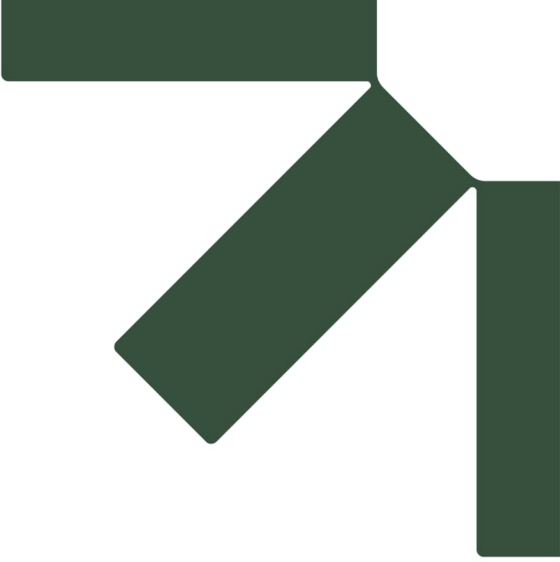




Attachment 10 Assessment Against Significant Impact and Referral Guidelines

**Casuarina South Precinct Residential Development - Lots
110, 111, 108 and 114 Lugg Place**

EPBC Act Referral

316 Property Developments Pty Ltd and 316 Property Group Pty Ltd

SLR Project No.: 675.073556.00001

10.1 Assessment of Significance

Assessments against the *Matters of National Environmental Significance - Significant Impact Criteria 1.1 EPBC Act* (DEWHA, 2013) are provided for the following threatened species and threatened ecological community:

- Carnaby's Cockatoo (*Zanda latirostris*) (Endangered) – Recorded (Table 1)
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksia naso*) (Vulnerable) – Recorded (Table 3)
- Baudin's Cockatoo (*Calyptorhynchus baudinii*) (Endangered) – Medium likelihood of occurrence (Table 5)
- Chuditch (*Dasyurus geoffroii*) (Vulnerable) – Medium likelihood of occurrence (Table 7)
- Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (Banksia Woodlands TEC) (Endangered) (Table 8)

An assessment against the *Referral Guidelines for 3 WA Threatened Black Cockatoo Species* (DAWE, 2022) is provided for Carnaby's Cockatoo (Table 2), Forest Red-tailed Black Cockatoo (Table 4) and Baudin's Cockatoo (Table 6).

10.1.1 Carnaby's Cockatoo

Table 1: Assessment of the Significance of Impacts (DEWHA, 2013) – Carnaby's Cockatoo (Endangered)

Significant Impact Criteria	Assessment
Lead to a long-term decrease in the size of a population	Unlikely to lead to a long-term decrease in the size of a population • A total of 68 potential nesting trees were recorded in the Project Area, six of which contain hollows (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.3, p.44). • The nesting trees recorded in the Project Area have the potential to be used for roosting; however, no direct sightings of roosting Black Cockatoos or evidence of roosting was observed (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.4-4.3.5, p.45). • Ninety-five Black Cockatoo roost sites are known within a 10 km radius of the Survey Area, one of which occurs within the Survey Area; however, it was not observed to be in use over the 2010 to 2019 Great Cocky Count surveys (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.2, p.44). • A total of 26.88 ha of high-quality Carnaby's Cockatoo foraging habitat was recorded in the Survey Area, of which 4.25 ha occur within the Project Area (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.4-4.3.5, p.45). • The proposed action will require clearing of at most 4.25 ha of high-quality Carnaby's Cockatoo foraging habitat.



Significant Impact Criteria	Assessment
	- The proposed action will require clearing of at most 68 potential nesting trees within the Project Area, six of which contain hollows. - The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. - Black Cockatoos are considered to forage within a 6-12 km radius during the breeding season and a 20 km radius during the non-breeding season (DAWE, 2022). - Extensive foraging habitat is available in the vicinity of the Project Area: - Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). - Some of the vegetation in the vicinity of the Project Area is protected in areas with reserve status, including the Beeliar Conservation Park (approximate extent of 272 ha, located approximately 1.9 km northwest), the Modong Nature Reserve (approximate extent of 156 ha, located approximately 3.2 km northeast), and the Leda Nature Reserve (approximate extent of 437 ha, located approximately 3.3 km southwest) (DBCA, 2025c). - The proposed clearing of approximately 4.25 ha of native vegetation represents 0.03% of the remaining native vegetation within a 15 km radius of the Project Area. - Carnaby's Cockatoo was recorded on five occasions (four direct sightings and one call) within the Survey Area (SLR, 2024). None of these occurred within the Project Area; however, the nearest record was 0.18 km south from the nearest Project Boundary (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.1, p.44). The proposed action is unlikely to lead to a long-term decrease in the size of any Carnaby's Cockatoo populations, given the highly mobile nature of the species, and the availability of habitat in nearby areas.
Reduce the area of occupancy of the species	May reduce the area of occupancy of the species – unlikely to be significant - Carnaby's Cockatoo has an estimated area of occupancy of between 34,500 km² (measured on a 10 km x 10 km x grid) and 86,800 km² (measured on a 20 km x 20 km grid) (DPaW, 2013) within a non-breeding range extending from Kalbarri southeast to Albany and inland to Morawa in the north and to Esperance in the south (EPA, 2019). - The Project Area of 7.99 ha (0.0799 km²) is small compared with the estimated area of occupancy, representing between 0.0001% and 0.0002% of the total area of occupancy. The proposed action may reduce the area of occupancy. However, the dimensions of the Project Area are smaller than the grid size used by DPaW (2013) to estimate the area of occupancy, and the overall extent of the Project Area represents at most 0.0002% of the total area of occupancy for Carnaby's Cockatoo, so the potential reduction is unlikely to be significant.
Fragment an existing population into two or more populations	Unlikely to fragment an existing population Black Cockatoos are a highly mobile species, known to forage in areas 6-12 km from their nesting site during breeding season and up to 20 km from night roosting habitat in non-breeding season (DAWE, 2022).



Significant Impact Criteria	Assessment
	- Foraging habitat is available in the vicinity of the Project Area, with approximately 13,035.4 ha of remnant native vegetation within 15 km of the Project Area (DWER, 2025). - The maximum dimensions of the Project Area (0.4 km x 0.4 km) are smaller than the estimated Black Cockatoo foraging range of 6-12 km. The proposed action is unlikely to fragment an existing population, given the mobility of this species and the availability of habitat outside the Project Area.
Adversely affect habitat critical to the survival of a species	Likely to adversely affect habitat critical to the survival of the species - Habitat critical to the survival of Carnaby's Cockatoo is defined as (DPaW, 2013): - The eucalypt woodlands that provide nest hollows used for breeding, together with nearby vegetation that provides feeding, roosting, and watering habitat that supports successful breeding. - Woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established. - In the non-breeding season, the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resource. - The habitat in the Project Area provides feeding habitat within the foraging range of breeding habitat. The nearest permanent water source to the Project Area is Bollard Bullrush Swamp located 1.5 km northeast of the Project Area (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.1, p.46). - The presence of suitable foraging options, close proximity to water, and direct sightings indicate that this species may frequently use the Survey Area (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.1, p.47). - Approximately 26.88 ha of high-quality Carnaby's Cockatoo was identified within the Survey Area, of which 4.25 ha occurs within the Project Area. - The proposed action will require clearing of no more than 4.25 ha of high-quality Carnaby's Cockatoo foraging habitat within the Project Area. - The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. - Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). The proposed clearing of approximately 4.25 ha of native vegetation represents 0.03% of the remaining native vegetation within a 15 km radius of the Project Area. - Potential indirect impacts associated with clearing such as dust, noise, fire, dieback, and weeds will be managed to ensure no impact occurs on critical habitats and the quality of these habitats.



