

Referral of proposed action

Project title:

Narrogin Link Road Stage 3 - North Extension

1 Summary of proposed action

1.1 Short description

Main Roads WA (MRWA) Wheatbelt (WB) region is proposing to realign and widen the Great Southern Highway between 165.4 – 167.4 SLK. This will involve the creation of an approximately 1km long section of new, two lane, two way, road running north from the existing Kipling Street roundabout as a continuation of the existing Pioneer Drive.

1.2 Latitude and longitude

location point	Latitude			Longitude		
	degrees	minutes	seconds	degrees	minutes	seconds
1	-32	55	47.408	117	10	47.042
	-32	55	35.846	117	10	54.44
	-32	55	24.436	117	11	3.898
	-32	55	1.396	117	11	5.009

The proposed area for the realignment is indicated by the start, end and turning point coordinates.

1.3 Locality and property description

This project occurs north of Narrogin town site. It will occur within the Great Southern Highway reserve, crown land and freehold lease properties.

1.4 Size of the development footprint or work area (hectares)

5.08ha.
1.21ha is native vegetation. The remaining area is composed of road, driveway, pastureland and weed infested road reserve.

1.5 Street address of the site

There is no street address as this project will be a new road that connects Great Southern Highway and Pioneer Drive.

1.6 Lot description

The tie-ins for this project will occur within Great Southern Highway reserve. The remainder of the road project occurs within freehold lease and crown land. The lot numbers for these leases are PT153, 804, 805, 1, 2, 1593 and 1710.

1.7 Local Government Area and Council contact (if known)

The project occurs within the Shire of Narrogin and the Town of Narrogin. The council contact officers are:
Shire of Narrogin CEO (Acting)-Torre Evans
Town of Narrogin CEO-Aaron Cook

1.8 Time frame

The project works are scheduled to start in October 2016 and continue through to March 2017.

1.9 Alternatives to proposed action

<input checked="" type="checkbox"/>
<input type="checkbox"/>

No

Yes, you must also complete section 2.2

1.10 Alternative time frames etc

<input checked="" type="checkbox"/>
<input type="checkbox"/>

No

Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3.3 (where relevant).

1.11	State assessment		No
		✓	Yes, you must also complete Section 2.5
1.12	Component of larger action	✓	No
			Yes, you must also complete Section 2.7
1.13	Related actions/proposals		No
		✓	Yes, provide details: The proposed action forms part of the larger Narrogin Link Road plan. This involves the existing Pioneer Drive section, completed in 2002 and the Narrogin Link Rd South Extension which is currently under construction. The Narrogin Link Rd South Extension will complete a road connection through the town of Narrogin to the Great Southern Hwy in the south. The Narrogin Link Rd North Extension will complete the connection through the Town of Narrogin.
1.14	Australian Government funding	✓	No
			Yes, provide details:
1.15	Great Barrier Reef Marine Park	✓	No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

2.1 Description of proposed action

The Narrogin Link Road Stage 3 - North Extension project site is located north of Narrogin townsite and involves re-alignment of the Great Southern Highway, between 165.4 to 167.4 SLK. The project site falls within the Town of Narrogin and Shire of Narrogin Local Government Areas. Main Roads Wheatbelt Region is proposing to construct an approx. 1km long, two lane, two-way road running north from the existing Kipling Street roundabout as a continuation of the existing Pioneer Drive and improve 0.8km of existing highway. The new extension will tie into the Great Southern Highway to the south of the Callan Way development. A cul-de-sac will be required on the existing Great Southern Highway south of the Pioneer Drive tie in, and provision for access to adjacent properties and businesses will be required. The typical cross section will be; 10m seal on 11m formation, with 6:1 fill batters and varying cut batters. Works will include; clearing, subgrade preparation, road construction, drainage improvements, signs and pavement markings, safety barrier, and kerbing.

The latest design drawing is shown in Attachment 1.

2.2 Alternatives to taking the proposed action

There were no feasible alternatives to taking the proposed action, other than not providing the link.

2.3 Alternative locations, time frames or activities that form part of the referred action

Due to funding constraints there are no alternative timeframes for this project.

An alternative option was considered which shared the same southern tie in and tied into the Great Southern Highway further north of Callan Way making it a longer alignment. This longer option was eliminated following economic, environmental and safety considerations. The preferred short option involves the clearing of less vegetation and less Black Cockatoo habitat trees. Clearing for the longer option would include vegetation in better condition and structure. This retained vegetation will provide better habitat for fauna and provides a better linkage/fauna movement corridor.

