ecological linkages based on past studies and new linkages across the landscapes with <60% native vegetation retained or on core landscapes that are predominantly over private property”.

While it is acknowledged that the application area is within the above mapped linkage and the clearing will remove a portion of this linkage, it is noted that the proposed clearing is associated with an existing path that crossed through the linkages previously and therefore, is not likely to significantly increase the impact of the pathway on the function of the linkage. Nevertheless, the proposed clearing will impact on vegetation that is a part of this a linkage and the location of the clearing has the potential to increase the impact of edge effects and increase the spread of weeds throughout the remnant.

Conclusion
Significant habitat refers to the resources (breeding, resting and feeding), connectivity or habitat area for a species or community that is critical for its survival. Noting the extent and purpose of the proposed clearing and its location within a broader remnant, it is considered that the proposed clearing is unlikely to have a significant impact on fauna habitat.

Whilst the application area does not comprise of significant habitat for fauna, there is the potential for individuals to be present at the time of clearing. Slow, directional clearing to allow the movement of fauna that may be present at the time of clearing into adjacent vegetation will mitigate any impacts to fauna individuals.

Conditions
To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- hygiene management to reduce the risk of introducing and spreading weeds and dieback into adjacent vegetation; and
- slow directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity.

3.2.3. Biological values (flora) - Clearing Principles (a) and (c)

Assessment

According to available databases, there are 27 species of conservation significant flora within the local area. Of these species, 20 are listed as priority flora and seven are listed as threatened.

Eco Logical Australia conducted two flora and vegetation surveys, covering the application footprint and surrounding conservation area, Bush Forever Site 325 (Eco Logical Australia, 2021 & 2024). One of the surveys recorded three species of conservation significance, specifically:

- *Marianthus paralius* (T)
- *Hibbertia leptotheca* (P3), and
- *Jacksonia sericea* (P4)

Marianthus paralius

Marianthus paralius is a shrub that is known from three different locations in Perth's northern suburbs and is listed as threatened under the BC Act and endangered under the EPBC Act. One of the biological surveys recorded *M. paralius* within the bushland adjacent to the proposed clearing (Eco Logical Australia, 2021), which is consistent with herbarium records which have identified the species in the same location (Florabase, 1998-).

Habitat for *M. paralius* is described as coastal heath in areas of white sand and brown loam, on coastal limestone cliffs (DEC, 2009). The Interim Recovery Plan for the species describes critical habitat as the area of occupancy of populations, areas of similar habitat surrounding and linking populations (these providing potential habitat for population expansion and for pollinators), additional occurrences of similar habitat that may contain undiscovered populations of the species or be suitable for future translocations, and the local catchment for the surface and/or groundwater that maintains the habitat of the species (DEC, 2009).

The proposed clearing will not result in the direct clearing of individuals, however, the proximity of the records to the proposed clearing area may result in indirect impacts to the species. It is considered that these potential impacts can be managed through the weed and dieback management condition on the clearing permit.

Hibbertia leptotheca* & *Jacksonia sericea

Hibbertia leptotheca is a low shrub found in Heathland, usually with Banksia spp., sometimes with Melaleuca spp. and mixed heath in sand dunes (Florabase, 1998-). The Iluka-Burns Beach biological survey (Eco Logical, 2021) recorded this species in eight locations in the northern survey area. According to available databases, there are three records of this species in the local area, the nearest being 0.01 km from the proposed clearing.

Jacksonia sericea (waldjumi) is a low spreading shrub found in low woodland or tall scrub, often with Eucalyptus spp., Banksia spp., Melaleuca spp., and herbs in sandy soils (Florabase, 1998-). The Iluka-Burns Beach Survey identified a large population of waldjumi in the broader survey area where it made up approximately two per cent of the ground cover where it was found (Eco Logical Australia, 2021). According to available databases, this species has been recorded 21 times in the local area, the nearest being 2.91 km from the proposed clearing.

Neither of the biological surveys recorded these species within the proposed clearing area (Eco Logical Australia 2021 & 2024). Due to the extent and location of the application in relation to the records found during the surveys, the proposed clearing is not likely to directly impact either *H. leptotheca* or waldjumi, nor result in the loss of critical habitat for these species. Indirect impacts that may occur given the proximity of the application to these records, particularly *H. leptotheca* which was recorded in proximity to the proposed clearing area, can be managed through conditions on the permit such as hygiene management to prevent the introduction and spread of weeds and dieback.

Other priority flora

Based on the results of the preliminary assessment and the biological surveys (Eco Logical Australia, 2021 & 2024), the following species were also considered likely to occur:

- *Grevillea* sp. Ocean Reef (D. Pike Joon 4) (P1)
- *Leucopogon maritimus* (P1), and
- *Sarcozona bicarinata* (P3)

None of these species were recorded during the surveys (Eco Logical Australia, 2021 & 2024), however, have suitable habitat within the proposed clearing area.

Grevillea sp. Ocean Reef (D. Pike Joon 4) (P1) is a shrub that is found in coastal scrub and tall shrubland in sand dunes and is only known from Bush Forever Area 325 (Florabase, 1998-). According to available databases, there are four records of this species in the local area, the nearest being 0.71 km from the proposed clearing. Records of this species note that it is quite large and has distinctive foliage (Florabase, 1998-), making it easily identifiable. Therefore, the proposed clearing is not likely to result in the loss of any *Grevillea* sp. Ocean Reef as it is considered that if present, the surveys would have identified it.

Leucopogon maritimus (P1) is a small shrub found in Heathland, usually with Banksia spp., sometimes with Melaleuca spp. and mixed heath in sand dunes (Florabase, 1998-). According to available databases, there are two records of the species in the local area, the nearest being 3.4 km from the proposed clearing. The proposed clearing area is at the southern extent of the species known range, with one record further south being from 1966. Other records of the species note that where it is found it is generally abundant and therefore, it is considered that it is not likely to be present within the proposed learning area and surrounding vegetation as it would likely have been identified during the surveys.

Sarcozona bicarinata (P3) is a succulent herb found in coastal heathland in sound dunes (Florabase, 1998-). According to available databases, there are six records of this species in the local area, the nearest being adjacent to the proposed clearing area. The proposed clearing is located at the southern extent of the species large range which extends to Jurien Bay and notably, the closest records are all from the 1990's, with no recent records (Florabase, 1998-). This species is generally considered to be abundant where is it recorded and therefore, it is considered that it is not likely to be present within the proposed learning area and surrounding vegetation as it would likely have been identified during the surveys.

Conclusion
Based on the above assessment, the proposed clearing will result in the loss of priority and threatened flora. Given the small, linear size of the proposal and its location next to an existing path, it is considered the proposal is not likely to result in the loss of critical habitat for these species.

For the reasons set out above, it is considered that the indirect impacts of the proposed clearing on threatened and priority flora can be managed by taking steps to minimise the risk of the introduction and spread of weeds.

Conditions
To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- hygiene management to reduce the risk of introducing and spreading weeds and dieback into adjacent vegetation.

3.2.4. Land and water resources (wind erosion) - Clearing Principles (g)

Assessment
According to available databases, the proposed clearing may increase the risk of land degradation from wind erosion in the area. This is due to the sandy nature of the topsoil across the application area, in combination with the coastal location. As the proposed clearing is to remove narrow sections of vegetation located alongside an existing pathway, the exposure of the clearing area to erosion is minimal but may still occur. If appropriate management measures such as ground cover or adequate dust suppression on exposed surfaces are put in place, the environmental impacts caused by wind erosion can be managed. Ensuring works commence within two months of clearing will minimise exposure of bare soils.

Although the soil types within the application areas indicate that there may be an increased risk of water erosion, water repellence and phosphorus export, due to the extent and location of the proposed clearing, these risks are unlikely to appreciably increase as a result of clearing.

Conclusion
Based on the above assessment, the proposed clearing may cause land degradation through wind erosion. Ensuring works commence within two months of the clearing will minimise any potential risks of wind erosion.

