



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3020/1
Permit Holder:	Shire of Beverley
Duration of Permit:	9 May 2009 – 9 May 2016

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 maintenance and hazard reduction.

2. Land on which clearing is to be done

Lot 2 and 9 on Plan 2959 Forrest Street, Beverley (24 trees)
Talbot West Road reserve, Beverley (0.14 ha)
Kokendin Road reserve, Beverley (0.12 ha)
Yenyening Lakes Road reserve, Bally Bally (0.17 ha)
Qualandary Road reserve, Bally Bally (0.13 ha)
Caroling – Bally Bally Road reserve, Bally Bally (0.13)
Greenhills South Road reserve, East Beverley (5 trees)
Un-named Road reserve (PIN 11329452), East Beverley (2 trees)

3. Area of Clearing

The Permit Holder must not clear more than 0.7 hectares and 31 trees of native vegetation within the area hatched yellow on attached Plan 3020/1a, 3020/1b, 3020/1c and 3020/1d.

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:

- (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.

8. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the area(s) shall be inspected by a *fauna specialist* who shall identify tree(s) that contain hollows suitable to be utilised as habitat by fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice 2009*.
- (b) Prior to clearing, any *habitat tree(s)* identified by condition 8(a) shall be inspected by a *fauna specialist* for the presence of fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice 2009*.
- (c) Prior to clearing, the Permit Holder shall ensure that any fauna identified by condition 8(b) shall be removed and relocated by a *fauna clearing person*, in accordance with a licence issued by the Department.

9. Revegetation and rehabilitation

- (a) The Permit Holder must *revegetate* and *rehabilitate* the area cross-hatched red on attached Plan 3020/1e by:
 - (i) establishing and maintaining native vegetation to an average planting density of 2,000 plants per hectare;
 - (ii) ensuring the species consist of overstorey, midstorey and understorey species;
 - (iii) sourcing seeds and propagating material from within a 50 km radius of the area cleared, and;
 - (iv) commencing *planting* before 1 June 2010 and completing *planting* by 31 August 2012.
- (b) Within twelve months of undertaking *revegetation* in accordance with condition 9(a) of this Permit, the Permit Holder must:
 - (i) determine the species composition, structure and density of the area *revegetated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 9(b)(i) of this Permit will not result in a similar species composition, structure and density to that defined under condition 9(a)(i)(ii) of this Permit, the Permit Holder must undertake additional planting or direct seeding of native vegetation in accordance with the requirements of condition 9(a)(i)(ii) and (iii) of this Permit.

PART III - RECORD KEEPING AND REPORTING

10. Records must be kept

- (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 fauna management pursuant to condition 8 of this Permit:
 - (i) the location of each habitat/habitat tree identified 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 species of fauna reasonably likely to utilise, or that have been observed utilising, the habitat/habitat tree(s); and
 - (iii) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings.

- (c) 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 of records required under condition 10 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.

- (b) Prior to 9 February 2016, 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:

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;

fauna clearing person means a person who has obtained a licence from the Department, issued pursuant to the *Wildlife Conservation Regulations 1970* authorising them to take fauna;

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

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 native vegetation in an area such that the species composition and structure consists of overstorey, midstorey and understorey species and the average density is 2,000 plants per hectare, and can involve *regeneration, direct seeding* and/or *planting*;

A handwritten signature in black ink, appearing to read 'Kelly Faulkner', written over a horizontal line.

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

9 April 2009

Plan 3020/1a

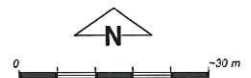


LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO
- LRS (cont)

- MR
- N
- TR
- Clearing Instruments
- Areas Approved to Clear
- Corrigin North 1.4m Orthomosaic - Landgate 2001

- Norham 1m Orthomosaic - Landgate 2003
- Beverly Townsite 15cm Orthomosaic - Landgate 2004
- Beverly 50cm Orthomosaic - Landgate 2006



Scale 1:1102
(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.

K. Faulkner Date 9/4/09

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.

