



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4882/1
Permit Holder:	Shire of Laverton
Duration of Permit:	25 May 2012 – 25 May 2017

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 road reconstruction and realignment.

2. Land on which clearing is to be done

Lot 55 on Plan 240377 (Cosmo Newberry 6440)

Lot 49 on Plan 92113 (Newberry 6440)

Lot 6 on plan 92244 (Newberry 6440) Unallocated Crown Land (Newberry 6440)

Crown Reserve 24980 (Lake Wells 6440)

3. Area of Clearing

The Permit Holder must not clear more than 113.75 hectares of native vegetation within the area hatched yellow on attached Plan 4882/1a, Plan 4882/1b, Plan 4882/1c, Plan 4882/1d, Plan 4882/1e, Plan 4882/1f, and Plan 4882/1g.

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.

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. **Avoid, minimise etc 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.

PART III - RECORD KEEPING AND REPORTING

8. **Records must be kept**

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) 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;
 - (ii) the date that the area was cleared; and
 - (iii) the size of the area cleared (in hectares).

9. **Reporting**

- a) The Permit Holder must provide to the CEO on or before 31 July of each year, a written report:
 - (i) of records required under condition 8 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 July and 30 June of the preceding year.
- (b) Prior to 25 February 2017, the Permit Holder must provide to the CEO a written report of records required under condition 8 of this Permit where these records have not already been provided under condition 9 (a) of this Permit.

Definitions

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

botanist means a person with specific training and/or experience in the ecology and taxonomy of Western Australian flora;

priority flora means those plant taxa described as priority flora classes 1, 2, 3 or 4 in the *Department's Declared Rare and Priority Flora List for Western Australia* (as amended);



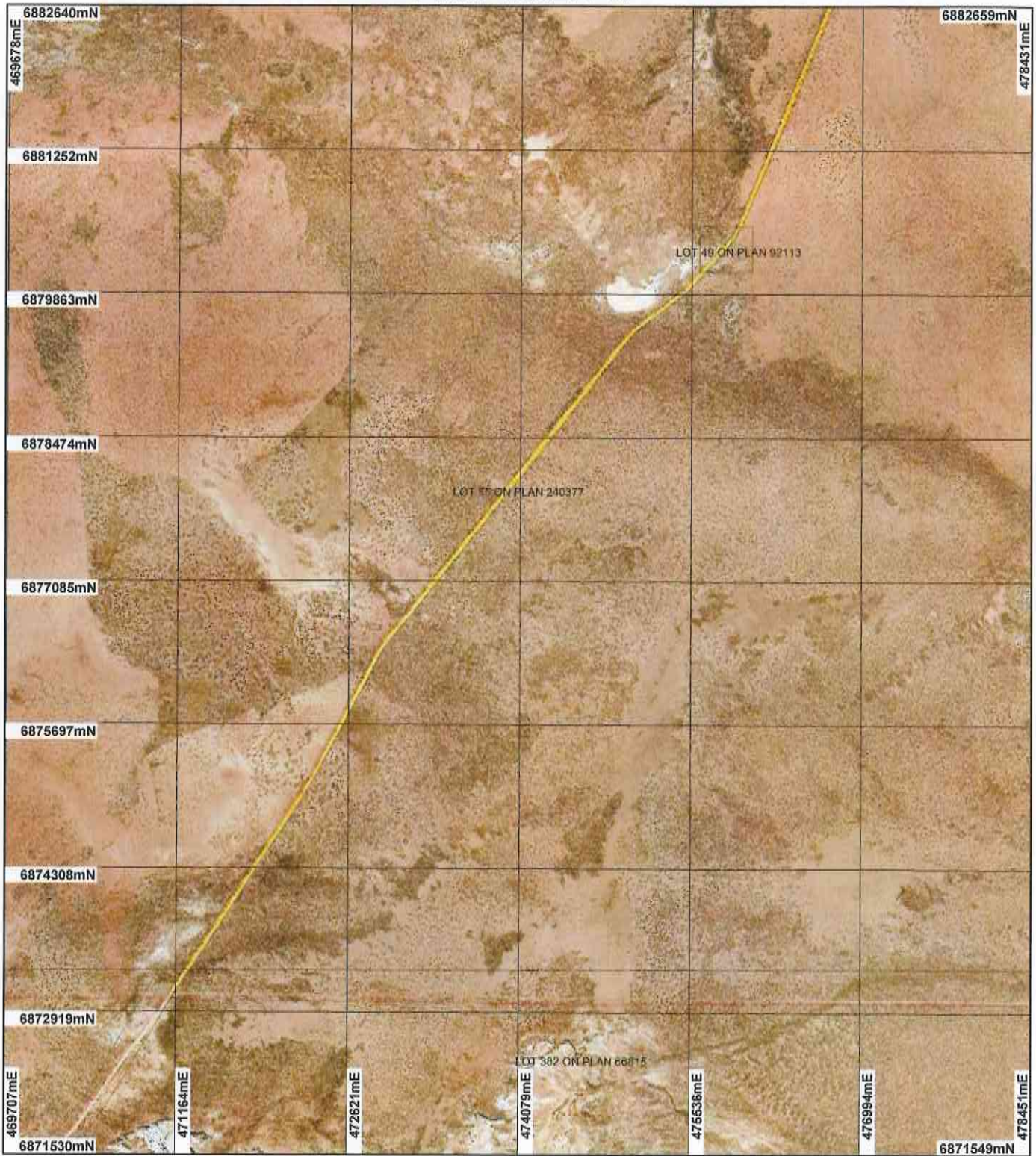
Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

