GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 2883/2
Permit Holder:	BHP Billiton Iron Ore Pty Ltd
Duration of Permit:	2 May 2009 – 1 November 2015

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 railway construction and maintenance and associated works.

2. **Land on which clearing is to be done**
   Lot 218 on Deposited Plan 220376, Mulga Downs;
   Iron Ore (Mount Newman) Agreement Act 1964, Special Lease for Mining Operations 3116/3687, Document I 154279 L, Lot 65 on Deposited Plan 48920;
   Special Lease for Mining Operations 3116/4028, Lot 96 on Deposited Plan 60709; and
   Special Lease for Mining Operations 3116/6038, Document I 123402 L, Lot 135 on Deposited Plan 48926.

3. **Area of Clearing**
   The Permit Holder must not clear more than 366 hectares of native vegetation within the combined areas hatched yellow on attached Plans 2883/2a, 2883/2b, 2883/2c, 2883/2d, 2883/2e and 2883/2f.

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 – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

5. **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.

6. **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.

7. 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.
(b) at an *optimal time* within 12 months following clearing authorised under this Permit, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
    (i) laying the vegetative material and topsoil retained under condition 7(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 7(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 7(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.

PART III - RECORD KEEPING AND REPORTING

8. Records must be kept

(a) 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:
    (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 *regeneration* of areas pursuant to condition 7 of this Permit:
    (i) the location of any areas *regenerated*, 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 *regeneration* activities undertaken;
    (iii) the size of the area *regenerated* (in hectares); and
    (iv) the species composition, structure and density of *regeneration*.

9. Reporting

(a) The Permit Holder must provide to the CEO, on or before 1 October 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 financial year.

(b) If no clearing authorised under this Permit was undertaken between 1 July to 30 June of the preceding financial year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 1 October of each year.

(d) Prior to 1 August 2015, 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:

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 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, or who is approved by the CEO as a suitable environmental specialist.

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 200 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion 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;

optimal time means the period from November to December.

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

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

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.

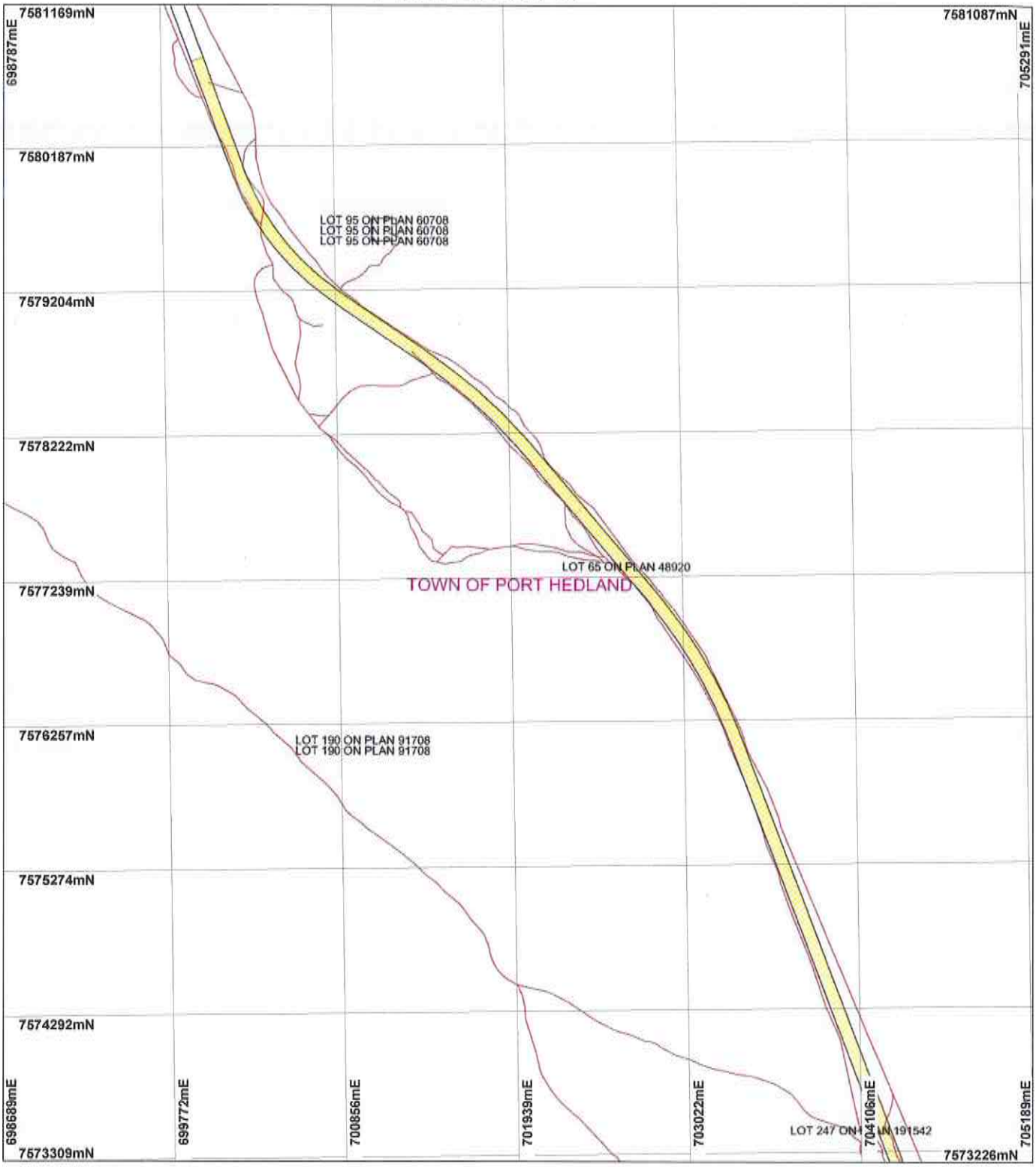
weed/s means any plant -
(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
(c) not indigenous to the area concerned.

