GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 8103/1
Permit Holder:	Holcim (Australia) Pty Ltd
Duration of Permit:	14 April 2019 to 14 April 2024

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done
Clearing for the purpose of extractive industry

2. Land on which clearing is to be done
Lot 6 on Diagram 69555, Willyung
Lot 2 on Diagram 52197, Willyung

3. Area of Clearing
The Permit Holder must not clear more than 2.3 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8103/1.

4. Application
This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II – MANAGEMENT CONDITIONS

5. Avoid, minimise and reduce the impacts and extent of clearing
In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
(a) avoid the clearing of native vegetation;
(b) minimise the amount of native vegetation to be cleared; and
(c) reduce the impact of clearing on any environmental value.

6. Dieback and weed control
When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:
(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
(b) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
(c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

PART III – RECORD KEEPING AND REPORTING

7. Record keeping

The Permit Holder must maintain the following records in relation to the clearing of native vegetation authorised under this Permit:

(a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
(b) the date(s) that the area was cleared;
(c) the size of the area cleared (in hectares);
(d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 5 of this Permit;
(e) actions taken to minimise the risk of the introduction and spread of *dieback* and *weeds* in accordance with condition 6 of this Permit; and

8. Reporting

The Permit Holder must produce the records required under condition 7 of this Permit when required by the *CEO*.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

dieback means the effect of *Phytophthora* species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means any plant -

(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
(c) not indigenous to the area concerned.

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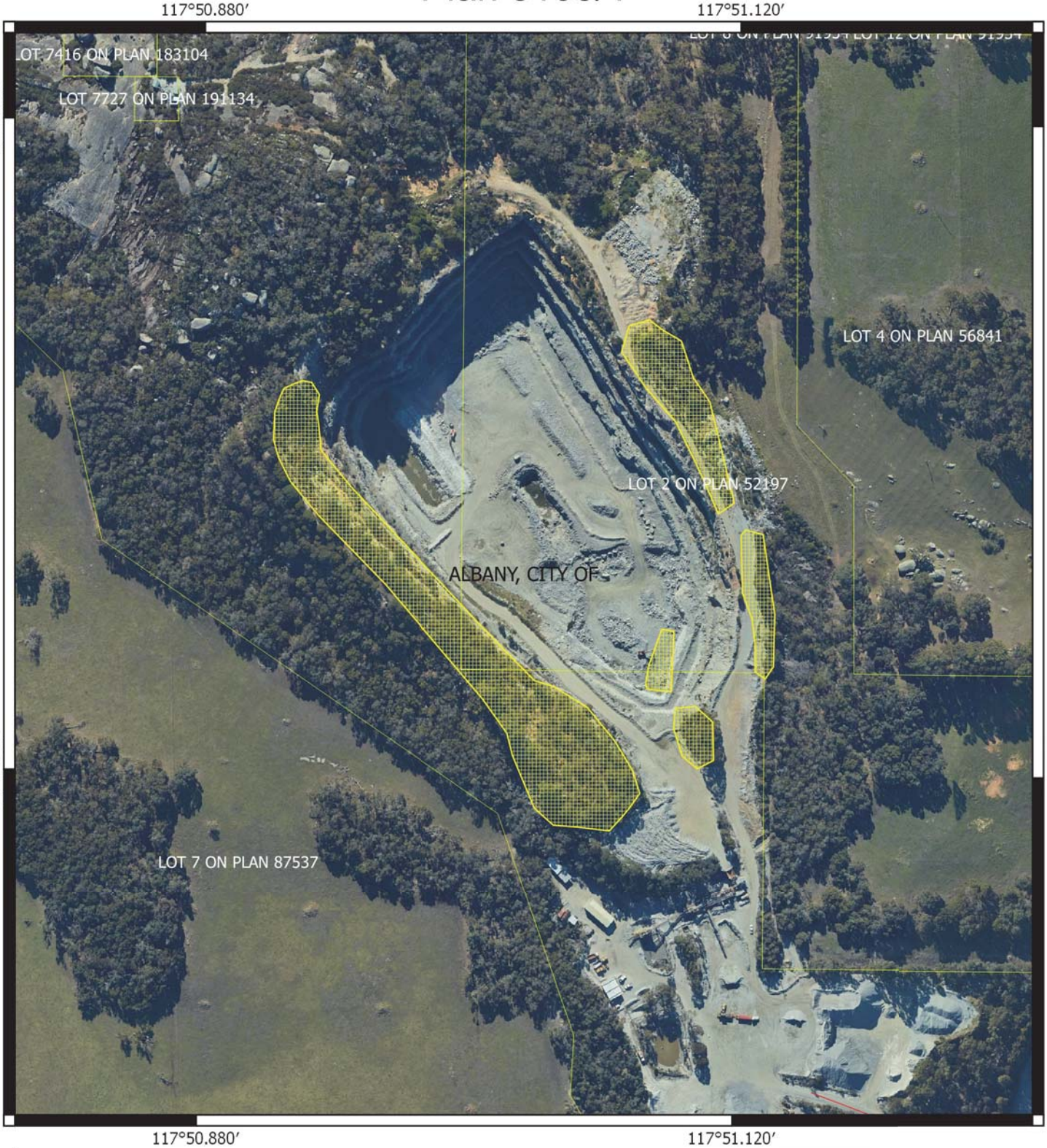
Abbie Crawford
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