Significant Impact Criteria	Assessment
	The proposed action will implement management measures such as dieback and weed management, noise attenuation devices, maintenance of firebreaks, availability of fire control equipment to minimise the potential for fires to be started by the proposed action that could impact on critical habitat. The proposed action is likely to adversely affect habitat critical to the species given the presence and proposed clearing of critical habitat (breeding habitat in proximity to foraging habitat and water sources) in the Project Area. The availability of suitable habitat in the vicinity of the Project Area, and the management measures to be implemented will reduce the significance of the impact.
Disrupt the breeding cycle of a population	Likely to disrupt the breeding cycle of a population - Suitable breeding habitat comprises hollows of mature Marri, Jarrah, and Karri trees in the south-west forests (DPaW, 2013). - Sixty-eight (68) potential nesting trees were recorded in the Project Area, of which six contain hollows. - A total of 442 potential nesting trees were recorded in the Survey Area, of these 27 contained 59 hollows (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.1, p.44-45). - The proposed action will require clearing of 68 potential nesting trees within the Project Area, six of which contain hollows. - The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. - Black Cockatoos are considered to forage within a 6-12 km radius during the breeding season and a 20 km radius during the non-breeding season (DAWE, 2022). - Indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats. - The proposed action will implement management measures such as dieback and weed management, noise attenuation devices, maintenance of firebreaks, and availability of fire control equipment to minimise the potential for fires to be started by the proposed action that could impact critical habitat. The proposed action is likely to disrupt the breeding cycle of a population given the clearing and disturbance to potential nesting trees. Appropriate management measures will be implemented to reduce the disruption on the breeding cycle of the population of this species.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Unlikely to reduce the availability or quality of habitat to the extent that the species is likely to decline The proposed action will require clearing of 4.25 ha of high-quality Carnaby's Cockatoo foraging habitat within the Project Area.



Significant Impact Criteria	Assessment
	• The proposed action will require clearing of 68 potential nesting trees within the Project Area, six of which contain hollows. • The nesting trees recorded in the Project Area have the potential to be used for roosting; however, no direct sightings of roosting Black Cockatoos or evidence of roosting was observed (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.4-4.3.5, p.45). Ninety-five Black Cockatoo roost sites are known within a 10 km radius of the Survey Area (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.2, p.44). • Extensive foraging habitat is available in the vicinity of the Project Area: - o Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). - o The proposed clearing of approximately 4.25 ha of native vegetation represents 0.03% of the remaining native vegetation within a 15 km radius of the Project Area. • Foraging habitat outside the Project Area is within the 6-12 km radius Black Cockatoos are considered to forage in during the breeding season and within the 20 km radius Black Cockatoos are considered to forage in during the non-breeding season (DAWE, 2022). • Indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats. The proposed action will implement management measures to minimise the potential for fires to be started by the proposed action that could impact on critical habitat. The proposed clearing will result in the loss of foraging and nesting habitat. However, given the availability of habitat outside the Project Area, the mobile nature of this species, and management measures that will be implemented, it is unlikely the loss of foraging habitat will result in a decline of the species.



Significant Impact Criteria	Assessment
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	Unlikely to result in invasive species that are harmful to Carnaby's Cockatoo becoming established • Black Cockatoos are adversely impacted by competition for nest hollows from introduced species such as galahs, corellas and European honeybees. • Sixty-eight (68) potential nesting trees were recorded in the Project Area, of which six contain hollows. • Predation by feral cats is a threat to Black Cockatoos, particularly juveniles. • A Construction Environmental Management Plan (CEMP) will be prepared for the proposed action and will include the following management procedures: - o Weed and dieback hygiene management. - o Waste management procedures and removal of waste offsite. - o Prohibition on feeding fauna. - o Feral animal control. Given the limited number of potential nesting trees with hollows, and the implementation of management procedures that includes invasive species controls, the proposed action is not expected to result in the establishment of new invasive species.
Introduce disease that may cause the species to decline	Unlikely to introduce disease that may cause the species to decline • Infectious diseases such as beak and feather disease virus (BFDV), avian polyomavirus (APV) and chlamydophilosis may pose a threat to Carnaby's Cockatoo, however DPaW (2013) note that this is an undetermined risk due to lack of reliable data. • Decline in tree health from insects, soil-borne, foliar and canker pathogens including dieback, is a threat to Black Cockatoo habitat (DPaW, 2013). • A CEMP will be prepared for the proposed action and will include dieback hygiene management. Given dieback hygiene measures will be in place, the proposed action is not expected to introduce disease that may cause the species to decline.



Significant Impact Criteria	Assessment
Interfere with the recovery of the species	May interfere with the recovery of the species – unlikely to be significant • Performance criteria are specified in the Recovery Plan for Carnaby's Cockatoo (DPaW, 2013) and are summarised below for a ten-year period: - o The area of occupancy does not decline. - o The number of breeding pairs at designated breeding sites remains stable or increases, averaged over three consecutive years. - o Estimates of the number of birds and proportion of juveniles at standardised roost sites remains stable or increases, averaged over three consecutive years. - o The extent of nesting habitat, feeding habitat and night roosting habitat are maintained throughout the species range. Given the availability of foraging habitat in the vicinity of the Project Area, the proposed action is unlikely to affect the number of birds or proportion of juveniles at roost sites, as no direct sightings of roosting Black Cockatoos or evidence of roosting was observed. Clearing of 4.25 ha of high-quality foraging habitat for Carnaby's Cockatoo may reduce the area of occupancy and the extent of foraging habitat in the local area. The proposed clearing represents a potential reduction of approximately 0.0002% in the area of occupancy of Carnaby's Cockatoo, and a potential reduction in the extent of foraging habitat of approximately 0.03% of the native vegetation within the 15 km of the Project Area. These reductions are unlikely to be so significant that it interferes with the recovery of the species. Appropriate management measures will be implemented to reduce the effect on habitat critical to the survival of this species.



