



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4583/1
Permit Holder:	Shire of Ngaayattjarraku
Duration of Permit:	31 October 2011 – 31 October 2019

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 gravel extraction.

2. Land on which clearing is to be done

Crown Reserve 24980 (Gibson Desert South 0872)

Lot 9 on Plan 91722 (Ngaanyatjarra-Giles 0872)

Lot 8 on Plan 91735 (Warburton 6431)

3. Area of Clearing

The Permit Holder must not clear more than 72 hectares of native vegetation within the combined areas hatched yellow on attached Plan 4583/1.

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.

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the power to clear native vegetation 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:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

8. 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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *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.

9. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) within 6 months following completion of extractive activities, *revegetate* and *rehabilitate* the area(s) the areas that are no longer required for the purpose for which they were cleared under this Permit by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
 - (ii) ripping the ground on the contour to remove soil compaction; and
 - (iii) ripping the pit floor and contour batters within the extraction site; and
 - (iv) laying the vegetative material and topsoil retained under condition 9(a) on the cleared area(s).
- (c) within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 9(b) of this Permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 9(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.
- (d) where *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 9(c)(ii) of this permit, the Permit Holder shall repeat condition 9(c)(i) and 9(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.
- (e) where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 9(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 9(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 9(c)(ii).

PART III - RECORD KEEPING AND REPORTING

10. 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 species composition, structure and density of the cleared area;
 - (ii) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).

- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 9 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

11. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 10 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 24 July 2019, the Permit Holder must provide to the CEO a written report of records required under condition 10 of this Permit where these records have not already been provided under condition 11(a) of this Permit.

DEFINITIONS

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

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

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

local provenance means native vegetation seeds and propagating material from natural sources within 20 kilometres of the area cleared;

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;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area; and

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.



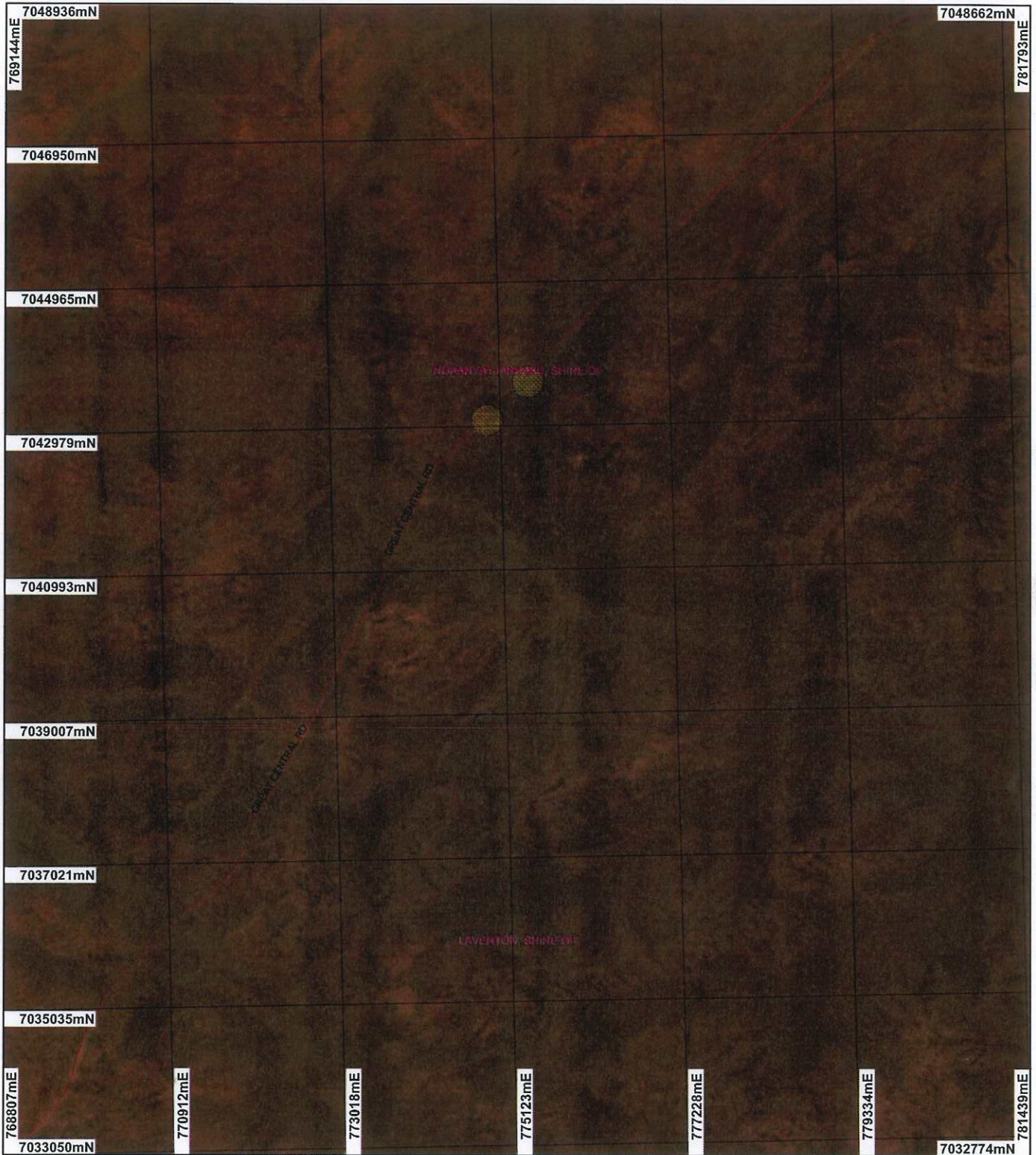
Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