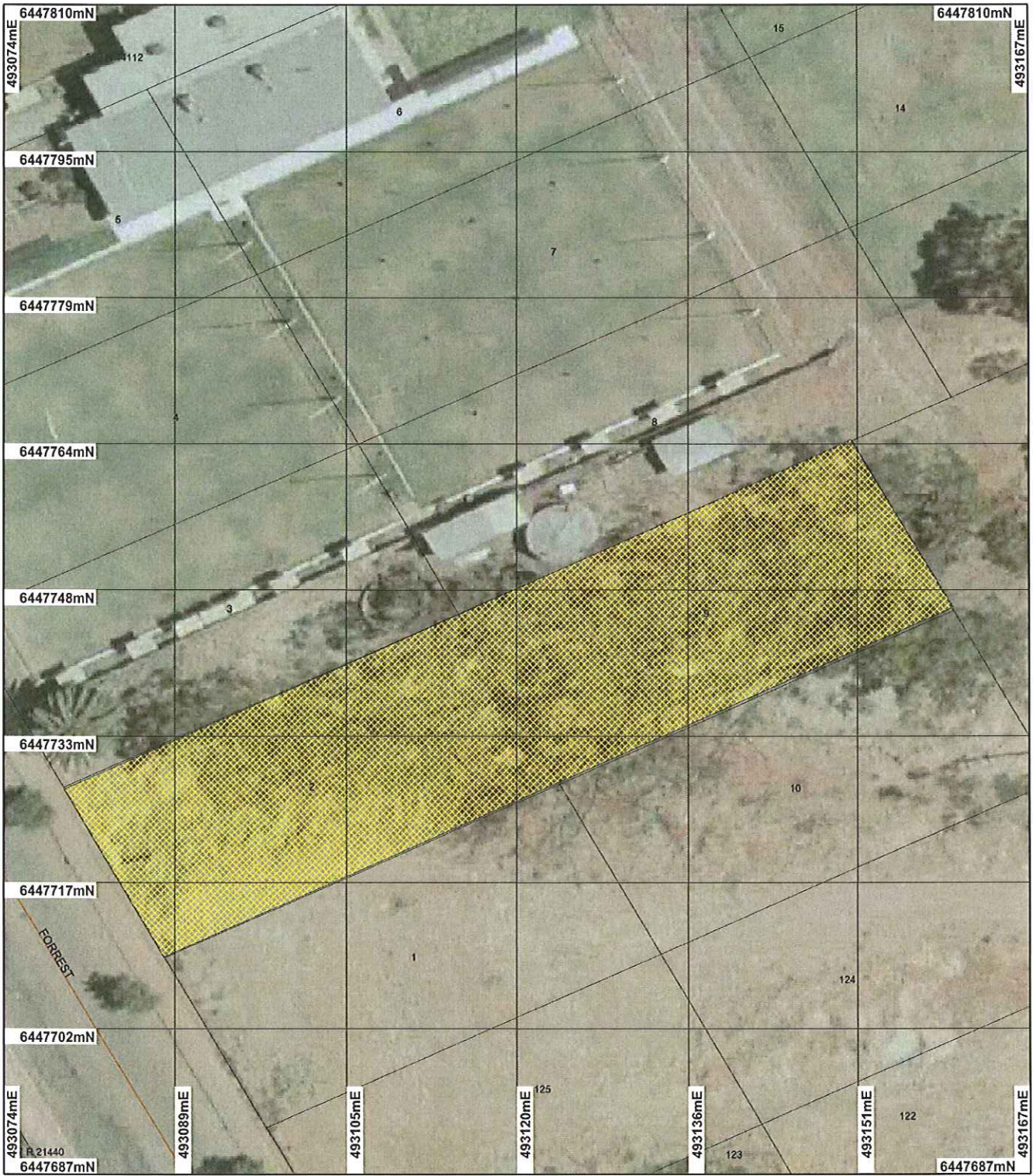


Department of Environment and Conservation

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

Plan 3020/1b

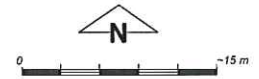


LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO
- LRS (cont)

- MR
- N
- TR
- Clearing Instruments
- Areas Approved to Clear
- Corrigin North 1.4m Orthomosaic - Landgate 2001

- Northern 1m Orthomosaic - Landgate 2003
- Beverly Townsite 15cm Orthomosaic - Landgate 2004
- Corrigin 80cm Orthomosaic - Landgate 2005



