



1. Application details

1.1. Permit application details

Permit application No.: 7933/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Osen Group Pty Ltd
Application received date: 02 January 2018

1.3. Property details

Property: LOT 28 ON DIAGRAM 69857, HAMMOND PARK
Local Government Authority: COCKBURN, CITY OF
Localities: HAMMOND PARK

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.22		Mechanical Removal	Hazard reduction or fire control

2. Site Information

Clearing Description The application is to clear 0.22 hectares of native vegetation within Lot 28 on Diagram 69857, Hammond Park, for the purpose of widening a firebreak (figure 1).

Vegetation Description A flora and vegetation survey undertaken within the application area identified that the application area predominantly consists of the following vegetation type:

Open Low Forest of *Banksia attenuata*, *B. ilicifolia* and *B. menziesii* with scattered *Allocasuarina fraseriana* over open tall Shrubland to tall Shrubland of *Xanthorrhoea preissii*, with occasional pockets of *Kunzea glabrescens* tall shrubs, over open shrubland to shrubland of *Stirlingia latifolia* over open low shrubland of *Hibbertia hypericoides* or *Hypocalymma robustum* and *Bossiaea eriocarpa* or over a mixed sedgeland/herbland including *Phlebocarya ciliata*, and/or *Desmocladius flexuosus* and *Lepidosperma pubisquameum* on midslope flats, on loamy sands (Coterra Environment, 2017b).

Vegetation Condition Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
To
Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994)
Approximately two thirds of the application area is in a good to very good (Keighery, 1994) condition. The remaining 0.06 hectares of native vegetation is considered to be a degraded or completely degraded (Keighery, 1994) condition (Coterra Environment, 2017a).



Figure 1: Application area hatched in blue

2.1. Decision on application

Decision on Permit Application:

Refuse

Decision Date:

24 January 2019

Reasons for Decision:

The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance to principles (a), (b) and (d) and is not likely to be at variance to the remaining principles.

The Delegated Officer determined that the proposed clearing will result in the loss of 0.22 hectares of vegetation that; contains high biodiversity, foraging habitat for black cockatoos and is synonymous with the Banksia Woodlands of the Swan Coastal Plain threatened ecological community (TEC).

The Delegated Officer also had regard State Planning Policy (SPP) 3.7 and the Guidelines for Planning in Bushfire Prone Areas (Guidelines).

In letters dated 21 May 2018, 29 August 2018 and 22 November 2018 the applicant was afforded the opportunity to demonstrate their ability to avoid or minimise the impacts identified and to address the identified planning issues.

In a letter of 9 July 2018 the applicants representative provided advice that the impact to black cockatoos and the TEC were not considered significant and that there were no opportunities to avoid and minimise the identified impacts.

On 8 December 2018 a letter was received from the applicants representative providing further information to support their claim that the environmental impacts were insignificant. This letter also contained advice from a third party consultant providing their interpretation of SPP 3.7 and the Guidelines.

These matters were taken into consideration by the Delegated Officer in the decision to refuse to grant a clearing permit.

3. Assessment of application against clearing principles

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

Proposed clearing is at variance to this Principle

According to available databases, six rare flora and 26 priority flora species have been recorded within the local area (10 kilometre radius). A flora and vegetation survey undertaken by Coterra Environment in October 2017 did not identify any rare or priority flora within the application area (Coterra Environment, 2017b).

As discussed under Principle (b), the application area contains vegetation that provides suitable foraging habitat for threatened fauna, including Carnaby's cockatoo (*Calyptorhynchus latirostris*) and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*). The application area is part of a larger remnant and comprises of Banksia woodland across the majority of the property. The entire property is considered to provide foraging habitat for the black cockatoo species. The proposed clearing will impact the vegetation within Lot 28 through the direct clearing of 0.22 hectares and indirectly through edge effects and therefore further degrading the adjacent remnant vegetation. Therefore the application area is considered to comprise of significant habitat for these species.