Table 2: Assessment against EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species (DAWE, 2022) – Carnaby's Cockatoo

Referral Threshold	Assessment
Breeding Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister. Loss of any potential nesting habitat is likely to require a referral to the minister.	Requires referral Proposed clearing of 68 potential nesting trees, of which six contain hollows.
High-quality native foraging habitat Loss of greater than or equal to 1 ha of foraging habitat scoring 5-10 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool and takes into account context i.e. proximity of the impact site to important attributes.	Requires referral Proposed clearing of 4.25 ha of high-quality Carnaby's Cockatoo foraging habitat (as scored by the DCCEEW methodology (DAWE, 2022)).
Lower-quality native foraging habitat Loss of greater than or equal to 10 ha of foraging habitat scoring 0-4 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool and takes into account context i.e. proximity of the impact site to important attributes.	Does not meet the threshold for referral No low-quality Carnaby's Cockatoo foraging habitat was recorded in the Project Area.
Exotic foraging habitat Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by Black Cockatoos is likely to require a referral to the minister.	Does not meet the threshold for referral No exotic foraging habitat recorded in the Project Area.
Night roosting habitat Removal of any part of a known night roosting site is likely to require referral to the minister.	Does not meet the threshold for referral No night roosting habitat recorded in the Project Area.



10.1.2 Forest Red-tailed Black Cockatoo

Table 3: Assessment of the Significance of Impacts (DEWHA, 2013) – Forest Red-tailed Black Cockatoo (Vulnerable)

Significant Impact Criteria	Assessment
Lead to a long-term decrease in the size of an important population of a species	Unlikely to lead to a long-term decrease in the size of a population - A total of 68 potential nesting trees were recorded in the Project Area, six of which contain hollows (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.3, p.44). - The nesting trees recorded in the Project Area have the potential to be used for roosting; however, no direct sightings of roosting Black Cockatoos or evidence of roosting was observed (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.4-4.3.5, p.45). - Ninety-five Black Cockatoo roost sites are known within a 10 km radius of the Survey Area, one of which occurs within the Survey Area; however, it was not observed to be in use over the 2010 to 2019 Great Cocky Count surveys (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.3, p.44). - A total of 26.88 ha of high-quality Forest Red-tailed Black Cockatoo foraging habitat was recorded in the Survey Area, of which 4.25 ha occur within the Project Area (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.4-4.3.5, p.45). - The proposed action will require clearing of no more than 4.25 ha of high-quality Forest Red-tailed Black Cockatoo foraging habitat. - The proposed action will require clearing of 68 potential nesting trees within the Project Area, six of which contain hollows. - The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. - Black Cockatoos are considered to forage within a 6-12 km radius during the breeding season and a 20 km radius during the non-breeding season (DAWE, 2022). - Extensive foraging habitat is available in the vicinity of the Project Area: - Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). - Some of the vegetation in the vicinity of the Project Area is protected in areas with reserve status, including the Beeliar Conservation Park (approximate extent of 272 ha, located approximately 1.9 km northwest), the Modong Nature Reserve (approximate extent of 156 ha, located approximately 3.2 km northeast), and the Leda Nature Reserve (approximate extent of 437 ha, located approximately 3.3 km southwest) (DBCA, 2025c). - The proposed clearing of approximately 4.25 ha of native vegetation represents 0.03% of the remaining native vegetation within a 15 km radius of the Project Area.



Significant Impact Criteria	Assessment
	Forest Red-tailed Black Cockatoo was recorded on nine occasions (four direct observations and five records of foraging evidence) within the Survey Area (SLR, 2024). Three of these records (all foraging evidence) occurred within the Project Area, while five records occur within 0.2 km of the nearest Project boundary (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.1, p.44). The proposed action is unlikely to lead to a long-term decrease in the size of any Forest Red-tailed Black Cockatoo populations, given the highly mobile nature of the species, and the availability of habitat in nearby areas.
Reduce the area of occupancy of an important population	May reduce the area of occupancy of the species – unlikely to be significant - Forest Red-tailed Black Cockatoos have an estimated area of occupancy of 20,000 km² (DoE, 2026b). The current distribution of the Forest Red-tailed Black Cockatoo ranges from the north of Perth and east to Mount Helena, Christmas Tree Well, North Banister, Mt Saddleback, Rocky Gully and the upper King River (DEC, 2008a). - The Project Area of 7.99 ha (0.0799 km²) is small compared with the estimated area of occupancy, representing approximately 0.0004% of the total area of occupancy. - Black Cockatoos are a highly mobile species that are expected to forage outside the Project Area. The proposed action may reduce the area of occupancy. However, the overall extent of the Project Area represents at most 0.0004% of the total area of occupancy for Forest Red-tailed Black Cockatoos, so the potential reduction is unlikely to be significant.
Fragment an existing important population into two or more populations	Unlikely to fragment an existing population - Black Cockatoos are a highly mobile species, known to forage in areas 6-12 km from their nesting site during breeding season and up to 20 km from night roosting habitat in the non-breeding season (DAWE, 2022). - Foraging habitat is available in the vicinity of the Project Area, with approximately 13,035.4 ha of remnant native vegetation within 15 km of the Project Area (DWER, 2025). - The maximum dimensions of the Project Area (0.4 km x 0.4 km) are smaller than the estimate Black Cockatoo foraging range of 6-12 km. The proposed action is unlikely to fragment an existing population, given the mobility of this species and the availability of habitat outside the Project Area.
Adversely affect habitat critical to the survival of a species	Likely to adversely affect habitat critical to the survival of the species - Habitat critical to the survival of the Forest Red-tailed Black Cockatoo is defined as (DEC, 2008a): - All Marri (<i>Corymbia calophylla</i>), Karri (<i>Eucalyptus diversicolor</i>) and Jarrah (<i>Eucalyptus marginata</i>) forests, woodlands. - Remnants in the south-west of WA receiving more than 600 mm of annual average rainfall.



Significant Impact Criteria	Assessment
	- The habitat in the Project Area provides feeding habitat within the foraging range of breeding habitat. The nearest permanent water source to the Project Area is Bollar Bullrush Swamp located 1.5 km northeast of the Project Area (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.1, p.46). - The presence of suitable foraging options, close proximity to water, and direct sightings indicate that this species may frequently use the Survey Area (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.1, p.46). - Approximately 26.88 ha of high-quality Forest Red-tailed Black Cockatoo was identified within the Survey Area, of which 4.25 ha occurs within the Project Area. - The proposed action will require clearing of no more than 4.25 ha of high-quality Forest Red-tailed Black Cockatoo foraging habitat within the Project Area. - The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. - Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). The proposed clearing of approximately 4.25 ha of native vegetation represents 0.03% of the remaining native vegetation within a 15 km radius of the Project Area. - Indirect impacts associated with clearing such as dust, noise, fire, dieback, and weeds will be managed to ensure no impact occurs on critical habitats and the quality of these habitats. - The proposed action will implement management measures such as dieback and weed management, noise attenuation devices, maintenance of firebreaks, availability of fire control equipment to minimise the potential for fires to be started by the proposed action that could impact on critical habitat. The proposed action is likely to adversely affect habitat critical to the species given the presence and proposed clearing of critical habitat (breeding habitat in proximity to foraging habitat and water sources) in the Project Area. The availability of suitable habitat in the vicinity of the Project Area, and the management measures to be implemented will reduce the significance of the impact.
Disrupt the breeding cycle of an important population	Likely to disrupt the breeding cycle of a population - Suitable breeding habitat comprises hollows of mature Marri, Jarrah and Karri trees in the south-west forests (DEC, 2008a). - Sixty-eight (68) potential nesting trees were recorded in the Project Area, of which six contain hollows. - A total of 442 potential nesting trees were recorded in the Survey Area, of these 27 contained 59 hollows (SLR, 2024) (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.1, p.44-45). - The proposed action will require clearing of 68 potential nesting trees within the Project Area, six of which contain hollows.