Conditions To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- The permit holder must commence the construction of the pathway and conservation fencing no later than two (2) months after undertaking the authorised clearing activities to reduce the potential for wind erosion.

3.2.5. Significant remnant vegetation and conservation areas (Bush Forever) - Clearing Principle (h)

Assessment
The proposed clearing is located within Bush Forever Site 325. Whilst the vegetation proposed to be cleared consists of 0.22 hectares of vegetation mapped within a Bush Forever site, the individual sections consist of narrow parcels of vegetation along an existing stretch of pathway that is currently exposed to edge effects and bordered by conservation fencing in need of repair.

Taking into consideration the extent of the proposed clearing, and the composition and condition of the vegetation proposed to be cleared, it is considered that the proposed clearing is unlikely to sever connectivity within the bushland corridor, however, the proposed clearing does have a significant residual impact on the Bush Forever Site, in accordance with State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region (SPP 2.8.). SPP 2.8 sets out that, conservation of the bushland is a priority except in circumstances where environmental, social or economic benefits, alternatives to clearing have been considered, clearing is minimised as much as possible and reasonable offset strategies are implemented (DPLH, 2025).

The Policy also sets out that unavoidable adverse impacts on regionally significant bushland within a Bush Forever area should be offset at a ratio of at least 1:1 in habitat hectares, and at a ratio 2:1 when the conservation significance is deemed the highest (SPP 2.8 - Appendix 4).

The Department of Planning Lands and Heritage (DPLH) advised that to ensure the integrity of Bush Forever area 325 is not compromised, and in accordance with SPP 2.8 5.1.1 (ii) and 5.1.2.1 (e), a formal offset package should be prepared in accordance with the WA Environmental Offsets Policy (2011) and Appendix 4 of SPP 2.8. This ensures there will be an environmental gain for the proposed clearing (DPLH, 2025).

In collaboration with DPLH, the City has prepared an offset at a 2:1 ratio, to be conducted in two locations including Hillarys Foreshore Reserve - 0.38ha banked offset identified within the revegetation works for the Coastal Shared Path Revegetation Plan for Hillarys to Mullaloo and Ocean Reef Foreshore Reserve - 0.06ha (See Section 4).

In addition, there is potential that the proposed clearing activities could result in the introduction or spread of weeds and dieback into adjacent vegetation, which could impact on the habitat quality and connectivity of this conservation area. These risks can be mitigated through conditioning on the permit.

Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on Bush Forever Site 325 will have a significant residual impact. Indirect impacts from the proposed clearing can be managed through taking actions to mitigate the spread of weeds and dieback into adjacent conservation areas.

In accordance with the Government of Western Australia's *Environmental Offsets Policy* (2011) and *Environmental Offsets Guidelines* (2014), this significant residual impact has been addressed through the conditioning of environmental offset requirements, as outlined under Section 4.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- hygiene management to reduce the risk of introducing and spreading weeds and dieback into adjacent vegetation, and
- the provision of an offset to counterbalance the significant residual impacts to 0.22 hectares of native vegetation associated with Bush Forever Site 325.

3.3. Relevant planning instruments and other matters

Necessity of the clearing

'*A guide to the assessment of applications to clear native vegetation*' (DER, 2013) indicates that the necessity of the clearing is an 'other relevant matter' to be considered when making decisions as to whether a clearing permit should be granted. The assessment guideline prioritises clearing for public use over private benefit or commercial gain (DER, 2013).

In considering the clearing permit application, the Delegated Officer had regard to the fact that the proposed path upgrades are to account for increased bicycle and pedestrian traffic on the path and is expected to have a public benefit. In their application, the City of Joondalup provided the following information to support their proposal including (City of Joondalup, 2025a):

- data from February 2023 to August 2024 found there to be an average of 6,683 bike trips and 32,514 pedestrian trips per month,
- safety concerns from increased usage of the pathway, and the increased popularity of e-rideables along the coastal foreshore,
- widening will improve sight lines and the ability for users of the path to navigate around one another safely,
- the works will also include the construction of improved conservation fencing along the edges of the path, and the installation of drainage structures, and
- a new width of 4m will assist in improving the accessibility of the dual use path and reduce conflicts between various user groups to provide all users with a safe, sustainable and enjoyable trail.

Western Australian Bicycle Network Plan 2014-2031

The project will be delivered through the WABN Grants Program, which is an initiative of the State Government, administered by the Department of Transport (City of Joondalup, 2025a). The WABN Grants Program is one of the key actions detailed in the Western Australian Bicycle Network Plan 2014-2031 which sets out a framework for the provision of a safe and sustainable cycling network across WA. This coastal shared path upgrade is being undertaken to improve safety and reduce user conflicts. The coastal shared path is classified as a primary route in the Department of Transport's Long Term Cycle Network Plan meaning that it is a high demand corridor connecting major destinations and generally means the path will be 4 metres wide (City of Joondalup, 2025a).

Cumulative impacts

The department notes that the proposed upgrades to the coastal shared path under CPS 10956/1 is Stage 2 of the overall project, with a previous permit granted for Stage 1 (CPS 10219/1). A total of 0.6 hectares of native vegetation

has been applied to clear between both stages for 8.17 km of upgrades. The applicant advised that the separation of these proposals into different permits is to align with the WABN funding which supports the project being spread over two financial years to facilitate high quality planning and design and enables project staging (City of Joondalup, 2025a).

It is also noted that the construction of the Ocean Reef Marina is occurring adjacent to the proposed clearing (CPS CPS 8787/1, CPS 8788/1, and CPS 8947/2), which also includes the re-establishment of a section of the coastal path. Additionally, the City of Joondalup collaborated with the City of Wanneroo for the construction of the coastal shared path link between Burns Beach and Mindarie under clearing permit CPS 8220/3.

The cumulative impacts of the clearing occurring for the coastal path upgrades and Ocean Reef Marina has been considered during the assessment of CPS 10956/1 and was a consideration in requiring offsets for this application.

Site history
One clearing permit has previously been in force over the application area. CPS 3511/1, authorising the clearing of two hectares of native vegetation, which was granted to the City of Joondalup on 11 November 2010 for the purpose of widening the shared path. The applicant advised that clearing under CPS 3511/1 was conducted in 2011 to facilitate the widening of the Coastal Shared Path by up to 1.5 m to address concerns regarding public safety, however, the current path width, which resulted from works under the previous clearing permit CPS 3511/1, is now insufficient given the significant increase in users, user speed, and the intention to align the path width with that of a "Primary Route" by the Department of Transport (City of Joondalup, 2025d). Clearing under clearing permit CPS 10956/1 is required in addition to the previous clearing to facilitate widening of the Coastal Shared Path.

Clearing permit CPS 3511/1 did not require details on the location and size of clearing area to be recorded by the City, however the City estimates that up to 0.37 hectares of native vegetation was cleared under clearing permit CPS 3511/1 (City of Joondalup, 2025d). It is likely that clearing was avoided or minimised along most of the path since many sections of the path have been widened within the existing fence line with pruning or minimal clearing (City of Joondalup, 2025d).

Aboriginal heritage
One Aboriginal site of significance has been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

4 Suitability of offsets

Through the detailed assessment outlined in Section 3.2 above, the Delegated Officer has determined that the following significant residual impacts remain after the application of the avoidance and mitigation measures summarised in Section 3.1:

- the loss of 0.22 hectares of native vegetation growing within Bush Forever Area 352.

The applicant proposed an environmental offset consisting of revegetation and rehabilitation in two locations, including:

- 0.38 hectares of primarily good condition vegetation within Hillarys Foreshore Reserve that was subject to a fire occurrence several years ago; and
- 0.06 hectares of degraded vegetation within the Ocean Reef Foreshore Reserve

The two sites are reserved as Regional Open Space in the Perth Metropolitan Regional Scheme and has the implementation category in SPP 2.8 as Bush Forever reserves.

