



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 7964/1

File Number: DER2015/000101-1

Duration of Permit: From 21 October 2018 to 21 October 2020

ADVICE NOTE

Monetary contributions to a fund maintained for the purpose of establishing or maintaining native vegetation (offset).

As part of approval 2008/4601 under the *Environment Protection and Biodiversity Conservation Act 1999* the proponent provided a total of \$614, 111 to the former Department of Environment and Conservation on 23 April 2010 for the purchase of 459 hectares of land containing Carnaby's cockatoo (*Calyptorhynchus latirostris*) foraging habitat north of Gingin and 477 hectares of Carnaby's cockatoo (*Calyptorhynchus latirostris*) foraging habitat east of Badgingarra.

PERMIT HOLDER

Northern Corridor Developments Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 1002 on Deposited Plan 61236, Alkimos

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 9.53 hectares of native vegetation within the area cross hatched yellow on attached Plan 7964/1.

CONDITIONS

1. 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.

2. 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) shall only move soils in *dry conditions*;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Wind erosion management

The Permit Holder shall not clear native vegetation unless bulk earth works commence within two months of the clearing being undertaken.

4. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, 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 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 1 of this Permit;
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of this Permit; and
- (f) the date the bulk earthworks started in accordance with condition 3 of this Permit.

5. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 4 of this Permit, when requested 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 administering the *Environmental Protection Act 1986*;

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

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

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 Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