Scale 1:545
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

K. Faulkner Date *9/4/09*
K. Faulkner

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

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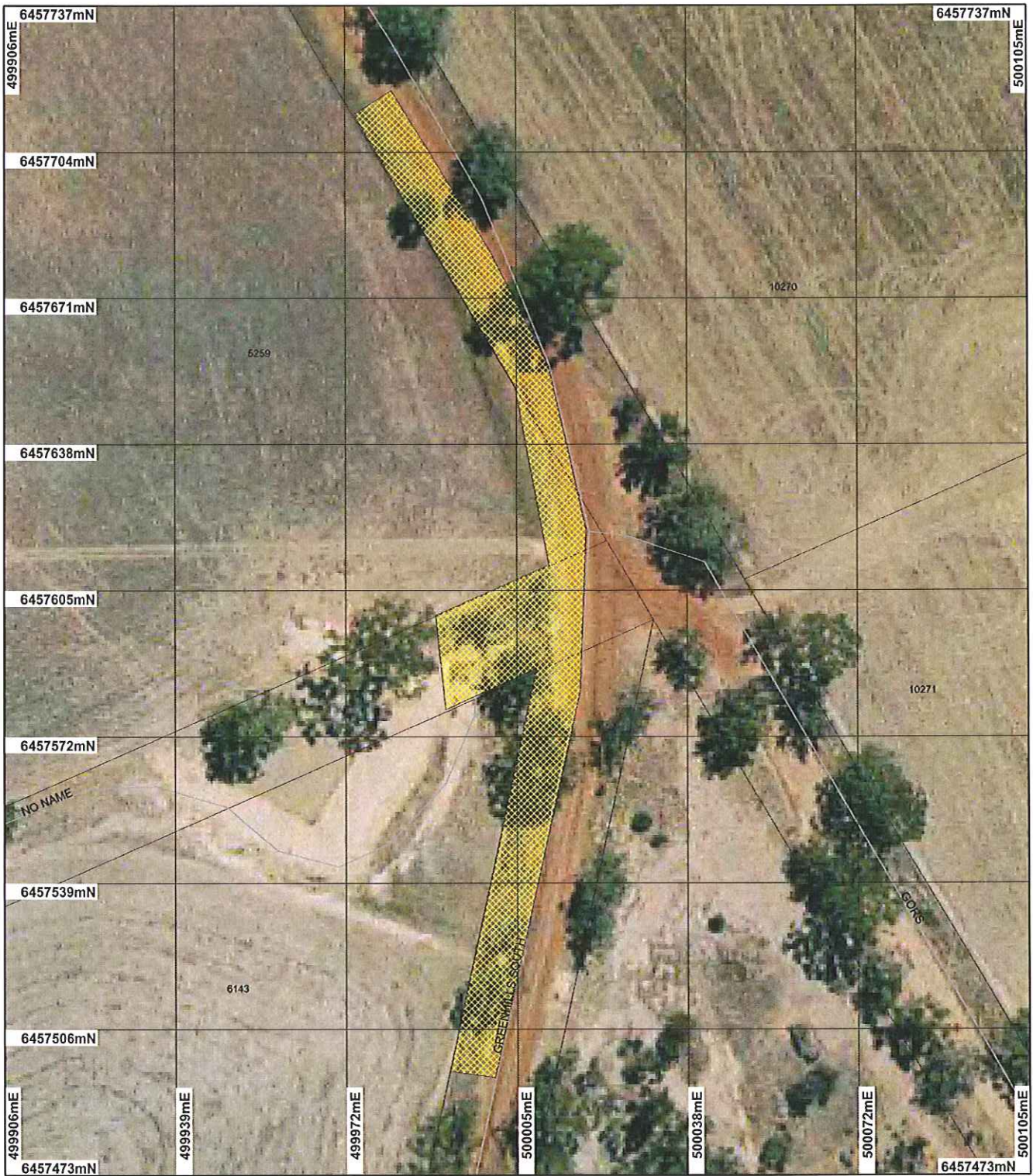


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Plan 3020/1c

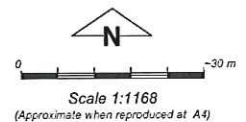


LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO
- LRS (cont)

- MR
- N
- TR
- Clearing Instruments
- Areas Approved to Clear
- Corrigin North 1.4m Orthomosaic - Landgate 2001

- Norham 1m Orthomosaic - Landgate 2003
- Beverley Townsite 15cm Orthomosaic - Landgate 2004
- Beverley 50cm Orthomosaic - Landgate 2006