As discussed under principle (d), the vegetation present within the application area is likely to be representative of the Commonwealth Department of the Environment and Energy (DotEE) listed Banksia Woodlands of the Swan Coastal Plain ecological community which is listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The DotEE mapping of this TEC includes the application area. A flora and vegetation survey undertaken within Lot 28 identified approximately 0.16 hectares of the application area that is representative of this TEC. The survey identified an occurrence of this TEC, 1.16 hectares in size, within Lot 28 which included three of the four key diagnostic species of this community (*Banksia attenuata*, *B. menziesii* and *B. ilicifolia*). Given this, and its size (1.16 hectares) and condition it is considered representative of the Banksia woodlands TEC.

The application area contains vegetation in very good (Keighery, 1994) condition, a TEC and suitable habitat for black cockatoos. Therefore, the application area is considered to comprise of high biological diversity.

The proposed clearing is at variance to this Principle.

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

Proposed clearing is at variance to this Principle

According to available databases, seven terrestrial fauna species listed as specially protected under the *Wildlife Conservation Act 1950* have been recorded within the local area, being; forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), chuditch (*Dasyurus geoffroyi*), a short-tongued bee (*Leioproctus douglasiellus*), numbat (*Myrmecobius fasciatus*), a short-tongued bee (*Neopasiphae simplicior*), Quokka (*Setonix brachyurus*) (Department of Biodiversity, Conservation and Attractions [DBCA], 2007-).

Carnaby's cockatoo is listed as endangered and forest red-tailed cockatoo is listed as vulnerable under the EPBC Act. Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). These species nest in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). No habitat trees suitable for breeding have been identified within the application area (Coterra Environment, 2017b).

Black cockatoos have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia, 2012). Given the presence of *Banksia* sp. within the application area, the application area comprises suitable foraging habitat for the black cockatoo species.

The chuditch is listed as vulnerable under the EPBC Act. Chuditch are now only present in approximately five per cent of their pre-European range. Most chuditch are now found in varying densities throughout the jarrah forest and south coast of Western Australia. Chuditch use a range of habitats including forest, mallee shrublands, woodland and desert. The densest populations have been found in riparian jarrah forest (DEC, 2012a). Given the present range of this species it is unlikely to be present within the application area.

The numbat is also listed as vulnerable under the EPBC Act. Numbats build nests in hollow logs or trees, or dig burrows. Only two isolated populations of this species remains at Dryandra and Perup in the southwest of Western Australia, approximately 160 kilometres apart (DotE, 2014). Given the distance to the two known remaining populations the proposed clearing is not likely to impact them.

The first abovementioned short-tongued bee is now thought to occur in three locations within the Perth metropolitan area ranging from Cannington to Forrestdale and have been collected on two plant species *Goodenia filiformis* (Priority 3) and *Anthotium junciforme* (Priority 4) (DotE, 2013). These species have not been recorded within the application area therefore suitable habitat for this species is not likely to be located within the application area.

The second abovementioned short-tongued bee is found at a single location within Forrestdale Lake Nature Reserve. The species has been collected only at flowers of Thread-leaved Goodenia (*Goodenia filiformis*), Slender Lobelia (*Lobelia tenulor*), *Angianthus preissianus* (males only) and Velleia sp (DotE, 2008). Given the present range of this species it is unlikely to be present within the application area.

Given the above, the application area provides foraging habitat for the black cockatoo species. The application area is part of a larger remnant and comprises of Banksia woodland across the majority of the property, with the western portion predominantly being in a good to very good (Keighery, 1994) condition and the eastern portion predominantly being in a degraded to completely degraded (Keighery, 1994) condition. The entire property is considered to provide foraging habitat for the black cockatoo species. The proposed clearing will impact the vegetation within Lot 28 through the direct clearing of 0.22 hectares and indirectly through edge effects and therefore further degrading the adjacent remnant vegetation. Therefore the application area is considered to comprise of significant habitat for these species.

Therefore, the proposed clearing is at variance to this Principle.

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

Proposed clearing is not likely to be at variance to this Principle

According to available databases, six rare flora species have been recorded within the local area.

A flora and vegetation survey undertaken by Coterra Environment in October 2017 did not identify any rare flora within the application area (Coterra Environment, 2017a).

The application area is not likely to include or be necessary for the continued existence of rare flora.

The proposed clearing is not likely to be at variance to this 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.