M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

10 April 2014

Plan 2883/2a



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Local Government Authorities

Cadastre

N

0 1 km

Scale 1:35998
(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.

M. Warnock
Date 10/11/14

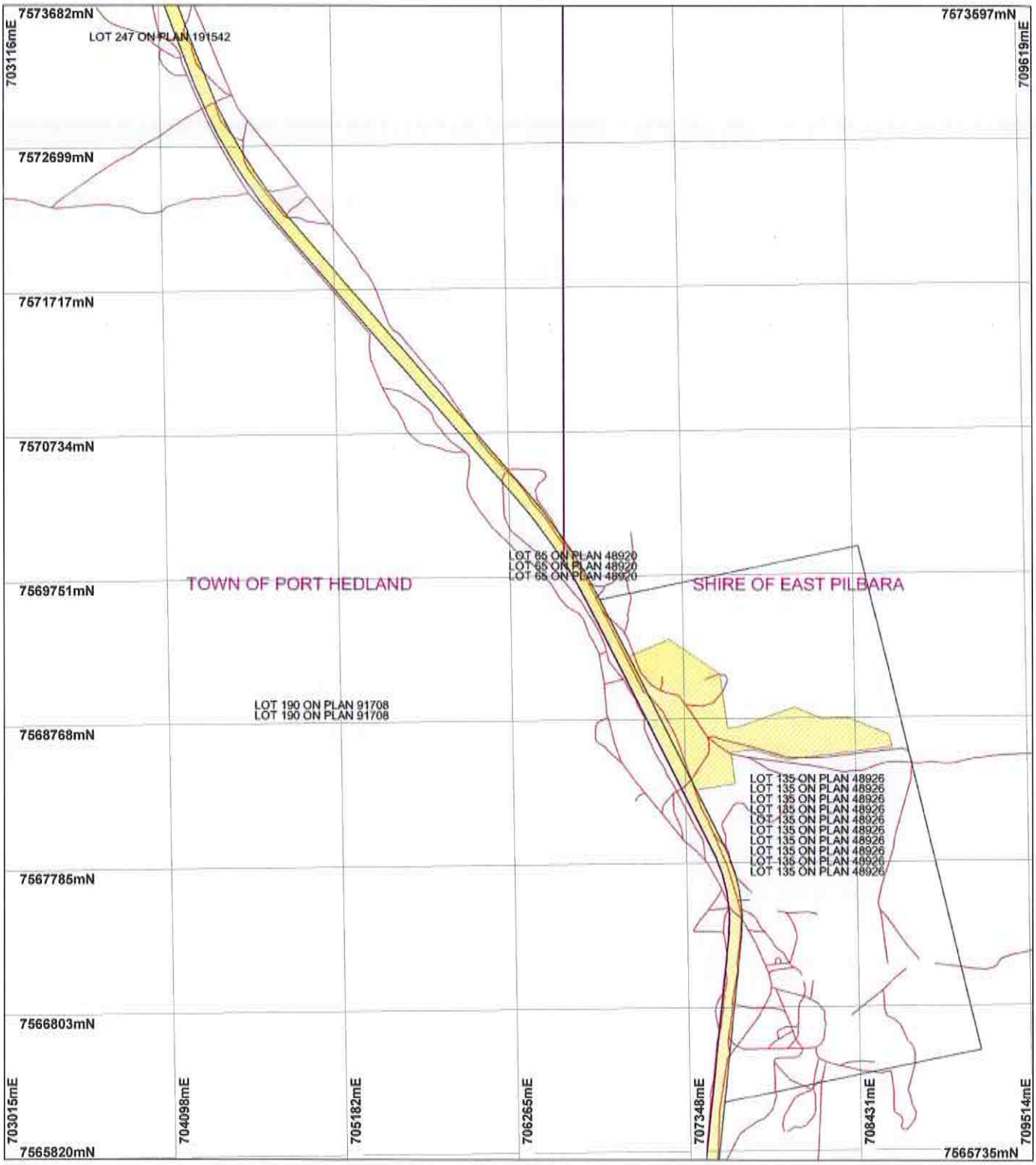
Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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

Government of Western Australia
Department of Environment Regulation

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

Plan 2883/2b



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Local Government Authorities

- Cadastre

N

0 — 1 km

Scale 1:36000
(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 10/4/14

M. Warnock

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

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Department of Environment Regulation