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

K. Faulkner Date 9/4/09
 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.

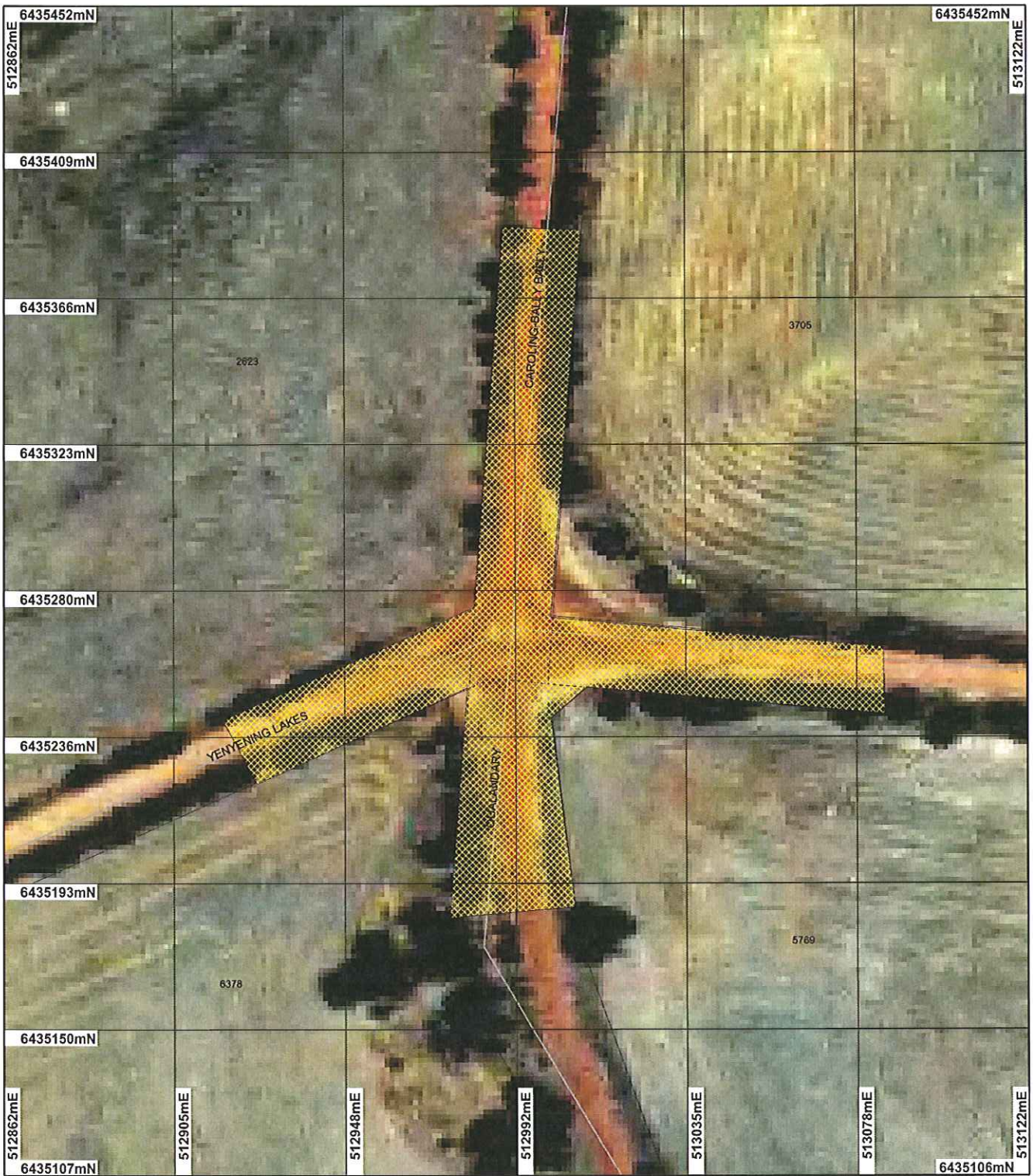


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Plan 3020/1d



LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO
- LRS (cont)

- MR
- N
- TR
- Clearing Instruments
- Areas Approved to Clear
- Corrigin North 1.4m Orthomosaic - Landgate 2001

- Northam 1m Orthomosaic - Landgate 2003
- Beverly Townsite 15cm Orthomosaic - Landgate 2004
- Beverly 50cm Orthomosaic - Landgate 2006



Scale 1:1527

(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.

K. Faulkner Date *9/4/09*

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.