Proposed clearing is at variance to this Principle

The application area is located within DotEE's mapping of the threatened ecological community (TEC), '*Banksia* Woodlands of the Swan Coastal Plain'. The *Banksia* Woodlands of the Swan Coastal Plain TEC is listed as endangered under the EPBC Act. The *Banksia* Woodlands ecological community is restricted to areas in and immediately adjacent to the Swan Coastal Plain IBRA bioregion, including the Dandaragan plateau. This coastal plain stretches from around Jurien Bay in the north, to Dunsborough in the south (DotEE, 2016).

A flora and vegetation survey undertaken within Lot 28 identified the application area to contain approximately 0.16 hectares of native vegetation as being representative of this TEC (Coterra Environment, 2017b). The remaining 0.06 hectares of native vegetation proposed to be cleared is in a completely degraded to degraded (Keighery, 1994) condition and therefore is not likely to be representative of this TEC. However, this portion is likely to provide a buffer to the TEC occurring within Lot 28 and therefore necessary for the maintenance of the TEC.

The flora and vegetation survey identified that the ecological community (1.16 hectares on the western side of Lot 28) has a dominant *Banksia* component, which includes three of four key species—*Banksia attenuata* (candlestick banksia), *B. menziesii* (firewood banksia), and *B. ilicifolia* (holly-leaved banksia) (Coterra Environment, 2017b). Given the ecological community contains three of the four key diagnostic species of this community, the size of the TEC and its condition it is considered to be representative of this community.

The ecological community provides habitat for many native plants and animals that rely on *Banksia* Woodlands for their homes and food. Remaining patches of the ecological community provide important wildlife corridors and refuges in a mostly fragmented landscape (DotEE, 2016).

Given the above, the application area comprises of and contains vegetation necessary for the maintenance of a TEC.

The proposed clearing is at variance to this 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.

Proposed clearing is not likely to be at variance to this Principle

The application area is located within the Swan Coastal Plain IBRA bioregion. This bioregion has approximately 38.5 per cent of its pre-European vegetation extent remaining (Government of Western Australia, 2018a).

The application area is also mapped as Heddlé Bassendean Central and South complex which retains approximately 27 per cent pre-European extent (Government of Western Australia, 2018b).

The area under application is located within the City of Cockburn, within which there is approximately 28 per cent pre-European extent remaining (Government of Western Australia, 2018a).

The local area retains approximately 35 per cent native vegetation.

The National Objectives and Targets for Biodiversity Conservation 2001-2005 include a target to have clearing controls in place that prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750 (Commonwealth of Australia 2001). In the Perth Metropolitan and Bunbury regions, the Environmental Protection Authority (EPA) has a modified objective to retain at least 10 per cent of the pre-clearing extent of vegetation complexes for defined

constrained areas (intensely developed) (EPA, 2015; EPA, 2003; Government of Western Australia, 2000). The application area is located within a constrained area given that it occurs within the Bush Forever Study Area Boundary.

The application area contains vegetation in very good (Keighery, 1994) condition, foraging habitat for black cockatoos and a TEC. Therefore the application area may be a significant remnant, however as the application is located within a constrained area it is not considered to be a significant remnant in an area that has been extensively cleared.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent remaining in all DBCA managed lands (proportion of Pre-European extent) (%)
IBRA Bioregion				
Swan Coastal Plain	1,501,222	578,4997	38.5	14.8
Heddlle Vegetation Complex				
Bassendean Complex-Central and South	87,476	23,533	27	5

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

Proposed clearing is not likely to be at variance to this Principle

No watercourses or wetlands have been mapped within the application area. The closest waterbody being a conservation category wetland mapped approximately 800 metres from the application area.

Given the distance to the closest wetland, the application area is not likely to be growing in association with a wetland or watercourse.

The proposed clearing is not likely to be at variance to this Principle.

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

Proposed clearing is not likely to be at variance to this Principle

The soils within the application area have been mapped as:

Bassendean B1 Phase (approximately 90% of application area) - Extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands sometimes with a pale yellow B horizon or a weak iron-organic hardpan at depths generally greater than two metres; Banksia dominant.

Bassendean B2 Phase (approximately 10% of application area) - Flat to very gently undulating sandplains with well to moderately well drained deep bleached grey sands with a pale yellow B horizon or a weak iron-organic hardpan 1.2 metres.