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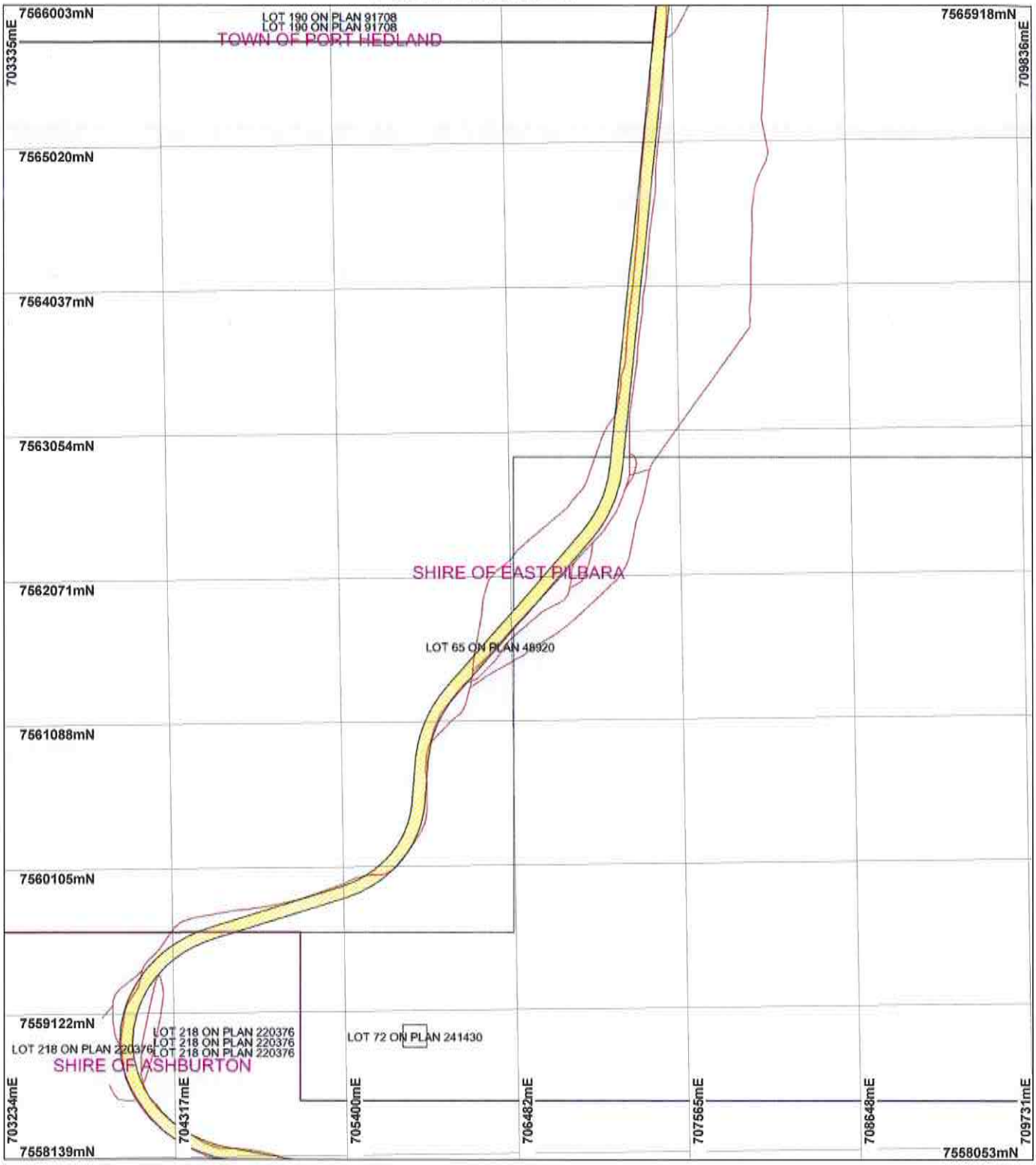
Plan 2883/2c



LEGEND

Clearing Instruments

Areas Approved to Clear

Local Government Authorities

Cadastre

N

0 1 km

Scale 1:36000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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Date 10/4/14

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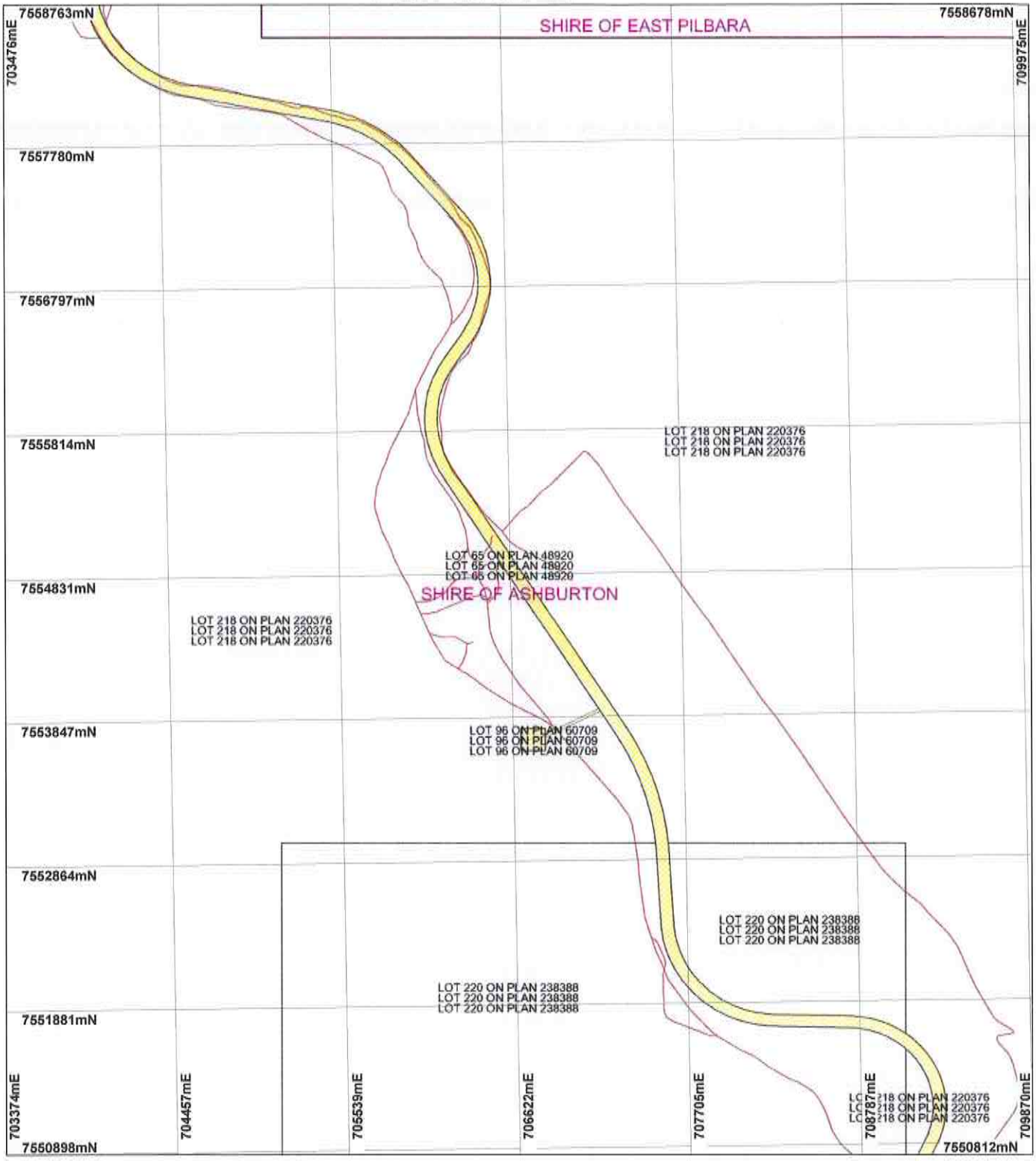
Plan 2883/2d