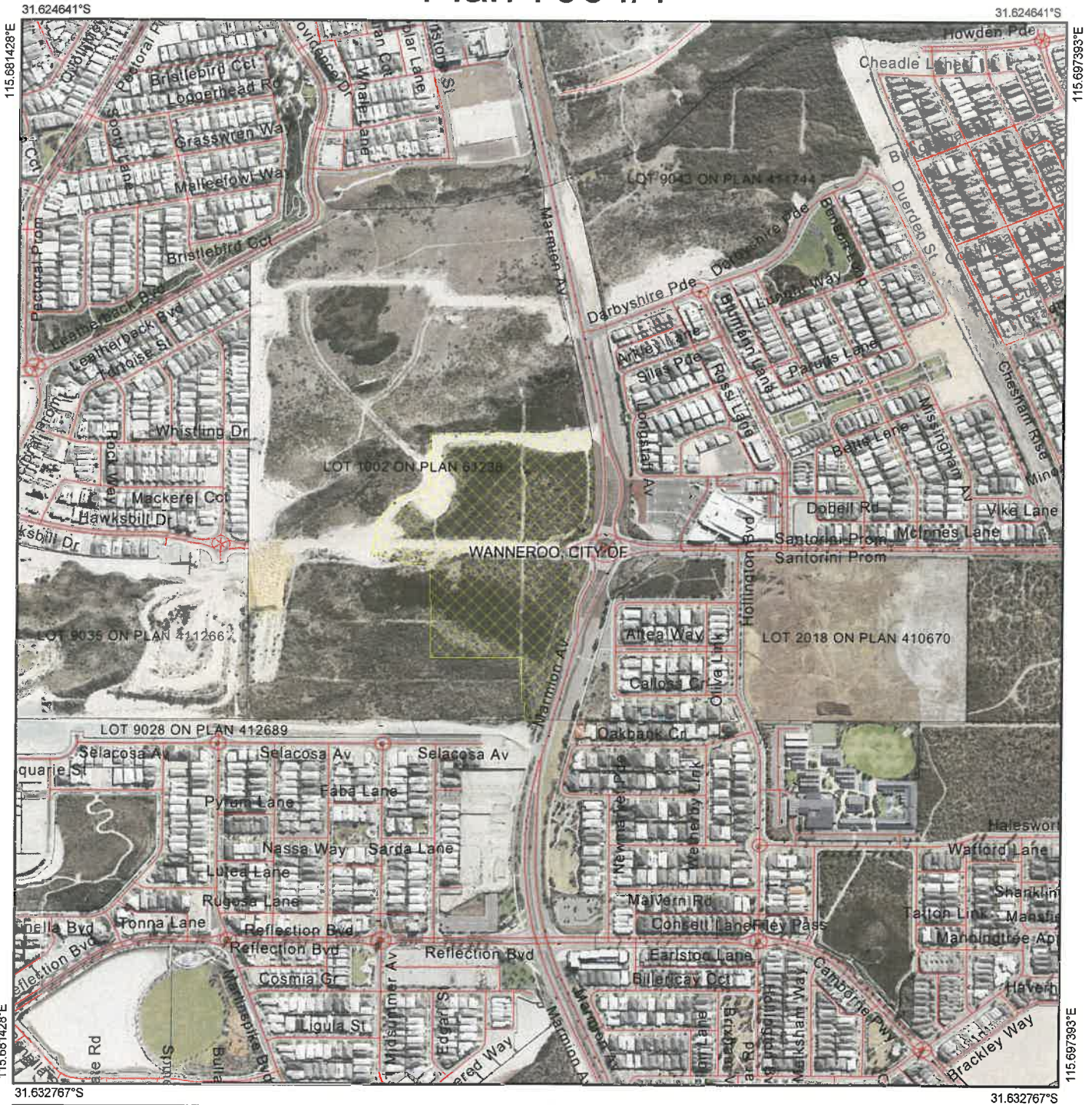


Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

21 September 2018

Plan 7964/1



Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority
-  Roads



1:8,024

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Mathew Gannaway Date 21/09/2018
 Mathew Gannaway

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



GOVERNMENT OF
 WESTERN AUSTRALIA
 WA Crown Copyright 2018



1. Application details

1.1. Permit application details

Permit application No.: 7964/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Northern Corridor Developments Ltd
Application received date: 25 January 2018

1.3. Property details

Property: Lot 1002 on Deposited Plan 61236, Alkimos
Local Government Authority: Wanneroo, City of
Localities: Alkimos

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
9.53		Mechanical Removal	Stockpile/bulk earthworks

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 21 September 2018
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*. It has been concluded that the proposed clearing is at variance to Principle (b), may be at variance to Principle (g) and is not likely to be at variance to any of the remaining clearing principles.

The assessment determined that the clearing will lead to the loss of up to 9.53 hectares of native vegetation that contains Carnaby's cockatoo (*Calyptorhynchus latirostris*) foraging habitat.

To offset the significant residual environmental impacts to Carnaby's cockatoo foraging habitat, and as part of approval 2008/4601 under the *Environmental Protection and Biodiversity Conservation Act 1999*, the applicant provided \$614,111 to the former Department of Environment and Conservation (DEC) on 23 April 2010. These funds are for the purchase of 459 hectares of land containing Carnaby's cockatoo foraging habitat north of Gingin and 477 hectares of Carnaby's cockatoo foraging habitat east of Badgingarra. The offset was based upon the clearing of a total of 157 hectares of Carnaby's cockatoo foraging habitat at Alkimos, which includes the 9.53 hectares of native vegetation the subject of this application. The applicant finalised the offset and the two land parcels (totalling 936 hectare remnants) were purchased by the former DEC for conservation purposes.

The assessment also identified that the clearing may result in appreciable land degradation through wind erosion. Conditioned wind erosion management measures that require bulk earthworks to be undertaken within two months of clearing will help to mitigate the effects of wind erosion on site.

The proposed clearing may increase the risk of weeds and dieback spreading into adjacent vegetated areas. A weed and dieback management condition has been placed on the permit to mitigate the impact of spreading weeds and dieback.

The applicant has received planning approval for the earthworks from the City of Wanneroo, subject to conditions. This factor has been taken into consideration in the decision to grant a clearing permit.

Given the above, the Delegated Officer decided to grant a clearing permit subject to conditions.

2. Site Information

Clearing Description

The application is to clear 9.53 hectares of native vegetation within Lot 1002 on Deposited Plan 61236, Alkimos, for the purpose of bulk earthworks to facilitate the construction of a sales office and housing (Figure 1).