2.4 Context, planning framework and state/local government requirements

The activities associated with the new road will comply with the legislative requirements established under the Commonwealth regulatory framework. In particular, this project is subject to, and will be undertaken in accordance with, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It should also be noted that no activities conducted during the works will occur on Commonwealth land or heritage places.

The MRWA Preliminary Environmental Impact Assessment and Environmental Management Plan and Clearing Impact Assessment and Vegetation Management Plan consider key legislation governing the protection and management of Western Australia's environment and heritage (Table 1). The key approvals requirements for the project derive from the *Environmental Protection Act 1986* and the EPBC Act.

Table 1: Relevant legislation and potential approval requirements

Legislation	Purpose	Requirement
Western Australia		
<i>Wildlife Conservation Act 1950</i>	Provides for the conservation and protection of Western Australia's wildlife	Licence to take protected flora and fauna, consent to take rare or endangered flora
<i>Aboriginal Heritage Act 1972</i>	Protection of places and objects customarily used by the original inhabitants of Australia.	Consent to disturb Aboriginal sites.
<i>Environmental Protection Act 1986</i>	Preventing, controlling and abating environmental harm and conserving, protecting, enhancing and managing the environment.	Approval to undertake an assessed proposal. Permit to clear native vegetation.
<i>Conservation and Land Management Act 1984</i>	Provides for the use, protection and management of certain public lands and waters and the establishment of responsible authorities.	Licence/permit to undertake activities impacting on DPaW managed properties and compliance with management plans.
<i>Heritage of Western Australia Act 1990</i>	Conservation of places having significance to Western Australia's cultural heritage.	Permit to disturb, damage or demolish heritage sites.
<i>Rights in Water and Irrigation Act 1914</i>	Provides for regulation, management, use and protection of water resources and irrigation schemes.	Rights and licences to take water; permit to obstruct or interfere with a watercourse or wetland including its bed or banks.

<i>Contaminated Sites Act 2003</i>	Identification, recording, management and remediation of contaminated sites.	Ensure that development complies with site classification and any restrictions that may apply.
Commonwealth of Australia		
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Provides for the protection of the environment and conversation of biodiversity.	Approval required for activities likely to have a significant impact on any matter of national environmental significance.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

The action has not previously been referred to the Department of the Environment (DotE) for a decision on whether approval under the EPBC Act is required.

The proposal will not be referred to the Western Australian Environmental Protection Authority for a decision on whether formal impact assessment is required pursuant to s38 of the *Environmental Protection Act 1986*. Clearing of native vegetation will be managed under Part V of the EP Act.

The clearing will be completed in accordance with the clearing regulations under the *Environmental Protection Act 1986*.

2.6 Public consultation (including with Indigenous stakeholders)

Indigenous stakeholders will not be affected by the proposed action. Consultation with relevant stakeholders will be carried out before the project commences as required.

2.7 A staged development or component of a larger project

The proposed action forms part of the ongoing upgrade of MRWA's network, which includes Great Southern Highway. Network wide upgrades have been progressed as per the annual works plan, specific upgrades to the Great Southern Highway have been progressed as a staged approached.

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

The EPBC Act Protected Matters Search Tool was used to identify matters of national environmental significance potentially of relevance to the proposed action. The search was conducted for the project area and its surround, as per the coordinated provided in Section 1.2. Further details regarding matters of national significance are provided below.

3.1 (a) World Heritage Properties

There are no World Heritage Properties within or adjacent to the project area.

Description

Not applicable

Nature and extent of likely impact

Not applicable

3.1 (b) National Heritage Places

There are no National Heritage Places within or adjacent to the project area.

Description

Not applicable

Nature and extent of likely impact

Not applicable

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

There is one Wetland of International Importance adjacent to the project area.

Description

The project area is upstream from a Wetland of International Importance, the Peel-Yalgorup System. However this system is located 130km to the west of the project area.

Nature and extent of likely impact

Due to the distance to the system it is unlikely that this system will be impacted.

