Title of Proposal - South Coast Highway Widening 8.2-14.16 SLK

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Transport - Land

1.2 Provide a detailed description of the proposed action, including all proposed activities.

The South Coast Highway 8.2-14.16 SLK Widening project occurs on South Coast Highway (SCH) between 8.2-8.94 and 9.78-14.16 SLK in the City of Albany. It is anticipated works will consist of limited vegetation pruning and vegetation removal works to create a 5m construction zone at certain locations on each side of the road. This will facilitate Shoulder Widening and Sealing works ideally retaining the existing batters. It is anticipated therefore that the works will require limited pruning rather than vegetation clearing.

In addition , culvert extension works will be undertaken for a (presently unknown) number of culverts; to be determined once survey is complete. Vegetation will be required to be removed to create a vegetation free zone 5 m from concrete structures as per Main Roads "Operational guidelines to protect infrastructure and maintain its efficacy".

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
SCH Widening 9.78 to 14.16 SLK	1	-34.912592666001	117.95873021748
SCH Widening 9.78 to 14.16 SLK	2	-34.913050156862	117.95920228627
SCH Widening 9.78 to 14.16 SLK	3	-34.914246659366	117.95727109578
SCH Widening 9.78 to 14.16 SLK	4	-34.917976819937	117.95113420155
SCH Widening 9.78 to 14.16 SLK	5	-34.919454761198	117.94825887349
SCH Widening 9.78 to 14.16 SLK	6	-34.920334475503	117.9447827306
SCH Widening 9.78 to	7	-34.923993985805	117.92795991566

Area	Point	Latitude	Longitude
14.16 SLK			
SCH Widening 9.78 to 14.16 SLK	8	-34.929166284511	117.91632985737
SCH Widening 9.78 to 14.16 SLK	9	-34.928814437792	117.916158196
SCH Widening 9.78 to 14.16 SLK	10	-34.924451413119	117.92572831776
SCH Widening 9.78 to 14.16 SLK	11	-34.923677303864	117.9277024236
SCH Widening 9.78 to 14.16 SLK	12	-34.923149497912	117.93019151356
SCH Widening 9.78 to 14.16 SLK	13	-34.922093875825	117.9347834554
SCH Widening 9.78 to 14.16 SLK	14	-34.920827111395	117.9407057729
SCH Widening 9.78 to 14.16 SLK	15	-34.919208439503	117.94791555073
SCH Widening 9.78 to 14.16 SLK	16	-34.912592666001	117.95877313283
SCH Widening 9.78 to 14.16 SLK	17	-34.912592666001	117.95873021748
SCH Widening 8.2 to 8.94 SLK	1	-34.937754675524	117.9047950175
SCH Widening 8.2 to 8.94 SLK	2	-34.934174939524	117.9101487067
SCH Widening 8.2 to 8.94 SLK	3	-34.934324464793	117.91032036807
SCH Widening 8.2 to 8.94 SLK	4	-34.937886603841	117.90490230587
SCH Widening 8.2 to 8.94 SLK	5	-34.937754675524	117.90480574634
SCH Widening 8.2 to 8.94 SLK	6	-34.937754675524	117.9047950175

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

The project area is restricted to within Main Roads South Coast Highway road reserve and is located approximately 7.7km north east of the townsite of Albany.

1.6 What is the size of the development footprint or work area?

The project clearing size is 1.3ha

1.7 Is the proposed action a street address or lot?

Street Address

South Coast Highway
Albany WA 6330
Australia

1.8 Primary Jurisdiction.

Western Australia

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 11/2017

End date 04/2018

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

The activities associated with the project will comply with the legislative requirements established under the Commonwealth regulatory framework. In particular, this project is subject to, and will be undertaken inaccordance with, the *Environment Protection and Biodiversity Conservation Act 1999.* It should also be noted that no activities conducted during the project will occur on Commonwealth land or heritage places. The Main Roads Environmental Impact Assessment and Environmental Management Plan considers key legislation governing the protection and management of Western Australia's environment and heritage. The key approvals requirements for the project derive from the *Environmental Protection Act 1986* and the EPBC Act.