3 May 2012

CPS 4882/1, 3 May 2012

Plan 4882/1 a



LEGEND

- Road Centrelines
- Clearing Instruments
- Areas Approved to Clear
- Cadastral for labelling
- McMillan 1.4m Orthomosaic - Landgate 2002



0 ————— ~1.5 km

Scale 1:50000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

Date 3/5/12
Kelly Faulkner

Officer with delegated authority under Section 20 of the Environmental Protection Act 1988

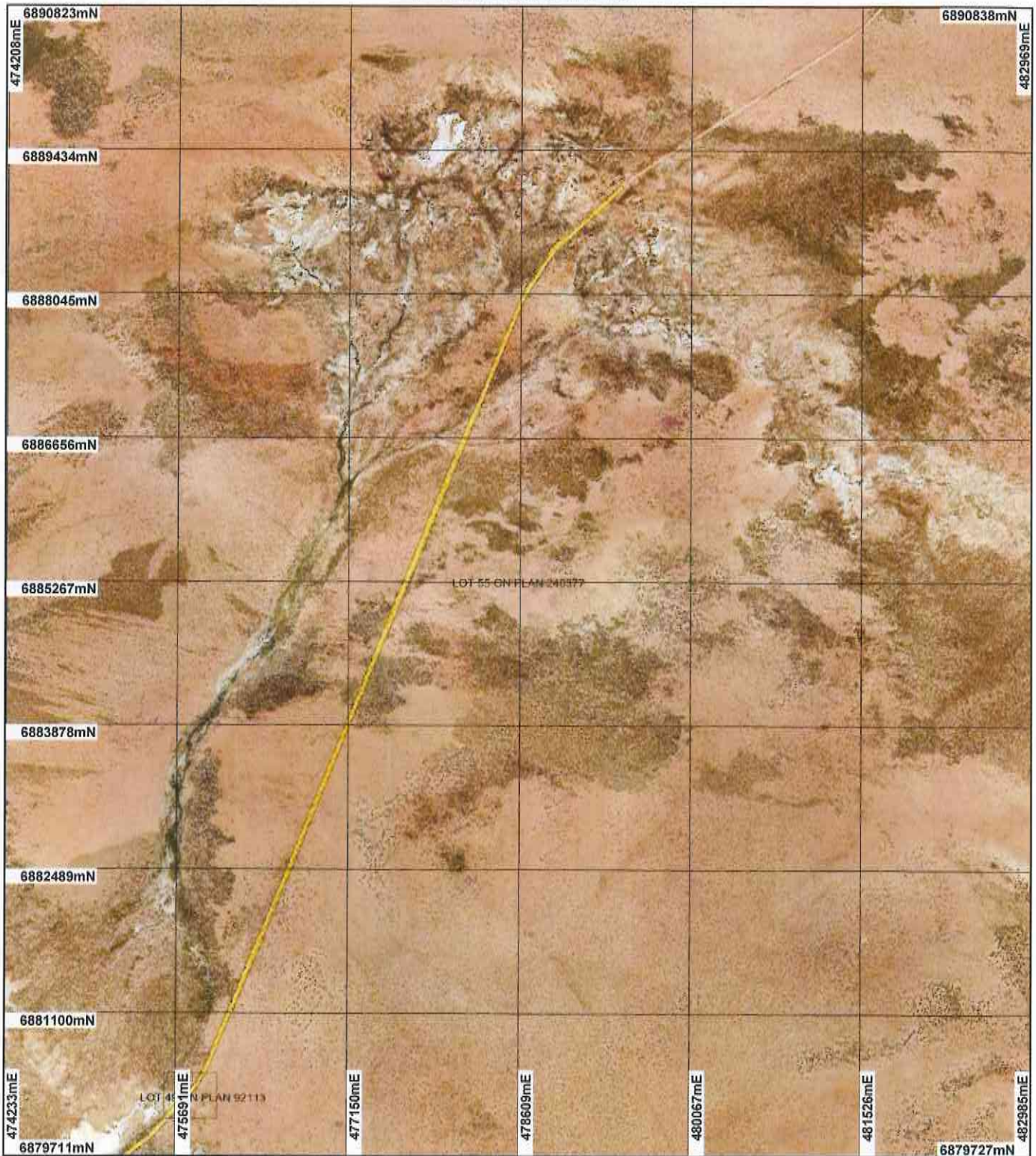
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Department of Environment and Conservation

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Plan 4882/1 b



LEGEND


-  Road Centrelines
-  Clearing Instruments
-  Areas Approved to Clear
-  Cadastre for labelling
- 