3.1 (d) Listed threatened species and ecological communities

Description

No Threatened Ecological Communities

18 threatened species:

Birds

- *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo)
- *Calyptorhynchus baudinii* (Baudin's Black-Cockatoo)
- *Calyptorhynchus latirostris* (Carnaby's Black Cockatoo)
- *Leipoa ocellata* (Malleefowl)

Mammals

- *Bettongia penicillata ogilbyi* (Woylie)
- *Dasyurus geoffroii* (Chuditch)
- *Myrmecobius fasciatus* (Numbat)
- *Phascogale calura* (Red-tailed Phascogale)

Plants

- *Acacia insolita subsp. recurva* (Yornaning Wattle)
- *Adenanthos pungens subsp. effusus* (Sprawling Spiky Adenanthos)
- *Banksia oligantha* (Wagin Banksia)
- *Boronia capitata subsp. capitata* (a shrub)
- *Darwinia carnea* (Mogumber Bell)
- *Daviesia euphorbioides* (Wongan Cactus)
- *Diuris micrantha* (Dwarf Bee-orchid)
- *Pultenaea pauciflora* (Narrogin Pea)
- *Roycea pycnophylloides* (Saltmat)
- *Verticordia fimbrialepis subsp. fimbrialepis* (Shy Featherflower)

Nature and extent of likely impact

DotE protected matters search tool identified that no threatened ecological communities (TECs) will be impacted by this project. However recently the Commonwealth have listed the *Eucalypt Woodlands of the Western Australian Wheatbelt* as a TEC. The project area is composed of two vegetation communities; riparian woodland of *Eucalyptus rudis* over sedges and planted *Eucalyptus* species within the road verge. Both of these areas contain an understorey that is dominated by non-native species therefore this project area is not representative of this TEC.

The Malleefowl inhabits shrublands and low woodlands that are dominated by mallee vegetation. As this habitat is not present within the project area it is unlikely that this species will be impacted by the project activities.

The Woylie habitat ranges from forest to grasslands however they require dense undergrowth, logs or rock-cavities to shelter in. There is limited dense undergrowth within the project area as such it is unlikely that this species will be present in the project area or impacted by this project.

The Chuditch inhabits wooded habitat including eucalypt forest, dry woodland and mallee shrublands. This habitat is not present within the project area which makes it unlikely that this species will be impacted by the project activities.

The Numbat prefers habitat including eucalypt forest, eucalypt woodland, Acacia woodland and Triodia grasslands. Habitats usually have an abundance of termites in the soil, hollow logs and branches for shelter. This habitat is not present within the project area, therefore this species is unlikely to be impacted by the project activities.

The Red-tailed Phascogale prefers Wandoo (*Eucalyptus wandoo*) or York Gum (*Eucalyptus loxophleba*) woodlands and dense Sheoak (*Allocasuarina huegeliana*) woodlands. The GHD report, Narrogin Link North Biological Assessment, identified that the Flooded Gums present with dense riparian vegetation

near Narrogin Brook could present habitat for the Red-tailed Phascogale. Along the Great Southern Highway there are Eucalypt species that contain small hollows that could potentially be used by this species. The Red-tailed Phascogale prefers habitat with a continuous canopy cover to aid in their arboreal habits. However as there is no area of dense Sheoak habitat, the roadside does not have a dense canopy cover. The species was not recorded in the area it is unlikely that the project area represents significant habitat for this species. The area does have the potential to provide a corridor that this species could use therefore the project may cause some indirect impacts on the Red-tailed Phascogale.

The GHD survey, Narrogin Link North Biological Assessment, included a targeted Black Cockatoo survey. Habitat for Baudin's Black Cockatoo, Forest Red-tailed Black Cockatoo and Carnaby's Black Cockatoo were all identified within the project area. After the GHD survey was completed an extra 500m was added to the northern extent of the project, the MRWA Environmental Officer went on site and completed a targeted Black Cockatoo investigation for the extra area. Potential breeding habitat was identified in the roadside survey area as shown below:

Potential trees within survey area	Containing hollows within survey area	Potential trees within project area	Containing hollows within project area	Species
248	25	30	3 (none suitable for nesting)	17 planted White Gum, 1 Wandoo and 12 Flooded Gum

As evident from the table above there are 30 trees of suitable size that could be potential breeding trees for Black Cockatoos and of these 3 have hollows. However none of these hollows are suitable for Black Cockatoos as they are too small or occupied by bees. All three species of Black Cockatoos have the potential to occur within the project area. During the GHD survey both foraging and breeding habitat was found within the roadside area.