Vegetation Description

The vegetation within the application area is mapped as Swan Coastal Plain vegetation complex Cottesloe Complex-Central and South: woodland and open forest and closed heath. This is described as a mosaic woodland of *Eucalyptus gomphocephala* (Tuart) and open forest of *E. gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri); closed heath on the limestone outcrops (Heddlie et al, 1980).

A 2004 Level 2 flora and vegetation survey described the vegetation within the application area as comprising (ATA Environmental, 2004):

- *Banksia sessilis* closed shrub;
- *Banksia attenuata* low open woodland over *Calothamnus quadrifidus* heath;
- *Calothamnus quadrifidus* mixed heath;
- *Eucalyptus decipiens* low woodland; and
- *Melaleuca systena* low open shrubland over *Lomandra maritima*.

Vegetation Condition

The vegetation condition within the application area is described as (ATA Environmental, 2004; Coterra, 2018):

- Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994); to
- Very Good; Vegetation structure altered, obvious signs of disturbance (Keighery, 1994).

Soil type

The soil type mapped within the application area is Karrakatta shallow soils phase, described as low hills and ridges. Bare limestone or shallow siliceous or calcareous sand over limestone (DPIRD, 2018).



Figure 1: CPS 7964/1 Application area

3. Assessment of application against clearing principles

The applicant proposes to clear 9.53 hectares of native vegetation within Lot 1002 on Deposited Plan 61236, Alkimos, for the purpose of bulk earthworks to facilitate construction of a sales office and housing. The proposed clearing is an extension within the larger Trinity Estate housing development (refer to Figure 1).

As noted in Section 2 above, the vegetation within the application area is mapped as a mosaic of vegetation communities comprising of *Banksia sessilis* closed shrub, *Banksia attenuata* low open woodland over *Calothamnus quadrifidus* heath, *Calothamnus quadrifidus* mixed heath, *Eucalyptus decipiens* low woodland and *Melaleuca systena* low open shrubland over *Lomandra maritima* (ATA Environmental, 2004). From recent photographs provided it is evident the application area and its surrounds has been significantly altered since 2004 by the expansion of the Trinity Estate housing estate (Coterra, 2018). In addition, the application area appears to lack the mapped mosaic eucalyptus woodland, and only comprises the mixed heath and shrubland vegetation. This vegetation ranges from being in a Very Good to Completely Degraded (Keighery, 1994) condition also having been impacted by historical un-authorised access and creation of vehicle tracks (Coterra, 2018).

The soil type and landform is described as low hills and ridges with bare limestone or shallow siliceous or calcareous sand over limestone (DPIRD, 2017). Site specific geotechnical investigations noted the soil profile to comprise a variable cover of loose to medium dense sand over limestone of variable strength and cementation. Some aspects of limestone outcropping occurs south of the dominate dune system, in the southern area of the general application area but is not apparent in the photographs provided (Coterra, 2018).

According to available datasets, two Priority One (P1) listed flora species (*Baekkea* sp. Limestone (N. Gibson & M.N. Lyons 1425) and *Leucopogon maritimus*), one P2 (*Fabronia hampeana*), three P3 (*Leucopogon* sp. Yanchep (M. Hislop 1986), *Hibbertia spicata* subsp. *leptotheca* and *Stylidium maritimum*) and one P4 species (*Conostylis pauciflora* subsp. *euryrhipis*) are mapped within the local area (WAH, 1998-).

It is noted that of these, only the P4 species was recorded, as common, during the 2004 flora survey (ATA Environmental, 2004). Depending on the extent of the limestone cropping referred to above, it is possible some areas of the southern application area could contain habitat for *Baeckea* sp. Limestone (N. Gibson & M.N. Lyons 1425), *Hibbertia spicata* subsp. *leptotheca* and *Styliidium maritimum*. However none were observed during the flora and vegetation survey (ATA Environmental, 2004).

It is considered that if any of the P1 or P2 species did occur within any of the vegetated sections of the clearing footprint, based on their current distribution and population records (WAH, 1998-) that any occurrences in the clearing footprint may not be significant as viable populations. It is further considered that the loss of any individuals, should they occur, would not impact the conservation status of these species.