Land Deg Risk Category	Bassendean B1 Phase	Bassendean B2 Phase
Water Erosion	3-10% of map unit has a high to extreme water erosion risk	<3% of map unit has a high to extreme water erosion risk
Wind Erosion	>70% of the map unit has a high to extreme wind erosion risk	>70% of the map unit has a high to extreme wind erosion risk
Waterlogging	3-10% of map unit has a moderate to very high waterlogging risk	3-10% of map unit has a moderate to very high waterlogging risk
Flooding	<3% of the map unit has a moderate to high flood risk	<3% of the map unit has a moderate to high flood risk
Salinity Risk	30-50% of map unit has a moderate to high salinity risk or is presently saline	30-50% of map unit has a moderate to high salinity risk or is presently saline

Based on the mapped land degradation risk outlined above, the application area has a relatively low likelihood of water erosion, waterlogging and flooding (Schoknecht et al., 2004).

Wind erosion is mapped at 70 per cent of the map unit having a high to extreme risk of wind erosion (Schoknecht et al., 2004).

Given the sandy nature of the soils and mapped land degradation risk, the application area may be prone to wind erosion. However, given the small area proposed to be cleared that is part of a larger remnant (approximately four hectares) the proposed clearing is not likely to lead to appreciable land degradation.

The proposed clearing is not likely to be at variance to this 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.

Proposed clearing is not likely to be at variance to this Principle

The closest mapped conservation area is Harry Waring Marsupial Reserve which is located approximately one kilometre west of the application area. This area is also mapped as Bush Forever Sites 391 and 392.

Jandakot Regional Park (Bush Forever Site 492) is located approximately 1.1 kilometres north west and Bush Forever Site 263 is mapped approximately three kilometres north west of the application area.

Given the distance to the nearest conservation reserve the proposed clearing is unlikely to impact on the conservation values of these reserves through the spread of weeds or dieback.

The application area is part of a north south ecological linkage that allows fauna movement across the landscape. However, given the small area proposed to be cleared that is part of a larger remnant, the proposed clearing will not sever this linkage and therefore the proposed clearing is not likely to have a significant impact upon fauna movement across the landscape.

The proposed clearing is not likely to be at variance to this 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.

Proposed clearing is not likely to be at variance to this Principle

No watercourses or wetlands have been mapped within the application area. The closest waterbody being a conservation category wetland mapped approximately 800 metres from the application area.

Given the distance to the closest wetland, the proposed clearing is not likely to cause deterioration in the quality of surface water.

Groundwater salinity within the application area is mapped at less than 500 total dissolved solids, milligrams per litre. This level of groundwater salinity is classified as 'fresh'. Given this level, the proposed clearing is not likely to increase groundwater salinity.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

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

Proposed clearing is not likely to be at variance to this Principle

Noting the size of the application area, the mapped soil types present and that Lot 28 will remain predominantly vegetation, the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Planning instruments and other relevant matters.

The City of Cockburn has advised that, generally, clearing to facilitate a neighbouring subdivision would not be supported as this places a liability on neighbouring land owners to maintain fire mitigation measures (City of Cockburn, 2018).

The applicant has obtained authorisation from the landowner of Lot 28 to undertake the proposed clearing.

On 31 August 2017 the Western Australia Planning Commission issues subdivision approval for Lot 29 Barfield Road, Hammond Park (Application No: 155626). Condition 1 of this approval excludes proposed Lots 45-53, which are located adjacent to the application area. Advice on this approval states that 'In the event that the applicant/landowner can demonstrate to the satisfaction of the Western Australian Planning Commission, on the advice of the City of Cockburn, that the bushfire hazard threat from vegetation on adjacent Lot 28 is no longer present, Condition 1 will become redundant and the approval and residual conditions where relevant will apply to proposed Lots 45-53.

On 25 October 2018 the City of Cockburn issued conditional Development Approval for 'Clearing of Vegetation' on Lot 28.

