Clearing Desktop Report – CPS 818

We're working for Western Australia.

Norseman Intersection Upgrade & Shoulder Widening
Coolgardie-Esperance Highway (H010) & Eyre Highway (H003)
Goldfields-Esperance
3538

D25#1213439
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1 PROPOSAL

1.1 Purpose and Justification

Main Roads Western Australia proposes to upgrade the intersections of Eyre Highway (H003) and Coolgardie-Esperance Highway (H010). The intersections are showing signs of degradation and do not meet the current road safety standards for the vehicles that are utilising these transportation routes. The upgrade will ensure the intersection meets the road safety standards and traffic demands at present and into the future.

1.1.1 Main Roads Approach to Road Safety and the Environment

Main Roads is committed to minimising the environmental impacts of all of its activities and manages the State road network to achieve balanced economic, social, safety and environmental benefits for the community. Main Roads recognises that Western Australia's environment is significant from a global perspective and the unique conservation values that are contained within its road reserve. Main Roads road network often adjoins natural areas and, in some locations, the reserve itself hosts remnant vegetation with high environmental values. Although the reserves were not established for this purpose, Main Roads recognises that it has a responsibility to conserve the environmental values that occur within the State's road network and minimise the impact its proposals have on the environment. In addition to providing a safe and efficient road network for all people using the roads under its control, Main Roads is also committed to protecting the natural environment.

In accordance with National and State Government road safety policies, Main Roads is also committed to substantially reducing road trauma on the road network through Safe System principles. The Safe System approach acknowledges that more than two thirds of all serious crashes are due to human error rather than deliberate risk taking (e.g. speeding or drink driving) and seeks to improve behaviour through education and enforcement while managing the safety of vehicles, speeds and the road and road infrastructure. It is shown that improving sub-optimal road formation will substantially reduce the likelihood and severity of road crashes. For example, according to the Road Safety Management Guideline, increasing the sealed shoulder from 0.5 m to 2 m will reduce Killed and Seriously Injured numbers by more than 50%.

As the statutory authority responsible for providing and managing a safe and efficient main road network in Western Australia, Main Roads focuses on improving road safety by thoroughly considering all environmental, economic and community benefits and impacts. It operates on a hierarchy of avoiding, minimising, reducing and then, if required, offsetting our environmental impacts. This has been achieved through changes in proposal scope and design. Main Roads regularly reduces its clearing footprint by restricting earthworks limits for proposals, steepening batters, installing barriers, establishing borrow pits in cleared paddocks and avoiding temporary clearing for storage, stockpiles and turn around bays to avoid and minimise its impacts.

Further details on measures to avoid, minimise and reduce are provided in Section 1.5.

1.2 Proposal Scope

Main Roads proposes to upgrade the intersections of Eyre Highway and Coolgardie-Esperance Highway. The project will comprise the following components:

- Intersection Upgrade and Kerbing – at Eyre Highway/Coolgardie-Esperance Highway and Eyre Highway/Roberts Street.
- Shoulder Seal and Driveway and Kerbing on Roberts Street.
- Upgrade Car Parking Bay.
- Upgrade/re-establishment of drainage.
- Relocation of services as required e.g. street lighting and power.

1.3 Proposal Location

The Clearing Area is located on Coolgardie-Esperance Highway (H010) at SLK 164.08 to SLK 164.4 and Eyre Highway (H003) SLK 0.00 to SLK 0.30 within the Shire of Dundas as shown in Figure 1.

The central coordinate of the proposal is 121.7784660°E / 32.1852706°S.

1.4 Clearing Details

Proposed Clearing to be undertaken using CPS 818:
0.95 ha of native vegetation will be cleared.

Areas of Native Vegetation Clearing:
The areas of native vegetation to be cleared are shown in Figure 2.

Type of Native Vegetation:
The type of vegetation to be cleared under this Proposal is described by Botanica (2025) as being Eucalypt Woodlands and shown in Figure 2.