The roadside clearing will involve the removal of 30 Eucalypt trees of suitable size that could be used as potential breeding trees. In the surrounding survey area there were a further 218 potential breeding trees, 25 of which contain hollows. The presence of such a large amount of suitable trees in the surrounding area makes it unlikely that the removal of potential breeding trees for this project will have a significant impact on Black Cockatoos. Particularly as there will be trees remaining in the road reserve in this area and in the immediate area surrounding the watercourse that could be used as habitat for the Black Cockatoo species. The roadside project area also contains 1.21ha of appropriate foraging habitat that will need to be removed for this project.

The study area (10km buffer) is mapped entirely as vegetation associations that could be Black Cockatoo appropriate habitat as they are Eucalypt dominated associations. There are also many watercourses mapped in the study area that could support these species. Within the study area there is approximately 3,400 ha of larger un-fragmented patches of vegetation that could potentially be suitable Black Cockatoo habitat. There would also be further potential within smaller sections of vegetation and roadside corridors located within the study area. The larger areas of un-fragmented patches of vegetation would provide more appropriate habitat than the project area. There is one confirmed roost located 1.8km south west of the roadside project area. This roost occurs within a large 770ha area of potential Black Cockatoo habitat located on the other side of Narrogin townsite.

The clearing for this project includes a total of 1.21ha of potential foraging and breeding habitat and 30 potential breeding trees, though none have hollows suitable for Black Cockatoos (See Attachment 2 for Black Cockatoo habitat tree locations as identified in the survey). Given the larger patches of Black Cockatoo potential habitat in the study area and that the project area involves taking only small areas of trees in a disturbed roadside and farmers paddock it is unlikely that the project will have a significant impact on Black Cockatoos. However as per the Black Cockatoo referral guidelines this project will still require referral to the Commonwealth.

The soil type within the project area is brown loamy sand. This soil type is the incorrect habitat for the

Acacia insolita subsp. recurva (prefers lateritic ridges), *Adenanthos pungens subsp. effusus* (prefers white siliceous sand), *Banksia oligantha* (prefers yellow or yellow-brown sand), *Boronia capitata subsp. capitata* (prefers sand), *Darwinia carnea* (prefers lateritic loam & gravel), *Daviesia euphorbioides* (prefers clayey sand, sandy gravel), *Pultenaea pauciflora* (prefers sandy & clay lateritic soils), *Roycea pycnophylloides* (prefers saline flats) and *Verticordia fimbrialepis subsp. fimbrialepis* (prefers gravelly sandy or clayey soils). During the GHD biological survey none of these flora species were identified.

The Dwarf Bee-orchid was not identified however the survey was conducted outside its flowering time. This species usually occurs in shallow water and brown loamy clay; however the project area is composed of loamy sand so it is unlikely this species will be impacted by the project activities. The project area is also outside this species' normal range. The project area occurs within the Avon Wheatbelt region and Shire of Narrogin but this species is only known from the Jarrah Forest, Swan Coastal Plain regions and the local government authorities of Harvey, Kwinana, West Arthur and Williams (Florabase, 2015).

Project activities may directly or indirectly impact upon Black Cockatoos and Red-tailed Phascogale due to the clearing of habitat associated with this project.

3.1 (e) Listed migratory species

Description

There are five listed migratory species identified in the DotE protected matters search tool as potentially occurring within the project area. These are:

Marine Birds

- *Apus pacificus* (Fork-tailed Swift)

Terrestrial

- *Motacilla cinerea* (Grey Wagtail)
- *Merops ornatus* (Rainbow Bee-eater)

Wetlands

- *Ardea alba* (Great Egret)
- *Ardea ibis* (Cattle Egret)

Nature and extent of likely impact

The Fork-tailed Swift is almost entirely aerial. As such it is unlikely that this species will be impacted by the project activities as this highly mobile bird will be a “fly-over” species.

The Grey Wagtail has a strong association with water, particularly rocky substrates along watercourses. There are no rocky substrates along this watercourse therefore this species is not likely to be impacted by project activities.

The Rainbow Bee-eater inhabits a wide variety of habitats and has the potential to occur within the project area. However this species was not identified during the biological survey. Given that this species is highly mobile it can easily locate other habitat in the surrounding area and therefore the clearing of the vegetation will not directly or indirectly impact the Rainbow Bee-eater.