Relevant legislation and potential approval requirements.

Western Australia

Wildlife Conservation Act 1950

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.

Aboriginal Heritage Act 1972

Prevention of places and objects customarily used by the original inhabitants of Australia. Consent to disturb Aboriginal sites.

Environmental Protection Act 1986

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.

Conservation and Land Management Act 1984

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.

Heritage of Western Australia Act 1990

Conservation of places having significant to Western Australia's cultural heritage. Permit to disturb, damage or demolish heritage sites.

Rights in Water and Irrigation Act 1914

Provides for regulation, management, use and protection of water resources and irrigation schemes. Rights and licenses to take water; permit to obstruct or interfere with a watercourse or wetland including its bed or banks.

Contaminated Sites Act 2003

Identification, recording, management and remediation of contaminated sites. Ensure that development complies with site classification and any restrictions that may apply.

Commonwealth of Australia

Environment Protection and Biodiversity Conservation Act 1999

Provides for the protection of the environment and conservation of biodiversity. Approval required for activities likely to have a significant impact on any matter of national environmental significance.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

No stakeholder consultation was required for this project. However further stakeholder consultation will be undertaken in line with Main Roads Statewide Clearing Permit CPS 818/12.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

The action has not previously been referred to the Department of the Environment and Energy (DoEE) 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 requried pursuant to s38 of the *Environmental Protection Act 1986*. Clearing of native vegetation will be managed under Part V of the EP Act. The release of the *Environmental Protection and Biodiversity Conservation Act 1999* referral guidelines for the threatened black cockatoo species requires consideration of this proposal by the Department of the Environment and Energy.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

Yes

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation).

There is a potential future widening project that will occur within the 14-20 SLK range on this road. However this second project is yet to receive funding or design confirmation. As such this secondary project will not occur for a year or more, if ever.

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

2.1 Is the proposed action likely to impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to impact on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Proteaceae Dominated Kwongkan Shrublands	During the biological survey it was identified

Species	Impact
of the Southeast Coastal Floristic Province of Western Australia Threatened Ecological Community	that one of the vegetation units within the project area is consistent with the Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia Threatened Ecological Community (TEC). There will only be 0.2ha of this TEC removed as part of this project. Given the small amount of clearing, that this vegetation is adjacent to the roads edge and is the edge of the much larger Bakers Junction Nature Reserve which represents this TEC it is unlikely to be that the conservation status and function of the TEC will be significantly impacted by the project.
Australasian Bittern	The Australasian Bittern inhabits densely freshwater wetlands. There are two locations within the survey that were identified as potential habitat for this species. This is tall Baumea sedgeland surrounded by a 2-3m thicket of Taxandria linearifolia and T. parviceps. There was 0.33ha identified within the survey but only 0.01ha is being removed by this project. As such it is unlikely that this species will be significantly impacted by the project activities.
Black Cockatoos	The project area is within the known distribution and predicted breeding range of the Carnaby's Cockatoo, Baudin's Cockatoo and Forest Red-tailed Black Cockatoo. During the survey a flock of Carnaby's and several flocks of Forest Red-tailed Black Cockatoos were sighted flying over the area and evidence of foraging by Carnaby's and Forest Red-tailed Black Cockatoos was identified on Banksias and Marris within the project area. Within the project area these species could find foraging/potential breeding habitat within the Eucalyptus woodland/forest and Banksia shrublands. Within the survey a total of 435 trees were identified as potential breeding trees as they are over 50cm DBH and 60 of these area current or potential breeding trees as they contain hollows. Within the project area up to 10 of these potential breeding trees will be removed and only two of these contain hollows. One hollow is too small to be currently used.