This offset equates to 0.44 hectares, which is a clearing to a revegetation ratio of approximately 2:1 or two times the area of native vegetation to be cleared. This is consistent with guidance under the SPP 2.8 for clearing within a Bush Forever site (detailed in Section 3.2.6) and *WA Environmental Offsets Policy* 2011.

The City has proposed to allocate a portion of their banked offset site within the Hillary's Foreshore Reserve (R 47831). In 2024, the City proposed to revegetate and rehabilitate 1.04 hectares of native vegetation within the Hillarys Foreshore Reserve, using 0.65 hectares as an offset for CPS 10219/1 and banking the remainder.

To ensure a net environmental gain because of the clearing and revegetation offset, the offset sites are as follows (City of Joondalup, 2024a and 2024c):

- Hillarys (R 47831) Foreshore Reserve- 0.38 hectares (Figure 2)
    - Contains Priority 3 PEC - FCT 29a: Coastal shrublands on shallow sands.

- Revegetation and rehabilitation works will be conditioned to increase vegetation condition (Keighery, 1994) from good to a minimum of excellent condition.

- Ocean Reef Foreshore Reserve (R 47831) – 0.06 hectares (Figure 2)
  - Contains Priority 3 PEC - FCT 29a: Coastal shrublands on shallow sands.
  - Revegetation and rehabilitation works will be conditioned to increase vegetation condition (Keighery, 1994) from degraded to a minimum of very good condition.

The minimum vegetation condition was agreed to through consultation between the applicant and DPLH (City of Joondalup, 2025c). A revegetation plan (City of Joondalup, 2025b) was reviewed and approved by the department and completion criteria have been conditioned on the clearing permit under Schedule 3.

The Delegated Officer considers that this adequately counterbalances the significant residual impacts listed above.

Figure 2. Maps of the proposed offset locations. The Ocean Reef Foreshore location is on the left and the Hillary's Foreshore location is on the right.

End

Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
Response to request for further information (City of Joondalup, 2025c): • Revised clearing footprint • Updated offset proposal • Addressing concerns raised by public submissions	See Section 3.1 Avoidance and mitigation measures for the revised clearing footprint See Section 4 Suitability of offsets See Appendix B for responses to public submissions.
Additional information regarding clearing done under CPS 3511/1 (City of Joondalup, 2025d)	See Section 3.3 Relevant planning instruments and other matters.

Appendix B. Details of public submissions

Summary of comments	Consideration of comment
Avoidance, mitigation and necessity of the clearing The applicant has not provided evidence of alternatives to clearing considered. The path could have been constructed adjacent to the road to avoid habitat fragmentation and the City should instead manage the recreation along the path to maintain the conservation values. Clearing for infrastructure should not occur in conservation areas. One submission also contends that the City does not have the funds to relocated infrastructure such as drink fountains. Several mitigation measures were recommended in submissions including, no materials to be laid on native vegetation, no clearing in PECs if the path is 3.5 m or grater, and ongoing weed management for three years post clearing. The proposal will not have a long-term public benefit and public benefit, safety and receiving funding does not justify clearing native vegetation	The avoidance and minimisation commitments employed by the applicant during planning, development and construction phases of the proposal are summarise in avoidance and mitigation measures (see Section 3.1). In considering a clearing permit application, the Delegated Officer shall also have regard to any relevant planning instrument or other matter, in accordance with section 51O of the EP Act. The necessity of the proposed clearing is deemed a relevant matter and has been considered in Relevant planning instruments and other matters (see Section 3.3). The Delegated Officer considers that the proposed path upgrades will have a long-term public benefit by improving the safety of the path because of increased usage by pedestrians and e-rideables.
Cumulative impacts 30ha of adjoining Bush Forever 325 have already been cleared in Ocean Reef since 2020 for a marina. Now further coastal limestone shrublands will be lost for path rewidening.	DWER's assessment of the cumulative impacts of the native vegetation clearing was considered in accordance with 'A Guide to the assessment of applications to clear native vegetation' (DER, 2013).
Clearing footprint The clearing permit does not accurately reflect the amount of clearing as City of Joondalup require a further 0.5m clearing along the path for management.	It is the responsibility of the applicant to determine whether a clearing footprint includes all the area required for a proposal. The applicant has advised that the clearing footprint accounts for widening the path to four metres, upgrades to conservation fencing and drainage works were required.
Impacts to the Honey myrtle TEC One submitter claims to have identified several occurrences of the Honey Myrtle TEC in proximity to the proposed clearing. This TEC is listed as critically endangered under the EPBC Act which requires a buffer of 200 m, and therefore an approval under the EPBC Act is required.	The flora and vegetation surveys did not record vegetation indicative of the 'Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion' TEC within the application area or broader survey area (Eco Logical Australia, 2021 & 2023). While one survey was conducted prior to the community being listed under the EPBC Act, the vegetation types within the survey do not indicate this community is present. Impacts to ecological communities are assessed under Section 3.2.1 of the decision report.

Summary of comments	Consideration of comment
	This approval does not absolve the City from complying with other legislative requirements as necessary.
Permit conditions One submission provided several recommendations for permit conditions relating to no net loss of native vegetation and fauna and a gain in native vegetation, evidence that there will not be a loss of local unique biodiversity, and that the Department of Fire and Emergency Services (DFES) is consulted regarding the use of treated pine posts.	In accordance with section 51H of the EP Act, a clearing permit may be granted subject to conditions as necessary for the purposes of preventing, controlling, abating, or mitigating environmental harm or directly or indirectly offsetting the loss of the cleared vegetation, and proportionate to the assessed potential impact on the environment. See Section 3.2 of the decision report for the assessment of environmental impacts and their corresponding conditions. Conditions recommended relating to consultation with DFES is beyond the scope of the clearing permit process.
Consistency with CPS 10219/1 The conditions applied to CPS 10219/1, specifically regarding the management of priority ecological communities, should also be applied to CPS 10956/1. The submission also noted the Appeal Convenor's recommendation to the Minister to amend condition 8 of the permit to 'restrict clearing to that necessary to enable the construction of a 3.5-metre-wide Coastal Shared Path with associated fencing and drainage in areas where the Coastal Shared Path corridor intersects with Priority Ecological Communities' and recommended this be implemented to the current application.	The department, where appropriate, has tried to remain consistent with the assessment for CPS 10219/1. Given that all the vegetation proposed to be cleared is composed of priority ecological community, the department determine that a specific management condition restricting the amount of the community that can be cleared is not required as impacts to this community are assessed under this environmental impact assessment. See Section 3.2 of the decision report for the department's assessment. The permit includes a standard requirement for the Permit Holder to avoid and minimise clearing throughout the life of the permit. The appeal against CPS 10219/1 was dismissed by the Minister for Environment; Climate Action (Ref: 037/2024). In his statement, the Minister acknowledged this recommendation, however, ultimately determined that the reduction in size to 3.5 metres was not feasible. Further information about the width of the path is available in Section 3.1 of the Decision Report.
Impacts to *Hibbertia leptotheca* One submission claimed that contrary to the application, *Hibbertia leptotheca* (P3) occurs along the existing fence line at several locations.	DWER's assessment of the impacts on flora are summarised in Section 3.2.3 of this decision report. The submission did not include evidence to support the identification of this species within the application area. One of the flora surveys identified *Hibbertia leptotheca* within the broader survey area (Eco Logical Australia, 2021). Based on the results of the flora survey, the proposed clearing will not result in the loss of individuals of this species.
Significant remnant vegetation The proposed clearing will impact a significant remnant within an extensively cleared landscape	When considering the significance of remnant vegetation within a landscape, the Department assesses the extent of native vegetation at a bioregional, vegetation complex and local scale (10 km radius from the impact area) against the national objectives and targets for biodiversity conservation in Australia. These objectives include a target to prevent the clearance of vegetation and ecological communities with an extent below 30 per cent of their pre-European extent (Commonwealth of Australia, 2001). However, the Environmental Protection Authority (EPA) recognises the Perth Metropolitan Region to be a constrained area, within which a minimum 10 per cent representation threshold for ecological communities is recommended (EPA, 2008).