6 October 2011

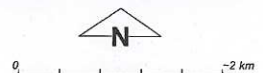
CPS 4583/1, 6 October 2011

Plan 4583/1a



LEGEND

- | | |
|-------------------------|------------------------------|
| Clearing Instruments | Local Government Authorities |
| Areas Approved to Clear | |
| Road Centrelines | |
| Cadastre for labelling | |
- Western Australia ETM 25m
543 - AGO 2002



Scale 1:71636
(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: 6/10/11
K 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.

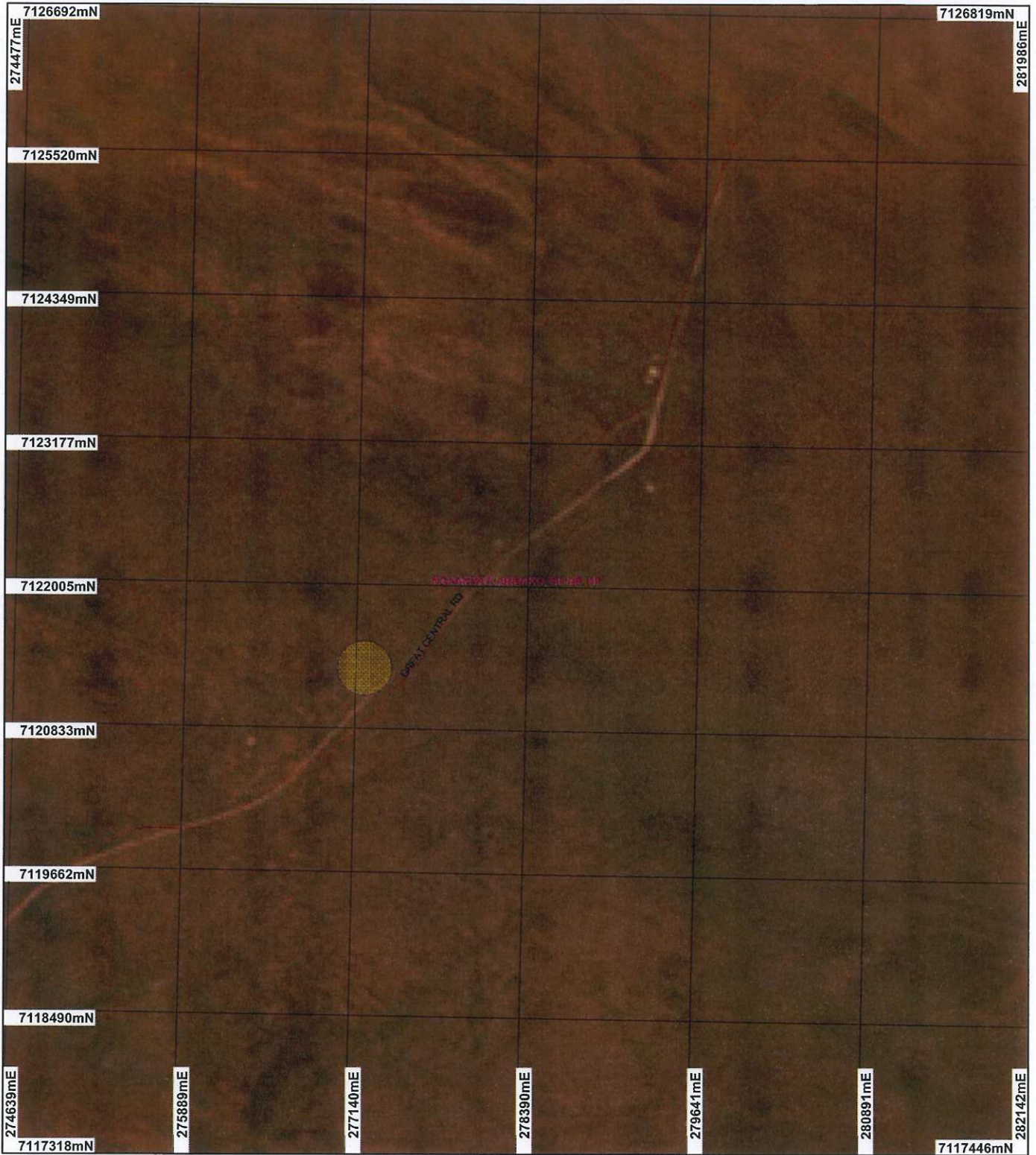


Department of Environment and Conservation

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* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 4583/1b



LEGEND

- | | |
|-------------------------|---|
| Areas Approved to Clear | Local Government Authorities |
| Road Centrelines | Western Australia ETM 25m
543 - AGO 2002 |
| Cadastre for labelling | |



0 ————— 1.25 km

Scale 1:42381
(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 6/10/11
K 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.