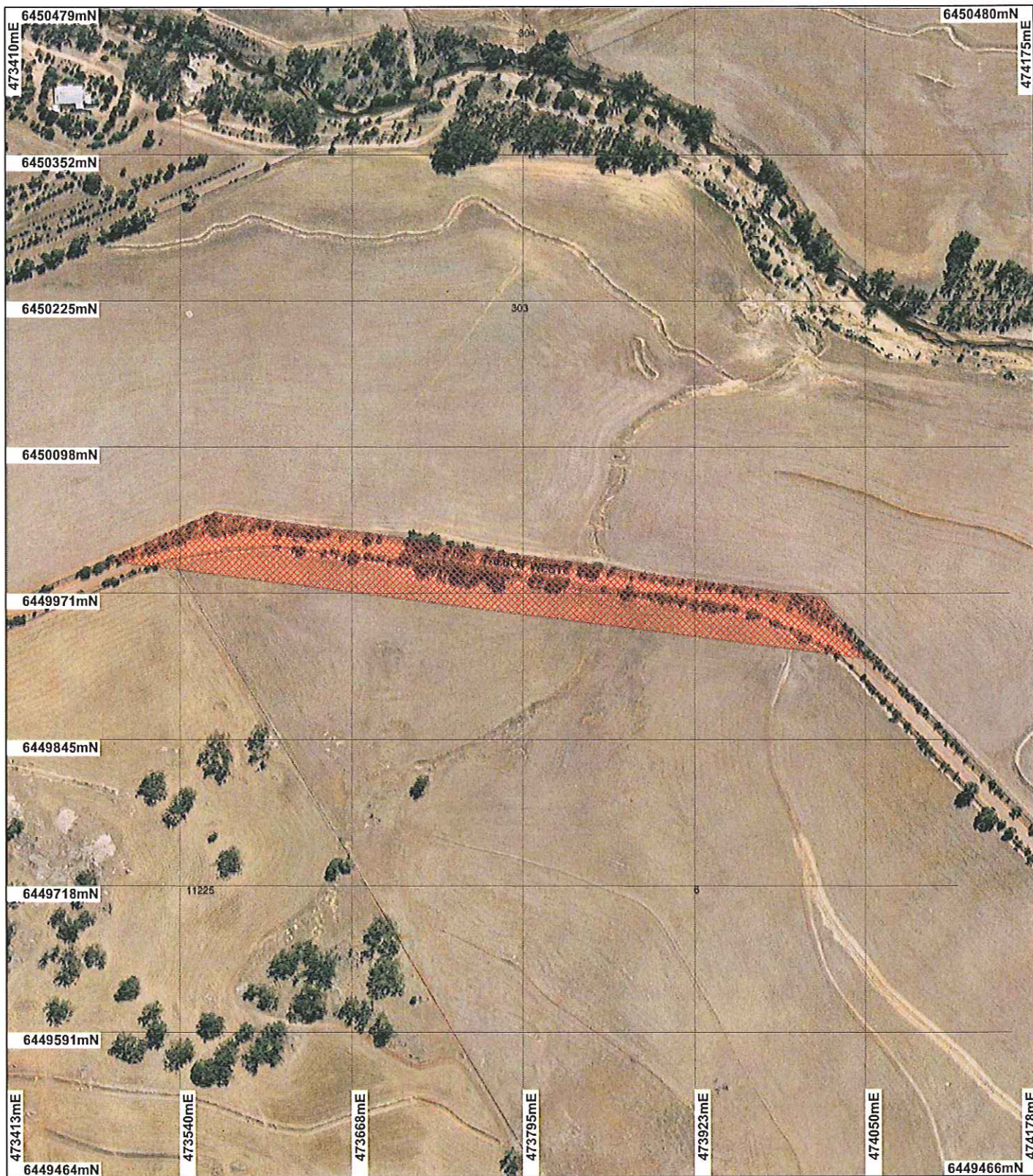


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Plan 3020/1e



LEGEND

- Cadastre for labelling
- Road Centrelines
- FW
- HY
- LRO (cont)

- LRS
- MR
- N
- TR
- Clearing Instruments
- Areas Subject to Conditions

Beverly 50cm Orthomosaic - Landgate 2006



0 ————— 125 m

Scale 1:4486
(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.

K Faulkner Date 9/4/09

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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1. Application details

1.1. Permit application details

Permit application No.: 3020/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Beverley

1.3. Property details

Property: LOT 9 ON PLAN 2959 (Lot No. 9 BARTRAM BEVERLEY 6304)
 LOT 2 ON PLAN 2959 (House No. 62 FORREST BEVERLEY 6304)
 ROAD RESERVE (EAST BEVERLEY 6304)
 ROAD RESERVE (EAST BEVERLEY 6304)
 ROAD RESERVE (EAST BEVERLEY 6304)
 ROAD RESERVE (BALLY BALLY 6304)
 ROAD RESERVE (BALLY BALLY 6304)
 ROAD RESERVE (BALLY BALLY 6304)
 ROAD RESERVE (BALLY BALLY 6304)
 ROAD RESERVE (BEVERLEY 6304)
 ROAD RESERVE (BEVERLEY 6304)

Local Government Area: Shire Of Beverley

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.7	31	Mechanical Removal Mechanical Removal	Hazard reduction or fire control Road construction or maintenance