Significant Impact Criteria	Assessment
	- The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within public open space, district open space, internal road reserves and lots, wherever practicable. - Black Cockatoos are considered to forage within a 6-12 km radius during the breeding season and a 20 km radius during non-breeding season (DAWE, 2022). - Indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats. - The proposed action will implement management measures such as dieback and weed management, noise attenuation devices, maintenance of firebreaks, and availability of fire control equipment to minimise the potential for fires to be started by the proposed action that could impact critical habitat. The proposed action is likely to disrupt the breeding cycle of a population given the clearing and disturbance to potential nesting trees. Appropriate management measures will be implemented to reduce the impact on breeding cycle of the population of this species.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Unlikely to reduce the availability or quality of habitat to the extent that the species is likely to decline - The proposed action will require clearing of 4.25 ha of high-quality Forest Red-tailed Black Cockatoo foraging habitat within the Project Area. - The proposed action will require clearing of 68 potential nesting within the Project Area, six of which contain hollows. - The nesting trees recorded in the Project Area have the potential to be used for roosting; however, no direct sightings of roosting Black Cockatoos or evidence of roosting was observed (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.4-4.3.5, p.45). Ninety-five Black Cockatoo roost sites are known within a 10 km radius of the Survey Area (Att6_Fauna & Black Cockatoo Assessment, Section 4.3.2, p.44). - Extensive foraging habitat is available in the vicinity of the Project Area: - Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). - The proposed clearing of approximately 4.25 ha of native vegetation represents 0.03% of the remaining native vegetation within a 15 km radius of the Project Area. - Foraging habitat outside the Project Area is within the 6-12 km radius Black Cockatoos are considered to forage in during the breeding season and within the 20 km radius Black Cockatoos are considered to forage in during the non-breeding season (DAWE, 2022). - Indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats. The proposed action will implement management measures to minimise the potential for fires to be started by the proposed action that could impact on critical habitat.



Significant Impact Criteria	Assessment
	The proposed clearing will result in the loss of foraging and nesting habitat. However, given the availability of habitat outside the Project Area, the mobile nature of this species and implementation of management measures, it is unlikely the loss of foraging habitat will result in a decline of the species.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	Unlikely to result in invasive species that are harmful to Forest Red-tailed Black Cockatoo becoming established • Black Cockatoos are adversely impacted by competition for nest hollows from introduced species such as galahs, corellas and European honeybees. • Sixty-eight (68) potential nesting trees were recorded in the Project Area, of which six contain hollows. • Predation by feral cats is a threat to Black Cockatoos, particularly juveniles. • A Construction Environmental Management Plan (CEMP) will be prepared for the proposed action and will include the following management procedures: - o Weed and Dieback hygiene management. - o Waste management procedures and removal of waste offsite. - o Prohibition on feeding fauna. - o Feral animal control. Given the limited number of potential nesting trees with hollows, and the implementation of management procedures that includes invasive species controls, the proposed action is not expected to result in the establishment of new invasive species.
Introduce disease that may cause the species to decline	Unlikely to introduce disease that may cause the species to decline • Decline in tree health from insects, soil-borne, foliar and canker pathogens including dieback, is a threat to Black Cockatoo habitat (DEC, 2008a). • A CEMP will be prepared for the proposed action and will include Dieback hygiene management. Given Dieback hygiene measures will be in place, the proposed action is not expected to introduce disease that may cause the species to decline.
Interfere with the recovery of the species	May interfere with the recovery of the species – unlikely to be significant • Criteria for success are specified in the Recovery Plan for Forest Red-tailed Black Cockatoo (DEC, 2008a) and summarised below for a ten-year period: - o The extent of occurrence remains stable or increases. - o The number of breeding pairs remains stable or increases. - o The number of individuals in each roosting flock remains stable or increases. - o The proportion of juveniles in each roosting flock remains stable or increases.



Significant Impact Criteria	Assessment
	Given the availability of foraging habitat in the vicinity of the Project Area, the proposed action is unlikely to affect the number of birds or proportion of juveniles at roost sites, as no direct sightings of roosting Black Cockatoos or evidence of roosting was observed. Clearing of 4.25 ha of high-quality foraging habitat for Forest Red-tailed Black Cockatoo and the clearing of 68 potential nesting trees, six of which contain hollows may affect the extent of occurrence and the number of breeding pairs at breeding sites. Appropriate management measures will be implemented to reduce the effect on habitat critical to the survival of this species.



Table 4: Assessment against EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species (DAWE, 2022) – Forest Red-tailed Black Cockatoo

Referral Threshold	Assessment
Breeding Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister. Loss of any potential nesting habitat is likely to require a referral to the minister.	Requires referral Proposed clearing of 68 potential nesting trees, of which six contain hollows.
High-quality native foraging habitat Loss of greater than or equal to 1 ha of foraging habitat scoring 5-10 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool and takes into account context i.e. proximity of the impact site to important attributes.	Requires referral Proposed clearing of 4.25 ha of high-quality Forest Red-tailed Black Cockatoo foraging habitat (as scored by the DCCEEW methodology (DAWE, 2022)).
Lower-quality native foraging habitat Loss of greater than or equal to 10 ha of foraging habitat scoring 0-4 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool and takes into account context i.e. proximity of the impact site to important attributes.	Does not meet the threshold for referral No low-quality Forest Red-tailed Black Cockatoo foraging habitat was recorded in the Project Area.
Exotic foraging habitat Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by Black Cockatoos is likely to require a referral to the minister.	Does not meet the threshold for referral No exotic foraging habitat recorded in the Project Area.
Night roosting habitat Removal of any part of a known night roosting site is likely to require referral to the minister.	Does not meet the threshold for referral No night roosting habitat recorded in the Project Area.



10.1.3 Baudin's Cockatoo

Table 5: Assessment of the Significance of Impacts (DEWHA, 2013) – Baudin's Cockatoo (Endangered)

Significant Impact Criteria	Assessment
Lead to a long-term decrease in the size of a population	Unlikely to lead to a long-term decrease in the size of a population - The Project Area falls outside the modelled distribution for Baudin's Cockatoo. Baudin's Cockatoo was not recorded by the SLR (2024) survey; however, the species is considered to have a medium likelihood of occurrence within the Survey Area (Att6_Fauna & Black Cockatoo Assessment, Section 4.2.4, p.18) - Suitable foraging vegetation (Banksia and Eucalyptus Woodlands) for Baudin's Cockatoo is present within the Project Area, comprising approximately 2.94 ha. - Potential roosting and nesting habitat, comprising large Tuarts, Marris, and stags, that are suitable for Baudin's Cockatoo are also present in the Project Area (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.3, p.49). No evidence of black cockatoo nesting or roosting was observed during the SLR (2024) survey. - The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. - The proposed action will require clearing of up to 2.94 ha of Banksia Woodlands and Eucalyptus Woodlands fauna habitats, and total overall clearing of up to 4.57 ha of fauna habitat. - The proposed action will require clearing of up to 68 potential black cockatoo nesting trees, 11 of which are Tuarts, 26 are Marri and four are stags. - Black Cockatoos are considered to forage within a 6-12 km radius during the breeding season and a 20 km radius during the non-breeding season (DAWE, 2022). - Extensive foraging habitat is available in the vicinity of the Project Area: - Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). - Some of the vegetation in the vicinity of the Project Area is protected in areas with reserve status, including the Beeliar Conservation Park (approximate extent of 272 ha, located approximately 1.9 km northwest), the Modong Nature Reserve (approximate extent of 156 ha, located approximately 3.2 km northeast), and the Leda Nature Reserve (approximate extent of 437 ha, located approximately 3.3 km southwest) (DBCA, 2025c). - The proposed clearing of approximately 4.57 ha of native fauna habitat represents 0.035% of the remaining native vegetation within a 15 km radius of the Project Area. The proposed action is unlikely to lead to a long-term decrease in the size of any Baudin's Cockatoo population, given the highly mobile nature of the species, the availability of habitat in nearby areas and that the Project Area is outside the modelled distribution of the species.