15 March 2019

Plan 8103/1



Legend

- CPS areas approved to clear
- Local Government Authorities
- Roads
- Cadastre

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Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8103/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Holcim (Australia) Pty Ltd
Application received date: 15 June 2018

1.3. Property details

Property: LOT 6 ON DIAGRAM 69555, WILLYUNG
LOT 2 ON DIAGRAM 52197, WILLYUNG
Local Government Authority: City of Albany
Localities: Willyung

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
2.3		Mechanical Removal	Extractive Industry

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 March 2019
Reasons for Decision: The clearing permit application was received on 15 June 2018 and 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 not likely to be at variance to the clearing principles.

Weed and dieback management measures will minimise impacts to adjacent remnant vegetation.

In granting a clearing permit subject to conditions, the Delegated Officer determined that the proposed clearing is unlikely to have any significant environmental impacts.

2. Site Information

Clearing Description The application is to clear 2.3 hectares of native vegetation within Lot 6 on Diagram 69555 and Lot 2 on Diagram 52197. Willyung, for the purpose of extractive industry for the operation of the Albany Quarry (Figure 1).

Vegetation Description The vegetation within each application area is mapped as Beard vegetation association Albany 128: Bare areas; rock outcrops; and as
Albany 978: Low forest; jarrah, *Eucalyptus staeri* (Albany Blackbutt) & *Allocasuarina fraseriana* (approximately eight per cent of the application area) (Shepherd, 2001).

A flora and vegetation survey encompassing the entire application area (and a 50 metre buffer surrounding the application area), was undertaken by Stantec Australia in November 2017, in the aim of describing vegetation units, fauna habitats and their condition and assessing the potential occurrence of flora, fauna and vegetation of conservation significance (Stantec, 2018). The field survey was undertaken on 13th November 2017 and included the establishment of three quadrats (bounded sites) and three relevés (unbounded sampling sites). There vegetation types were identified based on field observations, however the application area was found to comprise mostly of rehabilitated areas (R), where the vegetation is described as *Eucalyptus conferruminata* and *Eucalyptus* sp. low woodland over *Acacia podalyriifolia*, *Gastrolobium brownii* and *Leucopogon obovatus* subsp. *revolutus* mid to tall shrubland over *Lepidosperma gracile* and *Lepidosperma squamatum* low isolated sedges; with approximately ten per cent of the application area described as vegetation type CcEmTp: *Corymbia calophylla* and *Eucalyptus marginata* low open woodland over *Taxandria parviceps* and *Pittosporum undulatum* tall open shrubland over *Agonis theiformis* mid open shrubland over *Tetraria octandra* and *Xanthosia rotundifolia* low open forbland (Stantec, 2018).

Vegetation Condition The vegetation condition of the application area was determined through the flora and vegetation survey undertaken by Stantec Australia (Stantec, 2018), as:
Degraded; Basic vegetation structure severely impacted by disturbance, scope for regeneration but not to a state approaching good condition without intensive management. (Keighery, 1994);

to
Completely degraded; The structure of the vegetation is no longer intact and the area is completely or almost completely without native species (Keighery, 1994).

Soil and Landform Type:

The application area is mapped as:
Barrow upper slope Phase (242PrBAg), described as Granite outcrop (95 per cent of the application area)
And as
Barrow lower slope Phase (242PrBAf), described as Yellow duplex soils, sands, gravels; Jarrah-Marri-Yate forest (five per cent of the application area) (DPIRD, 2017).