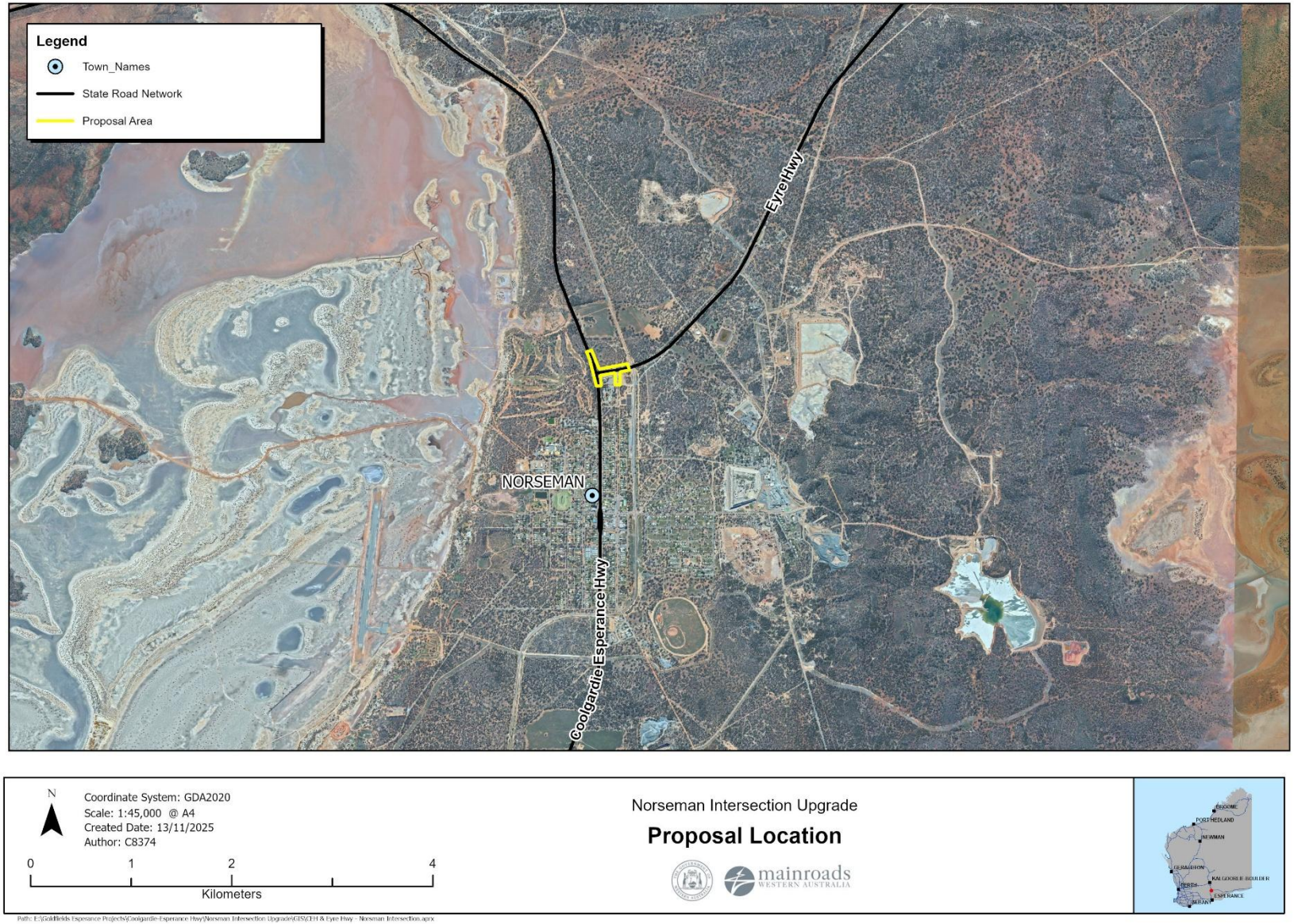

Figure 1: Proposal Location

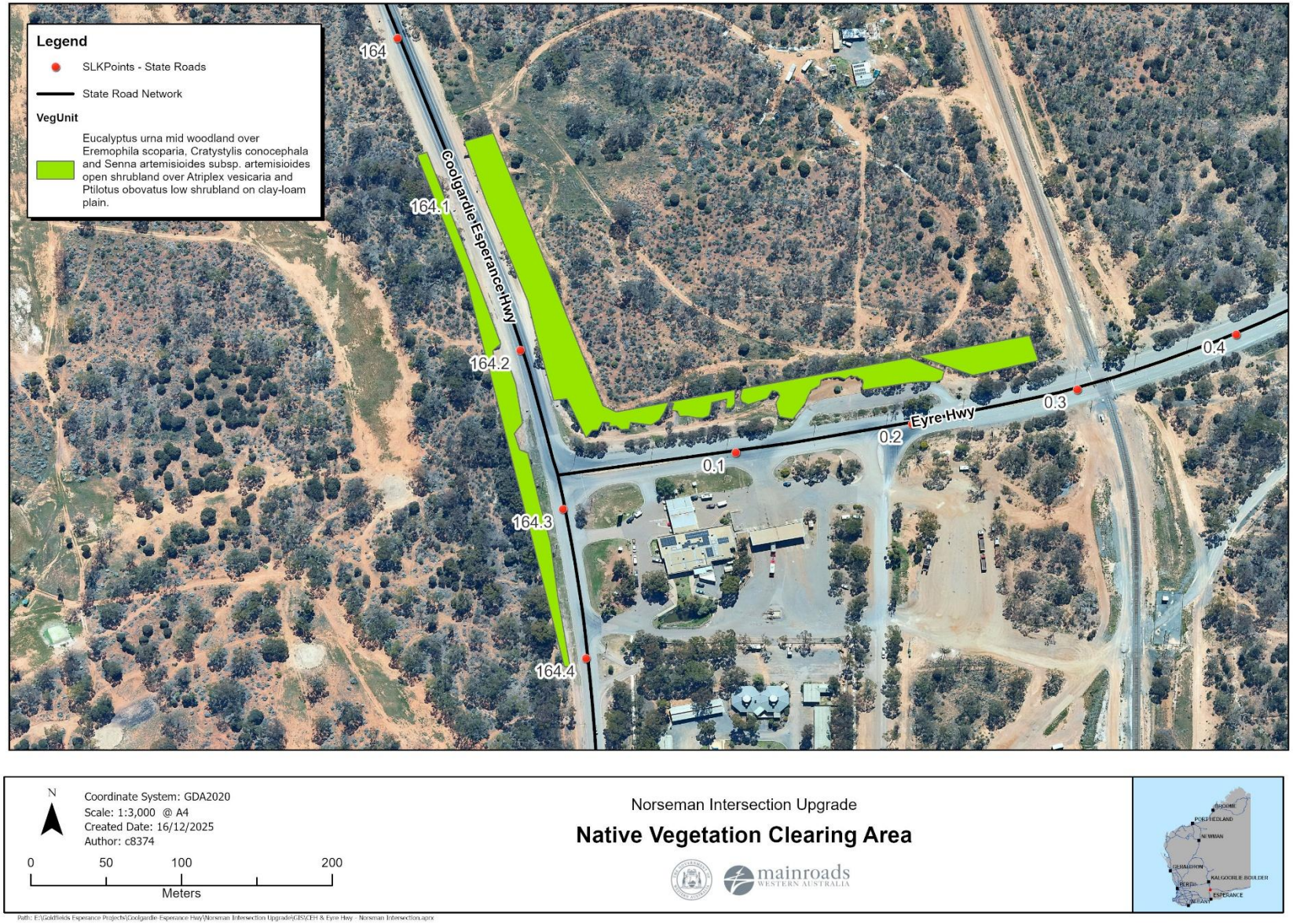

Figure 2: Vegetation within Native Vegetation Clearing Area

1.5 Alternatives to Native Vegetation Clearing Considered During Proposal Development

The following alternatives to clearing were considered during the development of the proposal:

- Do not upgrade the road, however this will potentially result in a poorer safety outcome and may result in future fatalities or serious injuries and further degradation of the State road asset.
- Main Roads retains frangible vegetation where a clear zone is to be established for road projects. For this project, however, clearing will only be required to accommodate the road formation, with no clear zone being established. Accordingly, the retention of frangible vegetation does not apply to this proposal.
- Reducing the speed limit to minimise clearing requirements, while still balancing safety (driver fatigue) and freight efficiency. Speed Limits are an essential mechanism to ensure the safe and efficient operation of road networks. The application of appropriate speed limits and other traffic management measures is a key mechanism in managing vehicle speeds to achieve desired safety, mobility, traffic management, local amenity, and road user expectations. There are several factors involved in road safety, including road conditions, driver behaviour and overall road design. Except in special situations, reducing speed limits below national standards on state and national roads is not typically supported as it has the potential to contribute to driver frustration, impatience, tiredness and recklessness. The environmental values protected by reducing the speed limit, do not justify the impacts on freight efficiencies nor road user safety. Given the proposal relates to intersection upgrades and addresses degradation of the infrastructure, the reduction of the speed limits to avoid clearing of native vegetation for this proposal is not proposed.

1.6 Measures to Avoid, Minimise, Reduce and Manage Proposal Clearing Impacts

The design and management measures implemented to avoid and minimise the potential clearing impacts of the Proposal are provided in Table 1.

Table 1. Measures Undertaken to Avoid, Minimise, Reduce and Manage the Proposal Clearing Impacts

Design or Management Measure	Discussion and Justification
Simplification of design to reduce complexity of intersections	Design has been optimised to reduce the required clearing and utilise as much as possible the existing roadway and cleared areas.
Installation of kerbing	Existing kerbing will be reinstalled following the intersection upgrade. This will reduce the construction footprint by minimising drainage.
Use of existing cleared areas for construction storage and stockpiling	No clearing for storage, stockpiles, or turn around bays will be undertaken as cleared areas will be utilised for these components of the Proposal.

1.7 Approved Policies and Planning Instruments