Priority Three and Priority Four flora species occur over a wide geographical area and are known from several populations, some within conservation reserves, and so their conservation status is not considered to be under any immediate threat (Jones, 2015). Noting this, and the number of records and the distribution of the above listed species, the proposed clearing is not likely to impact the conservation status of these species should any individuals occur within the clearing area.

No threatened or priority ecological communities (TEC and PEC respectively) are mapped within the application area and none were recorded during the 2004 flora and vegetation survey (ATA, 2004). The closest PEC community is the "Northern Spearwood shrublands and woodlands" approximately 2.5 kilometres southeast of the application area in the Neerabup National Park [listed as a Priority Three PEC by the Department of Biodiversity, Conservation and Attractions (DBCA)] and the "*Melaleuca huegelii* - *Melaleuca acerosa* (currently *M. systema*) shrublands on limestone ridges (Gibson et al. 1994 type 26a)" approximately 2.7 kilometres northeast and southeast of the application area (listed as an Endangered TEC by DBCA). The flora and vegetation survey identified a floristic community that closely resembles the PEC (ATA Environmental, 2004). This community is well represented within the local area (Neerabup National Park), and therefore it is not expected that the proposed clearing will impact on the conservation status of this community.

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 surrounding the application area retains approximately 45 per cent native vegetation. The area under application is mapped as Swan Coastal Plain vegetation complex "Cottesloe complex central and south", which retains approximately 32 per cent of its pre-European vegetation extent (Government of Western Australia, 2018). Therefore, the application area is not considered to be within an extensively cleared landscape.

A previous fauna survey of the application and surrounding area recorded, in particular, Carnaby's cockatoo (*Calyptrorhynchus latirostris*) (ATA Environmental, 2008), which is listed as Endangered under the *Wildlife Conservation Act 1950* and similarly under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). The vegetation under application includes a *Banksia attenuata* low open woodland and *Banksia sessilis* closed shrubland (ATA Environmental, 2004). Carnaby's feed on the seeds, nuts and flowers of a large variety of plants including *Banksia*, *Hakea* and *Grevillea* species (Valentine and Stock, 2008), therefore suitable foraging habitat for this species is located within the application area. The northern region of the Swan Coastal Plain is considered a particularly important area for Carnaby's foraging (Shah, 2006) and it is considered that the vegetation under application provides significant foraging habitat for Carnaby's. No vegetation identified as suitable breeding habitat is identified within the application area (Coterra, 2018).

There are no wetlands or watercourses mapped within the application area, therefore the proposed clearing is not likely to cause or exacerbate water erosion or flooding, or impact on water quality.

The soils within the area under application are comprised of bare limestone or shallow siliceous or calcareous sand over limestone (DPIRD, 2018). Sandy soils are highly susceptible to wind erosion and if left exposed for any length of time post clearing, wind erosion has the potential to result in appreciable land degradation. Soil erosion management practices, such as staged clearing and the application of a hydromulch layer (NCD, 2018) to the cleared areas, will help mitigate this potential risk.

The closest conservation area to the application area is Neerabup National Park (the Park) which is located approximately two kilometres east of the application area. Given the distance and lack of vegetative connectivity between the application area and the Park, the proposed clearing is not likely to impact on the conservation values of this Park.

Remnant native vegetation occurs along the northern and western boundaries of the application area. The proposed clearing may increase the risk of weeds and dieback spreading into adjacent vegetated areas. Weed and dieback management practices will help to mitigate the impact of spreading weeds and dieback.

Given the above, the proposed clearing is at variance to Principle (b), may be at variance to Principle (g) and is not likely to be at variance to any of the remaining clearing Principles.

Planning instruments and other relevant matters.

Northern Corridor Developments Pty Ltd were granted a clearing permit in April 2016 (CPS 6931/1) to clear 4.53 hectares within Lot 1002 for bulk earthworks to facilitate construction of housing and a sales office. That permit expired in January 2018 before any clearing was undertaken. The applicant has now re-submitted this application for the same area, increasing the clearing area to 9.53 hectares.