Significant Impact Criteria	Assessment
Reduce the area of occupancy of the species	May reduce the area of occupancy of the species – unlikely to be significant - Baudin's Cockatoo has an estimated extent of occurrence of 70,000 km² with a stable trend at high to medium reliability, and 25,000 km² with a declining trend with low reliability (DoE, 2026c). The distribution of the Baudin's Cockatoo ranges from Albany northward to Gidgegannup and Mundaring, and inland to the Stirling Ranges and near Kojonup (DoE, 2026c). - The Project Area of 7.99 ha (0.0799 km²) is small compared with the estimated area of occupancy, representing between 0.0001% and 0.0003% of the total area of occupancy for Baudin's Cockatoo. The proposed action may reduce the area of occupancy of the species. However, the dimensions of the Project Area are smaller than the estimated extent of occurrence, and the overall extent of the Project Area represents at most 0.0003% of the total extent of occurrence for Baudin's Cockatoo, so the potential reduction is unlikely to be significant.
Fragment an existing population into two or more populations	Unlikely to fragment an existing population - The Project Area is situated outside the modelled distribution of Baudin's Cockatoo. - Black Cockatoos are a highly mobile species, known to forage in areas 6-12 km from their nesting site during breeding season and up to 20 km from night roosting habitat in non-breeding season (DAWE, 2022). - Foraging habitat is available in the vicinity of the Project Area, with approximately 13,035.4 ha of remnant native vegetation within 15 km of the Project Area (DWER, 2025). - The maximum dimensions of the Project Area (0.4 km x 0.4 km) are smaller than the estimated Black Cockatoo foraging range of 6-12 km. The proposed action is unlikely to fragment an existing population, given the modelled distribution of the species, the mobility of the species and the availability of habitat outside the Project Area.
Adversely affect habitat critical to the survival of a species	May adversely affect habitat critical to the survival of the species – unlikely to be significant - Habitat critical to the survival of Baudin's Cockatoo is defined as (DCCEEW, 2008): - Currently occupied by the cockatoos. - Not currently occupied by the cockatoos due to recent fire but capable of supporting cockatoo populations when sufficiently recovered. - Natural vegetation in which the cockatoos nest, feed and roost. - Natural vegetation through which the cockatoos can move from one occupied area to another. - Suitable vegetation within the recorded range in which undiscovered cockatoo populations may exist. - All Marri (<i>Corymbia calophylla</i>), Karri (<i>Eucalyptus diversicolor</i>) and Jarrah (<i>Eucalyptus marginata</i>) forests, woodlands.



Significant Impact Criteria	Assessment
	- o Remnants in the south-west of WA receiving more than 600 mm of annual average rainfall. • The Project Area provides suitable foraging vegetation (Banksia and Eucalyptus Woodlands) for Baudin's Cockatoo, and potential nesting and roosting habitat from the presence of tuarts, marris, and stags (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.3, p.49). • The proposed action will require clearing of up to 2.94 ha of Banksia Woodlands and Eucalyptus Woodlands fauna habitats, and total overall clearing of up to 4.57 ha of fauna habitat. • The proposed action will require clearing of up to 68 potential black cockatoo nesting trees, 11 of which are Tuarts, 26 are Marri and four are stags. • Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). The proposed clearing of approximately 4.57 ha of native fauna habitat represents 0.035% of the remaining native vegetation within a 15 km radius of the Project Area. • The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. • Potential indirect impacts associated with clearing such as dust, noise, fire, dieback, and weeds will be managed to ensure no impact occurs on critical habitats and the quality of these habitats. • The proposed action will implement management measures such as dieback and weed management, noise attenuation devices, maintenance of firebreaks, availability of fire control equipment to minimise the potential for fires to be started by the proposed action that could impact on critical habitat. The proposed action may adversely affect habitat critical to the species given the presence and proposed clearing of potential critical habitat within the Project Area. However, given the availability of suitable habitat in the vicinity of the Project Area, the management measures to be implemented, and the Project Area being located outside the modelled distribution of the species, the impact is unlikely to be significant.
Disrupt the breeding cycle of a population	May disrupt the breeding cycle of a population – unlikely to be significant • Suitable breeding habitat comprises hollows of mature Marri, Jarrah, and Karri trees in the south-west forests (DPaW, 2013). • Potential nesting habitat, comprising large Tuarts, Marris, and stags, that are suitable for Baudin's Cockatoo are present in the Project Area (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.3, p.49). No evidence of black cockatoo nesting was observed during the SLR (2024) survey. • The proposed action will require clearing of up to 68 potential black cockatoo nesting trees, 11 of which are Tuarts, 26 are Marri and four are stags. • The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable.



Significant Impact Criteria	Assessment
	- Black Cockatoos are considered to forage within a 6-12 km radius during the breeding season and a 20 km radius during the non-breeding season (DAWE, 2022). - Indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats. - The proposed action will implement management measures such as dieback and weed management, noise attenuation devices, maintenance of firebreaks, and availability of fire control equipment to minimise the potential for fires to be started by the proposed action that could impact critical habitat. The proposed action may disrupt the breeding cycle of a population given the clearing of and disturbance to potential nesting trees. However, given Baudin's Cockatoo has not been recorded within the Project Area, which is outside the modelled distribution of the species, the disruption is unlikely to be significant.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Unlikely to reduce the availability or quality of habitat to the extent that the species is likely to decline - The proposed action will require clearing of up to 2.94 ha of Banksia Woodlands and Eucalyptus Woodlands fauna habitats, and total overall clearing of up to 4.57 ha of fauna habitat. - The proposed action will require clearing of up to 68 potential black cockatoo nesting trees, 11 of which are Tuarts, 26 are Marri and four are stags. - The proposed action has been designed to avoid the clearing of trees identified as suitable foraging and nesting habitat by retaining them within Public Open Space, District Open Space, internal road reserves and lots, wherever practicable. - No evidence of black cockatoo nesting or roosting was observed by the SLR (2024) survey. - Extensive foraging habitat is available in the vicinity of the Project Area: - Approximately 13,035.4 ha of remnant native vegetation is present within 15 km of the Project Area (DWER, 2025). - The proposed clearing of approximately 4.57 ha of native fauna habitat represents 0.035% of the remaining native vegetation within a 15 km radius of the Project Area. - Foraging habitat outside the Project Area is within the 6-12 km radius Black Cockatoos are considered to forage in during the breeding season and within the 20 km radius Black Cockatoos are considered to forage in during the non-breeding season (DAWE, 2022). - Indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats. The proposed action will implement management measures to minimise the potential for fires to be started by the proposed action that could impact on critical habitat. The proposed clearing will result in the loss of suitable foraging vegetation and potential roosting and nesting habitat for Baudin's Cockatoo. However, given the mobile nature of the species, the availability of habitat outside the Project Area, and