Scale 1:50020
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

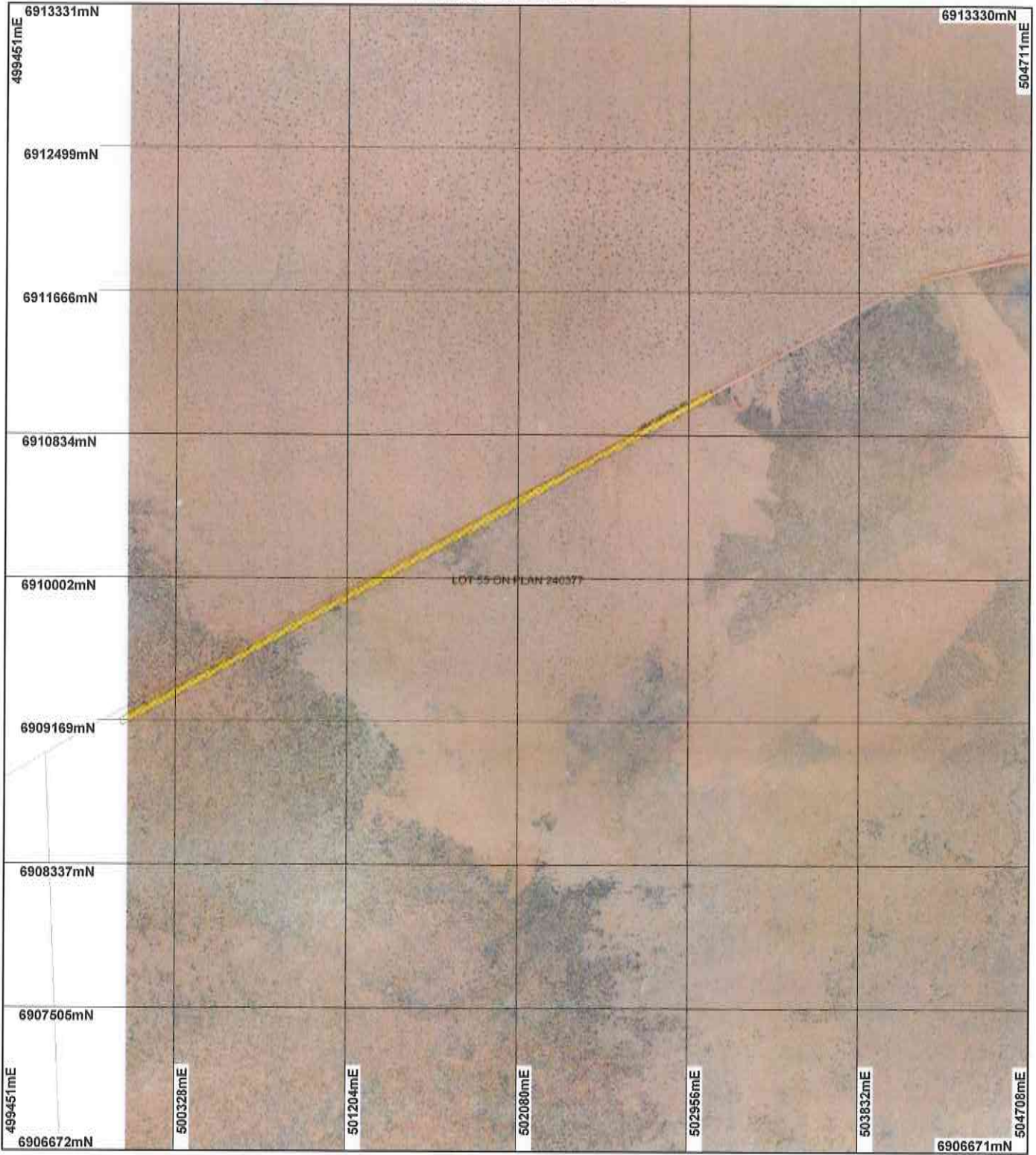
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 Date 3/5/12
Kelly Faulkner

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.

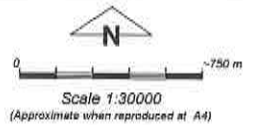
Plan 4882/1 c



LEGEND

- Road Centrelines
- Clearing Instruments
- Areas Approved to Clear
- Cadastre for labelling

Western Australia ETM 25m
543 - AGO 2002
North East Yilgarn 1.5m
Orthomosaic - Landgale 2004