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act, Main Roads has also had regard to the below instruments where relevant.

Other Legislation potentially relevant for assessment of clearing and planning/other matters:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Country Areas Water Supply Act 1947* (WA) (CAWS Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005* (WA) (P and D Act)
- *Soil and Land Conservation Act 1945* (WA)
- *Rights in Water and Irrigation Act 1914*
- *Aboriginal Heritage Act 1972* (WA).

Environmental Protection Policies:

- Environmental Protection (Peel Inlet - Harvey Estuary) Policy 1992
- Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011.

Other relevant policies and guidance documents:

- Environmental Offsets Policy (Government of Western Australia, 2011)
- A guide to the assessment of applications to clear native vegetation (Government of WA, December 2014)
- Procedure: Native vegetation clearing permits (Government of WA, October 2019)
- Environmental Offsets Guidelines (Government of Western Australia, 2014)
- Technical guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA, 2020)
- Approved conservation advice under section 266B of the EPBC Act for threatened flora/fauna/vegetation communities.

2 SCOPE AND METHODOLOGY ASSESSMENT OF CLEARING

Native vegetation will be cleared to accommodate this Proposal. This clearing will be undertaken using the Main Roads Statewide Clearing Permit CPS 818.

To comply with CPS 818, Main Roads must prepare a Clearing Desktop Report (CDR).

The CDR outlines the key activities associated with the Proposal, the existing environment and an assessment of native vegetation clearing. This assessment provides an evaluation of the vegetation clearing impacts associated with the Proposal using the ten Clearing Principles listed under s51 of the *Environmental Protection Act 1986* (EP Act) and strategies used to manage vegetation clearing.

2.1 Report Terminology and Sources

The following terms are used in this Clearing Report:

- **Native Vegetation Clearing Area** – The maximum amount of native vegetation to be cleared for the Proposal that will accommodate the designed earthworks and, typically, a nominal buffer to allow for the safe movement of machinery during construction.
- **Study Area** – Area covered by the Desktop Assessment. The Study Area for the Proposal is confined to a local area of a 20km radius.
- **Survey Area** – Area covered by the Biological Survey, which is typically larger that the Development Envelope.

2.2 Desktop Assessment

A desktop assessment of the Native Vegetation Clearing Area as undertaken by viewing internal datasets and other government agency managed databases, and consulting with relevant stakeholders where necessary.

GIS layer viewing and mapping is done using ArcMap and/or Main Roads corporate mapping system known as iMaps. Referencing of the GIS layers accessed is done under the relevant methodology section of each Clearing Principle. Government managed databases were searched to locate additional information.