Significant Impact Criteria	Assessment
	that the Project Area is outside the modelled distribution of the species, it is unlikely the proposed clearing will result in a decline of the species.
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	Unlikely to result in invasive species that are harmful to Baudin's Cockatoo becoming established • Black Cockatoos are adversely impacted by competition for nest hollows from introduced species such as galahs, corellas and European honeybees. • Potential nesting habitat, comprising large Tuarts, Marris, and stags, that are suitable for Baudin's Cockatoo is present in the Project Area (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.3, p.49). • A total of 68 potential black cockatoo nesting trees were recorded in the Project Area, of which six contain hollows. • Predation by feral cats is a threat to Black Cockatoos, particularly juveniles. • A CEMP will be prepared for the proposed action and will include the following management procedures: - o Weed and dieback hygiene management. - o Waste management procedures and removal of waste offsite. - o Prohibition on feeding fauna. - o Feral animal control. Given the limited number of potential nesting trees with hollows, and the implementation of management procedures that includes invasive species controls, the proposed action is not expected to result in the establishment of new invasive species.
Introduce disease that may cause the species to decline	Unlikely to introduce disease that may cause the species to decline • Decline in tree health from insects, soil-borne, foliar and canker pathogens including dieback, is a threat to Black Cockatoo habitat (DPaW, 2013). • A CEMP will be prepared for the proposed action and will include dieback hygiene management. Given dieback hygiene measures will be in place, the proposed action is not expected to introduce disease that may cause the species to decline.



Significant Impact Criteria	Assessment
Interfere with the recovery of the species	May interfere with the recovery of the species – unlikely to be significant - Criteria for success are specified in the Recovery Plan for Baudin's Cockatoo (DCCEEW, 2008) and summarised below for a ten year period: - The extent of occurrence remains stable or increases; - The number of breeding pairs remains stable or increases; - The number of individuals in each roosting flock remains stable or increases; and - The proportion of juveniles in each roosting flock remains stable or increases. Given the availability of foraging habitat in the vicinity of the Project Area, the proposed action is unlikely to affect the number of birds or proportion of juveniles at roost sites, as no Baudin's Cockatoos were recorded in the Project Area and no evidence of black cockatoo roosting was observed. Clearing of up to 2.94 ha of suitable foraging vegetation (Banksia and Eucalyptus Woodlands) for Baudin's Cockatoo, may reduce the extent of occurrence. However, these reductions are unlikely to be significant that it interferes with the recovery of the species. Appropriate management measures will be implemented to reduce the effect on habitat critical to the species.



Table 6: Assessment against EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species (DAWE, 2022) – Baudin's Cockatoo

Referral Threshold	Assessment
Breeding Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister. Loss of any potential nesting habitat is likely to require a referral to the minister.	Requires referral Proposed clearing of 68 potential black cockatoo nesting trees, of which six contain hollows.
High-quality native foraging habitat Loss of greater than or equal to 1 ha of foraging habitat scoring 5-10 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool and takes into account context i.e. proximity of the impact site to important attributes.	Does not meet the threshold for referral - Proposed clearing of 4.25 ha of High-quality Carnaby's Cockatoo foraging habitat (as scored by the DCCEE methodology (DAWE, 2022)). - The foraging quality scoring tool was not applied to Baudin's Cockatoo but the species utilise similar foraging habitat.
Lower-quality native foraging habitat Loss of greater than or equal to 10 ha of foraging habitat scoring 0-4 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool and takes into account context i.e. proximity of the impact site to important attributes.	Does not meet the threshold for referral No low-quality Baudin's Cockatoo foraging habitat was recorded in the Project Area.
Exotic foraging habitat Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by Black Cockatoos is likely to require a referral to the minister.	Does not meet the threshold for referral No exotic foraging habitat recorded in the Project Area.
Night roosting habitat Removal of any part of a known night roosting site is likely to require referral to the minister.	Does not meet the threshold for referral No night roosting habitat recorded in the Project Area.



10.1.4 Chuditch

Table 7: Assessment of the Significance of Impacts (DEWHA, 2013) – Chuditch (Vulnerable)

Significant Impact Criteria	Assessment
Lead to a long-term decrease in the size of an important population of a species	Unlikely to lead to a long-term decrease in the size of an important population - All populations and areas occupied by Chuditch are considered important to the survival of the species (DEC, 2012a, p.5). - The Chuditch was not recorded during the SLR (2024) survey; however, database searches identified a number of records in the vicinity of the Survey Area. The nearest record is 4 km north of the Survey Area from 2013, and the most recently recorded was in 2017 approximately 10.5 km southwest of the Survey Area (Att6_Fauna & Black Cockatoo Assessment, Section 4.2.4, p.37). - The Chuditch is considered to have a medium likelihood of occurrence in the Survey Area (Att6_Fauna & Black Cockatoo Assessment, Section 4.2.4, p.37). - The Eucalyptus Woodland fauna habitat may be utilised by the Chuditch, and the connectivity of neighbouring bushland to the Survey Area may also allow the species to move between the Survey Area and nearby patches of habitat (Att6_Fauna & Black Cockatoo Assessment, Section 5.2.3, p.48). - The Eucalyptus Woodland fauna habitat is mapped over 1.6 ha (20%) of the Project Area, and ranges in condition from Very Good to Completely Degraded. - The proposed action will require clearing of no more than 1.6 ha of the Eucalyptus Woodland fauna habitat, and a total of 4.57 ha of fauna habitat. - The proposed clearing has been designed to retain potentially suitable habitat within Public Open Space, District Open Space, internal road reserves and lots wherever practicable. The proposed action is unlikely to lead to a long-term decrease in the size of an important Chuditch population, given the absence of records and limited availability of suitable habitat within the Project Area.
Reduce the area of occupancy of an important population	May reduce the area of occupancy of an important population – unlikely to be significant - In the absence of foxes, Chuditch have relatively large areas of occupancy (home ranges), males ranging over 15 km² and females 3-4 km². Core areas are 4 km² and 0.9 km² for males and females respectively (DEC, 2012a, p.7). - The Project Area of 7.99 ha (0.0799 km²) represents 0.005% of the area of occupancy for the male Chuditch, and up to 0.02% for the female Chuditch. - The proposed action will require clearing of up to 4.57 ha of fauna habitat, representing 57% of the Project Area.