LEGEND

Clearing Instruments

Areas Approved to Clear

Local Government Authorities

Cadastre

N

0 1 km

Scale 1:36000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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Date 10/4/14

M. Warnock

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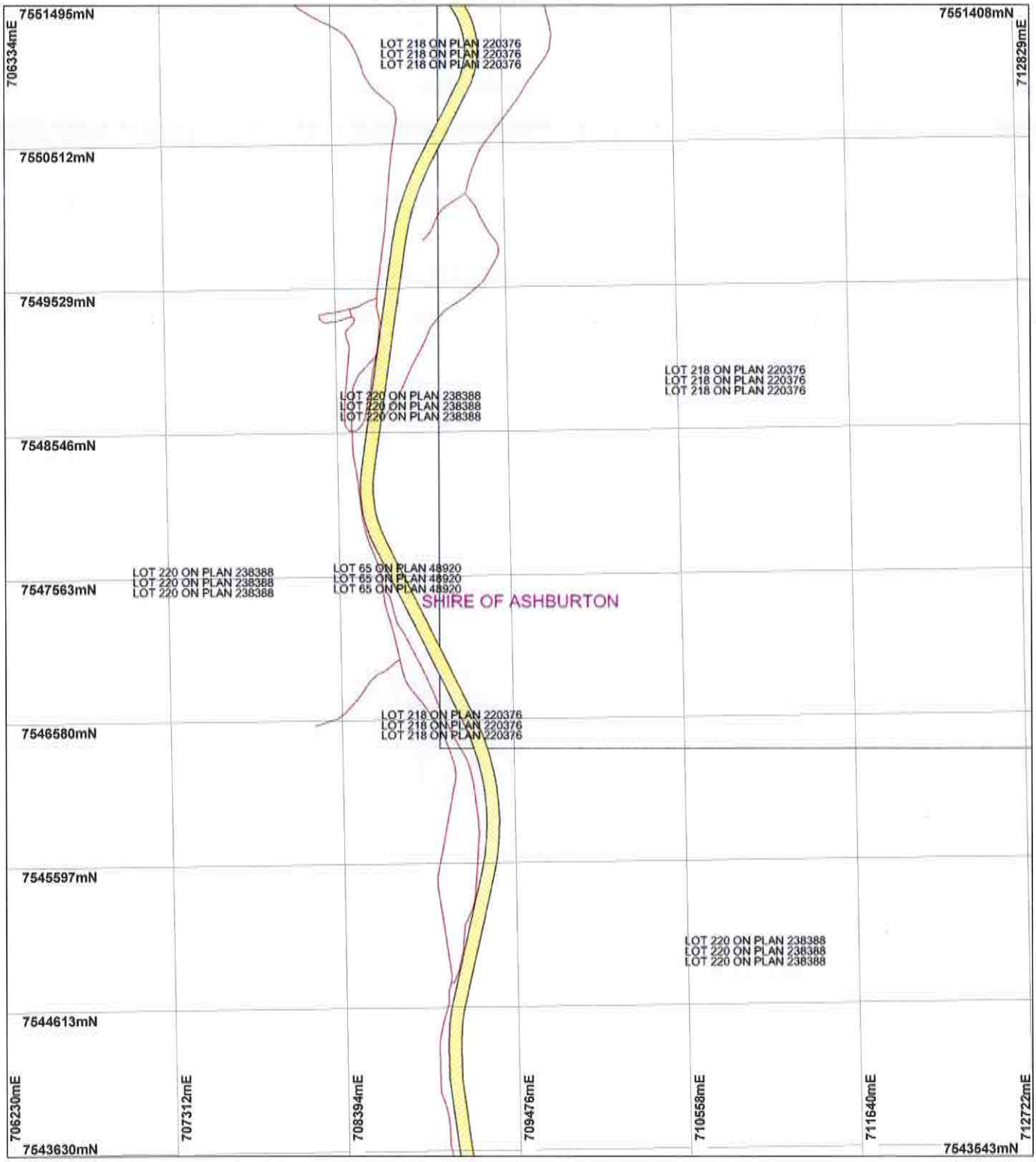
Plan 2883/2e



LEGEND

Clearing Instruments

Areas Approved to Clear

Local Government Authorities

Cadastre

N

0 1 km

Scale 1:35988

(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.