The Great Egret usually inhabits wetland habitats including the margins of rivers. This habitat is present within the project area however it is unlikely that this project will directly or indirectly impact this species as it is a highly mobile bird species that could locate habitat elsewhere.

The Cattle Egret occurs in wetland habitats which are not present within the project area. Therefore this project will not directly or indirectly impact this species.

Given the above it is unlikely that this project will directly or indirectly impact on any migratory species.

3.1 (f) Commonwealth marine area

There are no Commonwealth marine areas within or adjacent to the project area.

Description

Not applicable

Nature and extent of likely impact

Not applicable

3.1 (g) Commonwealth land

There is one parcel of Commonwealth land in the study area.

Description

This parcel is not within the project area therefore there will be no impacts to Commonwealth land.

Nature and extent of likely impact

Not applicable

3.1 (h) The Great Barrier Reef Marine Park**Description**

Not applicable

Nature and extent of likely impact

Not applicable

3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development**Description**

Not applicable

Nature and extent of likely impact

Not applicable

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

3.2 (a)	Is the proposed action a nuclear action?	<input checked="" type="checkbox"/>	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment			
3.2 (b)	Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?	<input checked="" type="checkbox"/>	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment			
3.2 (c)	Is the proposed action to be taken in a Commonwealth marine area?	<input checked="" type="checkbox"/>	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))			
3.2 (d)	Is the proposed action to be taken on Commonwealth land?	<input checked="" type="checkbox"/>	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))			
3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?	<input checked="" type="checkbox"/>	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))			

3.3 Other important features of the environment

3.3 (a) Flora and fauna

During the field survey completed by consultants GHD there were 102 flora taxa (76 native and 26 introduced) flora species within the survey area. Also identified within the survey were 81 fauna species (67 birds, 7 reptiles and 7 mammals). A variety of mammals, birds and plants of conservation significance are listed as potentially occurring within the project area and its surrounds but only 1 species of Commonwealth significance was noted during the survey. The field survey results with respect to these potential species is discussed in Section 3.1 (d) and 3.1 (e).

3.3 (b) Hydrology, including water flows

There are no wetlands located within the study area. There is a minor non-perennial watercourse (Narrogin Brook) that intersects the southern section of the road project. The design will incorporate this watercourse to ensure that the watercourse is not adversely impacted by the project.

The project area does not occur on any Groundwater Areas, Proclaimed Surface Water Areas or Public Drinking Water Source Areas.

3.3 (c) Soil and Vegetation characteristics

Soils

The soil type is generally sandy gravel over laterite, with a small area of deeper loamy sand within the low-lying area south of Narrogin Link Road (GHD 2016).

A search of the NRM SLIP database identified that there is a low risk (3-30%) of Acid Sulfate Soils occurring within the project area. As no dewatering or excavation below the water table is required, for the construction of the project area Acid Sulfate Soils will not be an issue.

Vegetation

The vegetation is mapped as pre-European Vegetation Association 1023 (Medium woodland; York gum, wandoo & salmon gum (*Eucalyptus salmonophloia*)) and Vegetation Association 947 (Medium woodland; powderbark & mallet) (Government of Western Australia, 2014).

There are three main areas within the project area described in the GHD report. These are:

Near Narrogin Brook:

Open Forest of *Eucalyptus rudis* over Sedgeland of **Juncus acutus* subsp. *acutus* and *Isolepis cernua* var. *setiformis* over Sparse Herbland of **Cotula coronopifolia* and **Frankenia pulverulenta* (Note: * denotes weed species (non native)).

Road project tie-in:

Cleared area with occasional Marri (*Corymbia calophylla*), Wandoo (*Eucalyptus wandoo* subsp. *wandoo*) and Flooded Gum (*E. rudis*) trees or planted tree species over an understorey of weedy herbs and grasses.

Paddock:

Highly altered pasture land with only scattered native trees.

3.3 (d) Outstanding natural features

There are no outstanding natural features.

3.3 (e) Remnant native vegetation

The vegetation is mapped as pre-European Vegetation Association 1023 (Medium woodland; York gum, wandoo & salmon gum (*Eucalyptus salmonophloia*)) (Government of Western Australia, 2014).