Geocentric Datum Australia 1994

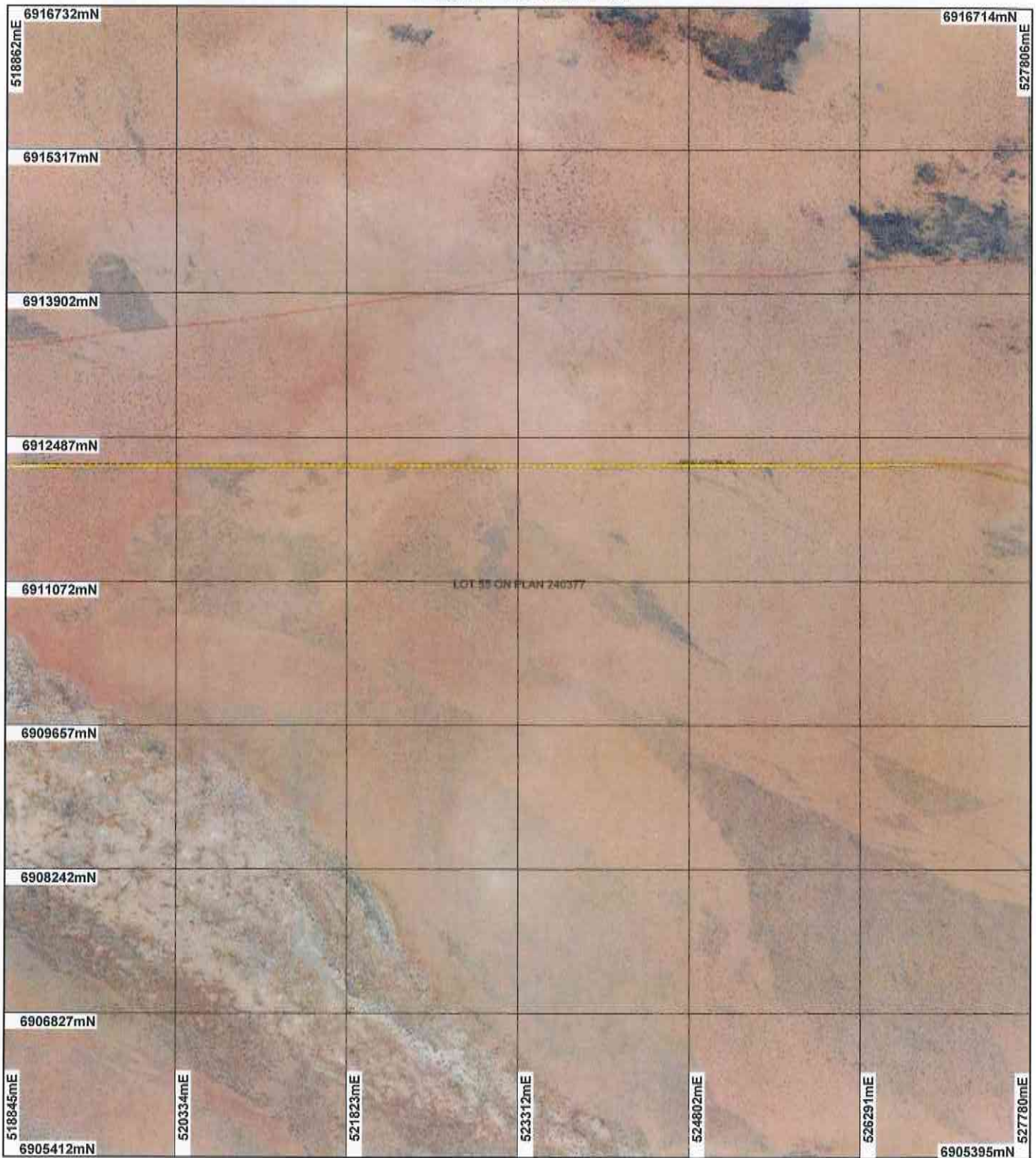
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Kelly Faulkner

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Plan 4882/1 d



LEGEND

- Road Centrelines
- Clearing Instruments
- Areas Approved to Clear
- Cadastre for labelling

Western Australia ETM 25m
 543 - AGO 2002
 North East Yilgarn 1.5m
 Orthomosaic - Landgate 2004



Scale 1:51000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: The data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

Date 3/5/12
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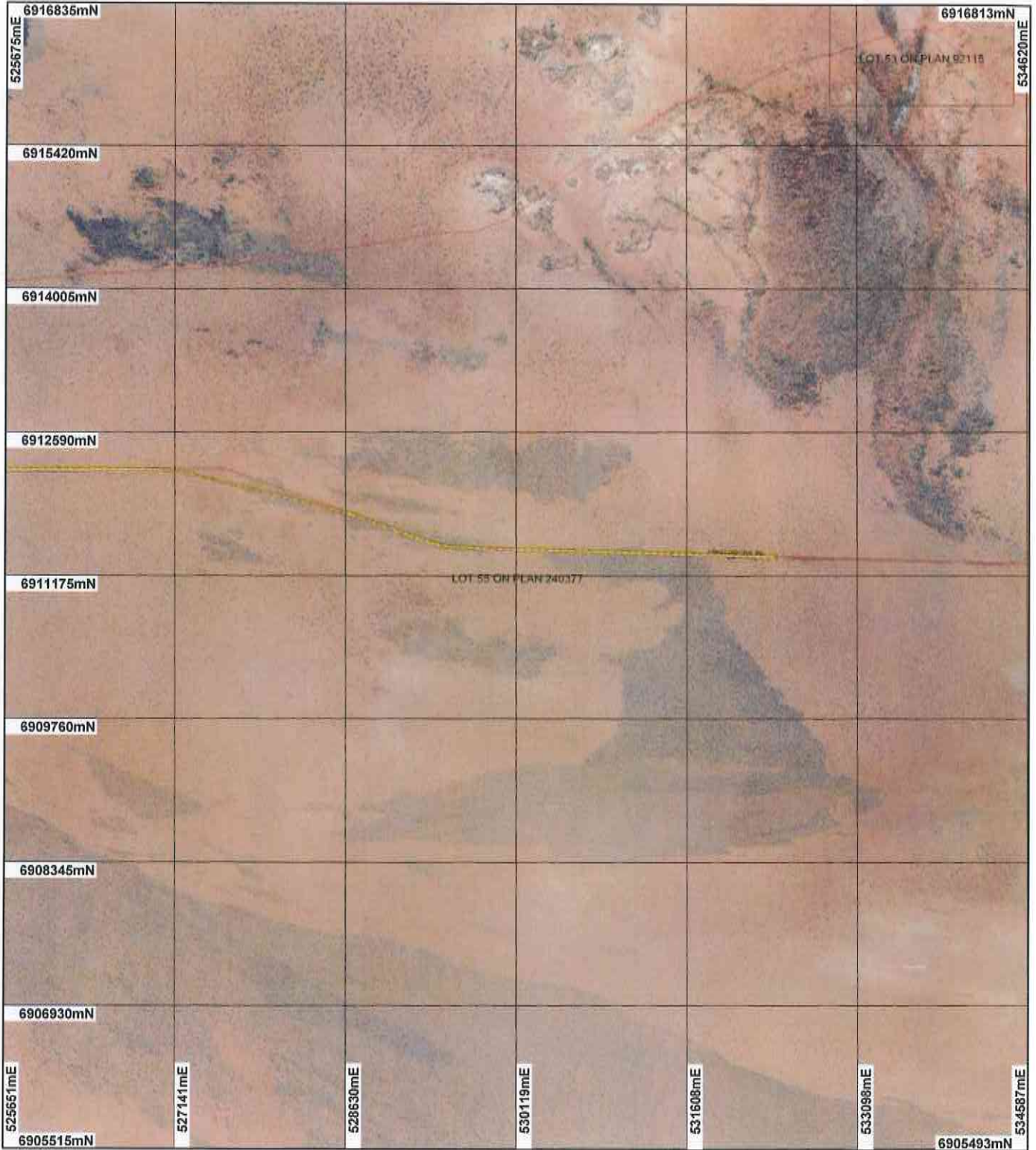
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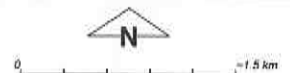
Plan 4882/1 e