M. Warnock

Date 10/4/14

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

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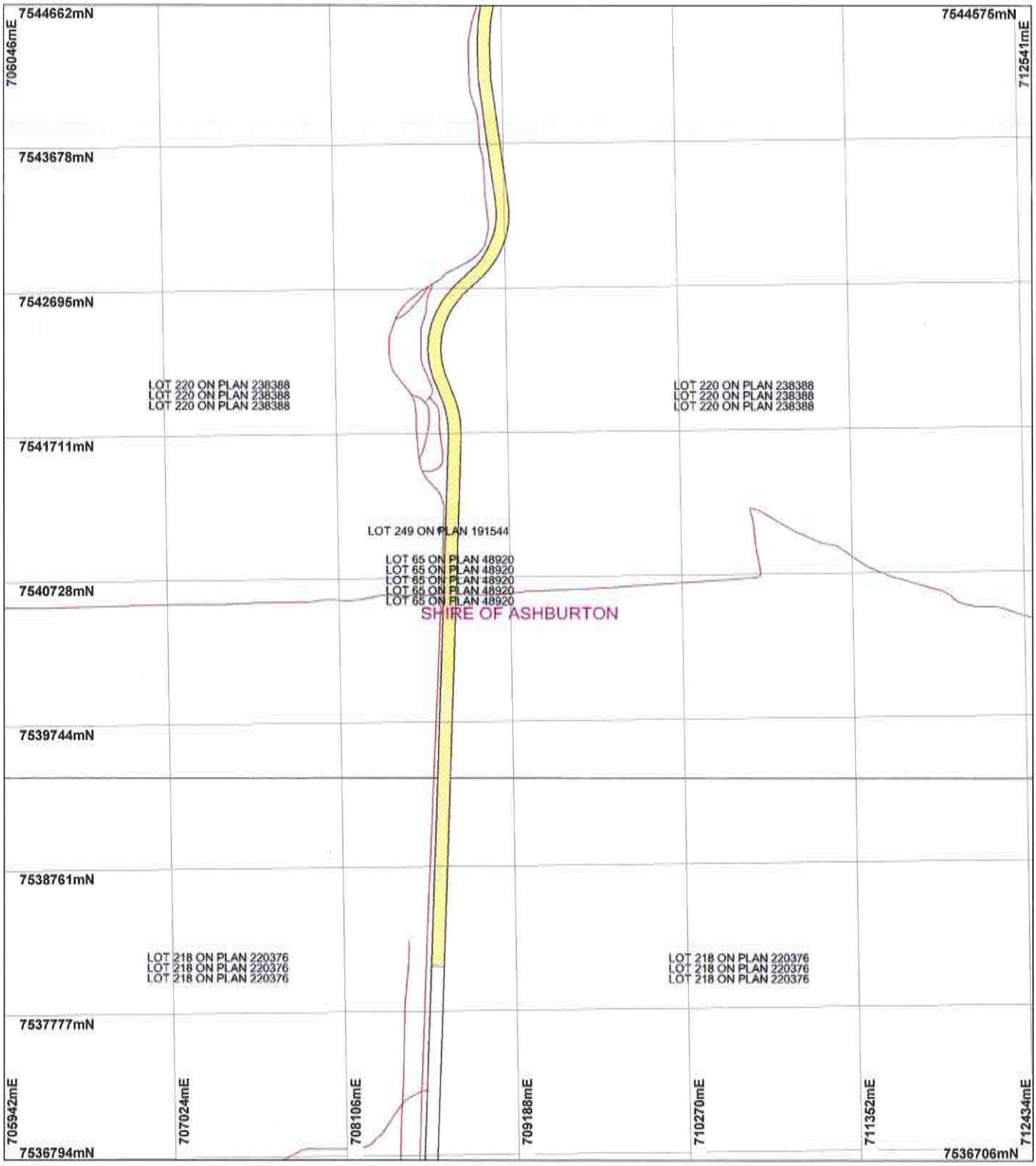
Government of Western Australia
Department of Environment Regulation

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

Plan 2883/2f



LEGEND

Clearing Instruments

Areas Approved to Clear

Local Government Authorities

Cadastre

N

0 1 km

Scale 1:36000

(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 10/4/14

M. Warnock

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GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 2883/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **BHP Billiton Iron Ore Pty Ltd**

1.3. Property details

Property: LOT 65 ON PLAN 48920 (MARBLE BAR 6760)
LOT 135 ON PLAN 48926 (MARBLE BAR 6760)
LOT 96 ON PLAN 60709 (MULGA DOWNS 6751)
LOT 218 ON PLAN 220376 (Lot No. 218 GREAT NORTHERN MULGA DOWNS 6751)
Local Government Area: Shires of Ashburton and East Pilbara and Town of Port Hedland
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
366		Mechanical Removal	Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 April 2014

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

The area applied to clear has been broadly mapped at a scale of 1:250,000 as:

Beard Vegetation Association 29: Sparse low woodland; Mulga, discontinuous in scattered groups;

Beard Vegetation Association 93: Hummock grasslands, shrub steppe; kanji over soft spinifex;

Beard Vegetation Association 173: Hummock grasslands, shrub steppe; kanji over soft spinifex & *Triodia wiseana* on basalt;

Beard Vegetation Association 175: Short bunch grassland - savanna/grass plain (Pilbara); and

Beard Vegetation Association 562: Mosaic: Low woodland; Mulga in valleys / Hummock grasslands, open low tree-steppe; Snappy Gum over *Triodia wiseana*.