Conservation Significant Flora Species

Main Roads undertook a desktop assessment of Threatened and Priority Flora species within a 20 km Study Area, with restricted DBCA and Herbarium WA GIS datasets used to identify records of conservation significant flora. 37 conservation significant flora species were identified within the 20 km Study Area.

A Likelihood of Occurrence assessment was undertaken for these species with 21 species determined as being Possible or Likely to occur within the Native Vegetation Clearing Area.

2.3 Surveys and Assessments

The following surveys/assessments were undertaken to inform this CDR:

- Reconnaissance Flora/Vegetation and Targeted Flora Survey (Botanica, 2025)

Biological and targeted surveys conducted for the proposal are outlined in Table 2 and a summary of the findings in these reports are presented in Sections 3.1.

Table 2. Summary of Biological and Targeted Surveys Relevant to the Proposal

Consultant and Survey Name	Survey Details
Botanica Consulting (2025) Norseman Intersection Upgrade: Reconnaissance Flora/Vegetation Survey and Targeted Flora Survey	**Survey Area:** Survey area comprised approximately 3.8 ha at the intersection of Coolgardie-Esperance Highway and Eyre Highway. **Type:** Reconnaissance vegetation/flora survey and targeted flora survey. **Timing:** Fieldwork conducted on 23rd September 2025. **Survey Results Shapefile TRIM Ref:** D25#1362866 **Document TRIM Ref:** D25#1196603

3 SURVEY RESULTS

3.1 Summary and Analysis of Flora and Vegetation Surveys

Botanica (2025) undertook a reconnaissance flora and vegetation survey and targeted flora survey of the Norseman Intersection Upgrade Proposal. The survey mapped the dominant vegetation units, vegetation condition and completed targeted searches for conservation significant flora within the Survey Area.

The survey covered 3.8 ha at the intersection of Coolgardie-Esperance Highway and Eyre Highway.

Vegetation
One native vegetation unit was identified within the Survey Area, being:

- **Eucalypt Woodlands (MVG 5)** - *Eucalyptus urna* mid woodland over *Eremophila scoparia*, *Cratystylis conocephala* and *Senna artemisioides* subsp. *artemisioides* open shrubland over Atriplex vesicaria and *Ptilotus obovatus* low shrubland on clay-loam plain.

An additional 1.07 ha of vegetation within the Survey Area was noted as being planted.

The condition of the native vegetation within the Survey Area was rated by Botanica (2025) as being Poor.

The vegetation type recorded by Botanica (2025) is not representative of communities that correspond to Threatened Ecological Communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or *Biodiversity Conservation Act 2016* (BC Act) or Priority Ecological Communities (PEC) listed by Department of Biodiversity Conservation and Attractions (DBCA).

Flora

Botanica (2025) recorded a total of 51 flora taxa within the Survey Area, of which 14 were introduced species. None of the identified introduced species are listed as Declared Pests on the Western Australian Organisms List or listed as a Weed of National Significance (WoNS).

Of the 21 conservation significant flora species identified within the desktop assessment, only one, *Eucalyptus brockwayi* (Priority 3), was identified within the Survey Area. The two individuals of this species observed within the Study Area were noted by Botanica (2025) as being planted with both an equal distance from the side of the road and within a surrounding area not consistent with their preferred habitat of low rocky hills and/or slopes.

The post-survey likelihood of occurrence was conducted for all significant flora species identified during the desktop assessment with all assessed as "Would not Occur" due to no suitable habitat preset within the Survey Area (Botanica, 2025).

4 DESKTOP ASSESSMENT OF VEGETATION

4.1 Desktop Vegetation Description

Table 3 and Table 4 provide details of the vegetation types and their condition within the Native Vegetation Clearing Area and the remaining extents of these associations.

Table 3. Summary of Vegetation Types within Native Vegetation Clearing Area

Vegetation Type	Extent within Native Vegetation Clearing Area (ha)	Total Extent Mapped (ha) within Survey Area	Vegetation Condition
Eucalypt Woodlands (MVG 5) - *Eucalyptus urna* mid woodland over *Eremophila scoparia*, *Cratystylis conocephala* and *Senna artemisioides* subsp. *artemisioides* open shrubland over Atriplex vesicaria and *Ptilotus obovatus* low shrubland on clay-loam plain.	0.95	0.95	Poor
Planted	1.07	1.07	Completely Degraded
Cleared	1.85	1.85	-
Total	3.87	3.87	

Table 4. Pre-European Vegetation Representation

Pre-European Vegetation Association	Scale	Pre–European Extent (ha)	Current Extent (ha)	% Remaining	% Current Extent in DBCA Managed Land (proportion of pre-European Extent)
Veg Assoc No. 9	**Statewide**	240,509.33	235,161.94	97.78	7.89
	IBRA Bioregion Coolgardie	240,441.99	235,100.97	97.78	7.90
	IBRA Sub-region Eastern Goldfield	235,047.15	229,757.07	97.75	8.08
	Local Government Authority Shire of Dundas	27,832.41	27,401.50	98.45	10.49

5 ASSESSMENT AGAINST THE TEN CLEARING PRINCIPLES

In assessing whether the Proposal's proposed clearing is likely to have a significant impact on the environment, the Proposal was assessed against the ten Clearing Principles (EP Act, Schedule 5).

Each Principle has been assessed in accordance with the former Department of Environment Regulation (now Department of Water and Environmental Regulation (DWER) '*A Guide to the Assessment of Applications to Clear Native Vegetation*' (Department of Environment Regulation, 2014) and other relevant clearing permit application decision reports prepared by DWER.