Species	Impact
	The second hollow is a medium size and though not currently in use, is a potentially usuable hollow. This tree has potential breeding capacity and as such will demarcated by Main Roads to ensure it is not removed by the project activities. It is unlikely that the removal of 1.12ha of foraging habitat and 9 potential breeding trees, only one with a hollow which is too small to be used, will significantly impact this species, given the amount of other trees identified in the immediate area and the excellent condition vegetation that is remaining in the neighbouring conservation area. The Bakers Junction Nature Reserve is over 1000ha and includes foraging habitat and habitat trees. This means the foraging habitat that is to be removed for the project is approximately 0.1% of the available habitat in the immediate area. As the project area is adjacent to the existing highway it is unlikely to be critical habitat and as such these cockatoo species are unlikely to be significantly impacted by the project activities.
Western Ringtail Possum	During this survey it was identified that the Western Ringtail Possum would be able to find appropriate habitat within the project area and use it as a corridor. Several scat accumulations and dreys were found within the project area and one tree with a hollow showed evidence of use by a possum. This tree will be demarcated and not removed as part of the project activities. This project area presents habitat for the Western Ringtail Possum and as such Main Roads has commissioned a Management Plan that will be implemented during the project lifespan to ensure no direct or indirect impact to the Western Ringtail Possum during the clearing activities. It is unlikely that the project area represents significant habitat for this species as only a small linear section of habitat will be removed from the edge of an existing road. The remainder of the road reserve and the adjacent conservation area will remain and will provide habitat for these species. This species will be able to utilise the surrounding area for habitat and corridors between nearby conservation areas. Therefore this project is

Species	Impact
	unlikely to significantly impact this species.

2.4.2 Do you consider this impact to be significant?

No

2.5 Is the proposed action likely to impact on the members of any listed migratory species, or their habitat?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action likely to impact on any part of the environment in the Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Will there be any impact on a water resource related to coal / gas / mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to impact on any part of the environment in the

Commonwealth marine area?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

The only Threatened or Priority Ecological Communities that were identified within the project area is the "Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia" Threatened Ecological Community discussed in Section 2.4

Within the survey area a total of 397 flora species were recorded. No threatened flora were recorded, one priority flora species *Astartea transversa* was identified within the survey however this P2 flora occurs outside the project area.

Five vegetation units were mapped within the project area. This has the potential to provide habitat for six protected fauna species. The Australasian Bittern, Carnaby's Cockatoo, Forest Red-tailed Cockatoo, Baudin's Cockatoo and Western Ringtail Possum are all discussed previously in Section 2.4.

The remaining species is a priority 5 species the *Isodon obesulus subsp. fusciventer* (Southern Brown Bandicoot). Southern Brown Bandicoot occurs in wet or dry sclerophyll forest through to open woodland and scrubby, dense vegetation on sandy soils. This species was identified walking through the survey area and evidence of its presence was found within the survey area, particularly in the *E.staeri* woodlands and Banksia shrublands. There is 0.52 ha of vegetation that could present habitat to this mobile species.

3.2 Describe the hydrology relevant to the project area (including water flows).

Three minor non-perennial watercourses intersect the project area. There is one wetland that intersects the project area from 10.67-12.96 SLK; this is the Johnston Creek conservation class palusplain wetland. The project does not occur on any Surface Water Irrigation Areas, Groundwater Area or Public Drinking Water Source Areas.

The project will not change the hydrology of the area. Management measures will be put in place to minimise the potential impacts to this wetland and watercourse. As no surface water will be taken for this project and due to the minor nature of the works it is unlikely that there will be a significant impact to the water quality of this area. Given the small scale of clearing and that no dewatering or drainage modifications are required; it is considered that there will be very little to no deterioration of underground water quality. The drainage of the road will ensure that any runoff from the road will be captured and transported away from the wetland. As such a

small percentage of the wetland will be impacted and as the wetland is intersected by the current road it is unlikely that the widening required for this project will significantly impact this wetland.