Summary of comments	Consideration of comment
	The extent of vegetation in the bioregion (Swan Coastal Plain) is 38.62 per cent and as discussed in Appendix C.1 of this decision report, the mapped vegetation complexes are all above the 30 per cent threshold. The extent of vegetation remaining within the local area (10 km radius from the impact area) is below 30 per cent, however, is still above the 10 per cent threshold for constrained areas (as noted in Appendix C.1). Therefore, Department considers that the proposed clearing does not warrant further assessment under Principle (e) for being significant as a remnant of native vegetation in an extensively cleared landscape.
Appropriateness and adequacy of offsets Concerns were raised about the feasibility of revegetation as an offset due to the ability of some species that may be impacted are not easy to grow from seed or propagate from cuttings. Revegetation should include species lost in the path widening and no clearing should occur until these species have grown enough to be planted. The number of plants propagated per species should be ten times the amount cleared to account for survival rate. If this cannot be achieved, the amount of time for revegetation should be extended to allow for increased chance of survival. The City uses bushland descriptors such as "degraded' to support its clearing when the City have been the only land manager while that degradation has worsened and the City have a dire record (if any) of the City in effectively restoring and/or rehabilitating any bushland. Offsets are not near the impact area, are not like-for-like and should result in a gain in native vegetation area. The ratio of Offset be set at 4:1, so as to include equal areas in Stage 1 (Hillarys to Ocean Reef) and Stage 2 (Ocean Reef to Burns beach).	The Department's assessment of the suitability of offsets is outlined in Section 4 of this Decision Report. The City have provided various management plans where sufficient evidence of restoring and rehabilitation of bushland is taking place (Natural Area, 2016 and 2019). The Delegated Officer is satisfied that the Revegetation Plan, in addition to the conditions on the clearing permit, will ensure the effective revegetation and rehabilitation of the nominated offset areas. As the offset is for the loss of vegetation within a Bush Forever Area, the department sought advice from the DPLH which is outlined in section 3.2.5 of this Decision Report.
Ocean Reef Marina Two submissions raised concerns about the application of offsets for this proposal because of the Ocean Reef Marina Development, specifically that the offset for the Ocean Reef Marina did not result in a like-for-like outcome and therefore the City should increase the size of the revegetation area to compensate for the net loss to foreshore reserve and that the Ocean Reef Marina is proof that the City does not understand the purpose of offsets.	Offsetting the loss of vegetation for the Ocean Reef Marina is outside of the scope of this application. While the decision whether to offset a proposal may be influenced by the cumulative impacts of multiple developments in an area, the department's assessment of environmental impacts and to what extent they are offset is limited to the area applied to clear. The Department's assessment of the suitability of offsets is outlined in Section 4 of this Decision Report.
Indirect impacts The proposed clearing will result in indirect impacts to the remaining vegetation including through the spread of weeds and pathogens, movement of machinery damaging vegetation and materials (e.g. old fencing and construction materials) being left onsite within the remnant vegetation.	The Department's assessment of the potential indirect impacts of the proposed clearing is summarised in Section 3.1 Avoidance and mitigation measures and Section 3.2 Assessment of impacts on environmental values.

Summary of comments	Consideration of comment
Bush Forever Although the applicant states that the permit area is a Class C Reserve, Bush Forever Reserve should be considered as a Class A Reserve.	This submission item is beyond the scope of the clearing permit assessment. All clearing permit assessments are undertaken based on current available data for a site.
Availability of information The Permit application as published by DWER has pages 18 – 24 redacted. These pages are required to be made public and available for review and comment.	The department granted the City of Joondalup's request for an exemption of publication to protect the location of threatened flora. The relevant pages have been redacted to allow for the remainder of the surveys to be published.
Alleged unauthorised clearing One submission contends that the proposed clearing is Stage 2 of this project and is actually Stage 3 with Stage 1 being from Mullaloo north to the Ocean Reef Marina, being completed without a clearing permit application and is the subject of a formal Pollution Watch complaint.	The area applied to clear is Stage 2 of a larger project which was split to align with funding under the WABN. See Section 3.3 of the decision report for more information. Consideration of alleged unauthorised clearing outside of the application area is beyond the scope of this assessment.
Aboriginal Heritage The applicant states fails to acknowledge or refer to a Registered Aboriginal Heritage site and makes no comment or identify risks on the potential impact on this application proposal. This permit application should not be granted or proceed further until the applicant has completed and presented a Section 18 approval application under the *Aboriginal Heritage Act 1972* for public comment.	According to available databases one Aboriginal site of significance has been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.
Community consultation The applicant states Extensive consultation from internal and external stakeholders resulted in a 0.122ha reduction in the overall clearing area, however, no evidence provided. The applicant shows no regard to the need for consultation. In this application it states it has been developing this project for 5 years and now its still awaiting consultation outcome.	The supporting documents for the clearing permit application state that stakeholder consultation for the proposal was undertaken. Information provided to the Department is authorised, by signature on the application form, as a true and accurate representation of the information submitted. The Department undertook its assessment on good faith that the information submitted and approved by an authorised person from the City is accurate. In response to a request for further information (City of Joondalup, 2025c), the City advised that in accordance with their Public Consultation Policy, the City will consult with the community whenever it is required to do so under legislation, or whenever it is considered valuable to inform decision-making. This could include major policy changes, new community facilities and venues, or changes to City services, amongst others. Infrastructure projects that are listed under the City's Capital Works Program generally do not have community consultation undertaken once added to the Capital Works Program and endorsed by Council. In accordance with the City's Notification of Public Works Council Policy, the City will notify the residents and stakeholders affected by upcoming public works prior to the commencement of the works.

Appendix C. Site characteristics

C.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of a large patch of remnant native vegetation in the intensive land use zone of Western Australia. It is surrounded by remnant vegetation

Characteristic	Details
	and adjacent to the ocean and developed residential areas. The proposed clearing area contributes to an important ecological linkage. Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 24.57 per cent of the original native vegetation cover.
Ecological linkage	The proposed clearing is mapped as an ecological linkage under the Perth Regional Ecological linkages dataset and the Gnangara Sustainability Strategy, where it is categorised as 'Bush Forever associated with conceptual linkage'.
Conservation areas	The proposed clearing is mapped within Bush Forever Area 325 (Coastal strip from Burns Beach to Hillarys).
Vegetation description	The Biological Surveys (Eco Logical, 2021 & 2024) identified 11 vegetation types within the survey area, seven (7) vegetation types were identified within the proposed clearing area consisting of: • FpApSc - *Frankenia pauciflora, Acanthocarpus preissii, Scaevola crassifolia* low open shrubland. • McAr - *Melaleuca cardiophylla, Acacia rostellifera* mid shrubland • *Melaleuca cardiophylla* Closed Heath Closed Heath • Mixed Open Shrubland • SgEsOa - *Spyridium globulosum, Exocarpos sparteus, Olearia axillaris* tall sparse shrubland • SgMhAr - *Spyridium globulosum, Melaleuca huegelii, Acacia rostellifera* tall open shrubland • SgSa - *Spyridium globulosum, Santalum acuminatum* tall sparse shrubland The full survey descriptions and maps are available in Appendix F. This is consistent with mapped vegetation types (Quindalup Complex) (Government of Western Australia, 2019): • Cottesloe Complex-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, and • Quindalup Complex described as Coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of *Melaleuca lanceolata* (Rottnest Teatree) - *Callitris preissii* (Rottnest Island Pine), the closed scrub of *Acacia rostellifera* (Summer-scented Wattle) and the low closed *Agonis flexuosa* (Peppermint) forest of Geographe Bay. The mapped vegetation types retain approximately 32.16 per cent and 60.49 per cent of their original extent respectively (Government of Western Australia, 2019).
Vegetation condition	The Biological Surveys (Eco Logical, 2021 & 2024) indicate the vegetation within the proposed clearing area is in good to excellent (Keighery, 1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix E. The full survey descriptions and mapping are available in Appendix F.
Climate and landform	The proposed clearing is in the Perth region which experiences a mediterranean climate with cool winters and hot summers. The average maximum temperature for Perth is 24.9 degrees Celsius with a mean annual rainfall of 725 millimetres. Landform varies throughout the proposed clearing area from Rocky low hills and ridges to sand dunes with slopes up to 20% and some instability.