The proposed clearing is not at or not likely to be at variance with the ten Clearing Principles.

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

Proposed clearing is not likely to be at variance to this Principle.

Vegetation

The Proposal is located within the Coolgardie Interim Biogeographical Regionalisation of Australia (IBRA) region and Eastern Goldfield sub-region.

According to the broad scale mapping undertaken by Beard (Shepherd et al 2001), the native vegetation clearing area is mapped as occurring within the following pre-European vegetation association:

- 9 – Medium woodland; coral gum (*Eucalyptus torquata*) & Goldfields blackbutt

This vegetation unit has great than 97% of pre-European extent remaining at all levels, as shown in Table 4.

A reconnaissance vegetation survey by Botanica (2025) described the vegetation as Eucalypt Woodlands in Poor condition.

Ecological Communities

No State (BC Act) or Commonwealth (EPBC Act) listed Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) are present within or directly adjacent to the Native Vegetation Clearing Area.

Flora

A desktop assessment of DBCA Threatened and Priority Flora and WA Herbarium Databases identified 37 species of conservation significance within the 20km Study Area, comprising 3 Threatened species, 13 Priority One (P1) species, 3 Priority Two (P2) species, 16 Priority Three (P3) species and 2 Priority Four (P4) species.

Of the 37 species, 21 were determined through a Likelihood of Occurrence assessment to possibly be present within the Native Vegetation Clearing Area due to suitable habitat possibly being present. These species include:

- *Allocasuarina globosa* (T)
- *Daviesia macrocarpa* (T)
- *Eucalyptus platydisca* (T)
- *Austrostipa vickeryana* (P3)
- *Beyeria sulcata var. truncata* (P3)

- *Acacia dorsenna* (P1)
- *Bossiaea saxosa* (P1)
- *Philotheca nutans* (P1)
- *Verticordia sp. Dundas* (C.A. Gardner 2848) (P1)
- *Acacia kerryana* (P2)
- *Aotus sp. Dundas* (M.A. Burgman 2835) (P2)
- *Acacia truculenta* (P3)
- *Austrostipa turbinata* (P3)
- *Chrysocephalum apiculatum subsp. norsemanense* (P3)
- *Eutaxia actinophylla* (P3)
- *Melaleuca coccinea* (P3)
- *Notisia intonsa* (P3)
- *Phlegmatospermum eremaeum* (P3)
- *Pityrodia chrysocalyx* (P3)
- *Teucrium diabolicum* (P3)
- *Frankenia glomerata* (P4)

A targeted flora survey undertaken by Botanica (2025) for the above species did not identify any individuals within the Native Vegetation Clearing Area. The post survey likelihood of occurrence assessment by Botanica (2025), assessed all species as 'Would Not Occur" due to no suitable habitat being present within the Survey Area and/or the targeted search did not find the species in the Survey Area.

Fauna

As detailed in Principle (b), no species of conservation significant fauna are likely to be impacted by the proposed clearing. With the vegetation type widespread throughout the region, the 0.95 ha of vegetation proposed to be cleared from the roadside of two busy intersections does not represent significant fauna habitat.

Summary

No species of conservation significance will be impacted by the proposed clearing, with no significant flora species identified. Whilst the vegetation has the potential to support fauna species of conservation significance, it is unlikely to provide important habitat (e.g. breeding habitat or key foraging habitat) given it is linear and adjacent to the existing road corridor and maintenance zone where it is subject to edge effects due to traffic movement and does not contain any particular key habitat features. Habitat is extensively availability beyond the Native Vegetation Clearing Area in better condition and would preferentially be used over the Native Vegetation Clearing Area.

The native vegetation proposed to be cleared does not comprise a high level of biological diversity.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

- Biological Survey (Botanica 2025)
- DCCEEW Protected Matters Search Tool Report
- Government GIS Shapefiles:
  - DBCA Threatened and Priority Ecological Community database search (Accessed 16 July 2025)
  - DBCA Threatened and Priority flora database search (Accessed 16 July 2025)
  - WA Herbarium database (Accessed 16 July 2025)
- Statewide Vegetation Statistics (Government of Western Australia 2019)

(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 .

Proposed clearing is not likely to be at variance to this Principle.

A desktop review of the DBCA restricted Fauna GIS database identified 6 species of conservation significance within a 20km Study Area, being:

- Carnaby's Cockatoo (*Zanda latirostris*) EN
- Hooded Plover (*Charadrius cucullatus*) P4
- Malleefowl (*Leipoa ocellata*) VU
- Peregrine Falcon (*Falco peregrinus*) OS
- Red-necked Stint (*Calidris ruficollis*) MI
- Western Rosella (*Platycercus icterotis xanthogenys*) P4

Carnaby's Cockatoo - The two records of Carnaby's Cockatoo are dated 1966 and 1975. The Native Vegetation Clearing Area is now located outside of the known range extent for this species, therefore it is highly unlikely to be present within the region and will not be impacted by the proposal.

Hooded Plover – A non-migratory species that moves from the coast to the salt lakes some distance inland in winter. One record noted within 20 km of the Native Vegetation Clearing Area (dated 2012) located within a Salt Lake. Whilst adjacent to a Salt Lake the Native Vegetation Clearing Area does not comprise of habitat critical for this species and as such the Hooded Plover will not be impacted by the proposal.