LEGEND

-  Road Centrelines
-  Clearing Instruments
-  Areas Approved to Clear
-  Cadastre for labelling

Western Australia ETM 25m
543 - AGO 2002
North East Yilgarn 1.5m
Orthomosaic - Landgate 2004



Scale 1:51000
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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Date 3/5/12
Kelly Faulkner

Officer with delegated authority under Section 20 of the Environmental Protection Act 1985

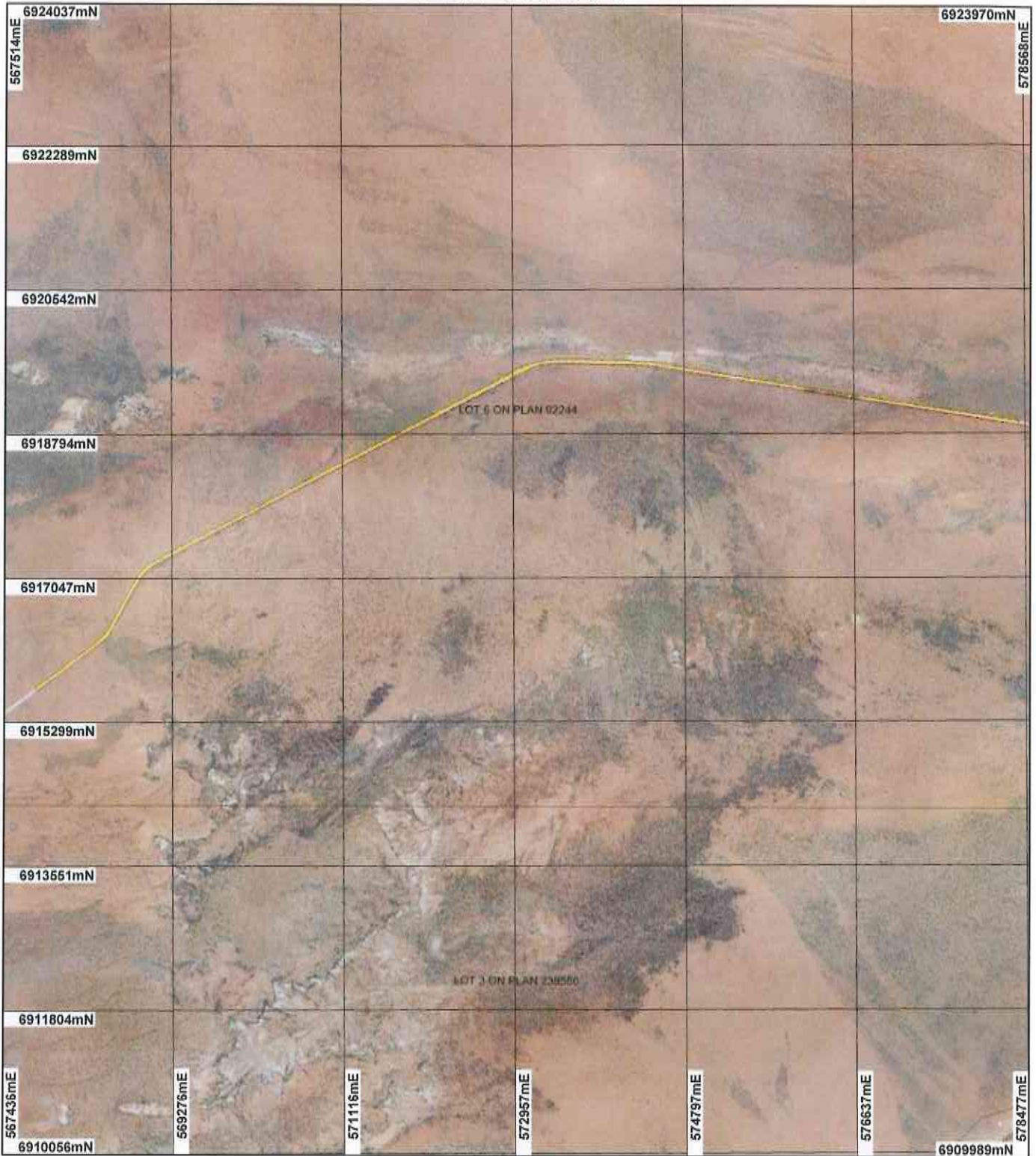
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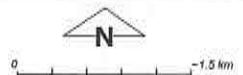
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Plan 4882/1 f