3.3 Describe the soil and vegetation characteristics relevant to the project area.

The project area is in degraded to very good/excellent condition with the majority of the vegetation in very good/excellent condition (EPA, 2016).

Five vegetation units were mapped during the detailed field survey (Rathbone 2016). These are:

Jarrah/Sheoak/E.staeri Sandy Woodland

Woodlands of Jarrah/Sheoak/*Eucalyptus staeri* were recorded on mid slopes on deep white/grey sandy soils.

Areas in excellent condition are described as a woodland of *Eucalyptus staeri, Eucalyptus marginata* and *Allocasuarina fraseriana* over tall shrubland of *Agonis theiformis, Hakea ruscifolia* and *Gompholobium scabrum* over diverse low shrubland of *Isopogon longifolia, Beaufortia anisandra, Adenanthos cuneatus, Leucopogon glabellus, Daviesia flexuosa, Daviesia incrassata, Hypocalymma strictum, Gompholobium venustum, Acacia browniana, Petrophile rigida, Boronia spathulata, Synaphea polymorpha* and *Hibbertia depressa* over a sedgeland of *Anarthria scabra, Cyathochaeta equitans, Tricostularia neesii, Anarthria prolifera* and *Schoenus caespititius.*

Jarrah/Marri/Sheoak Laterite Forest

Woodlands or forest of Jarrah/Marri/Sheoak were recorded on upper slopes and hill crests with gravel or outcropping laterite and loam or sandy soils.

Areas in excellent condition are described as a woodland or forest of *Eucalyptus marginata*, *Corymbia calophylla*, *Eucalyptus staeri*, and *Allocasuarina fraseriana* over tall shrubland of *Banksia grandis*, *Hakea amplexicaulis* and *Persoonia longifolia* over a shrubland of *Agonis theiformis, Bossiaea linophylla, Beaufortia decussata, Taxandria parviceps, and Leucopogon verticillatus* over a low shrubland of *Xanthosia rotundifolia, Bossiaea ornata, Tetratheca setigera and Hovea chorizemifolia* over a sedgeland (including forbs) of *Anarthria prolifera, Tetraria octandra, Tetraria* sp. Jarrah Forest, *Desmocladus fascicularis* and *Patersonia umbrosa* var. *umbrosa.*

***Taxandria parviceps* Transitional Shrubland**

Shrublands to closed shrublands of *Taxandria parviceps* were recorded on the margins of wetlands and lower slopes in deep grey sands.

Areas in excellent condition are described as isolated trees of *Eucalyptus staeri, Banksia littoralis* or *Banksia quercifolia* over a closed shrub of *Taxandria parviceps* over a low shrubland

of *Hakea ceratophylla, Adenanths obovatus, Beaufortia decussata* and *Sphaerolobium grandiflorum* over a sedgeland of *Anarthria scabra, Anarthria laevis, Mesomelaena gracilipes, Schoenus efoliatus, Schoenus acuminatus* and *Chordifex laxus.* Herbs such as *Drosera* and *Stylidium* were common in this vegetation. Some long unburnt areas had a very tall and closed canopy. In more recently burnt areas, habitat for the Threatened orchid, *Drakaea micrantha* existed within this community.

***Homalospermum firmum/Callistemon glaucus* Peat Thicket**

Shrublands to closed shrublands of *Homalospermum firmum* and *Callistemon glaucus* were recorded in seasonally wet lower areas of broad drainage channels in leached grey sand with a heavy peat layer. These sites are waterlogged in winter and usually moist in summer.

Areas in excellent condition are described as a closed shrubland of *Taxandria linearifolia Homalospermum firmum, Callistemon glaucus, Aotus intermedia, Hakea linearis, Taxandria parviceps, Sphaerolobium fornicatum* and *Acacia hastulata* with a diverse sedgeland of *Evandra aristata, Empodisma gracillimum, Gymnoschoenus anceps, Schoenus multiglumis, Leptocarpus tenax, Gahnia decomposita, Lepidosperma striatum* and *Xyris lanata*. Standing water occurs within this community in the very lowest part of the valley profile, where *Baumea rubiginosa, B. vaginalis and B. arthrophylla* become dominant.