Characteristic	Details
Soil description	The proposed clearing is mapped over five (5) different soil types described as: • Karrakatta shallow soils Phase - Low hills and ridges. Bare limestone or shallow siliceous or calcareous sand over limestone. Dense low shrub dominated by *Dryandra sessilis*, *Melaleuca huegellii* and species of Grevillea. • Quindalup South second dune Phase - The second phase. A complex pattern of dunes with moderate relief. Calcareous sands have organic staining to about 20 cm, passing into pale brown sand; some cementation below 1 m. • Quindalup South third dune Phase - The third phase. Irregular dunes with high relief and slopes up to 20%. Loose calcareous sand with little surface organic staining and incipient cementation at depth. • Quindalup South unstable sand Phase - Presently unstable sand. • Quindalup South youngest dune Phase - The youngest phase. Irregular dunes with slopes up to 20%. Loose pale brown calcareous sand with no soil profile development.
Land degradation risk	All the mapped soil types were identified as having a high to extreme risk of land degradation from wind erosion. The Quindalup South unstable sand Phase also has a high risk of land degradation from phosphorous export.
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses or wetlands intersected the areas proposed to be cleared. The nearest waterbody is the Indian Ocean, located less than 50 m west of the proposed clearing.
Hydrogeography	The proposed clearing is mapped within the Perth Groundwater Area Proclaimed under the RIWI Act. None of the mapped soils were identified as having a high risk of water erosion, waterlogging or flooding.
Flora	According to available databases there are 122 records across 27 species of conservation significant flora in the local area (10-kilometre radius), of which 20 are Priority species and seven (7) are listed as threatened. One of the biological surveys (Eco Logical, 2021) recorded three conservation significant flora species: • *Marianthus paralius* (T) • *Hibbertia leptotheca* (P3) • *Jacksonia sericea* (P4)
Ecological communities	According to available databases, there are six (6) priority and threatened ecological communities recorded in the local area (10-kilometre radius), the nearest being the 'Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain', located approximately 2.70 km from the proposed clearing area. The biological surveys identified one priority ecological community within the proposed clearing area (Eco Logical, 2021 & 2024), namely the 'Coastal shrublands on shallow sands, southern Swan Coastal Plain ('floristic community type 29a')' (SCP29a) which is listed as Priority 3 by DBCA.
Fauna	According to available databases, there are 1273 records across 47 species of conservation significant fauna in the local area (10-kilometre radius), eight of which have been recorded within one-kilometre of the application, namely: • Carnaby's cockatoo (*Zanda latirostris*) (EN) • crested tern (*Thalasseus bergii*) (MI) • forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (VU) • fork-tailed swift (*Apus pacificus*) (MI) • graceful sunmoth (*Synemon gratiosa*) (P4) • grey-headed albatross (*Thalassarche chrysostoma*) (VU) • quenda (*Isoodon fusciventer*) (P4) • western brush wallaby (*Notamacropus irma*) (P4) 20 known black cockatoo roosting sites and 21 known black cockatoo breeding sites have been recorded within the local area, the nearest being 0.95 km and 4.00 km from the application respectively. The biological surveys recorded three conservation significant fauna species (Eco Logical, 2021 & 2024), namely: • Carnaby's cockatoo (*Zanda latirostris*) (EN) • osprey (*Pandion haliaetus*) (MI)

Characteristic	Details
	• quenda (*Isoodon fusciventer*) (P4)

C.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix G.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Y	Y	Y	0.71	4	Y
Hibbertia leptotheca	3	Y	Y	Y	0.01	3	Y
Jacksonia sericea	4	Y	Y	Y	2.91	21	Y
Leucopogon maritimus	1	Y	Y	Y	3.40	2	Y
Marianthus paralius	T	Y	Y	Y	0.00	8	Y
Sarcozona bicarinata	3	Y	Y	Y	0.02	6	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

C.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Carnaby's cockatoo (*Zanda latirostris*)	EN	Y	Y	0.12	627	Y
graceful sunmoth (*Synemon gratiosa*)	P4	Y	Y	0.00	97	Y
Osprey (*Pandion haliaetus*)	MI	Y	Y	3.90	5	Y
Quenda (*Isoodon fusciventer*)	P4	Y	Y	0.00	143	Y
white-tailed black cockatoo (*Zanda* sp. 'white-tailed black cockatoo')	EN	Y	Y	2.36	10	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

C.4. Ecological community analysis table

Community name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Northern Spearwood shrublands and woodlands	P3	Y	Y	Y	4.72	6	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

C.5. Land degradation risk table

Risk categories	Karrakatta shallow soils Phase	Quindalup South second dune Phase	Quindalup South third dune Phase	Quindalup South unstable sand Phase	Quindalup South youngest dune Phase
Wind erosion	H1: 50-70% of map unit has a high to extreme wind erosion risk	H1: 50-70% of map unit has a high to extreme wind erosion risk	H1: 50-70% of map unit has a high to extreme wind erosion risk	H2: >70% of map unit has a high to extreme wind erosion risk	H2: >70% of map unit has a high to extreme wind erosion risk

Appendix D. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The area proposed to be cleared contains regionally significant flora, fauna, habitats and assemblages of plants including vegetation that is representative of the Coastal shrublands on shallow sands, southern Swan Coastal Plain ('floristic community type 29a') priority ecological community, foraging habitat for threatened black cockatoo species and suitable habitat for conservation significant fauna and flora.	At variance	Yes *Refer to Section 3.2.1, 3.2.2, & 3.2.3 above.*
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."* Assessment: The area proposed to be cleared contains suitable foraging habitat for Carnaby's cockatoo and suitable habitat for several conservation significant fauna species. The proposed clearing is also part of a mapped ecological linkage.	At variance	Yes *Refer to Section 3.2.2, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The area proposed to be cleared may contain habitat for flora species listed under the BC Act, given *Marianthus paralius* was recorded within the broader survey area, but not the proposed clearing.	Not likely to be at variance	Yes *Refer to Section 3.2.3, above.*
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."* Assessment: The area proposed to be cleared does not contain species that can indicate a threatened ecological community listed under the BC Act or EPBC Act.	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
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."* Assessment: The extent of the mapped vegetation types and native vegetation in the local area is consistent with the national objectives and targets for biodiversity	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
conservation in Australia where a modified target of 10 per cent is applied for constrained areas.		
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."* Assessment: The proposed clearing is entirely contained within Bush Forever Area 325 (Coastal strip from Burns Beach to Hillarys).	At variance	Yes *Refer to Section 3.2.5, above.*
Environmental value: land and water resources		
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."* Assessment: Given no water courses or wetlands are recorded within the application area and the small size and linear nature of the proposal, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.	Not likely to be at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils are highly susceptible to wind erosion. Noting the size and location of the application area, the proposed clearing is not likely to have an appreciable impact on land degradation.	Not likely to be at variance	Yes *Refer to Section 3.2.4, above.*
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."* Assessment: Given no water courses or wetlands are recorded within the application area and the small size and linear nature of the proposal, the proposed clearing is unlikely to impact surface or ground water quality.	Not likely to be at variance	No
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding. Given no wetlands or watercourses are recorded within the application area, the proposed clearing is unlikely to contribute to waterlogging.	Not likely to be at variance	No

Appendix E. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as ‘parkland cleared’ with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix F. Biological survey information excerpts

Ocean Reef foreshore reserve flora survey and vegetation condition assessment (Eco Logical, 2024)