LEGEND

- Road Centrelines
- Clearing Instruments
- Areas Approved to Clear
- Cadastre for labelling
- North East Yilgarn 1.5m Orthomosaic - Landgate 2004



Scale 1:63000
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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Date 3/5/12
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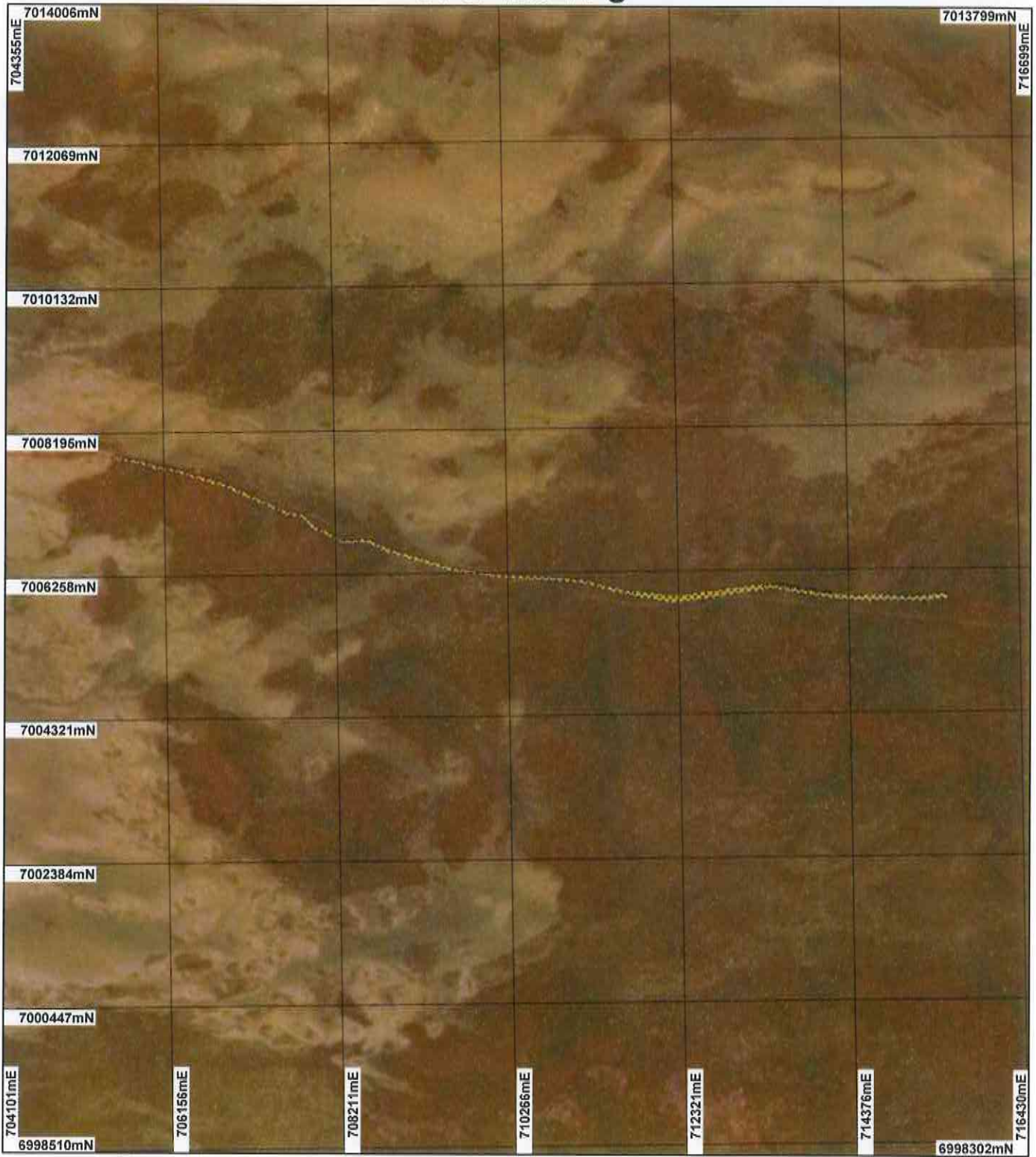
Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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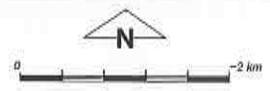
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CPS 4882/1 g



LEGEND

-  Road Centralines
-  Clearing Instruments
-  Areas Approved to Clear
-  Cadastre for labelling
- Western Australia ETM 25m
543 - AGO 2002



Scale 1:70005
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

 Date 3/5/12
Kelly Faulkner

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1. Application details

1.1. Permit application details

Permit application No.: 4882/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Laverton