Ecologia Environment Pty Ltd (2008b) conducted a Level 1 flora and vegetation survey of the proposed rail duplication area on 9 October 2007 and between 30 March and 2 April 2008, in order to describe finer scale vegetation types than those described by Beard vegetation mapping.

Mainline Lease

The flora and vegetation survey of the proposed rail duplication area consisted of 34 quadrats, each 50 metres x 50 metres (the standard size for surveys carried out in the Pilbara) (Ecologia Environment Pty Ltd, 2008b). In addition, 13 transects were walked through different vegetation types along the length of the proposed rail duplication to ensure that a representative species list was produced for the survey area. The following vegetation units (and associated landforms) were described from the proposed rail duplication area (Ecologia Environment Pty Ltd, 2008b):

Creekline
1a - Moderately dense *Eucalyptus camaldulensis var. obtusa*, *E. victrix* and *Melaleuca argentea* low to medium trees, over moderately dense mixed *Melaleuca glomerata*, *M. argentea*, *M. bracteata*, *Acacia coriacea subsp. pendens*, *A. trachycarpa*, *A. ampliceps* and *Atalaya hemiglauca* low trees to high shrubs, over sparse *Crotalaria cunninghamii* and *Stemodia grossa* low shrubs, over open mixed *Cyperus cunninghamii subsp. cunninghamii*, *C. blakeanus* and *C. difformis* sedges, *Typha domingensis* rushes, and sparse mixed **Cenchrus ciliaris*, *Chrysopogon fallax*, *Cymbopogon ambiguus* tussock and *Triodia epactia* hummock grasses;

1b - Sparse to moderately dense *Eucalyptus victrix* medium trees, sometimes over *Atalaya hemiglauca*, *Acacia coriacea subsp. pendens* and *Flueggea virosa subsp. melanthesoides*
low trees to high shrubs, over open *Acacia bivenosa*, *Petalostylis labicheoides*, *Acacia trachycarpa* and *Acacia pyrifolia* high to medium shrubs, over open **Cenchrus ciliaris* tussock grasses and sparse to open *Cyperus blakeanus* and *Cyperus vaginatus* sedges;

Minor creekline/channel
2a - Open *Corymbia hamersleyana* medium to low trees, over moderately dense to dense varying Acacia spp. high shrubs (*Acacia trachycarpa*, *A. ancistrocarpa*, *A. bivenosa*, *A. tumida var. tumida*, *A. inaequilatera* and *A. ligulata*), over sparse *Senna artemisioides subsp. oligophylla* low shrubs, over open to moderately dense **Cenchrus ciliaris*, *Themeda triandra* and *Cymbopogon ambiguus* tussock grass, with open *Triodia epactia* hummock grass and scattered *Cyperus blakeanus* sedges;

2b - Sparse to open *Acacia coriacea subsp. pendens* medium trees, over sparse **Vachellia farnesiana* high shrubs, over open *Enneapogon caerulescens* tussock and sparse *Triodia wiseana* hummock grasses;

Drainage line in cracking clay
3 - Open to moderately dense *Acacia xiphophylla* high to medium shrubs, over sparse *Senna sericea*, *Senna artemisioides subsp. oligophylla* and *Sida aff. fibulifera* low shrubs, over open to moderately dense *Aristida inaequiglumis* and *Astrebla pectinata* tussock grasses;

Cracking clay plain
4 - Isolated *Senna artemisioides subsp. oligophylla*, *S. artemisioides subsp. helmsii, Acacia synchronicia*, *A. tetragonophylla* and **Vachellia farnesiana* medium shrubs, over
sparse *Streptoglossa bubakii* and *Sida aff. fibulifera* low shrubs, over moderately dense
mixed *Aristida latifolia*, *Acrachne racemosa, Eragrostis desertorum*, **Cenchrus ciliaris* and *Cymbopogon ambiguus* tussock grasses;

Plain
5 - Scattered *Acacia pruinocarpa* low trees, over sparse to moderately dense *Acacia aneura var. microcarpa* and *var. aneura* high shrubs to low trees, over sparse to open *Acacia xiphophylla* high shrubs, over sparse patches of *Acacia synchronicia* medium shrubs, over open *Senna artemisioides subsp. oligophylla* and *Sclerolaena cornishiana* low shrubs, over open to moderately dense **Cenchrus ciliaris*, *Aristida contorta*, *A. latifolia* tussock and *Triodia epactia* hummock grasses;

Low hill slope/undulating plain
6a - Scattered *Corymbia hamersleyana* low trees, over sparse to moderately dense *Acacia orthocarpa* high shrubs, over sparse *Acacia maitlandii* medium shrubs, over moderately dense *Triodia angusta*, *T. basedowii*, *T. lanigera* and *T. epactia* hummock grasses, with scattered *Fimbristylis rara* sedges and sparse *Cymbopogon ambiguus* and *Chrysopogon fallax* tussock grasses;