***Banksia coccinea* Shrubland/*Eucalyptus staeri*/Sheoak Open Woodland**

Shrublands of *Banksia coccinea* with *Eucalyptus staeri*/Sheoak Open Woodland were recorded on lower slopes on the margin of seasonally wet drainage lines in white/light grey sands.

Areas in excellent condition are described as an open woodland or isolated trees of *Eucalyptus staeri, Eucalyptus marginata* and *Allocasuarina fraseriana* over a tall shrubland of *Banksia coccinea* and *Taxandria parviceps* over a mid-open shrubland of *Jacksonia spinosa, Gompholobium scabrum, Melaleuca thymoides, Adenanthos cuneatus* and *Adenanthos obovatus* over a dense sedgeland of *Anarthria scabra* and *Anarthria prolifera*. A high proportion of the species within this vegetation type are susceptible to Phytophthora Dieback, which is prevalent in the Survey Area. In areas of high disease impact the shrubland of *Banksia coccinea* becomes sparse or absent and the diversity of lower shrub species reduces.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

Not applicable

3.5 Describe the status of native vegetation relevant to the project area.

The project area is mapped as Vegetation Association 3 described as a Medium forest: jarrah-marri, Vegetation Association 51 described as Sedgeland; reed swamps, occasionally with heath and Vegetation Association 978 described as Low forest; jarrah, Eucalyptus staeri &

Allocasuarina fraseriana. (Government of Western Australia, 2016).

There is approximately 67.24%, 36.49% and 35.67% vegetation remaining in the area.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

Not relevant

3.7 Describe the current condition of the environment relevant to the project area.

The project area is confined to the road reserve which contains the exisiting South Coast Highway.The road reserve is comprised of remnant vegetation and areas previously cleared for the maintenance of the road and access/driveways to local properties. The vegetation is in degraded to very good/excellent condition with the majority of the vegetation in very good/excellent condition (EPA, 2016).

Within the biological assessment many common weed species were identified within the survey area. Two Weeds of National Significance were identified within the survey area, Bridal Creeper (Asparagus asparagoides) and Blackberry (Rubus species complex). There were no declared weeds identified within the project area but construction personnel will be made aware of these weeds and any infestations identified within the project area will be removed.

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

No Commonwealth Heritage Places will be impacted.

The State Heritage Register (inherit database) and the ArcGIS shapefiles has indicated that there are over 45 known sites of heritage significance within the study area, the majority of which occur within the townsite of Albany. The nearest site is the Bakers Junction Nature Reserve and adjacent reserves that is located adjacent to the project on the north side of the road from 11-14.16 SLK.

As the project is contained to the Main Roads road reserve it is unlikely that this site will be impacted by the project activities. Given the small localised impacts expected from this project no impacts to non-indigenous heritage sites are expected.

3.9 Describe any Indigenous heritage values relevant to the project area.

The Aboriginal Heritage Risk Assessment (AHRA) identified no known heritage sites and one lodged heritage site within the vicinity of the project area and an overall risk rating of Medium. The AHRA is provided in Appendix B.

The lodged place is Paddy's Coyne's Camp. This site is located approximately 15m north of SCH and is unlikely to be impacted by the project activities. Site personnel will be made aware of this sites location. No further heritage actions are recommended.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

The project area is road reserve vested with the Commissioner of Main Roads.