1.3. Property details

Property: LOT 55 ON PLAN 240377 (Lot No. 55 GREAT CENTRAL COSMO NEWBERY 6440)
LOT 49 ON PLAN 92113 (COSMO NEWBERY 6440)
UNALLOCATED CROWN LAND (COSMO NEWBERY 6440)
LOT 6 ON PLAN 92244 (COSMO NEWBERY 6440)
CROWN RESERVE 24980 (LAKE WELLS 6440)

Local Government Area: Shire of Laverton
Colloquial name: Great Central road

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
113.75		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 3 May 2012

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Four Beard vegetation types are mapped within the applied area:	The application proposes to clearing 113.75 ha of native vegetation for the purpose of road reconstruction.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The description and condition of the vegetation under application was determined via the use of aerial imagery (Mcmillan 1.4m Orthomosaic-Landgate 2002, North East Yilgarn 1.5m Orthomosaic - Landgate 2004 and Western Australia ETM 25m 543 - AGO 2002)
Mapped Beard vegetation association 18 is described as Tall forest; karri & marri (<i>Corymbia calophylla</i>);			
Mapped Beard vegetation association 45 is described as Shrublands; mallee scrub (Great Victoria Desert);			
Mapped Beard vegetation association 676 is described as Succulent steppe; samphire;			
Mapped Beard vegetation association 1239 is described as: Hummock grasslands, open medium tree & mallee steppe; marble gum & mallee (<i>E. youngiana</i>) over hard spinifex <i>Triodia basedowii</i> on sandplain;			

3. Assessment of application against clearing principles

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

Comments **Proposal may be at variance to this Principle**
The proposal application is to clear up to 113.75 ha of native vegetation along Great Central Road within Lot 55 on Plan 240377, Lot 49 on Plan 92113 Lot 6 on plan 92244 and Unallocated Crown Land, Newberry and Crown Reserve 24980, Lake Wells, for the purpose of road reconstruction.

Nineteen priority flora have been recorded within the local area (30km). *Conosperma visidulum* (P4) has been recorded numerous times within the local area (30km) as well as within the application area. *Melaleuca apositiba* (P3) has been recorded approximately 600m south of the application area on the same vegetation and soil type. *Conospermum toddii* (P4), *Thryptomene nealensis* (P3) and *Lechenaultia aphylla* (P1) have been recorded on the same vegetation and soil type within 10 km of the areas proposed to be cleared. Given the large area and very good condition of the vegetation proposed to be cleared numerous priority species are likely to be found within the application area.

The local area (40 km radius) is well vegetated containing approximately 90 per cent vegetation cover. The application area is unlikely to represent an area of higher biodiversity value when compared to representative vegetation in a local and regional context.

The closest Priority Ecological Community (PEC) is Laverton Downs Calcrete located which is located approximately 50 km west of the application area. Given the distance from the application area, the clearing as proposed is unlikely to have a significant impact on this PEC.

A number of fauna species considered rare or likely to become extinct have been recorded within a 40 km radius of the proposed clearing areas. However given the long linear nature of the proposed clearing and that the fauna habitat within the area proposed to be cleared are well represented elsewhere within the local and regional area no significant loss of habitat for fauna species is expected.

Given the possibility of priority flora occurring within the application area the clearing as proposed may be at variance to this principle.

Methodology **References:**
DEC (2007 -)

GIS Databases:
- SAC Biodatasets - Accessed 16 April 2012
- Pre European Vegetation

(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.

Comments **Proposal is not likely to be at variance to this Principle**
Three species of fauna considered rare or likely to become extinct have been recorded within a 40 km radius of the proposed clearing areas. Three species of fauna considered rare or likely to become extinct have been recorded within a 40 km radius of the proposed clearing areas, *Dasyercus cristicauda* (Crest-tailed Mulgara), *Dasyurus geoffroi* (Chuditch) and *Egernia kintorei* (Great Desert Skink).

Given the long linear nature of the proposed clearing and that the fauna habitats within the area proposed to be cleared are well represented elsewhere within the local and regional area no significant loss of habitat for fauna indigenous to Western Australia is expected.

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

Methodology **Reference:**
DEC (2007-)

GIS Databases:
- Pre-European vegetation
- SAC Biodatasets - accessed Accessed 16 April 2012

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

Comments **Proposal is not likely to be at variance to this Principle**
No known records of Declared Rare Flora (DRF) have been recorded within the local area (40km).

Given the above, it is unlikely the vegetation under application will include or be necessary for the continued existence of DRF. Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Databases:
 - Pre-European vegetation
 - SAC Biodatasets - Accessed 16 April 2012

(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.

Comments **Proposal is not likely to be at variance to this Principle**
 No known records of Threatened Ecological Communities are located within the local area (40km).

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

Methodology GIS Databases:
 - SAC Biodatasets - Accessed 16 April 2012

(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.

Comments **Proposal is not at variance to this Principle**
 The area under application is located within the Great Victoria Desert Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 100 per cent of its Pre European vegetation extent remaining (Shepherd, 2009).

The vegetation under application is mapped as Beard Vegetation Associations 18, 45 676 and 1239, all of which have approximately 100 per cent of their Pre European extent remaining in the Great Victoria Desert bioregion (Shepherd, 2009).