Image	Vegetation community	Vegetation description	Quadrats	Natural Area 2019		ELA 2023	
				Extent (ha)	Proportion (%)	Extent (ha)	Proportion (%)
	*Acacia rostellifera* Shrubland	*Acacia rostellifera* Shrubland over mixed shrubland; *Scaevola crassifolia*, *Rhagodia baccata* and *Spyridium globulosum* and an understory of weedy grasses and herbs such as **Bromus diandrus* **Ehrharta longiflora*, and **Euphorbia terracina*. This vegetation type occurs on the tertiary dunes at the eastern edge of the site.	Q1, Q5, Q11	17.9	32.3	17.1	30.1
	*Spinifex hirsutus* and **Thinopyrum distichum* Grassland	*Spinifex hirsutus* and **Thinopyrum distichum* Grassland with sparse *Olearia axillaris* shrubs. This vegetation type occurs along the foredunes on the western edge of the site.	Q2, Q7, Q9	0.5	0.9	0.5	0.9
	Mixed Open Shrubland	Mixed Open Shrubland of Olearia axillaris, Rhagodia *baccata* and *Scaevola crassifolia* and other mixed shrubs over an understorey of weedy grasses and mixed herbs; This vegetation type occurs on the secondary and tertiary dunes along the entire length of the site.	Q3, Q8, Q12	26.6	47.9	23.9	42.1
	*Melaleuca cardiophylla* Closed Heath	Closed Heath of *Melaleuca cardiophylla* over *Styphelia insularis* and mixed shrubs and an understorey of mixed herbs and weed grasses. This vegetation type is situated on shallow sand over limestone.	Q4, Q6, Q10, Q13	7.7	13.9	9.3	16.4
Open Beach/Rocks				N/A	N/A	3.7	6.5
Tracks/Cleared Areas					5.0	2.3	4.0
Total				**55.5**	**100.0**	**56.9**	**100.0**

Figure 3. Vegetation descriptions within the survey area.

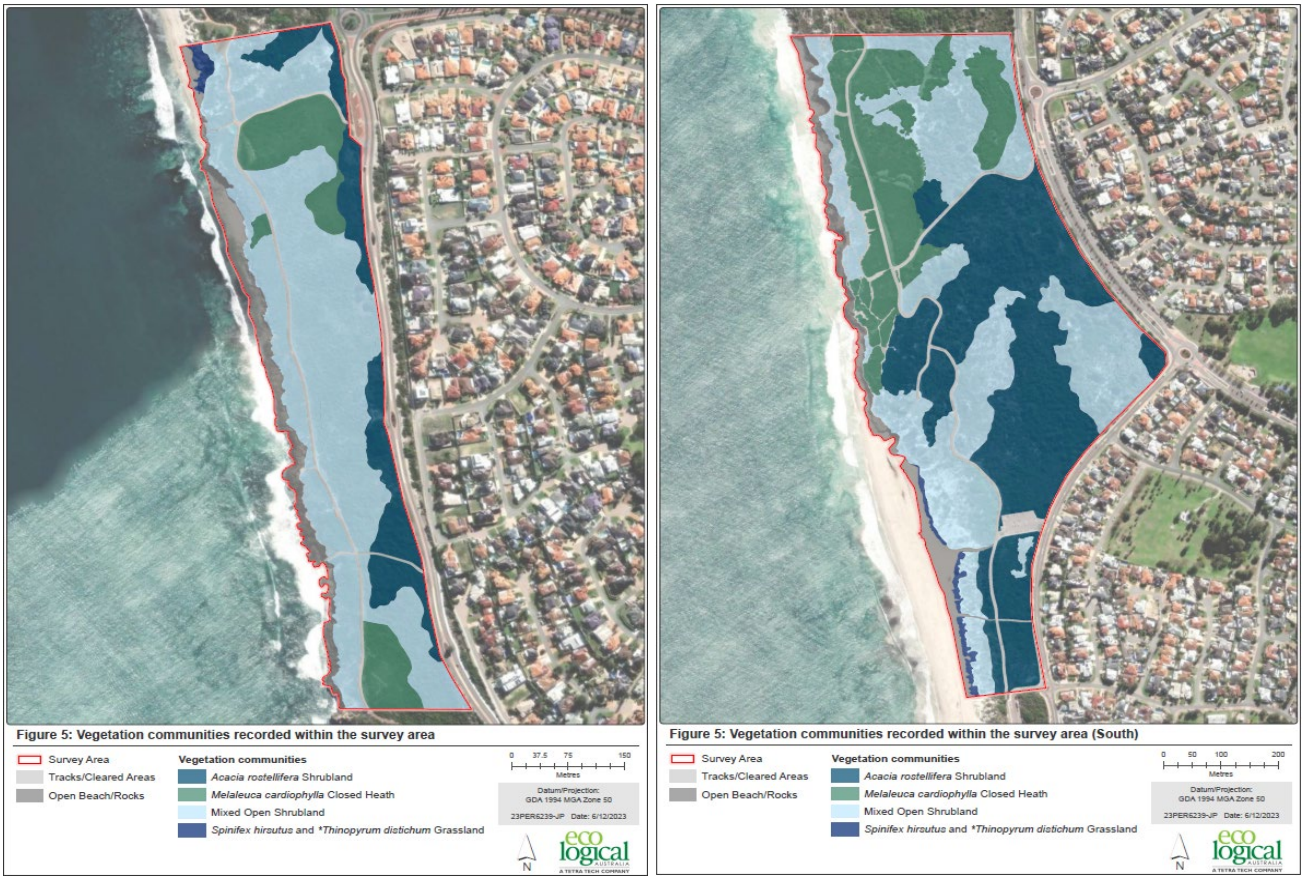

Figure 4. Vegetation mapping within the survey area.