3.11 Describe any existing or any proposed uses relevant to the project area.

The area is currently road reserve

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

Impact Avoidance During the development phase of this project, Main Roads incorporated environmental considerations in selecting the design. During the design phase, the design wasrationalised to reduce the amount of clearing whilst providing a safe and safety compliant design. The clearing line will be pegged prior to clearing commencing and where possible vegetation 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), a Vegetation Management Plan (VMP), a Dieback Management Plan (DMP) and a Possum Management Plan (PMP) will be created for this project. 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. Key aspects are detailed below:-Project area will be included in Main Roads annual weed program to ensure no new weed infestations particularly adjacent to the Nature Reserve.-Possum Management Plan will be implemented-Dieback Management Plan will be implemented.-The clearing area demarcation will be checked and approved by the Environment Officer or Project Manager prior to clearing.-Trees of significant fauna habitat value will be demarcated and retained. -Clearing of vegetation shall not exceed the limits of clearing and mature trees especially, shall be conserved as far as practicable, and shall not be disturbed for such temporary works as side tracks, access tracks, temporary storage areas, campsites, spoil areas or site offices.-Restrict movement of machines and other vehicles to the limits of the areas cleared.-Vehicle and equipment wash down areas will be located away from environmentally sensitive areas, reserves and at least 50 m from waterways.-Spoil and laydown areas will not be stored within 50 m of waterways.-Spill kits will be present on site and all staff trained in their use.-Refuelling will be undertaken in accordance with the SHEWMS or equivalent.-All waste materials from the project area will be removed from the site to a suitable licenced facility upon completion of the project and to the satisfaction of the Project Manager or SiteSuperintendent.-Bulk fuel and hazardous material storage areas will be bunded and managed in compliance with applicable Australian Standards.-Regular vehicle servicing will be undertaken at designated areas, at least 100 m away from watercourses.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

It has been determined that 1.12ha of potential Black Cockatoo breeding and foraging habitat will be removed. There are 10 potential breeding trees with greater than 50cm DBH within the project area but only 9 will be removed. Only one of these 9 trees has a hollow but it is too small to be utilised. 0.2ha of the TEC "Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia" will also be removed. The project also involves the removal of Western Ringtail Possum habitat which will be managed through the Possum Management Plan.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

This project is not considered likely to be a controlled action.

The project is likely to remove up to 0.2 ha of vegetation that represents the “Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia” TEC. The TEC that is to be removed occurs on the edge of an existing highway and contiguous with larger remnants of this TEC, including surrounding conservation areas, that are in similar or better condition than the vegetation to be removed. It is unlikely that this project will create any fragmentation or break any linkages of this TEC as only the edges of pre-existing remnants near the already disturbed road corridor will be removed. Given the large amount of this TEC that will remain in the area adjacent to the road it is unlikely that the small linear section of vegetation to be removed will significantly impact the “Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia” TEC.

There is a total of 1.12 ha of Carnaby’s Cockatoo foraging habitat along a 5.96 km stretch of highway that will be removed for this project. The project requires the removal of 9 potential breeding trees with greater than 50cm DBH, only one of which contains a hollow but it is too small to be utilised. The surrounding area has similar vegetation and habitat values to the project area.The removal of a linear section of vegetation from the edge of a larger area of similar vegetation reduces the significance of the vegetation to be removed. It is unlikely that there will be a significant impact to Carnaby's Black Cockatoo as there is an abundance of alternative habitat available for this species.

The Western Ringtail Possum is not restricted to the vegetation within the road reserve but is utilizing the larger areas of habitat immediately adjacent. To ensure no direct or indirect impacts resulting from the minor clearing, a possum management plan has been commissioned from Dr Sandra Gilfillan a south coast Western Ringtail Possum expert and will be implemented. This will manage the risks to this species. There is one tree identified as currently containing an

occupied hollow but this will be demarcated and will not be cleared as part of these works.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