Comments:

The local area referred to in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area. The local area contains approximately 45 per cent native vegetation cover.

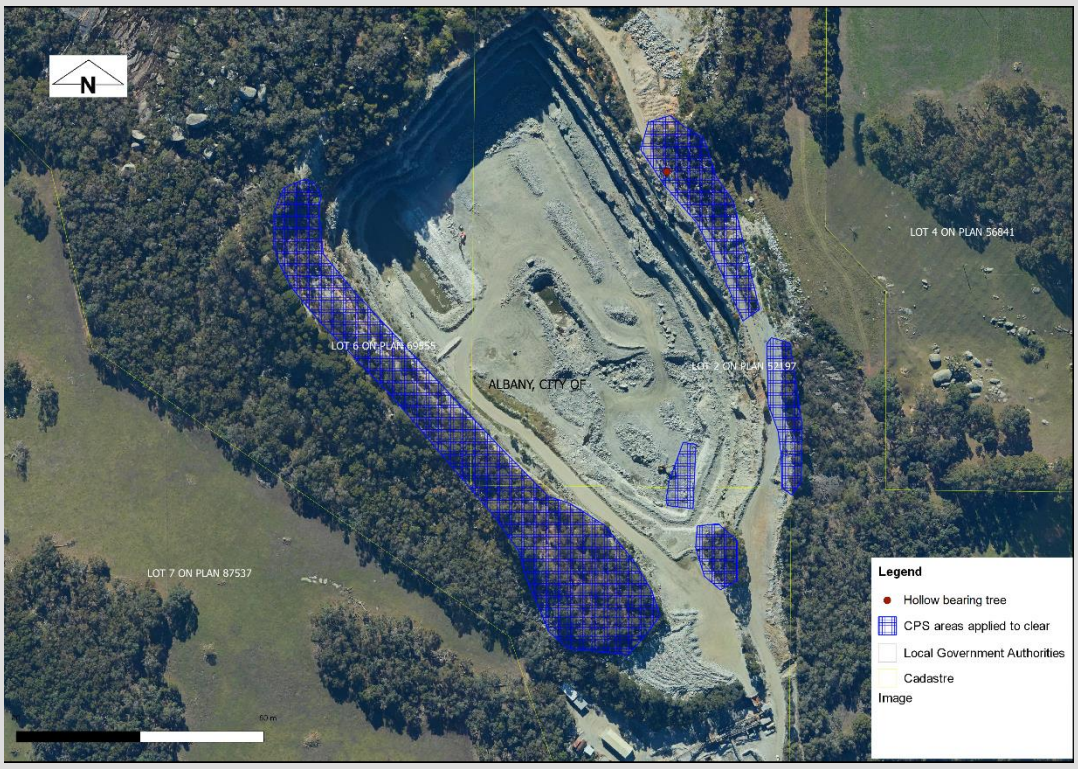

Figure 1: Application area

3. Minimisation and mitigation measures

The applicant states that the clearing area has been made as small as possible for pit development and a new haul road to increase safety (Holcim, 2018).

4. 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 not likely to be at variance to this principle

The application area is predominately rehabilitated areas surrounding an active mine pit and the vegetation within these rehabilitated areas is described as *Eucalyptus conferruminata* and *Eucalyptus* sp. low woodland over *Acacia podalyriifolia*, *Gastrolobium brownii* and *Leucopogon obovatus* subsp. *revolutus* mid to tall shrubland over *Lepidosperma gracile* and *Lepidosperma squamatum* low isolated sedges (Stantec, 2018). Some parts (approximately ten per cent) of the application area comprise *Corymbia calophylla* and *Eucalyptus marginata* low open woodland over *Taxandria parviceps* and *Pittosporum undulatum* tall open shrubland over *Agonis theiformis* mid open shrubland over *Tetraria octandra* and *Xanthosia rotundifolia* low open forbland (Stantec, 2018). The soils within the appliation area is predominately granite outcrops (DPIRD, 2017).

Eleven Threatened flora species and 45 priority flora species have been recorded within the local area. However, the majority of these species occur on winter wet swampy areas and in sandy soils and therefore are unlikely to occur within the application area. Given their association with granite outcrops, four Threatened flora species and 17 Priority flora species could potentially occur within the application area.