6b - Scattered *Corymbia hamersleyana* low trees, sometimes with scattered *Eucalyptus leucophloia subsp. leucophloia* low trees, over sparse *Acacia inaequilatera* and *Hakea lorea subsp. lorea* high to medium shrubs, over sparse to open varying *Acacia ancistrocarpa*, *A. bivenosa*, *A. trudgeniana*, *A. orthocarpa*, *Senna glutinosa subsp. glutinosa* and *Senna artemisioides subsp. oligophylla* medium shrubs, over open to moderately dense *Triodia wiseana*, *T. epactia* and *Triodia lanigera* hummock grass, with sparse **Cenchrus ciliaris*, *Aristida contorta* and *Chrysopogon fallax* tussock grasses;

Rocky hillslope
7a - Sparse to open *Eucalyptus leucophloia subsp. leucophloia*, sometimes with *Corymbia hamersleyana* low trees, over sparse to open *Acacia inaequilatera*, *A. ancistrocarpa* and *A. bivenosa* medium to high shrubs, over varying sparse to open *Acacia hilliana*, *Acacia arida*, *Goodenia stobbsiana* and *Corchorus laslocarpus* low shrubs, over moderately dense *Triodia epactia* and *T. basedowii* hummock grass, with sparse *Cymbopogon ambiguus* tussock grass;

7b - Sparse *Eucalyptus leucophloia subsp. leucophloia*, *Acacia pruinocarpa* and *Acacia aneura var. microcarpa* low trees, over open *Grevillea wickhamii subsp. hispidula*, *subsp. aprica* and *Acacia marramamba* tall shrubs, over open *Triodia epactia* hummock grass, with sparse *Eriachne lanata* and *Cymbopogon ambiguus* tussock grasses.

Rail Repeater Station Five Lease

Ecologia Environment Pty Ltd (2008b) undertook a Rare and Priority Flora survey of the Rail Repeater Station Five lease area on 5 April 2008. Foot traverses and grid searches were undertaken over an area measuring 150 metres x 150 metres (2.25 hectares). A 40 metre wide strip of vegetation was also surveyed along a distance of approximately 370 metres where BHP Billiton Iron Ore Pty Ltd are proposing to construct an access track and install fibre optic cable from the Mainline lease to Rail Repeater Station Five. One vegetation type, associated with one distinct landform was described for the Rail Repeater Station Five lease area:

Cracking clay plain
1 - Open *Sida* aff. *fibulifera* very low shrubs, over a dense mixed tussock grassland dominated by *Aristida latifolia* grass.

Quarry Four Lease

Ecologia Environment Pty Ltd (2008c) undertook a Level 1 flora and vegetation survey at the Quarry Four lease area on 29 – 30 March 2008. The survey consisted of systematic sampling using 30 quadrats (50 metres x 50 metres) which allowed a broad scale vegetation map to be produced for a majority of the Quarry Four lease area (approximately 436.8 hectares of the 507 hectares). This was adequate given that only 61 hectares of the Quarry Four lease is subject to this clearing permit application. The following ten vegetation units were described from

five landform types within the Quarry Four lease area:

Major creekline
1 - Moderately dense *Eucalyptus victrix* and *E. camaldulensis* var. *obtusa* medium trees, over moderately dense mixed *Melaleuca glomerata*, *Acacia coriacea* subsp. *pendens*, *A. trachycarpa* and *Alectryon oleifolius* subsp. *oleifolius* low trees, over moderately dense *M. glomerata* high to medium shrubs, over open *Cyperus blakeanus* and *C. cunninghamii* subsp.*cunninghamii* sedges, with sparse **Cenchrus ciliaris* tussock grass (whilst recorded on the Quarry Four lease, this vegetation unit does not occur within the proposed clearing area);

Minor creekline/channel
2 - Scattered *Eucalyptus victrix*, *Corymbia hamersleyana* and *Alectryon oleifolius* subsp. *oleifolius* low trees, over moderately dense *Acacia trachycarpa* and *Acacia bivenosa* high to medium shrubs, over open *Chrysopogon fallax*, **Cenchrus ciliaris* tussock grasses and sparse *Triodia epactia* hummock grass;

Floodplain
3a - Scattered *Corymbia hamersleyana* low trees, over moderately dense *Acacia bivenosa*, *A. ancistrocarpa A. trachycarpa*, *A. pyrifolia* and *Eremophila longifolia* medium to high shrubs, over moderately dense *Cullen leucanthum*, *Gossypium australe*, *Indigofera monophylla* and *Pluchea ferdinandi-muelleri* low to medium shrubs, over open *Triodia epactia* hummock grass, with sparse **Cenchrus ciliaris* tussock grass;

3b - Open *Corymbia hamersleyana* low trees, over sparse to open *Acacia trachycarpa* and *Acacia coriacea* subsp. *pendens* tall shrubs, over open *Acacia bivenosa* medium to low shrubs, over sparse *Pluchea ferdinandi-muelleri* low shrubs, over moderately dense *Triodia wiseana*, *Triodia angusta* hummock grasses, with sparse **Cenchrus ciliaris* tussock grass;

3c - Sparse *Corymbia hamersleyana* low trees, over dense *Acacia bivenosa, Acacia sclerosperma* subsp. *sclerosperma* and *Acacia pyrifolia* high to medium shrubs, over open *Scaevola acacioides* low shrubs, over sparse *Triodia epactia* hummock grass;