Malleefowl – Malleefowl have a widespread distribution and occupy semi-arid mallee scrub, with a breeding season between September and February. A search of DBCA restricted data within a 20km study area shows three records, the most recent dated 2006. All records are located greater than 10km from the Native Vegetation Clearing Area.

It is unlikely that this species will be present within the vegetation directly adjacent to the roadside and this is supported by the targeted survey undertaken by Botanica (2025) that did not note the presence of any Malleefowl mounds.

Peregrine Falcon – The Peregrine Falcon has a wide distribution and is found in most habitats from rainforests to the arid zone and at most altitudes from the coast to the alpine areas. The species prefers coastal and inland cliffs to open woodlands near water for nesting sites. Three records are noted from Restricted DBCA data within a 20 km Study Area with the most recent record dated 2004.

While the Peregrine Falcon may be a transient visitor to the area for hunting there are no suitable breeding sites within the Native Vegetation Clearing Area. The vegetation does not form critical habitat for this species and as such the Peregrine Falcon will not be impacted by the proposal.

Red-necked Stint – A very small migratory wader that inhabits the shores of inland and coastal wetlands and estuaries. The Red-necked Stint spend their non-breeding season in Southeast Asia and Australasia. Whilst adjacent to a Salt Lake the Native Vegetation Clearing Area does not comprise of habitat critical for this species and as such the Red-necked Stint will not be impacted by the proposal.

Western Rosella – Recorded only in the south-western corner of Australia. There are two sub-species, *icterotis* - confined to the south-west coast; and *xanthogenys* - found in the Wheatbelt. Restricted DBCA data shows 5 records within 20km of the Native Vegetation Clearing Area (dated 2012-2013), located 19km south of the proposal.

The small area of roadside vegetation directly adjacent to two busy intersections is not likely to support the presence of this species and being aerial, they can relocate easily from the area. The vegetation does not provide critical habitat for this species and larger areas of intact and better quality vegetation is available within the local and wider regional area.

Whilst the vegetation present within the Native Vegetation Clearing Area has the potential to support some fauna species of conservation significance, it does not represent significant habitat for fauna that are transient visitors.

Clearing is proposed in a linear strip, directly adjacent to the existing highway, and will not result in further fragmentation to the existing fauna habitat corridors.

The Native Vegetation Clearing Area does not comprise the whole or a part of, and is not necessary for the maintenance of a significant habitat for fauna.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

- DCCEEW Protected Matters Search Tool Report
- Government GIS Shapefiles:
  - DBCA Threatened and Priority fauna database search (Accessed 16 July 2025)
- Species specific conservation listing advice and recovery plans

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

Proposal is not at variance to this Principle.

Main Roads Western Australia undertook a desktop assessment of the restricted DBCA and WA Herbarium databases within a 20km radius of the Native Vegetation Clearing Area, identifying the following Threatened Species as occurring within the Study Area:

- *Allocasuarina globosa;*
- *Daviesia microcarpa; and*
- *Eucalyptus platydisca.*

All three species were considered as having a possible likelihood of occurrence within the Native Vegetation Clearing Area.

A targeted Flora Survey undertaken by Botanica (2025) did not identify any individuals of the above Threatened flora species within the Native Vegetation Clearing Area. No Threatened Flora species were identified during the survey.

The Native Vegetation Clearing Area does not include, and is not necessary for the continued existence of Threatened flora.

The proposed clearing is not at variance to this Principle.

Methodology

- Biological Survey (Botanica, 2025)
- Government GIS shapefiles:
  - DBCA Threatened flora database search (Accessed 16 July 2025)
  - WA Herbarium databse search (Accessed 16 July 2025)

(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.

Proposed clearing is not at variance to this Principle.

Assessment

A search of DBCA databases did not identify any Threatened Ecological Communities (TEC) within the Native Vegetation Clearing Area. Likewise, a search of DCCEEW Protected Matters Search Tool did not identify any Federally listed TEC within the Native Vegetation Clearing Area.

The vegetation is not representative of communities that correspond to any State (BC At) or Commonwealth (EPBC Act) listed TEC.

The Native Vegetation Clearing Area does not comprise the whole or a part of, and is not necessary for the maintenance of a Threatened ecological community.

The proposed clearing is not at variance to this Principle.

Methodology

- Government GIS shapefiles:
  - DBCA Threatened Ecological Community database search (Accessed 16 July 2025)

(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.

Proposed clearing is not at variance to this Principle.

Assessment

The proposal is located within the Coolgardie Interim Biogeographical Regionalisation of Australia (IBRA) region and Eastern Goldfield sub-region.

According to the broad scale mapping undertaken by Beard (Shepherd et al 2001), the Native Vegetation Clearing Area is mapped as occurring within the following pre-European vegetation association:

- 9 – Medium woodland; coral gum (*Eucalyptus torquata*) & Goldfields blackbutt

The National Objectives and Targets for Biodiversity Conservation recognise that the retention of 30% or more of the pre-clearing extent of each ecological community is necessary if Australia's biological diversity is to be protected (Commonwealth of Australia 2001) except in constrained areas (Perth and Peel) where 10% representation should be maintained.

The Native Vegetation Clearing Area is not located within a constrained area, with the vegetation associations having greater than 30% of pre-European vegetation extend remaining at all levels, as summarised in the Table below.