The flora and vegetation survey did not identify any Threatened or priority flora species (Stantec, 2018), however the survey covered only two relevẽs within the southwestern portion of the application area and did not cover the northern areas (Figure 1). Considering the degraded to completely degraded condition of the application area, the disturbed environment in the vicinity of

the application area and the presence of better quality habitat in the local area, the application area is not likely to support habitat for Threatened or priority vascular flora species.

Two non-vascular, Priority lichens species are likely to occur within the application area, with suitable habitat for these species found within the application area. *Degelia flabellata* (Priority 2), a foliose lichen, is known from a total of 14 records from Albany, Jerramungup, Manjimup and Plantagenet areas, from sites generally found growing on bare, sheltered to exposed granite rock outcrops (Western Australian Herbarium, 1998-). The nearest occurrence of the species is 200 metres from the application area. *Usnea pulvinata* (Priority 1), a fruticose lichen, is known from a total of seven records from Albany and Bridgetown-Greenbushes areas, growing on bare, sheltered to exposed granite rock outcrops (Western Australian Herbarium, 1998-).. The closest record for this species is 200 metres south of the application area. The flora survey did not record any occurrence of these two lichen species (Stantec, 2018). Noting this, the disturbed environment (active quarry) in the vicinity of the application area and the presence of better quality habitat in the local area, the proposed clearing is not likely to impact the conservation status of these species should any individuals occur within the application area.

As assessed under principle (b), the application area may comprise suitable foraging and roosting habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*). Black cockatoo foraging and night roosting has been recorded in the local area, however minimal evidence of feeding was recorded from the application area (Stantec, 2018). Noting that the local area retains 45 per cent native vegetation cover, the type and condition of the vegetation within the application area and the presence of better quality foraging and roosting habitat in the local area, the proposed clearing is not likely to have a significant impact on foraging and roosting habitat for these species.

Three priority ecological communities (PEC) have been recorded within the local area, however suitable habitat for these communities are not found within the application area.

Thirty-five introduced flora species, of which 29 were weed species, have been recorded from the application area and within 50 metres of the application area, and includes three declared pest species (Stantec, 2018). Weed and dieback management practices will help mitigate further spread of weed species and potential spread of dieback to adjacent vegetation.

Given the above, the proposed clearing is not likely to be 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 not likey to be be at variance to this principle

According to available databases, twenty six Threatened fauna species have been recorded within the local area (DBCA, 2007-). Noting the habitat requirements of these species, and the type and condition of the vegetation within the application area, the application area may comprise suitable breeding, foraging and roosting habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*).

Carnaby's cockatoo and Baudin's cockatoo are listed as endangered and forest red-tailed cockatoo is listed as vulnerable under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). These species nest in hollows in live or dead trees, generally in woodland or forest, but may also breed in former woodland or forest now present as isolated trees (Commonwealth of Australia, 2012). The application area is within the breeding range of all three black cockatoos species.

The fauna survey, which included a targeted black cockatoo survey, indicated that a number of trees within the application area are likely to fit the criteria for black cockatoo roosting habitat and may contain hollows suitable as black cockatoo nesting habitat. One tree was recorded to contain a hollow large enough to be utilised by black cockatoos (Stantec, 2018). A black cockatoo habitat assessment of this potential habitat tree (marked in red in Figure 1), identified that the tree contained a single hollow, however it was deemed unsuitable for black-cockatoos due to small entrance diameter (Gamblin and Bramford, 2019).

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). The application area is predominately rehabilitated areas surrounding an active mine pit with the presence of some jarrah and marri trees that may potentially provide low foraging values for black cockatoos, with minimal evidence of feeding recorded (Stantec, 2018).

Black cockatoos generally use tallest trees in an area as roosting sites, with jarrah, marri, blackbutt, tuart and introduced eucalypt trees within or on the edge of forests being commonly utilised. Although some fidelity to roosting sites are reported, they may also vary based on changing patterns of food and water availability (Commonwealth of Australia, 2012). Carnaby's cockatoo roosting sites have been recorded in the local area and two blue gum trees (*Eucalyptus globulus*) were identified as potential roosting habitat for black cockatoos, however no roosting evidence was recorded (Stantec, 2018).

Noting that the local area retains 45 per cent native vegetation cover, the type and condition of the vegetation within the application area and the presence of better quality breeding, foraging and roosting habitat in the local area, the proposed clearing is not likely to have a significant impact on breeding, foraging and roosting habitat for these species.