Digital imagery (Mcmillan 1.4m Orthomosaic-Landgate 2002, North East Yilgarn 1.5m Orthomosaic - Landgate 2004 and Western Australia ETM 25m 543 - AGO 2002) indicates that the local area (20km radius) surrounding the area under application retains approximately 100 per cent vegetation cover.

Given the vegetation representation within the local area it is unlikely that the vegetation under application is significant as a remnant in an extensively cleared landscape.

Therefore, the clearing as proposed is not at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Great Victoria Desert	21,794,207	21,785,242	100%	8%
Shire*				
Shire of Laverton	17,999,828	17,992,719	100%	7%
Beard Vegetation Association in Bioregion*				
18	1,954,625	1,954,625	100%	9%
45	170,380	170,380	100%	6%
676	2,061,211	1,963,655	95%	14%
1239	2,233,685	2,233,685	100%	12%

* Shepherd 2009

Methodology References:
 Shepherd (2009)

GIS Database:
 - Mcmillan 1.4m Orthomosaic-Landgate 2002,
 - North East Yilgarn 1.5m Orthomosaic
 - Landgate 2004 and Western Australia ETM 25m 543 - AGO 2002
 - Local Government Authority
 - Pre-European vegetation
 - SAC Biodatasets - Accessed 16 April 2012

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

Comments **Proposal is at variance to this Principle**
 One minor, non perennial watercourse intersects the proposed clearing area.

An Anca wetland Yeo Lake/Lake Throssell is located approximately 6 km east of the application area. The minor watercourse intersecting the proposed clearing also intersects this wetland.

A Paleo-Drainage Line also intersects the proposed clearing area.

Given the above the clearing as proposed is at variance to this principle.

Methodology GIS Databases:
- Hydrography, linear

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

Comments **Proposal is not likely to be at variance to this Principle**

There are seven types of soils within the application area which Northcote (1960-68) describes as:

AB47: Plains and dunes--longitudinal and ring dunes with interdune corridors and plains; occasional salt pans: chief soils are the red earthy sands of the interdune plains and corridors.

AB50: Plains with scattered dunes and small breakaways of unit BY7: chief soils are red earthy sands, some containing ferruginous nodules, some underlain by a red-brown hardpan.

BY7: Scarpland--low lateritic breakaways on granites and gneisses: chief soils on the steeper slopes are probably shallow stony sands and sandy loamsand, possibly with some soils.

My99: Plains with extensive gravel pavements and small tracts of longitudinal dunes: chief soils are shallow red earths and earthy loams underlain by a red-brown hardpan.

My100: Gently sloping plains with extensive gravel pavements: chief soils are shallow red earths underlain by a red-brown hardpan.

Mx22: Plains often flanking areas of regional drainage; some longitudinal sand dunes: chief soils are alkaline red earths.

SV10: Shallow valleys with lakes, clay pans, salt pans, calcrete (kunkar) platforms, sand dunes, kopi dunes, and calcareous dunes: chief soils are probably shallow loams.

Rainfall with the local area is relatively low (200-300mm), however severe weather events do occur which may cause water erosion. The purpose of clearing is road reconstruction to reduce the risk of damage to Great Central Road reserves by storm events and flooding.

Given the proposed clearing is long and linear along an existing road it is unlikely to cause appreciable land degradation.

Methodology References:
Northcote et al. (1960 - 1968)

GIS Database:
- Rainfall, Mean Annual
- Soils, Statewide

(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.

Comments **Proposal is not likely to be at variance to this Principle**

The closest known conservation reserve is Yeo Lake Nature Reserve which is located approximately 20 km east of the application area.

A large proportion of the vegetation in the Great Victoria Desert bioregion remains uncleared, approximately 100 per cent (Shepherd, 2009). Therefore, it is unlikely that the application area provides an important buffer or ecological linkage to Yeo Nature Reserve.

Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Databases:
- DEC Tenure
- Pre-European vegetation

(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.

Comments **Proposal is not likely to be at variance to this Principle**
Clearing of riparian vegetation around minor watercourses may pose problems to surface water from increased sedimentation and runoff. One minor, non perennial watercourse intersects the proposed clearing area, this minor water course also intersects an Anca wetland Yeo Lake/Lake Throssell.

Although the proposed clearing may increase surface water sedimentation in the minor watercourse which intersects the clearing area effects will be minor and short term.

Great Central Road reserve should already include road side infrastructure, such as table drains and culverts to divert the surface water.

Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Databases:
-Soils, Statewide
-Pre-European vegetation
-Rainfall, Mean Annual

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

Comments **Proposal is not likely to be at variance to this Principle**
As the proposal is for the clearing along Clackline-Toodyay road, the clearing will be linear and occur in areas already disturbed by the existing road. Therefore, the clearing as proposed is unlikely to cause or exacerbate the incidence or intensity of flooding.

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

Methodology GIS Database:
- Rainfall, Mean Annual

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments
The proposal is to clear up to 113.75 ha of native vegetation along Great Central Road within Lot 55 on Plan 240377, Lot 49 on Plan 92113 Lot 6 on plan 92244 and Unallocated Crown Land, Newberry and Crown Reserve 24980, Lake Wells, for the purpose of road reconstruction.

One Aboriginal Site of Significance 'Point Virginia' is located within the proposed clearing area.

No public submissions have been received in relation to this proposal.

Methodology GIS Database:
Aboriginal Sites of Significance

4. References

DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 16 April 2012

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

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

5. Glossary

Term Meaning

BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)