Plain/rocky rise
4a - Scattered *Corymbia hamersleyana* low trees, over sparse *Acacia inaequilatera* and *Hakea lorea* subsp. *lorea* high shrubs to low trees, over sparse to open patches of *Acacia bivenosa* medium shrubs, over sparse *Indigofera monophylla* low shrubs, over moderately dense *Triodia epactia* hummock grass, with sparse *Cymbopogon ambiguus* and *Themeda triandra* tussock grasses;

4b - Scattered *Acacia inaequilatera* low trees, over open to moderately dense *Acacia orthocarpa* high to medium shrubs, over moderately dense *Triodia epactia* hummock grass, with numerous *Fimbristylis rara* sedges;

4c - Scattered *Corymbia hamersleyana* low trees, over scattered mixed *Acacia orthocarpa*, *A. bivenosa, A. ancistrocarpa* and *Senna glutinosa* subsp. *Glutinosa* medium to high shrubs, over open *Acacia stellaticeps* low shrubs, over moderately dense *Triodia epactia*, sometimes with *Triodia angusta* hummock grasses, with sparse *Fimbristylis dichotoma*, *Cyperus squarrosus* sedges and *Chrysopogon fallax* tussock grass;

4d - Scattered *Acacia inaequilatera* low trees to high shrubs, over open *Acacia bivenosa* high, medium and low shrubs, over sparse *Pluchea ferdinandi-muelleri* and *Acacia stellaticeps* low shrubs, over moderately dense *Triodia angusta* and *T. wiseana* hummock grasses, with scattered *Fimbristylis dichotoma* sedges; and

Midslope/ridgetop
5 - Scattered *Grevillea pyramidalis* subsp. *leucadendron* and *Acacia inaequilatera* low trees to high shrubs, over sparse to open *Acacia maitlandii* and *G. pyramidalis* subsp. *leucadendron* medium to low shrubs, over moderately dense *Triodia epactia* hummock grass, with scattered *Cyperus squarrosus* sedges and *Eriachne lanata* tussock grass.

* = introduced flora species

Clearing Description

The proposal is for clearing of 366 hectares of native vegetation for the purpose of railway construction and maintenance and associated works within Lot 218 on Deposited Plan 220376, Mulga Downs; Iron Ore (Mount Newman) Agreement Act 1964, Special Lease for Mining Operations 3116/3687, Document I 154279 L, Lot 65 on Deposited Plan 48920; Special Lease for Mining Operations 3116/4028, Lot 96 on Deposited Plan 60709; and Special Lease for Mining Operations 3116/6038, Document I 123402 L, Lot 135 on Deposited Plan 48926 in the Shires of Ashburton and East Pilbara and Town of Port Hedland.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

To

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

Comment

BHP Billiton Iron Ore Pty Ltd (BHP Billiton) have applied for a Purpose Permit to clear up to 366 hectares of native vegetation within a boundary of approximately 467 hectares (GIS Database). The proposed clearing involves duplicating a 50 kilometre section of the Newman to Port Hedland rail line between Spring Siding and Hesta Siding, located approximately 188 - 238 kilometres south of Port Hedland. Associated works will include upgrading signalling infrastructure, installation of power and communications cabling, establishment of access roads, borrow pits, temporary construction site office facilities and laydown areas. In addition, three new dual track railway bridges will be constructed where the proposed rail duplication crosses Coonarrie Creek. A majority of the proposed vegetation clearing is within the existing rail lease (Mainline - Special Lease 3116/3687) which is approximately 80 metres wide. Immediately adjacent to the Mainline lease, a quarry lease (Special Lease 3116/6038) will be used to source borrow material and will accommodate the temporary construction site office

facilities. The quarry lease will also act as a laydown area for construction materials and machinery due to the limited space available within the narrow rail corridor. Upgrades to Rail Repeater Station Five (located approximately 220.5 kilometres south of Port Hedland), located on Special Lease 3116/4028, are also a part of this clearing permit application. Vegetation clearing will be undertaken using mechanical means.

The vegetation condition rating was determined by Ecologia Environment Pty Ltd (2008b; 2008c;) during Level 1 flora and vegetation surveys of the proposed rail duplication area, Rail Repeater Station Five and Quarry Four lease. Factors taken into consideration when determining the vegetation condition were: weeds, grazing, litter and ground disturbance (tracks and other cleared areas).

3. Assessment of application against clearing principles

Comments

This amendment has been made to extend the permit duration until 1 November 2015 in line with BHP Billiton Iron Ore Pty Ltd's lease and amend reporting condition dates. Additional changes have been made to update the land description and weed definition and updates to bring the permit in line with current practice.

The assessment against the clearing principles has not changed and can be found in Decision Report CPS 2883/1.

Methodology

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

Comments

The assessment against Planning and Other Matters has not changed and can be found in Decision Report CPS 2883/1.

Methodology

4. References

Ecologia Environment Pty Ltd (2008b) Spring Siding to Hesta Siding Rail Duplication Project. Application to clear native vegetation under the Environmental Protection Act 1986: Spring Siding to Hesta Siding and Repeater Station 5 Flora Report. Unpublished report for BHP Billiton Iron ore Pty Ltd.

Ecologia Environment Pty Ltd (2008c) BHP Billiton Iron Ore Rapid Growth Project 5 (RGP5) Quarry Four Lease Flora and Vegetation Report (Version 2). Unpublished report for BHP Billiton Iron Ore Pty Ltd.

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