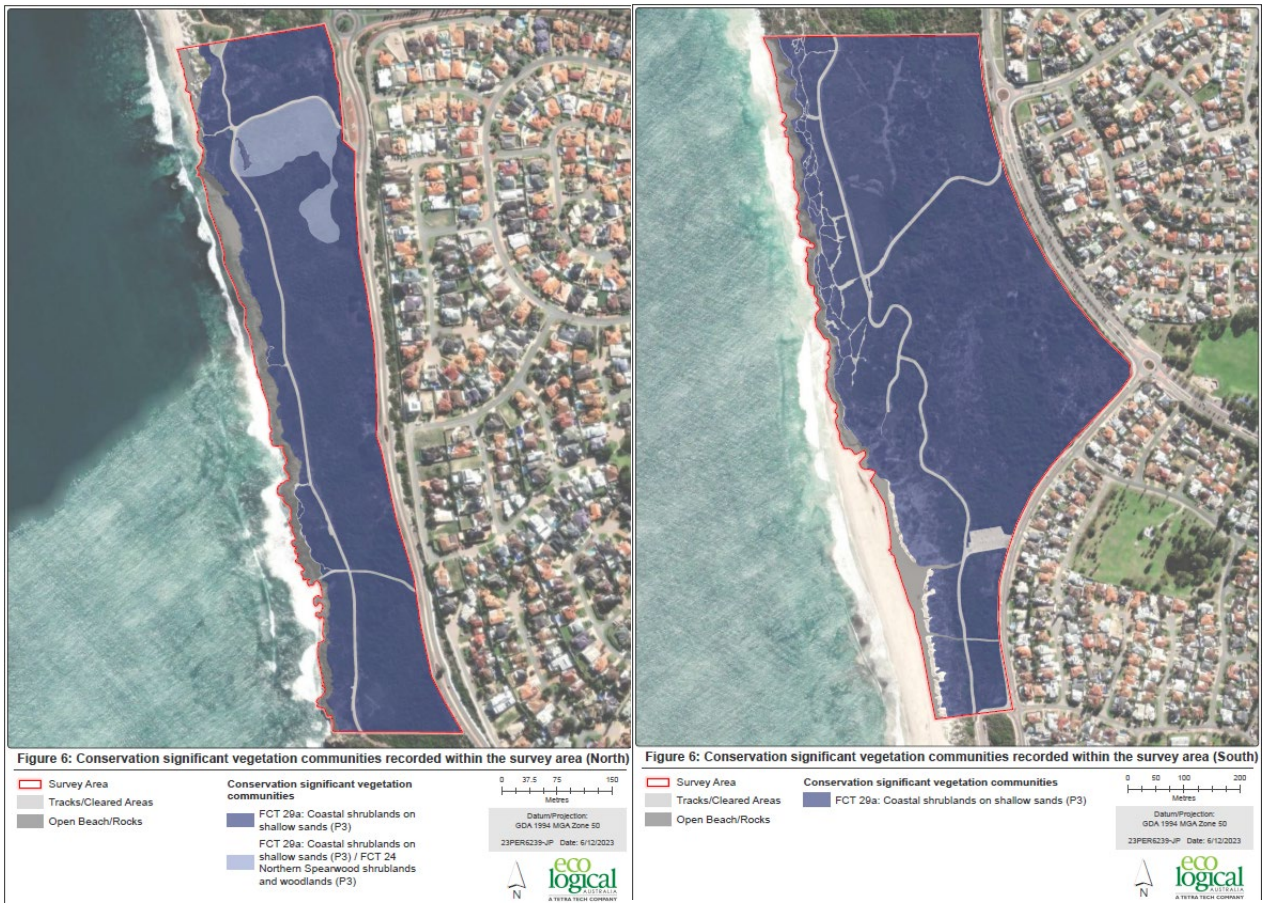

Figure 5. Priority Ecological Community mapping within the survey area.

Figure 6. Vegetation condition mapping within the survey area.

Iluka-Burns Beach Foreshore Reserve flora survey, vegetation condition assessment and fauna survey (Eco Logical, 2021)

Vegetation community	Vegetation description	Associated species	Quadrats	Extent within the Burns Beach survey area*	Extent within the restaurant development area	Extent within the Iluka survey area
McAr	*Melaleuca cardiophylla, Acacia rostellifera* mid shrubland over *Rhagodia baccata, Threlkeldia diffusa* low sparse chenopod shrubland and **Ehrharta calycina* low sparse tussock grassland.	**Carpobrotus edulis, *Catapodium rigidum, *Crassula glomerata, Daucus glochidiatus, *Ehrharta longiflora, *Galium murale, Leucopogon parviflorus, *Lysimachia arvensis, *Melilotus indicus, Parietaria cardiostegia, Plantago exilis, Rhodanthe corymbosa, Senecio pinnatifolius* var. *latilobus* and **Stellaria media*.	ELA20, ELA21 & ELA22	N/A	N/A	3.3 ha (10.5%)
FpApSc	*Frankenia pauciflora, Acanthocarpus preissii, Scaevola crassifolia* low open shrubland.	*Acrotriche cordata, *Catapodium rigidum, *Crassula glomerata, Eremophila glabra* subsp. *albicans, Hardenbergia comptoniana, *Hordeum leporinum, *Lysimachia arvensis, *Medicago polymorpha, Melaleuca huegelii, Olearia axillaris, Olax benthamiana, Rhagodia baccata, Senecio pinnatifolius* var. *latilobus, Spyridium globulosum, *Stellaria media* and *Templetonia retusa, Threlkeldia diffusa.*	ELA15, ELA16 & ELA17	0.1 ha (0.3%)	N/A	3.6 ha (11.5%)
SgMhAr	*Spyridium globulosum, Melaleuca huegelii, Acacia rostellifera* tall open shrubland over *Grevillea preissii* subsp. *preissii* mid sparse shrubland and *Rhagodia baccata, Threlkeldia diffusa* mid open chenopod shrubland over **Briza maxima, *Ehrharta calycina* low open tussock grassland and *Lomandra maritima* low sparse forbland.	*Acacia cyclops, Calandrinia tholiformis, *Catapodium rigidum, Conostylis setigera, Crassula colorata, *Crassula glomerata, Daucus glochidiatus, Desmocladus flexuosus, Dianella revoluta, *Ehrharta longiflora, *Galium murale, Hardenbergia comptoniana, Leucopogon parviflorus, *Lysimachia arvensis, *Melilotus indicus, Olearia axillaris, Parietaria cardiostegia, Rhodanthe corymbosa, Santalum acuminatum* and **Stellaria media.*	ELA23, ELA24, ELA25, ELA26 & ELA28	N/A	N/A	15.2 ha (48.6%)
BsArSg	*Banksia sessilis, Acacia rostellifera, Spyridium globulosum* mid open shrubland over *Hibbertia hypericoides, Banksia dallanneyi* low open shrubland and *Lomandra maritima* low sparse forbland.	*Acacia cyclops, Acanthocarpus preissii, Austrostipa flavescens, Banksia attenuata, *Briza maxima, Calothamnus quadrifidus, Conostylis setigera, Corynotheca micrantha, *Ehrharta calycina, *Euphorbia terracina, *Gladiolus caryophyllaceus, Hardenbergia comptoniana, *Pelargonium capitatum, *Petrorhagia dubia, Phyllanthus calycinus, Rhagodia baccata, Threlkeldia diffusa* and **Trachyandra divaricata.*	ELA13, ELA18, ELA19 & ELA27	0.4 ha (1.4%)	N/A	4.6 ha (14.7%)
SgEsOa	*Spyridium globulosum, Exocarpos sparteus, Olearia axillaris* tall sparse shrubland over *Acrotriche cordata, Scaevola crassifolia, Leucopogon parviflorus* mid sparse shrubland over *Acanthocarpus preissii* low sparse shrubland and **Trachyandra divaricata, Conostylis candicans* subsp. *calicola* low sparse forbland.	*Acacia saligna, Atriplex cinerea, *Carpobrotus edulis, Cassytha flava, *Crassula glomerata, Daucus glochidiatus, *Dischisma arenarium, *Ehrharta longiflora, Gastrolobium nervosum, Hardenbergia comptoniana, Hemiandra glabra, *Pelargonium capitatum, Rhagodia baccata, Senecio pinnatifolius* var. *latilobus, *Stellaria media* and *Threlkeldia diffusa.*	ELA07, ELA09 & ELA10	13.4 ha (46.1%)	N/A	1.2 ha (3.8%)
ArAcSg	*Acacia rostellifera, Acacia cyclops, Spyridium globulosum* tall shrubland over *Rhagodia baccata, Threlkeldia diffusa* low sparse chenopod shrubland and *Acanthocarpus preissii* low sparse shrubland.	**Asparagus asparagoides, *Avena barbata, *Bromus diandrus, Callitris preissii, *Crassula glomerata, Daucus glochidiatus, *Ehrharta calycina, Eucalyptus utilis, *Euphorbia terracina, Hardenbergia comptoniana, Kunzea glabrescens, *Lactuca serriola, Lepidosperma gladiatum, *Lysimachia arvensis, Melaleuca lanceolata, *Pelargonium capitatum, *Sonchus oleraceus, *Stellaria media* and **Trachyandra divaricata.*	ELA02, ELA03, ELA04, ELA06	1.9 ha (6.5%)	N/A	0.7 ha (2.2%)
SgSa	*Spyridium globulosum, Santalum acuminatum* tall sparse shrubland over *Olearia axillaris, Myoporum insulare* mid sparse shrubland and *Rhagodia baccata* mid sparse chenopod shrubland over **Tetragona decumbens, Scaevola crassifolia* low open shrubland and *Lepidosperma gladiatum* low open sedgeland.	*Acacia cyclops, Acacia rostellifera, Acanthocarpus preissii, *Bromus diandrus, Calandrinia brevipedata, *Carpobrotus edulis, Cassytha flava, Conostylis candicans* subsp. *calcicola, *Crassula glomerata, Daucus glochidiatus, *Ehrharta calycina, *Ehrharta longiflora, Hardenbergia comptoniana, *Lagurus ovatus, Lomandra maritima, *Lysimachia arvensis, Melaleuca systena, *Pelargonium capitatum, Senecio pinnatifolius* var. *latilobus, Spinifex longifolius, Threlkeldia diffusa,* and **Trachyandra divaricata.*	ELA01, ELA05, ELA08, ELA11, ELA12 & ELA14	10.7 ha (36.5%)	0.4 ha (84%)	0.4 ha (1.3%)
			Open beach / rocks	1 ha (3.4%)	N/A	1.2 ha (3.8%)
			Dunal blow out	0.6 ha (2%)	N/A	N/A
			Tracks	1.1 ha (3.8%)	0.1 ha (16%)	1.1 ha (3.5%)
			Total	**29.3 ha**	**0.5 ha**	**31.3 ha**

Figure 7. Vegetation descriptions within the survey area.