Pre-European Vegetation Association	Scale	Pre–European Extent (ha)	Current Extent (ha)	% Remaining	% Current Extent in DBCA Managed Land (proportion of pre-European Extent)
Veg Assoc No. 9	**Statewide**	240,509.33	235,161.94	97.78	7.89
	IBRA Bioregion Coolgardie	240,441.99	235,100.97	97.78	7.90
	IBRA Sub-region Eastern Goldfield	235,047.15	229,757.07	97.75	8.08
	Local Government Authority Shire of Dundas	27,832.41	27,401.50	98.45	10.49

Vegetation within the Native Vegetation Clearing Area is well represented locally and regionally with clearing proposed from within a narrow linear corridor on the edge of the existing roadway. As such the vegetation is not considered significant as a remnant of native vegetation.

The proposed clearing is not at variance to this Principle.

Methodology

- Aerial photography
- Government GIS shapefiles:
  - Pre-European vegetation (Accessed 16 July 2025)
  - IBRA Regions (Accessed 16 July 2025)
  - IBRA Sub-Regions (Accessed 16 July 2025)
- Statewide Vegetation Statistics (Government of Western Australia 2019)

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

Proposed clearing is not at variance to this Principle.

Assessment

The Native Vegetation Clearing Area is not located within and does not intersect with:

- Internationally Important Wetlands (i.e. RAMSAR),
- Nationally Important Wetlands; or
- A surface water area that is proclaimed under the Rights in Water and Irrigation Act 1914 (RIWI Act).

The Native Vegetation Clearing Area does not intersect any watercourses or drainage lines and none of the vegetation is considered to be growing in or in association with a watercourse or wetland.

The proposed clearing is not at variance to this Principle.

Methodology

- Government GIS shapefiles:
  - Geomorphic Wetlands (Accessed 16 July 2025)
  - Ramsar Wetlands (Accessed 16 July 2025)
  - Important Wetlands (Accessed 16 July 2025)
  - Watercourses (Accessed 16 July 2025)
  - RIWI Act Rivers (Accessed 16 July 2025)
  - RIWI Act Surface Water Areas (Accessed 16 July 2025)

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

Proposed clearing is not at variance to this Principle.

Assessment

The Australian Soil Resource Information System (ASRIS) mapping indicates that two soil landscape types occur within the Native Vegetation Clearing Area, being:

- 268Jn (Johnston Land System) - Gently undulating plains with occasional granite rises, supporting eucalypt woodlands and non-halophytic shrublands
- 268Ls (Lakeside Land System) - Lunettes and sand sheets surrounding playas, supporting eucalypt (mallee) woodlands with spinifex

The topography of the Native Vegetation Clearing Area is relatively flat with a fall from east to west, towards the Salt Lake.

The CSIRO ASRIS Acid Sulphate Soils mapping indicates an extremely low risk of acid sulphate soils within the Native Vegetation Clearing Area. The proposed works are not anticipated to have an impact on soil acidity.

DPRID mapping indicates that the Native Vegetation Clearing Area presents the following land degradation risk:

- 1% - Moderate to high flood risk
- 1% - Very high to extreme water erosion hazard
- 1% - High to extreme wind erosion hazard
- 1% - Moderate salinity Hazard
- 1% - Moderate to very high waterlogging and inundation risk
- 1% - Very poor to poor site drainage potential
- 0% - High susceptibility to subsurface acidification

The clearing of vegetation is not likely to exacerbate salinity, acidification, flooding or waterlogging, resulting in appreciable land degradation.

The proposed clearing is not at variance to this Principle.

Methodology

- Government GIS Shapefiles:
  - Acid Sulfate Soil Risk Map (Accessed 17 July 2025)
  - Soil landscape land quality – Water Erosion Risk (Accessed 17 July 2025)
  - Soil landscape land quality – Wind Erosion Risk (Accessed 17 July 2025)
  - Soil landscape land quality – Salinity Risk (Accessed 17 July 2025)
  - Soil landscape land quality – Surface Acidity (Accessed 17 July 2025)
  - Soil landscape land quality – Waterlogging Risk (Accessed 17 July 2025)
  - Soil landscape land quality – Flood Risk (DPIRD-007) (Accessed 17 July 2025)
  - Contours (Accessed 17 July 2025)

(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.

Proposed clearing is not at variance to this Principle.

Assessment

A desktop assessment did not identify any listed or proposed Nature Reserves or Conservation Areas, including Bush Forever Areas, Important Wetlands or DBCA Managed Lands that intersect with or are adjacent to the Native Vegetation Clearing Area.

A search of ArcGIS shapefiles identified one un-named Nature Reserve (R 6043) for the purpose of Conservation of Flora and Fauna, within the 20km Study Area. This reserve is located 4.3 km northeast of the Native Vegetation Clearing Area and will not be impacted by the proposed clearing. Additionally, the Brockway Timber Reserve is located 11 km south of the Native Vegetation Clearing Area and will not be impacted by the proposed clearing.

Several Environmentally Sensitive Areas (ESAs) are located within the 20 km Study Area, with all being located greater than 4 km from the Native Vegetation Clearing Area and will not be impacted.

No Bush Forever Areas are located within the Study Area.

The proposed clearing will not impact on the environmental values of any conservation areas.

The proposed clearing is not at variance to this Principle.

Methodology

- Government GIS Shapefiles:
  - DBCA Legislated Lands and Waters & Lands of Interest (Accessed 16 July 2025)
  - DBCA Lands of Interest (Accessed 16 July 2025)
  - Geomorphic Wetlands (conservation category wetlands only) (Accessed 16 July 2025)
  - Ramsar Wetlands (Accessed 16 July 2025)
  - Important Wetlands (Accessed 16 July 2025)
  - Bush Forever Sites (Accessed 16 July 2025)
  - Environmetnally Senstive Areas (Accessed 16 July 2025)

(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.