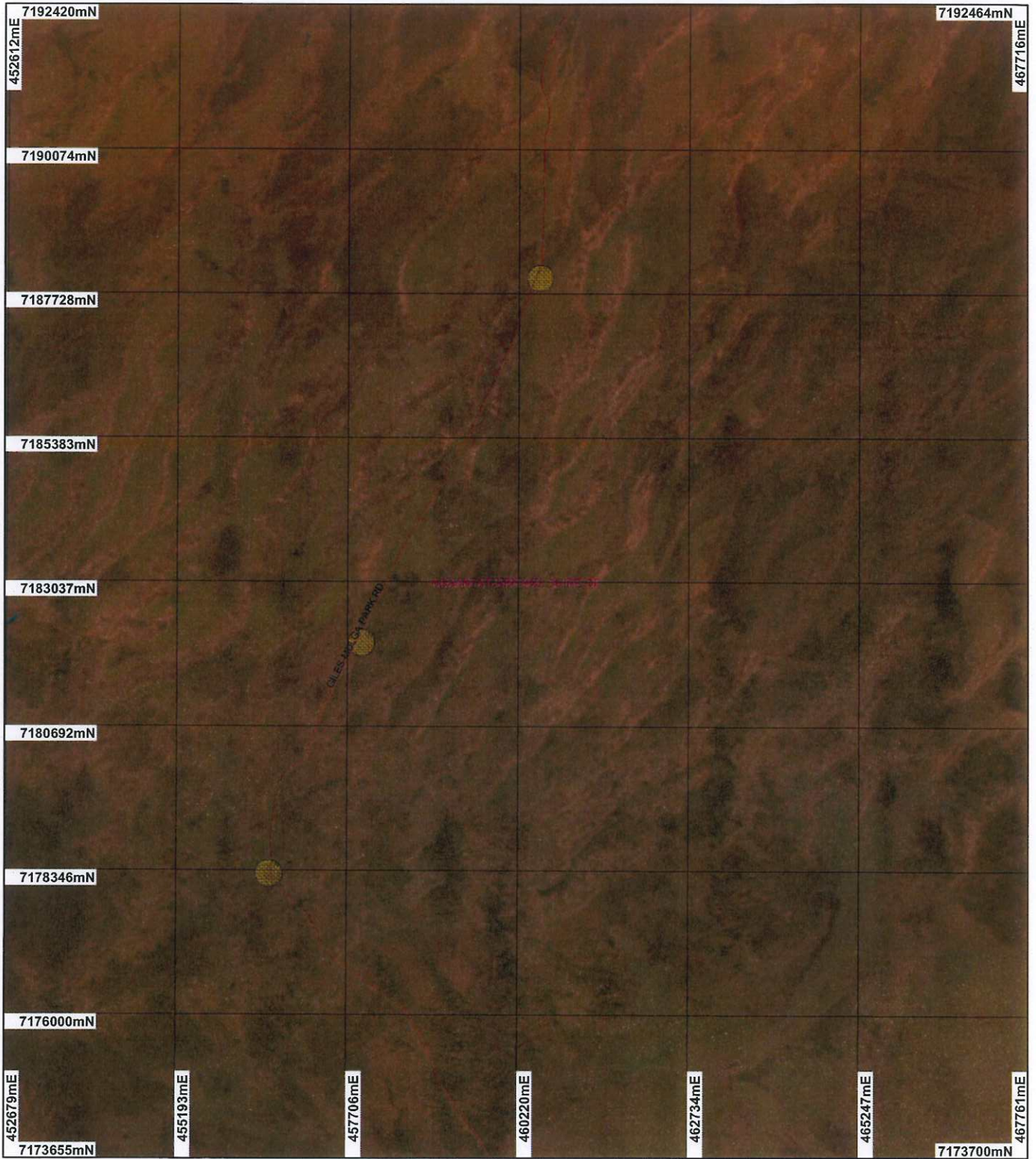


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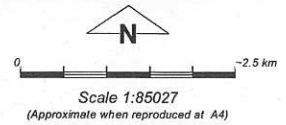
* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

Plan 4583/1c



LEGEND

- | | |
|--|---|
| Clearing Instruments | <input type="checkbox"/> Local Government Authorities |
| <input type="checkbox"/> Areas Approved to Clear | Western Australia ETM 25m
543 - AGO 2002 |
| <input checked="" type="checkbox"/> Road Centrelines | |
| <input type="checkbox"/> Cadastre for labelling | |



Geocentric Datum Australia 1994
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

[Signature] Date: 2/10/11
 K 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.



* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



1. Application details

1.1. Permit application details

Permit application No.: 4583/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Ngaanyatjarraku

1.3. Property details

Property: CROWN RESERVE 24980 (GIBSON DESERT SOUTH 0872)
LOT 9 ON PLAN 91722 (NGAANYATJARRA-GILES 0872)
LOT 8 ON PLAN 91735 (WARBURTON 6431)

Local Government Area: Shire of Ngaanyatjarraku
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
72		Mechanical Removal	Extractive Industry

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 6 October 2011

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
Beard Vegetation Associations: Great Central Road (1 site) - 18: Low woodland; mulga (<i>Acacia aneura</i>) Giles-Mulga Park Rd (1 site) - 19: Low woodland; mulga between sandridges Great Central Rd (2 sites) - 139: Hummock grasslands, patchy shrub steppe; mulga over hard spinifex on laterite Giles-Mulga Park Rd (2 sites) - 236: Hummock grasslands, shrub steppe; mulga and mallee (marble gum) over hard spinifex	The application to clear up to 72 hectares of native vegetation (6 sites along Giles-Mulga Pk and Great Central Roads) for the purpose of gravel extraction. The vegetation is considered to be in a very good (Keighery, 1994) condition and has been classified as predominantly Spinifex (<i>Triodia</i> species) and Mulga (<i>Acacia aneura</i>).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation was assessed through aerial imagery (Western Australia ETM 25m 543 - AGO 2004).