The applicant has received planning approval (DA2018/738) for the proposed preliminary earthworks from the City of Wanneroo, subject to conditions (NCD, 2018).

The proposed clearing falls within the Perth Coastal Underground Water Pollution Control Area (Priority 3 Public Drinking Water Course Area). The former Department of Water was previously notified of the proposed clearing and advised that it had no comment.

In November 2008 the Local Structure Plan (LSP) for the former Lot 3 Romeo Rd, Alkimos (which includes the area under application) was referred to the former Department of the Environment, Water, Heritage and the Arts (DEWHA) [now Department of the Environment and Energy (DotEE)] due to Carnaby's cockatoo being recorded on site during a fauna survey. DEWHA assessed the impact of the proposed development on this species and granted approval (EPBC 2008/4601) with conditions on 11 September 2009 with a subsequent correction notice made on 9 November 2009 and a variation on 29 September 2011 (DotEE, 2009). The approval was for the clearing of 157 hectares of significant habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*) within the Trinity Estate urban development proposal (total footprint of 226 hectares) and required that an offset be provided. This offset requirement included:

- Providing funds to acquire 459 hectares of Carnaby's cockatoo foraging habitat north of Gingin;
- Providing funds to acquire 477 hectares of Carnaby's cockatoo foraging habitat east of Badgingarra; and
- Retaining as part of reserves, 5.52 hectares of Carnaby's cockatoo foraging habitat within public open space.

This offset has since been finalised whereby funds were provided by Northern Corridor Developments Ltd to the now Department of Biodiversity, Conservation and Attractions for the purchase of the abovementioned land parcels for conservation.

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

The clearing permit application was advertised on the DWER website on 1 March 2018 with a 21 day submission period, and again on 25 July 2018 with a 7 day submission period due to an amendment to the clearing boundary during the assessment of this application. No public submissions have been received in relation to this application.

4. References

- ATA Environmental (2004) Lot 3 Romeo Road, Alkimos Flora and Vegetation Survey, Northern Corridor Developments LTD. Information received within Clearing Permit Application CPS 7964 1- Northern Corridor Developments Ltd (DWER Ref: A1717845)
- ATA Environmental (2008) Lot 3 Romeo Road, Alkimos Vertebrate Fauna Assessment, Northern Corridor Developments LTD. Additional Information for Clearing Permit Application CPS 5746/1. DER Ref A659830.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Coterra Environment (2018) Clearing Permit Application Supplementary Report. Information received within Clearing Permit Application CPS 7964 1- Northern Corridor Developments Ltd (DWER Ref: A1602075).
- Department of the Environment and Energy (DotEE) (2009) Copy of Approval from the then Department of Environment, Water, Heritage and the Arts of the Local Structure Plan for Lot 3 Romeo Rd, Alkimos (DER REF: A895725).
- Department of Primary Industries and Regional Development (DPIRD) (2017) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed August 2018).
- Government of Western Australia (2018) 2017 State-wide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Jones, A. (2015) Threatened and Priority Flora List. 11 November 2015. Department of Parks and Wildlife: Kensington, WA.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northern Corridor Developments Ltd (NCD) (2018) Application and supporting documentation for clearing permit CPS 7964/1 (DWER Ref: A1705230, A1717849, A1602075, A1602076, A1602077, A1602078 A1602079, A1602080, A1602081, A1602082).
- Shah, B. (2006) Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.
- Valentine L. and Stock W. (2008) Food Resources of Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*) in the Gngalara Sustainability Strategy study area. Unpublished report to the Forests Products Commission. Available from: <http://ro.ecu.edu.au/ecuworks/6147>.
- Western Australian Herbarium (WAH, 1998-) FloraBase-the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/>

GIS Databases:

- Aboriginal Sites of Significance
- Department of Biodiversity, Conservation and Attractions, Tenure
- Groundwater salinity
- Hydrography, General Hydro
- Hydrography, Wetlands
- SAC bio datasets
- TPFL Data
- WAHerb Data
- WA TEC PEC Boundaries
- Virtual Mosaic Landgate / Aerial imagery (accessed August 2018)