The application area is not likely to comprise suitable habitat for conservation significant fauna species, and is not likely to comprise significant habitat for indigenous fauna.

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

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

Proposed clearing is not likley to be at variance to this principle

According to available databases, eleven Threatened flora species have been recorded within the local area. However, only four Threatened flora species are likely to be present within the application area due to their association with granite outcrops, consistent with the mapped soil within the application area. The other seven flora species occur on winter wet swampy areas and in sandy soils and therefore are unlikely to occur within the application area. The flora and vegetation survey did not identify any Threatened flora species (Stantec, 2018), however the survey covered only two relevēs within the southwestern portion of the application area and did not cover the northern areas (Figure 1).

One Threatened flora species was recorded in 1999 from the centre of the quarry and is mapped as an environmentally sensitive area, however since this location is now in the centre of the quarry and is completely cleared, and noting the known distribution for this species, it is unlikely to occur in the vicinity of or within the application area.

The second Threatened flora species is a bushy, non-lignotuberous shrub or tree, usually occurring in gullies associated with sand over lateritic soils, gravel or loam over granite soils (Western Australian Herbarium, 1998-). The nearest record of this species is 1.4 kilometres from the application area.

The other two Threatened flora species occur more than eight kilometres away from the application area.

Considering the degraded to completely degraded condition of the application area, the disturbed environment in the vicinity of the application area and the presence of better quality habitat in the local area, the application area is not likely to support habitat for Threatened flora species.

Given the above, 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 not likley to be at variance to this principle

According to available databases, two threatened ecological communities (TEC) occur in the local area.

Banksia coccinea Shrubland/*Eucalyptus staeri*/Sheoak Open Woodland TEC/PEC and Subtropical and Temperate Coastal Saltmarsh TEC/PEC occurs approximately 3.5 kilometres and 5.8 kilometres respectively from the application area.

Noting the species composition of these TECs and the type and condition of the vegetation within the application area, the application area is not likely to comprise these TECs. The application area is not likely to comprise the whole or part of, or be necessary for the maintenance of a TEC.

Given the above, the proposed clearing is not likely to be 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 national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The local area retains approximately 145,573 hectares (45 per cent) native vegetation. The application area is located within the Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and within the City of Albany, which retains approximately 2,406,938 hectares (53 per cent) and 154,940 hectares (36 per cent) of its pre-European vegetation extents respectively (Table 1; Government of Western Australia, 2018).

The application area is mapped as Beard vegetation association 128 and 978, which retains approximately 7,173 hectares (90 per cent) and 18,751 hectares (35 per cent) of their pre-European vegetation extents within Jarrah Forest IBRA bioregion, of which 82 per cent and 27 per cent respectively are contained within conservation estate (Table 1; Government of Western Australia, 2018).

Noting that the local area, Shire and mapped vegetation association all retain over the 30 per cent threshold and that the application area does not contain high biodiversity or significant fauna habitat, the application area is not considered to be a significant remnant in an extensively cleared area.

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

Table 1: Vegetation representation statistics (Government of Western Australia, 2018)

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DBCA Managed Lands	
				(hectares)	(%)
BRA Bioregion					
Jarrah Forest	4,506,660	2,406,938	53	1,673,353	69
Local government					
City of Albany	431,369	154,940	36	40,782	26
Beard vegetation association in Bioregion					
128	7,971	7,173	90	5,898	82
978	53,016	18,751	35	5,024	27
Local area					
10 kilometre radius	318,227	145,573	45	-	-

(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 likley to be at variance to this principle

No watercourse or wetlands are mapped within or in close proximity to the application area. A non-perennial watercourse that is a tributary to the King River runs approximately one kilometre north of the application area. The application area does not contain riparian vegetation.

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 may be at variance to this principle

The application area has been mapped as the following soil types (DPIRD, 2017).

- Barrow upper slope Phase (242PrBAg), described as Granite outcrop (95 per cent of the application area);
- Barrow lower slope Phase (242PrBAf), described as Yellow duplex soils, sands, gravels; Jarrah-Marri-Yate forest (five per cent of the application area).