The following table represents the percentage of vegetation remaining in the region. It is evident that this area is an extensively cleared area, which is to be expected as this project is in the Wheatbelt surrounded by pastureland.

Pre-European Vegetation Associations	Pre-European (ha)	Current Extent (ha)	% Remaining	% Remaining in DPaW reserves
IBRA Region Avon Wheatbelt	9,517,109.90	1,765,881.10	18.55	9.73
Statewide Veg Assoc No. 1023	1,601,601.59	174,096.00	10.87	10.62
IBRA region Veg Assoc No. 1023 in the IRBA Avon Wheatbelt region	1,522,676.20	166,275.88	10.92	10.13
Local Government Authority Shire of Narrogin	161,816.19	31,644.75	19.56	26.84
Local Government Authority Town of Narrogin	1,314.09	514.26	39.13	3.33

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The Road project area has a flat topography.

3.3 (g) Current state of the environment

The majority of the project area is in degraded to completely degraded (Keighery, 1994) condition. A large section of the road project area is within cleared pastureland. The remainder of the project area is located near the Narrogin Brook in the south or tie-ins to the road in the north. These areas consist of native vegetation with weed invested due to their proximity to farmland and roadside.

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

There are no Commonwealth Heritage Places or other places recognised as having heritage values within the project area.

3.3 (i) Indigenous heritage values

There are no Aboriginal heritage sites having DAA extents overlying the project area, based on a search of the WA Department of Aboriginal Affairs (DAA) sites register. As the project occurs on previously disturbed land it is unlikely that any unknown Aboriginal heritage sites will be impacted by the project activities.

3.3 (j) Other important or unique values of the environment

There are no key features of the environment affected by, or in proximity to the proposed action.

3.3 (k) Tenure of the action area (eg freehold, leasehold)

Main Roads has control of the tenure for the road tie-ins as it is within the road reserve. The remainder of the area occurs within freehold and crown land. MRWA is currently in the process of negotiating with these land holders to obtain the required land for the project.

3.3 (l) Existing land/marine uses of area

Road/transport and farmland.

3.3 (m) Any proposed land/marine uses of area

There are no proposed land uses for this area.

4 Measures to avoid or reduce impacts

Impact Avoidance

During the develop phase of this project, Main Roads incorporated environmental considerations in selecting the alignment. The selection of the preferred option considered that the alignment had the lesser environmental value. The selected alignment impacted a smaller amount of Black Cockatoo trees and involved the clearing of a less densely vegetated area. During the design phase the design was rationalised to reduce the required amount of clearing whilst providing a safe and compliant design. Significant individual trees have been retained where possible and tie in points have been selected with consideration for minimal vegetation clearing. The road design has been created to pass between singular trees in the paddock area leaving them and removing only paddock instead. This will include a tie-in within the current driveway that is already cleared and has associated cleared sightlines to avoid clearing further vegetation.

The clearing line will be pegged prior to clearing commencing and where possible trees will be pruned rather than removed.

Further project clearing will be avoided as the site office, materials storage areas, construction vehicles/machinery and access tracks will be located on previously disturbed or cleared areas.

Environmental Management

An Environmental Management Plan (EMP) and a Vegetation Management Plan (VMP) will be created by Main Roads. Prior to the commencement of roadworks the EMP/VMP will be reviewed and updated as appropriate with the objective of minimising and managing the onsite environmental impacts, including the protection of fauna. The EMP/VMP will be implemented during investigations, during construction and post construction works.

5 Conclusion on the likelihood of significant impacts

5.1 Do you THINK your proposed action is a controlled action?

- ☒ No, complete section 5.2
- ☐ Yes, complete section 5.3

5.2 Proposed action IS NOT a controlled action.

The road project has habitat that can be nesting and foraging habitat for Black Cockatoo species. The project involves the removal of 30 trees that are of suitable size for breeding habitat, three of these contain hollows but they are all too small/low to be used or are currently being used by bees and as such will not be suitable for Black Cockatoos.

In the survey area there are a further 218 trees of suitable size, of which 25 contain hollows. Given the large amount of suitable trees in the immediate area it is unlikely that the removal of trees required for this project will have a significant impact.

1.21ha of foraging habitat will be removed, but 28ha of foraging habitat will remain in the immediate area. Therefore it is unlikely that the removal of vegetation required for this project will significantly impact Black Cockatoos.