Main Roads is a State agency and have a sound record of responsible environmental management and environmental management systems. Main Roads seeks to achieve balanced and sustainable outcomes for the community with responsible environmental stewardship in developing and maintaining the road network critical to its success. Main Roads is committed to:-Protecting and enhancing the environmental values of road reserves-Minimising the impact on the natural environment of roads and road use-Conserving natural resources and minimising energy consumption and waste. A corporate Environmental Management System facilitates management of environmental risks and performance improvement. The independently certified and audited system is integratedinto all key processes including planning, delivery, maintenance, network operations and supporting services.Main Roads holds Certificate No. EMS 530437 and operates an Environmental Management System which complies with the requirements of ISO 14001:2004 for the followingscope: Main Roads Total Management System comprising Planning, Delivery, Maintenance, Network Operations and Supporting Services. Officially registered since 14 July 2005 under Certificate 149459.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

Not applicable

6.3 Will the action be taken in accordance with the corporation's environmental policy and planning framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.

Main Roads operates under an Environment Policy and Sustainability Policy, as well as an

Environmental Assessment and Approvals Guideline. Main Roads also has an ISO 14001 accredited Environmental Management System. Main Roads Environmental Policy Statement (2004):-Main Roads manages the State's road network to provide safe and efficient road access that will enhance community lifestyles and support economic prosperity.-Main Roads seeks to achieve balanced and sustainable outcomes for the community.-Responsible environmental stewardship in developing and maintaining the road network is critical to thesuccess of Main Roads.Principles Main Roads is committed to:-Protecting and enhancing the environmental values of road reserves;-Minimising the impact on the natural environment of roads and road use; and-Conserving natural resources and minimising energy consumption and waste.ObjectivesIn applying these principles, Main Roads aims to:-Fully satisfy all environmental legislation, Government Policy and, where specific legislation is lacking, uphold the spirit of the law;-Implement, maintain and continually improve an effective environmental management system across Main Roads planning, business, project and managementprocesses;-Apply an approach of "avoid, minimise and mitigate", in order of preference, to the management of environmental impacts associated with road construction projects;-Develop awareness of environmental management processes, standards and responsibilities among Main Roads' employees and contractor partners;-Listen and be responsive to community and stakeholder views on environmental issues; and-Set specific environmental objectives and targets relating to the key environmental aspects of Main Roads' activities, and measure and report progress in achieving these targets.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

Yes

6.4.1 EPBC Act No and/or Name of Proposal.

Main Roads has previously referred projects under the EPBC Act including:

Albany Highway 242 to 248 Kojonup EPBC 2013/6842

South Coast highway Cheynes West EPBC 2013/6933

Tunney Passing Lanes EPBC 2014/7309

Northam Cranbrook Widening EPBC 2016/7714

Albany Highway Harold Rd EPBC 2016/7762

South Coast highway Cheynes East EPBC 2016/7777

Kojonup South (currently under assessment) EPBC 2017/7934

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Beeston, G.R., Hopkins, A.J.M. and Shepherd, D.P. (2002). Land-use and vegetation in Western Australia. Department of Agriculture, Western Australia, Resource Management Technical Report 250. CSIRO. (2014). Australian Soil Resource Information System (ASRIS) Database. Available online from http://www.asris.csiro.au Accessed 16/5/2017. Department of Aboriginal Affairs. (2016). Aboriginal Heritage Inquiry System Search for Registered Sites, Other Heritage Sites and Surveys. Available online from: http://maps.dia.wa.gov.au/AHIS2/default.aspx. Accessed 5/9/2016. Department of the Environment (2013). Matters of National Environmental Significance, Significant Impact Guidelines 1.1, Environment Protection and Biodiversity Conservation Act 1999. Canberra, Australian Capital Territory. Department of the Environment and Energy. (2017). Protected Matters Search Tool Report. Available online from: http://www.environment.gov.au/epbc/pmst/index.html / Accessed 16/5/2017.	All information is recent and reliable	There are no uncertainties