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 Complex:	The proposal is to clear 0.7 ha and 31 trees within various road reserves in the Shire of Beverley for the purpose of road widening and improved line of sight. Also for reduction of leaf litter falling on bowling green.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation clearing description based on a site visit conducted by DEC officers on 26 March 2009
352: Medium woodland; York gum			
25: Low woodland; Allocasuarina huegeliana & York gum			
Mattiske Vegetation Complex:	The area under application consists of four distinct areas. Talbot West Road and Kokendin Road intersection consists of predominately Eucalyptus loxophleba subsp loxophleba, Allocasuarina spp. and Acacia sp. over pasture weeds in a degraded condition (0.23 ha).		
Ck: Woodland of Eucalyptus wandoo with mixtures of Eucalyptus patens, Eucalyptus marginata subsp. thalassica and Corymbia calophylla on the valley slopes in arid and perarid zones.	The vegetation at Gors Road and Greenhills South Road intersection consisted of seven Eucalyptus salmonophloia trees, one dead, scattered over		

pasture weeds and is in completely degraded condition.

The vegetation at the intersection of Qualandary Road and Yenyening Lakes Road consisted of *Eucalyptus loxophleba* subsp *loxophleba*, *Allocasuarina* spp. and *Acacia* sp. over semaphore sedges in a good (0.07ha) to degraded condition (0.40ha).

The vegetation occurring on Lot 2 and 9 Forest Street, Beverley, is in a completely degraded condition and consisted of 20 mature *Eucalyptus loxophleba* subsp *loxophleba*, and four small *Eucalyptus loxophleba* subsp *loxophleba*, over grassy weeds. Some regeneration was observed in the eastern corner of the area under application. *Acacia* sp were observed in the southern portion of the site.

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 areas under application include four distinct areas and generally consist of *Eucalyptus loxophleba* subsp *loxophleba*, *Eucalyptus salmonophloia*, *Allocasuarina* spp. and *Acacia* sp. over pasture weeds in a predominantly degraded condition. However, condition ranges from completely degraded to good.

The majority of the areas of vegetation under application are located within road reserves in an extensively cleared local area (~20 Km radius) which has only 10.5% of remnant vegetation remaining. Given the low vegetation representation within the local area (~20 km radius), it is considered that vegetation in a degraded or better condition, although thin and linear, can significantly contribute to the conservation of biodiversity. It is therefore considered that the vegetation under application may comprise a high level of biodiversity, especially in a local context.

Vegetation types are similar within the road reserves under application and range from completely degraded to good condition. Vegetation under application in good condition may have the potential to provide suitable habitat for fauna in a cleared landscape. In addition, the vegetation at the intersection of Gors Road and Greenhills South Road, contain seven Salmon Gums (*Eucalyptus salmonophloia*) that are surrounded by cleared farm land. These trees contain several hollows of various sizes and are considered potential nesting habitat for the conservation significant species, Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*).

Therefore, the proposed clearing is considered maybe at variance to this Principle. A revegetation condition will be placed on the permit to mitigate this impact.

Methodology References
-DEC (2007)
-DEC (2009)
GIS Databases
- NLWRA Current Extent of Native Vegetation
- SAC Bio Databases (25/3/09)

(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 may be at variance to this Principle**

There are seven fauna species of conservation significance recorded within the local area (~5km radius).

Roadside vegetation can provide shelter, food and nesting sites for a range of native fauna (Roadside Conservation Committee 2002). The vegetation of the area under application at the intersection of Gors Road and Greenhills South Road, contain mature Salmon Gums (*Eucalyptus salmonophloia*) that are surrounded by cleared farm land. These trees contain several hollows of various sizes and are considered potential nesting habitat for the conservation significant species, Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*). This species can be found in the wheatbelt region during the breeding season where it nests predominantly in Salmon Gums and Wandoo trees that contain hollows two to 10 metres off the ground (DEC 2007).

During the site inspection, vegetation in a good condition was identified within the area under application along Qualandary Road (DEC 2009). Even though small and linear in shape, this vegetation is considered to be significant habitat for fauna in the local area especially for birds, as it is in a better condition than surrounding vegetation and is in a Shire that has been extensively cleared for agriculture. This vegetation has the potential to provide better shelter and food for fauna in the local area. Therefore, the proposed clearing is considered maybe at variance to this Principle. A fauna survey condition will be placed on the permit to mitigate this impact.