Significant Impact Criteria	Assessment
	The proposed action may reduce the area of occupancy through the removal of suitable habitat; however, as the overall extent of the Project Area represents at most 0.02% of the total area of occupancy of the Chuditch and the limited number of records in the vicinity of the Project Area, the potential reduction is unlikely to be significant.
Fragment an existing important population into two or more populations	Unlikely to fragment an existing important population • Chuditch have a solitary and nomadic lifestyle (DEC, 2012a, p.5). • Chuditch has not been recorded in the Survey Area but has a medium likelihood of occurrence due to the presence of suitable habitat and the occurrence of records within a 20 km radius (Att6_Fauna & Black Cockatoo Assessment, Section 4.2.4, p.37). • The SLR (2024) survey identified that Eucalyptus Woodland fauna habitat may be used by the Chuditch. Approximately 1.6 ha of the Eucalyptus Woodlands habitat was recorded within the Project Area, and a total 7.8 ha occurs within the broader Survey Area. • The proposed action will require clearing of no more than 1.6 ha of Eucalyptus Woodland fauna habitat, and a total of 4.57 ha of fauna habitat. The proposed action is unlikely to fragment an existing population, as no population has been identified in the immediate vicinity of the Project.
Adversely affect habitat critical to the survival of a species	May affect habitat critical to the survival of the species – unlikely to be significant • Habitat critical to the survival of the Chuditch is considered to include (DEC, 2012a): - o Areas currently occupied by Chuditch. - o Areas of natural vegetation in which Chuditch breed, forage and use to move from one area to another. - o Areas of suitable vegetation within the recorded range in which undiscovered Chuditch populations may exist. - o Areas not currently occupied by Chuditch due to recent fire but are capable of supporting Chuditch populations when sufficiently recovered. - o Areas previously occupied and that still provide suitable habitat and into which Chuditch can be reintroduced. • The Project Area is located within the recorded range of the Chuditch. The recorded Eucalyptus Woodland fauna habitat may be used by the Chuditch, and as such represents potentially suitable vegetation for the species. • The proposed action will require clearing of a total of 4.57 ha of fauna habitat, of which 1.6 ha is Eucalyptus Woodland. • Potential indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats and the quality of these habitats. • The proposed action will implement management measures such as dieback and weed management, noise attenuation devices, maintenance of firebreaks, availability of fire control equipment to minimise the potential for fires to be started by the proposed action that could impact on critical habitat.



Significant Impact Criteria	Assessment
	The proposed action may adversely affect habitat critical to the survival of the species, given the presence of suitable vegetation within the recorded range of the Chuditch. However, given the limited clearing and the management measures to be implement, the impact is unlikely to be significant.
Disrupt the breeding cycle of an important population	Unlikely to disrupt the breeding cycle of an important population - In the south-west and wheatbelt, Chuditch are seasonal and supernumerary breeders with mating occurring in late April to early July. Following a gestation period of 17-18 days, young are fully weaned at 170 days of age and subsequently disperse (DEC, 2012a, p.7). - Chuditch was not recorded during the SLR (2024) survey (Att6_Fauna & Black Cockatoo Assessment, Section 4.2.4, p.37). - Potential indirect impacts on habitat from dust, noise and light emissions will be managed during construction and operation of the proposed action. The proposed action is unlikely to disrupt the breeding cycle of a population given the limited suitable habitat in the Project Area.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Unlikely to reduce the availability or quality of habitat to the extent that the species is likely to decline - The Eucalyptus Woodland fauna habitat represents suitable habitat that may be used by the Chuditch ranges in condition from Very Good to Completely Degraded. - The proposed action will require clearing of up to 1.6 ha, (20%) of the Project Area, of the Eucalyptus Woodland fauna habitat. - Indirect impacts associated with clearing such as dust, noise, fire, dieback and weeds will be managed to ensure no impact occurs on critical habitats. The proposed action will implement management measures to minimise the potential for fires to be started by the proposed action that could impact on critical habitat. The proposed action will result in the loss of suitable habitat. However, given the limited quantity of suitable habitat in the Project Area, it is unlikely that the loss will result in a decline of the species.
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	Unlikely to result in invasive species that are harmful to Chuditch becoming established - Predation by, and competition from foxes and feral cats are a major threat to Chuditch (DEC, 2012a, p.13). - The SLR (2024) survey recorded the presence the non-native Cat (<i>Felis catus</i>) and did not record the fox (Att6_Fauna & Black Cockatoo Assessment, Section 4.2.3, p.14).



Significant Impact Criteria	Assessment
	- A CEMP will be prepared for the proposed action and will include the following management procedures: - Weed and Dieback hygiene management. - Waste management procedures and removal of waste offsite. - Prohibition on feeding fauna. - Feral animal control. Given the implementation of management procedures that includes invasive species controls, the proposed action is not expected to result in the establishment of new invasive species.
Introduce disease that may cause the species to decline	Unlikely to introduce disease that may cause the species to decline Disease is considered to have contributed to the decline of the Chuditch (DEC, 2012a, p.13). Given the hygiene management proposed to be in place, the proposed action is unlikely to introduce disease that may cause the species to decline.
Interfere with the recovery of the species	May interfere with the recovery of the species – unlikely to be significant - Performance criteria are specified in the Recovery Plan for Chuditch (DEC, 2012a) and are summarised below for a ten-year period: - Retain and improve habitat critical for survival. - Determine impacts of feral cats on Chuditch. - Determine the impact of feral cat control methods on Chuditch. - Continue, expand and improve baiting foxes and feral cats. - Determine population abundance and distribution of Chuditch populations. - Establish reference sites for monitoring Chuditch population abundance to evaluate the effectiveness of fox and cat control. - Undertake and monitor translocations to increase the extent of occurrence. - Increase public awareness through community education and enforcement of regulations. - Coordinate recovery implementation. The proposed action may interfere with the recovery of the species, given the proposed clearing of 1.6 ha of potentially suitable and critical habitat. However, this reduction is unlikely to be significant that it interferes with the recovery of the species.



10.1.5 Banksia Woodlands of the Swan Coastal Plain

Table 8: Assessment of Significance – Banksia Woodlands of the Swan Coastal Plain Ecological Community (Endangered)