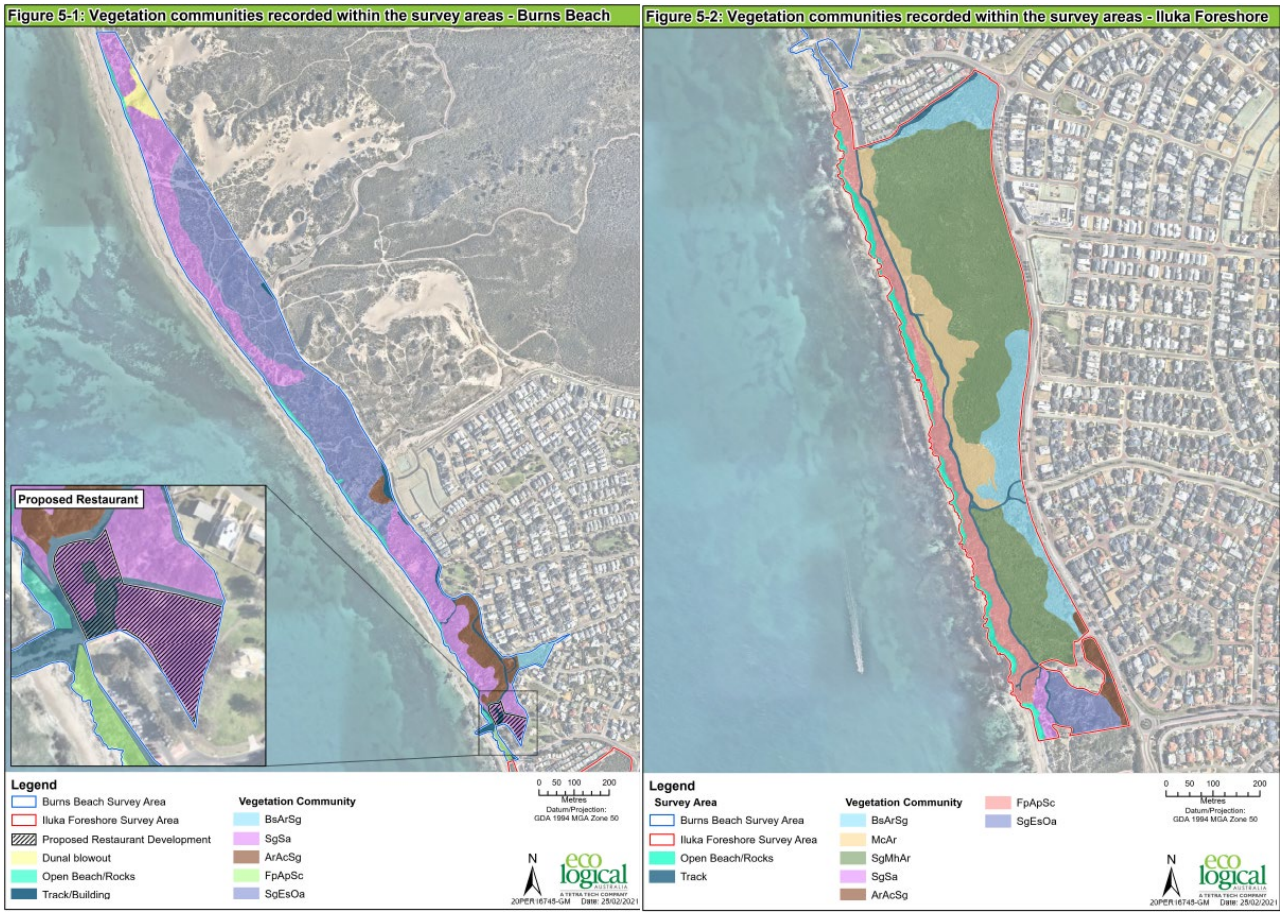

Figure 8. Vegetation mapping within the survey area.

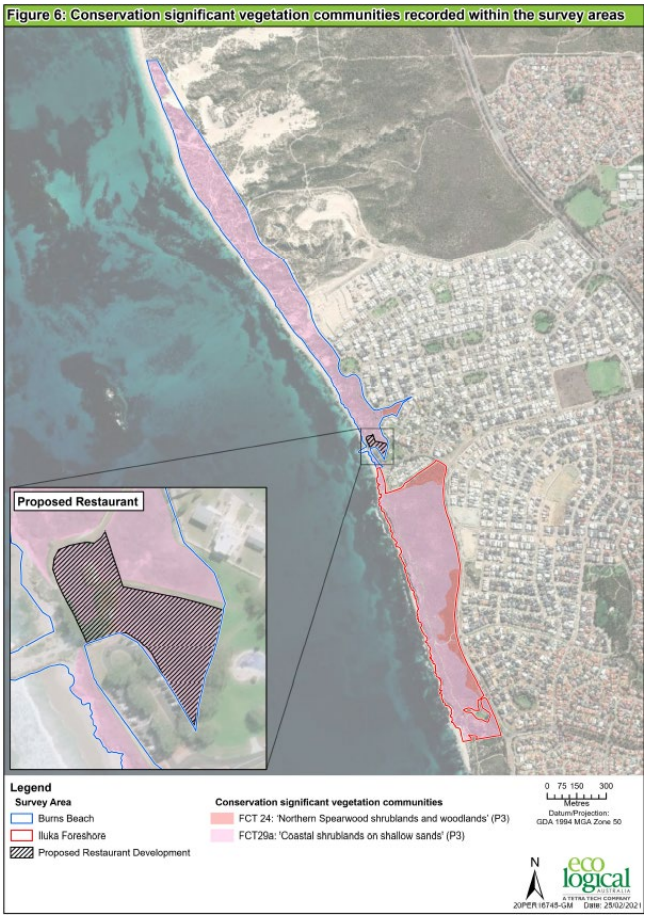

Figure 9. Priority Ecological Community mapping within the survey area.

Figure 10. Vegetation condition mapping within the survey area.

Fauna habitats	Extent within the Burns Beach survey area	Extent within the restaurant development area	Extent within the Iluka survey area
Dunes and swales	24.1 ha (82.3%)	0.4 ha (84%)	1.6 ha (5.2%)
Tall *Acacia* shrubland	1.9 ha (6.7%)	N/A	0.6 ha (2%)
Low *Banksia* shrubland over low heath	0.4 ha (1.4%)	N/A	4.6 ha (14.7%)
Low limestone coastal heath	0.1 ha (0.5%)	N/A	3.6 ha (11.5%)
Melaleuca shrubland over heath	N/A	N/A	18.5 ha (59.1%)
Open beach / rocks	1.6 ha (5.4%)	N/A	1.2 ha (3.8%)
Tracks	1.1 ha (3.8%)	0.1 ha (16%)	1.1 ha (3.7%)
Total	**29.3 ha**	**0.5 ha**	**31.3 ha**

Figure 11. Fauna habitat types within the survey area.

Figure 12. Fauna habitat mapping within the survey area.

Figure 13. Conservation significant fauna recorded within the survey area.

Appendix G. Sources of information

G.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register – Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

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