Advice received from Bushfire Policy, Department of Planning, Lands and Heritage (DPLH) on 8 January 2019 states that Condition 1 of the subdivision approval is not intended to encourage unnecessary clearing and on-going bushfire mitigation measures on a neighbouring lot, as State Planning Policy 3.7 (SPP3.7) and the Guidelines for Planning in Bushfire Prone Areas (Guidelines) do not provide for the clearing or the management of vegetation on adjoining properties. The condition allows for proposed lots 45-53 to be subdivided without seeking further approval from the Commission, if or when, lot 28 is subdivided and developed in the future. This condition is generally applied where the adjoining land is identified for further

development through a local planning strategy and scheme, and preferably where there is an approved structure plan in place for the adjoining lot (DHLH, 2018).

The Development Approval (DA) alludes to lot 28 being subdivided in the future. It is bushfire policy's position that the decision to clear native vegetation within sections of lot 28 should be considered through the standard planning framework (e.g. a structure plan, followed by subdivision and then a DA), as this ensures that any proposed clearing of native vegetation over an entire lot or area is considered in a holistic manner, rather than through piecemeal development applications (DPLH, 2018). Often the preparation of a structure plan or subdivision will present opportunities to identify and retain vegetation within public open space areas, etc (DPLH, 2018).

Policy objective 5.4 of SPP 3.7 outlines that the policy aims to "*Achieve an appropriate balance between bushfire risk management measures and, biodiversity conservation values, environmental protection and biodiversity management and landscape amenity, with consideration of the potential impacts of climate change.*" In accordance with this objective the advice within the Guidelines outlines that the APZ is to be contained within the lot in which the building is (or is to be) situated and that where the removal of native vegetation is proposed then a reduction in lot yield may be required (DPLH, 2018). Explanatory note *E2.1 Asset Protection Zones (APZ)* (on page 63 of the Guidelines and pasted below) should be read in its entirety as it is clear that roads, urban development, etc may form part of the APZ outside of the lot, however this does not extend to native vegetation or rural land. Rather, the explanatory notes outlines that in instances in which an APZ will adversely impact on the retention of native vegetation then the lot yield may need to be reduced (DPLH, 2018).

"... The APZ should be contained solely within the boundaries of the lot on which the building is situated, except in instances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity. The APZ may include public roads, waterways, footpaths, buildings, rocky outcrops, golf courses, maintained parkland as well as cultivated gardens in an urban context, but does not include grassland or vegetation on a neighbouring rural lot, farmland, wetland reserves and unmanaged public reserves.

APZs can adversely affect the retention of native vegetation. Where the loss of vegetation is not acceptable or causes conflict with landscape or environmental objectives, such as waterway foreshore areas and wetland buffers, reducing lot yield may be necessary in order to minimise the removal and modification of remnant vegetation."

The draft Perth and Peel Green Growth Plan for 3.5 million (Green Growth Plan) has identified the application area as falling within an 'Urban Class of Action'. The Green Growth Plan is in draft and therefore has no statutory basis at this time and therefore was not a consideration in this application.

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 12 February 2018 with a 21 day submission period. No public submissions have been received in relation to this application.

4. References

City of Cockburn (2018) Advice for Clearing Permit Application CPS 7933/1. Western Australia. (DWER Ref: A1616522)
Coterra Environment (2017a) Supplementary Information. DWER Ref: A1590129
Coterra Environment (2017a) Ecological Survey Report – Lot 28 Barfield Road, Hammond Park. DWER Ref: A1590129
CPS 7933/1

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, Canberra.

Department of Biodiversity, Conservation and Attractions (BDCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>.

Department of Environment and Conservation (DEC) (2012). Chuditch (*Dasyurus geoffroii*) Recovery Plan. Wildlife Management Program No. 54. Department of Environment and Conservation, Perth, Western Australia

Department of the Environment (DotE) (2008) Approved Conservation Advice for *Neopasiphae simplicior* (a short-tongued bee) 16 December 2008.

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Department of Planning, Lands and Heritage (DPLD) (2018) Advice regarding the interpretation of State Planning Policy 3.7 and the Guidelines for Planning in Bushfire Prone Areas. Received on 8 January 2019 (DWER Ref: A1753969).

Environmental Protection Authority (EPA) (2003) Bulletin 1108 – Greater Bunbury Region Scheme, Report and recommendations of the Environmental Protection Authority, Environmental Protection Authority, Perth.

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Government of Western Australia (2018b). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2017. WA Department of Parks and Wildlife, Perth.

Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.