Significant Impact Criteria	Assessment
Reduce the extent of an ecological community	Will reduce the extent of an ecological community – may be significant - The Project is located in the City of Kwinana, within the Perth IBRA subregion (SWA02) of the Swan Coastal Plain IBRA region. The Approved Conservation Advice (DoEE, 2016) estimates the following approximate extents of Banksia Woodland TEC: 3,804.8 ha in the City of Kwinana (DoEE, 2016, p.100); and 253,540.6 ha in the Perth IBRA subregion, of which approximately 57,054.9 ha (22.5%) is protected in reserves (DoEE, 2016, p.28). - The proposed action requires clearing of approximately 2.16 ha of Banksia Woodland TEC, ranging in condition from Excellent to Good, equating to approximately: 0.057% of the estimated extent of Banksia Woodlands TEC in the City of Kwinana; and 0.001% of the estimated extent of Banksia Woodlands TEC in the Perth IBRA subregion. - The depth to the water table in an area determines the extent to which Banksia species are groundwater dependent, with groundwater dependency decreasing with increasing water table depth (DoEE, 2016). The dominant, deep-rooted <i>Banksia</i> species of the Banksia Woodland TEC are considered to be groundwater dependent and therefore susceptible to impacts from groundwater drawdown (DoEE, 2016, p.88). - Pre-development groundwater levels between October 2022 and October 2024 ranged from a minimum elevation 9.1 mAHD to a maximum of 13.1 mAHD. The depth to water relative to existing surface ranged from 0.2 mbgl to a maximum of 4.4 mbgl (Att9_Groundwater Monitoring, Section 5.1, p.11). - Dewatering for construction of the proposed action may be required, and depending on the location, current groundwater level, depth of excavation required and duration, dewatering will cause temporary and localised groundwater drawdown. The proposed action will reduce the extent of the Banksia Woodland TEC by approximately 0.057% in the City of Kwinana and 0.001% in the Perth IBRA region, and this reduction in extent may be significant.
Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines	Will further fragment the Banksia Woodlands TEC – may be significant - In the City of Kwinana, the Banksia Woodland TEC had a pre-European extent of 10,472.9 ha and has seen a 63.7% decline in vegetation-system associations, to an approximate extent of 3,804.8 ha as of 2015 (DoEE, 2016, p.100). <i>Banksia</i> species require pollinators, and seed dispersal by both wind and seed dispersing fauna. Fragmentation can impede movement of fauna and dispersal of seeds (DoEE, 2016, p.86).



Significant Impact Criteria	Assessment
	- The proposed action will clear 2.16 ha of one patch of Banksia Woodland TEC. - Two additional patches of Banksia Woodland TEC were identified in the Survey Area, approximately 0.2 km and 0.4 km south respectively of the Project Area (360 Environmental, 2023). Further Banksia Woodland occurs outside the Survey Area and Project Area, directly adjacent to their eastern boundaries on Lot 123 (360 Environmental, 2023) (Att5_BiologicalSurvey, Section 5.1.7, p.73). The proposed action will increase fragmentation of the Banksia Woodland TEC. Given existing fragmentation, and the requirement for pollinators and seed dispersal, the increase in fragmentation may be significant.
Adversely affect habitat critical to the survival of an ecological community	Will adversely affect habitat critical to the survival of the Banksia Woodlands TEC – likely to be significant - The Approved Conservation Advice (DoEE, 2016, p.27) states that areas considered critical to the survival of the Banksia Woodlands TEC are all patches that meet the key diagnostic characteristics and condition thresholds for this ecological community, plus the buffer zones surrounding the TEC. - One patch of Banksia Woodland TEC, totalling 3.9 ha, overlaps the Project Area and meets the key diagnostic characteristics (360 Environmental, 2023) (Att5_BiologicalSurvey, Section 5.1.7, p.73). Approximately 2.16 ha (55%) of this patch occurs in the Project Area. The condition of this patch ranges from Excellent to Good. - Two further patches of Banksia Woodland TEC were identified in the Survey Area, totalling 1.87 ha (located 0.4 km south of the Project Area) and 0.38 ha (located 0.2 km south of the Project Area) respectively, both of which are considered to be in Good to Very Good conditions (360 Environmental, 2023). - These patches meet the diagnostic characteristics and condition threshold when taking the adjacent Banksia woodland to the east of the Project Area and Survey Area into account. - The proposed action will clear 2.16 ha of Banksia Woodland TEC meeting the key diagnostic characteristics. The proposed clearing of Banksia Woodlands TEC in the Project Area will adversely affect habitat critical to the survival of the Banksia Woodlands TEC and is, therefore, likely to be significant.
Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns	Will modify abiotic factors necessary for survival of the Banksia Woodlands TEC – may be significant. - The proposed action requires clearing of native vegetation, bulk earthworks, and civil construction of residential lots, internal roads, and open spaces. These activities are likely to alter abiotic factors such as soil, surface water flow, nutrient transport, and groundwater level, that are necessary for the survival of the Banksia Woodlands TEC. - A Local Water Management Strategy (LWMS) has been prepared to support the proposed action, addressing groundwater levels, surface water drainage and other management measures (Att11_LWMS). The proposed action will modify abiotic factors necessary to the survival of the TEC; these modifications may be significant, however the LWMS and future urban water management plans will address how these factors will be managed to reduce the impact on the Banksia Woodlands TEC.



Significant Impact Criteria	Assessment
Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting	Unlikely to result in a substantial change in species composition outside the Project Area - The proposed action will require clearing of approximately 2.16 ha of Banksia Woodland TEC, of which: 0.0002 ha is in Excellent condition. 0.45 ha is in Very Good condition. 1.52 ha is in Good-Very Good condition. 0.19 ha is in Good condition. - The proposed action will include implementation of management measures to minimise indirect impacts to the Banksia Woodlands TEC including: - Dust control measures. - Weed and dieback hygiene management. - Regular weed monitoring and control. - Maintenance of firebreaks. - Hotwork procedures. - Availability of fire control equipment. The clearing of 2.16 ha of Banksia Woodland TEC will result in the loss of the TEC in the Project Area. A substantial change in areas of TEC outside the Project Area is not expected as management measures will be in place to minimise the potential for indirect impacts to the Banksia Woodlands TEC.
Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including but not limited to: - Assisting invasive species, that are harmful to the listed ecological community, to become established, or - Causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological	Unlikely to result in a substantial reduction in the quality or integrity of the Banksia Woodlands TEC outside the Project Area - Key threats that may result in a reduction in the quality of the Banksia Woodlands TEC include dieback diseases, invasive species, changes to fire regime and changes to the hydrological regime (DoEE, 2016, p.30). - Environmental management for the proposed action will include: - Dust control measures, - Weed and dieback hygiene management, - Regular weed monitoring and control, - Maintenance of firebreaks, - Hotwork procedures, and - Availability of fire control equipment.



Significant Impact Criteria	Assessment
community which kill or inhibit the growth of species in the ecological community	Given the management measures to be implemented, the proposed action is not expected to result in the introduction of disease, establishment of new invasive flora or fauna species or changes to the fire regime in areas of the TEC outside the Project Area.
Interfere with the recovery of an ecological community	May interfere with the recovery of the Banksia Woodlands TEC – may be significant • The DoE (2026a) notes that a Recovery Plan has not been prepared for the Banksia Woodlands TEC as the Approved Conservation Advice (DoEE, 2016) sufficiently outlines the priority research and conservation actions needed for this TEC. • Priority actions in the Conservation Advice for the recovery of the TEC include (DoEE, 2016, p.33-43) - o Preventing vegetation clearance and direct habitat damage, - o Preventing weeds, feral animals, dieback and other diseases, - o Implementing re-vegetation at both a landscape scale and site-specific scale and including restoration of wildlife corridors and linkages, and - o Controlling invasive species and diseases. • The proposed action will result in clearing of 2.16 ha of Banksia Woodlands TEC. • Environmental management will include weed and dieback hygiene management, weed monitoring and control and feral animal management in the Project Area. Although the proposed action will implement management measures for the control of weeds, feral animals and dieback as per the Priority Actions, the proposed action will also clear 2.16 ha of Banksia Woodlands TEC. The proposed clearing may interfere with the recovery of the Banksia Woodlands TEC, and therefore, may be significant.