Reference Source	Reliability	Uncertainties
Department of the Environment and Energy. (2017). Species Profile and Threats Database. Available online from: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl / Accessed 18/5/2017. Department of Natural Resources and Environment (2002). Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria. Government of Western Australia. (2017). Contaminated Sites Database. Shire of Albany WA Department of Environment Regulation, Perth, Western Australia. Available online from: https://secure.dec.wa.gov.au/idelve/css/ Accessed 17/5/2017. Government of Western Australia. 2012. inHerit. South Coast Highway State Heritage Office, Perth, Western Australia. Available online from: http://inherit.stateheritage.wa.gov.au/public Accessed 17/5/2017. Government of Western Australia. (2014). 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. Department of Parks and Wildlife, 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. Rathbone Botanical Surveys (2017)		

Reference Source	Reliability	Uncertainties
Biological Assessment South Coast Highway King River to Kalgan River 7.16 to 18.12 SLK. Unpublished Report prepared for Main Roads Western Australia Western Australian Herbarium (2017). Florabase - The Western Australian Flora. Department of Parks and Wildlife. Available online from: https://florabase.dpaw.wa.gov.au/ Accessed 31/5/2017.		

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

There are no feasible alternative to taking the proposed action, other than not upgrading the safety of the existing road.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Project Manager

9.2.2 First Name

Brian

9.2.3 Last Name

Nevin

9.2.4 E-mail

brian.nevin@mainroads.wa.gov.au

9.2.5 Postal Address

PO Box 503
Albany WA 6331
Australia

9.2.6 ABN/ACN

ABN

50860676021 - MAIN ROADS

9.2.7 Organisation Telephone

138 138

9.2.8 Organisation E-mail

enquiries@mainroads.wa.gov.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date: .....

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 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

Person proposing the action - Declaration

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

Signature: Brian Nevin Date: 16/8/2017

I, Brian Nevin, the person proposing the action, consent to the designation of _____ as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature: Brian Nevin Date: 16/8/2017

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Project Manager

9.5.2 First Name

Brian

9.5.3 Last Name

Nevin

9.5.4 E-mail

brian.nevin@mainroads.wa.gov.au

9.5.5 Postal Address

PO Box 503
Albany WA 6331
Australia

9.5.6 ABN/ACN

ABN

50860676021 - MAIN ROADS

9.5.7 Organisation Telephone

138 138

9.5.8 Organisation E-mail

enquiries@mainroads.wa.gov.au

Proposed designated proponent - Declaration

I, Brian Nevin, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:…… Date: ……

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Environment Officer

9.8.2 First Name

Alix

9.8.3 Last Name

Chinnery

9.8.4 E-mail

alix.chinnery@mainroads.wa.gov.au

9.8.5 Postal Address

PO Box 6202
East Perth WA 6892
Australia

9.8.6 ABN/ACN

ABN

50860676021 - MAIN ROADS

9.8.7 Organisation Telephone

138 138

9.8.8 Organisation E-mail

enquiries@mainroads.wa.gov.au

Referring Party - Declaration

I, Alix Chinnery, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: ..... Date: 11/8/17

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. bakers_junction_7.16_to_18.12_slk_sch_management_plan_for_the_wrp.pdf
2. dieback_survey_report_gsbl_sch_bakers_junction_part1.pdf
3. dieback_survey_report_gsbl_sch_bakers_junction_part2.pdf
4. dieback_survey_report_gsbl_sch_bakers_junction_part3.pdf
5. part_1_sch_widening_8.2-14.16_slk-peia_emp.docx
6. part_2_sch_widening_8.2-14.16_slk-peia_emp.docx
7. project_total_footprint_7_to_14_may_15.zip
8. sc_hwy_7-18_bio_report_damien_rathbone_2016_part1.pdf
9. sc_hwy_7-18_bio_report_damien_rathbone_2016_part2.pdf
10. sc_hwy_7-18_bio_report_damien_rathbone_2016_part3.pdf
11. sc_hwy_7-18_bio_report_damien_rathbone_2016_part4.pdf
12. sc_hwy_7-18_bio_report_damien_rathbone_2016_part5.pdf
13. sch_widening_8.2-14.16slk-assessment_report_vmp.docx