Risk categories	Barrow upper slope	Barrow lower slope Phase
Wind erosion	<3 per cent of map unit has a high to extreme wind erosion risk	10-30 per cent of map unit has a high to extreme wind erosion risk
Water erosion	10-30 per cent of map unit has a high to extreme water erosion risk	10-30 per cent of map unit has a high to extreme water erosion risk
Salinity	30-50 per cent of map unit has a moderate to high salinity risk or is presently saline	30-50 per cent of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	3-10 per cent of map unit has a high subsurface acidification risk or is presently acid	30-50 per cent of map unit has a high subsurface acidification risk or is presently acid
Flood risk	<3 per cent of the map unit has a moderate to high flood risk	<3 per cent of the map unit has a moderate to high flood risk
Water logging	<3 per cent of map unit has a moderate to very high waterlogging risk	<3 per cent of map unit has a moderate to very high waterlogging risk
Phosphorus export risk	10-30 per cent of map unit has a high to extreme phosphorus export risk	10-30 per cent of map unit has a high to extreme phosphorus export risk

Based on the mapped land degradation risk outlined above, the proposed clearing has a relatively low likelihood of causing wind erosion, water erosion, flooding, waterlogging and eutrophication.

There is a moderate risk of increase in groundwater salinity on soils within the application area, however is not likley to be significant.

Given the above, 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 nearest conservation areas include Bakers Junction Nature Reserve and Bon Accord Road Nature Reserve, located approximately 6.7 kilometres northeast from the application area.

Given the distance to the nearest conservation area, the proposed clearing is not likely to impact on the environmental values of these reserves.

Given the above, 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

As discussed under principle (f), the closest watercourse is mapped one kilometre away from the application area.

Groundwater salinity within the application area is mapped between 500 and 1000 total dissolved solids, milligrams per litre. This level of groundwater salinity is considered to be marginal.

Given the above the proposed clearing is not likely to cause deterioration in the quality of surface or groundwater and is therefore 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

As discussed in Principle (g), the soils within the application area comprise mainly of granite outcrops (DPIRD, 2017). These soils have a low risk 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 applicant holds a valid prescribed premises licence (L4739/1981/10) for their quarry operations (Holcim, 2018).

Traditional revegetation options are not viable for hard rock quarry operations due to the steeper embankments in the final land surface. Therefore, the revegetation will be managed through the Extractive Industry Licence.

The Department of Biodiversity Conservation and Attraction Parks and Wildlife South Coast Region had no comments in relation to this application (DBCA, 2018).

The application area is zoned as General Agriculture under the City of Albany Town Planning Scheme Zones.

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

The clearing permit application was advertised on the DWER website on 29 June 2018 with a 21 day submission period. No public submissions have been received in relation to this application.

5. References

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 (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed August 2017.

Department of Biodiversity, Conservation and Attractions (DBCA) (2018) Regional advice from South Coast Region for Clearing Permit application CPS 8103/1. Western Australia (DWER Ref: A1708596).

Department of Primary Industries and Regional Development (DPIRD) (2017). NRInfo Digital Mapping. Accessed at https://maps.agric.wa.gov.au/nrm-info/ Accessed September 2018. Department of Primary Industries and Regional Development. Government of Western Australia.

Gamblin, T. and Bamford, M. (2019) Holcim Australia Pty Ltd: Inspection of possible nest tree of Black-Cockatoos at Albany Quarry. Received by DWER on 21 February 2019 (DWER Ref: A1767376).

Government of Western Australia. (2018). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Holcim (Australia) Pty Ltd (Holcim) (2018). Application form and supporting documents. Received by DWER on 15 June 2018 (DWER Ref: A1692403).

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Stantec (2018). Albany Quarry detailed flora and fauna survey 2017. Prepared for Holcim Australia Pty Ltd by Stantec Australia Pty Ltd in June 2018. Received by DWER on 15 June 2018 (DWER Ref: A1692403).

Western Australian Herbarium (1998-). FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. https://florabase.dpaw.wa.gov.au/ Accessed October 2018.

6. GIS Datasets

- Aboriginal Sites of Significance
- Clearing Regulations - Environmentally Sensitive Areas
- Carnaby's cockatoo: breeding, roosting, feeding
- Department of Biodiversity Conservation and Attractions, Tenure
- Geomorphic Wetlands, Swan Coastal Plain
- Groundwater salinity, statewide
- Heddle Vegetation
- Hydrology, linear
- IBRA Australia
- Land for Wildlife
- PDWSA, CAWSA, RIWI Act Areas
- Remnant vegetation
- SAC Biodatasets (accessed March 2019)
- Soils, statewide
- Town Planning Scheme Zones