Methodology **References**
-DEC (2007)
-DEC (2009)
-Roadside Conservation Committee (2002)
GIS Databases
- SAC Bio Databases (25/3/09)

(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**

There are three Rare flora species occurring in the local area (~5 km radius) being *Eleocharis Keigheryi*, *Glyceria drummondii* and *Thomasia montana* occurring 2.9 km southeast, 2.9 km southeast and 6.2 km east of the area under application, respectively.

Both *Eleocharis Keigheryi* and *Glyceria drummondii* are grass-like herbs that occur in claypans and *Thomasia montana* is an upright shrub, occurring on loamy soils in rocky granite knolls and lateritic hills (Western Australian Herbarium 1998-). Given that claypans, rocky granite knolls or lateritic hills were not identified in the areas under application during the site inspection (DEC 2009), it is unlikely for these Declared Rare Flora species to occur in the areas under application.

In addition, given the vegetation under application is in a predominantly degraded condition consisting of *Eucalyptus* trees and *Acacia* sp, over grassy weeds and in one of the areas, over semaphore sedges, and does not include shrubs such as the *Thomasia montana*, the vegetation under application is not considered necessary for the continued existence of rare flora.

Methodology **References**
-DEC (2009)
-Western Australian Herbarium (1998-)
GIS Databases
-SAC Bio Databases (25/3/09)

(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**

There are no Threatened Ecological Communities (TEC) occurring within the local area (~ 10 km radius). The closest being Perched Wetlands of the Wheatbelt Region with Extensive Stands of *Casuarina obesa* and *Melaleuca strobophylla* occurring 11.5 km south of area under application at Lot 2 and 9 Forrest St, Beverley.

Given the distance to the nearest TEC and that the site inspection identified the vegetation under application as consisting of *Eucalyptus* trees and *Acacia* sp, over grassy weeds and in one of the areas, over semaphore sedges in an overall degraded condition (DEC 2009), it is considered unlikely for the proposed clearings to be at variance to this Principle.

Methodology **References**
-DEC (2009)
Gis Databases
-SAC Bio Databases (25/3/09)

(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 at variance to this Principle**

The vegetation under application is associated with Beard Vegetation Association 352 and 25 of which there is

approximately 14.02% and 12.63% pre-European extent remaining (Shepherd 2007).

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents a clearance of ecological communities with an extent below 30% of that present pre-European settlement (Commonwealth of Australia 2001). All areas under application occur within a Beard Vegetation Association which is below the State Governments target of 30%. In addition, the areas under application occur within the Avon Wheatbelt IBRA Bioregion which has less than 15.17 % of pre European vegetation extent remaining.

The clearing is also within the Intensive Land-use Zone (Shepherd et al, 2001) and is located in the ?agricultural area? defined in EPA Position Statement No. 2 (EPA, 2000). There is only 10.5% of vegetation left in the local area. Therefore, it is considered that the proposed clearing is at variance to this Principle. A revegetation condition will be placed on the permit to mitigate this impact.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	In secure tenure (%)
IBRA Bioregion*				
Avon Wheatbelt	9 517 109	1 443 690	15.17	11.0
Shire of Beverley*	263 870	9999.5	32.9	87.2
Local Area (~20km radius)	31 400	3334.5	10.5	
Beard vegetation type in Avon Bioregion*				
352	630 581	88 397	14.02	11.4
25	8925	1126.9	12.63	2.5

* (Shepherd, 2007)

Methodology

References

- Commonwealth of Australia 2001
 - EPA (2000)
 - Shepherd (2007)
- GIS Databases**
- NLWRA Current Extent of Native Vegetation
 - SAC Bio Databases (25/3/09)

(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 not likely to be at variance to this Principle

Three wetlands occur within the local area of the areas under application, the closest occurring 1.4 km north. Two minor non ? perennial watercourse occur within 150 m of the areas under application. In addition, a minor non ? perennial watercourse occurs within the southern portion of Lot 2 and 9 Forrest St Beverley and the Avon River occurs ~240 m east of this area.

Minor non-perennial watercourses are utilised for drainage flow during significant rainfall events, and thus are generally considered unlikely to contain wetland dependant vegetation.

In addition, a site inspection (DEC 2009) did not identify any wetland dependent vegetation associated with any of the areas under application. Given the vegetation generally consists of York Gum, Salmon Gums and Acacia and Allocasuarina over grassy weeds, the vegetation is not considered to be wetland dependant and the proposed clearing is not considered likely to be at variance to this Principle.

Methodology

References

- DEC (2009)
- GIS Databases**
- Hydrography, linear
 - Hydrography, linear (hierarchy)
 - Wheatbelt_Wetlands

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

Comments Proposal may be at variance to this Principle

The soils identified within the areas under application included; hard alkaline red soils, hard neutral red soils; hard alkaline yellow soils underlain by acid lateritic clays and hard alkaline yellow mottled soils containing

laterite or large amounts of ironstone gravels (Northcote et al. 1960-68). These soils generally have a high risk of water erosion.