Proposed clearing is not likely to be at variance to this Principle.

Assessment

The Native Vegetation Clearing Area is not located within a Surface Water Area proclaimed under the *Rights in Water Irrigation Act 1914* (RIWI Act), nor is it located within a Public Drinking Water Source Area or within any of the controlled catchment areas under the *Country Areas Water Supply Act 1947* (CAWS Act). There are no RAMSAR or Nationally Important Wetlands within or adjacent to the Native Vegetation Clearing Area.

No watercourses or mapped rivers intersect the Native Vegetation Clearing Area.

With low rainfall and no permanent bodies of surface water within the Native Vegetation Clearing Area, clearing activities will not result in sedimentation, erosion or turbidity impacts on watercourses or wetlands.

The Native Vegetation Clearing Area is located within the Goldfields Groundwater Area as proclaimed under the RIWI Act. Clearing of native vegetation adjacent to the existing road will not alter salinity, pH of water tables or existing water regimes.

Based on the above, the proposed clearing is not likely to cause deterioration in the quality of surface or groundwater.

The proposed clearing is not likely to be at variance to this Principle.

Methodology

- Government GIS Shapefiles:
  - RIWI Act, Surface Water Areas and Irrigation Districts (Accessed 16 July 2025)
  - CAWSA Part 2A Clearing Control Catchments (Accessed 16 July 2025)
  - RIWI Act, Groundwater Areas (Accessed 16 July 2025)
  - Public Drinkg Water Source Areas (Accessed 16 July 2025)

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

Proposed clearing is not at variance to this Principle.

Assessment

The Shire of Dundas experiences low annual rainfall, with Norseman receiving an average annual rainfall of 288.4 mm. The majority of rainfall occurs between the months of May to July (BoM, 2025).

The Native Vegetation Clearing Area intersects the following soil landscape system:

- 268Jn (Johnston Land System) - Gently undulating plains with occasional granite rises, supporting eucalypt woodlands and non-halophytic shrublands
- 268Ls (Lakeside Land System) - Lunettes and sand sheets surrounding playas, supporting eucalypt (mallee) woodlands with spinifex

The Native Vegetation Clearing Area is mapped as having a low risk of waterlogging (1% of map unit has a moderate to very high waterlogging risk).

The topography of the Native Vegetation Clearing Area is relatively flat with a fall from east to west, towards the Salt Lake.

The proposed clearing is narrow and directly adjacent to the existing roadway, with no intersection or proximity to perennial watercourses or wetlands. With a low risk of waterlogging and flooding in the area, the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding.

The proposed clearing is not at variance to this Principle.

Methodology

- BoM Website (Accessed 16 July 2025)
- Government GIS Shapefiles:
  - Soil Mapping (Accessed 17 July 2025)
  - Contours (Accessed 17 July 2025)
  - Soil landscape land quality - Waterlogging Risk (Accessed 17 July 2025)
  - Soil landscape land quality - Flood Risk (Accessed 17 July 2025)

6 REHABILITATION, REVEGETATION AND OFFSETS

6.1 Revegetation and Rehabilitation

No temporary clearing will be undertaken as part of the Proposal activities and therefore no revegetation or rehabilitation will be conducted under CPS 818.

6.2 Offset Proposal

No offset proposal is required as the proposed clearing will not result in significant residual impacts to native vegetation within the region.

7 COMPLIANCE WITH CPS 818

The clearing associated with the proposal is not at or not likely to be at variance with the Clearing Principles. Additional management actions under CPS 818 are detailed in Table 5.

Table 5. Summary of Additional Management Actions Required by CPS 818

Impact of Clearing	Yes/No or NA	Further Action Required
1. The CDR indicates that the clearing is 'At Variance' or 'May be at Variance' with one or more of the Clearing Principles.	**No**	No further action required.
2. Clearing is at variance or may be at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality **or** (j) the incidence of flooding.	**No**	No further action required.
3. Clearing is at variance with Clearing Principle (g) land degradation, (i) surface or underground water quality **and** (j) the incidence of flooding.	**No**	No further action required.
4. The Proposal involves clearing for temporary works (as defined by CPS 818).	**No**	No further action required.
5a. Proposal is within a Region that: • has rainfall greater than 400mm; and, • is South of the 26th parallel; and, • works are necessary in 'Other than dry conditions'; and, • works have potential for **uninfested** areas to be impacted.	**No**	Standard Vehicle and Plant management actions from Annexure 204B (TABLE 204B.9.1), Hygiene Checklists and Vehicle, Plant and Machinery Hygiene Register Template will be applied.
5b. Do the proposed works require clearing within or adjacent to DBCA managed lands in non-dry conditions?	**No**	No further action required.
6. Main Roads has been notified by DWER or an environmental specialist that the area to be cleared is susceptible to a pathogen other than dieback.	**No**	No further action required.

Impact of Clearing	Yes/No or NA	Further Action Required
7. Weeds are likely to spread to and result in environmental harm to adjacent areas of native vegetation that are in good or better condition.	**No**	No further action required.
8. Did an environmental specialist conduct the survey or field assessment?	**Yes**	The Environmental Specialist undertaking the biological assessments was suitably qualified and had more than three years' experience.
9. Did an environmental specialist prepare the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal?	**Yes**	The Environmental Specialist preparing the Assessment Report and any other associated documentation including the VMP, Dieback Management Plan or Offset Proposal was suitably qualified and had more than three years' experience.

8 REFERENCES

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