Shepherd et al. (2009)

3. Assessment of application against clearing principles

Comments

The application to clear up to 72 hectares of native vegetation (6 sites of 12 hectares each along Giles-Mulga Pk and Great Central Roads) for the purpose of gravel extraction is unlikely to have any significant environmental impacts.

The vegetation is considered to be in a very good (Keighery, 1994) condition and has been classified as predominantly Spinifex (*Triodia* species) and Mulga (*Acacia aneura*).

There are no declared rare flora species or threatened ecological communities in the vicinity of the project. The vegetation to be cleared is well represented in the local area, and would not have a detrimental impact on fauna.

The proposed clearing for gravel extraction may cause appreciable land degradation in the form of soil erosion through wind erosion. This impact may be managed through staged clearing and revegetation of the cleared area.

Two sites along Great Central Road occur within the Baker Lake Area Registered National Estate. The proposed clearing may be at variance to this principle. Weed management strategies will mitigate the spread of weeds within this Estate.

The assessment of the application identified that the clearing may be at variance to principle (h) and is not likely to be at variance to the remaining principles.

Methodology References:
Keighery (1994)

GIS databases:

- Clearing Regulations - Environmentally Sensitive Areas - 30 May 2005
- Groundwater Salinity, statewide - DoW 13/07/06
- Hydrogeographic Catchments, Catchments - DoW 01/06/07
- Hydrogeology, statewide - DOW 13/07/06
- Hydrography, linear DOW 13/7/06
- Pre-European vegetation - DA 01/01
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- SAC Biodatasets (Accessed 4 October 2011)

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

Comments

No Public submission have been received.

There are no Aboriginal Sites of Significance listed within the areas under application.

Methodology GIS Dataset:
- Aboriginal Sites of Significance 26 April 2007

4. References

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

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)