The majority of the applied area is associated with a medium to high risk of salinity with the exception of the proposed clearing at Greenhill's South Road which has low to nil salinity risk. Given the vegetation under application is relatively small in size (0.71 ha and 31 trees) and is spread over four locations through out the Shire of Beverley, it is not considered likely that the proposed clearing would have an impact on salinity in the local area.

The main land degradation risk associated with the removal of vegetation on the identified soil type is considered to be water erosion. The areas under application that are within road reserves are adjacent to existing roads, which already include roadside infrastructure, such as table drains and culverts, to prevent land degradation in the form of water erosion associated with the roads.

However, the proposed clearing at Lot 2 and 9, Forrest St includes the removal of 24 trees within an area that slopes from the east to the west down to a small creek line (DEC 2009). The removal of vegetation from this site may increase the risk of soil erosion during significant rainfall events. Therefore, the proposed clearing may cause appreciable land degradation through water erosion.

Methodology References
-DEC (2009)
- Northcote et al. (1960-68)
GIS Databases
- Salinity Risk LM 25m - DOLA 00
- 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**
There are numerous conservation areas within 20 km of the areas under application. They include Yandinilling Nature Reserve, 5 km northeast, Yenyening Lakes Nature Reserve 2.4 km south and Wandoo National Park 9 km west of the areas under application.

Given the distances to these reserves it is not considered likely for the proposed clearing to impact on the environmental values of these conservation areas.

Methodology GIS Database
- DEC Managed Lands and Waters

(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 may be at variance to this Principle**
Three wetlands occur within the local area of the areas under application, the closest occurring 1.4 km north. Two minor non ? perennial watercourses occur within 150 m of the areas under application. In addition, a minor non ? perennial watercourse occurs within the southern portion of Lot 2 and 9 Forrest St, Beverley and the Avon River occurs ~240 m east of this area.

Groundwater salinity in the areas under application is ranges from high to very high with 7000 to 35 000 mg/l. Given the relatively small size of the areas to be cleared, the proposed clearing is not likely to significantly alter groundwater levels and have a significant affect on the groundwater salinity in the local area.

However, the proposed clearing at Lot 2 and 9, Forrest St includes the removal of 24 trees within an area that slopes from the east to the west down to a small creek line (DEC 2009). The removal of vegetation from this site may cause sedimentation of this creek line, which is a tributary of the Avon River, from water erosion during significant rainfall events. Therefore, it is considered that the proposed clearing may be at variance to this Principle.

Methodology References
- DEC (2009)
GIS Databases:
- Groundwater Salinity, Statewide
- Hydrography, linear
- Hydrography, linear (hierarchy)
- Salinity Risk LM 25m - DOLA 00

(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

Three wetlands occur within the local area of the areas under application, the closest occurring 1.4 km north. Two minor non ? perennial watercourses occur within 150 m of the areas under application. In addition, a minor non ? perennial watercourse occurs within the southern portion of Lot 2 and 9 Forrest St and the Avon River occurs ~240 m east of this area.

Given the extent of clearing in the local area for agriculture, and small areas of vegetation under application it is not considered likely that the proposed clearing would cause or exacerbate, the incidence or intensity of flooding.

Methodology GIS Databases:
- Hydrography, linear
- Hydrography, linear (hierarchy)
- Wheatbelt_Wetlands

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

Comments

The proposal is to clear 0.71 ha and seven trees within various road reserves in the Shire of Beverley for the purpose of road widening and improved line of sight and 24 trees for the reduction of leaf litter falling on an adjacent bowling green of the Beverley Bowling Club.

The areas under application are zoned Town Centre - Residential Land (Lot 2 and 9 Forrest St) and Road (various road reserves) under the Shire of Beverley Town Planning Scheme.

The areas under application are within the EPA Position Statement No. 2 ?Agricultural area? (EPA 2000).

Roadside Conservation Committee (2009) provided comment on the proposed clearing within various road reserves throughout Beverley.

Methodology References
- DEC (2009)
- EPA (2000)
- Roadside Conservation Committee (2009)
GIS Databases
- Town Planning Scheme Zones

4. Assessor's comments

Comment

The assessable criteria have been addressed and the clearing as proposed is at variance to Principles (e) and may be at variance to Principle (a), (b), (g) and (i).

5. References

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- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
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6. 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)