There is 1.21ha of Red-tailed Phascogale habitat in the project area to be removed. However there is 28ha of similar habitat in the immediate area that will remain after the clearing. Therefore it is unlikely this project will significantly impact Red-tailed Phascogales.

5.3 Proposed action IS a controlled action

Matters likely to be impacted

- | | |
|--------------------------|---|
| <input type="checkbox"/> | World Heritage values (sections 12 and 15A) |
| <input type="checkbox"/> | National Heritage places (sections 15B and 15C) |
| <input type="checkbox"/> | Wetlands of international importance (sections 16 and 17B) |
| <input type="checkbox"/> | Listed threatened species and communities (sections 18 and 18A) |
| <input type="checkbox"/> | Listed migratory species (sections 20 and 20A) |
| <input type="checkbox"/> | Protection of the environment from nuclear actions (sections 21 and 22A) |
| <input type="checkbox"/> | Commonwealth marine environment (sections 23 and 24A) |
| <input type="checkbox"/> | Great Barrier Reef Marine Park (sections 24B and 24C) |
| <input type="checkbox"/> | A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E) |
| <input type="checkbox"/> | Protection of the environment from actions involving Commonwealth land (sections 26 and 27A) |
| <input type="checkbox"/> | Protection of the environment from Commonwealth actions (section 28) |
| <input type="checkbox"/> | Commonwealth Heritage places overseas (sections 27B and 27C) |

6 Environmental record of the responsible party

	Yes	No
<p>6.1 Does the party taking the action have a satisfactory record of responsible environmental management?</p> <p>Provide details In recent years MRWA has successfully developed numerous highway infrastructure projects while demonstrating responsible environmental management.</p>	✓	
<p>6.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?</p> <p>If yes, provide details</p>		✓
<p>6.3 If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?</p> <p>If yes, provide details of environmental policy and planning framework MRWA operates under its Environmental Policy and Sustainability Policy. MRWA is also ISO 14001 accredited Environmental Management System.</p>	✓	
<p>6.4 Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?</p> <p>Provide name of proposal and EPBC reference number (if known)</p>		✓

7 Information sources and attachments

(For the information provided above)

7.1 References

Department of the Environment (2015) Species Profile and Threats Database Available online from <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl> Accessed 23rd February 2015.

GHD (2016) Narrogin Link North-Biological Assessment. Unpublished report prepared for Main Roads Western Australia. December 2014.

Government of Western Australia. (2014). 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Environment and Conservation, Perth, Western Australia.

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

Western Australian Herbarium (2015) FloraBase - The Western Australian Flora. Department of Environment and Conservation. Available online from: <http://florabase.dec.wa.gov.au>. Accessed 27th February 2015.

7.2 Reliability and date of information

All information used in Section 3 has been referenced in text and is provided in the reference list above.

7.3 Attachments

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	✓	Project Locality
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	Black Cockatoo Tree Locations
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	✓	GHD Narrogin Link North Biological Assessment
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and		

conclusions in the referral (section 3 and 4)		
report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

8 Contacts, signatures and declarations

Project title:

8.1 Person proposing to take action

1. Name and Title: Sam Foster
Project Manager

2. Organisation
Main Roads Western Australia

3. EPBC Referral Number

4: ACN / ABN 50 860 676 021

5. Postal address 120 Peel Terrace Northam, 6401

6. Telephone: 08 9622 4733

7. Email: sam.foster@mainroads.wa.gov.au

8. Name of designated
proponent (if not the
same person at item 1
above

9. ACN/ABN of
designated proponent (if
not the same person
named at item 1 above):

I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am: ☐ an individual; OR ☐ a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*).

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the [EPBC Regulations](#). Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:

Declaration

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.
I understand that giving false or misleading information is a serious offence.
I agree to be the proponent for this action.
I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature



Date

8.2 Person preparing the referral information (if different from 8.1)

Name	Emma Fitzgerald
Title	Environmental Officer
Organisation	Main Roads Western Australia
ACN / ABN (if applicable)	50 860 676 021
Postal address	PO Box 6202, East Perth WA 6892
Telephone	08 9323 5435
Email	emma.fitzgerald@mainroads.wa.gov.au
Declaration	I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct. I understand that giving false or misleading information is a serious offence.
Signature	<i>E Fitzgerald</i>
Date	25/2/2016
