



Environmental Protection Authority

EPA REFERRAL FORM
PROPONENT

Referral of a Proposal by the Proponent to the Environmental Protection Authority under Section 38(1) of the *Environmental Protection Act 1986*.

PURPOSE OF THIS FORM

Section 38(1) of the *Environmental Protection Act 1986* (EP Act) provides that where a development proposal is likely to have a significant effect on the environment, a proponent may refer the proposal to the Environmental Protection Authority (EPA) for a decision on whether or not it requires assessment under the EP Act. This form sets out the information requirements for the referral of a proposal by a proponent.

Proponents are encouraged to familiarise themselves with the EPA's *General Guide on Referral of Proposals* [see Environmental Impact Assessment/Referral of Proposals and Schemes] before completing this form.

A referral under section 38(1) of the EP Act by a proponent to the EPA must be made on this form. A request to the EPA for a declaration under section 39B (derived proposal) must be made on this form. This form will be treated as a referral provided all information required by Part A has been included and all information requested by Part B has been provided to the extent that it is pertinent to the proposal being referred. Referral documents are to be submitted in two formats – hard copy and electronic copy. The electronic copy of the referral will be provided for public comment for a period of 7 days, prior to the EPA making its decision on whether or not to assess the proposal.

CHECKLIST

Before you submit this form, please check that you have:

	Yes	No
Completed all the questions in Part A (essential).	✓	
Completed all applicable questions in Part B.	✓	
Included Attachment 1 – location maps.	✓	
Included Attachment 2 – additional document(s) the proponent wishes to provide (if applicable).	✓	
Included Attachment 3 – confidential information (if applicable).		
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but excluding confidential information.	✓	

Office of the Environmental Protection Authority

2 - APR 2014


A:	<input type="checkbox"/> For Information
for:	<input type="checkbox"/> For Discussion
Officer:	<input type="checkbox"/> For Action
<input type="checkbox"/> Dir. AC	Response to: <input type="checkbox"/> lease-
<input type="checkbox"/> Dir. Bus Ops	<input type="checkbox"/> GM
<input type="checkbox"/> Dir. SEPD	<input type="checkbox"/> Significant
<input type="checkbox"/> Dir. Air Quality	<input type="checkbox"/> Dir. Air GM
<input type="checkbox"/> Dir. Water	<input type="checkbox"/> (by GM)
<input type="checkbox"/> Dir. Land Use	<input type="checkbox"/> (by GM)
<input type="checkbox"/> Dir. Noise	<input type="checkbox"/> (by GM)
<input type="checkbox"/> Dir. Waste	<input type="checkbox"/> (by GM)
<input type="checkbox"/> Dir. Radiation	<input type="checkbox"/> (by GM)
<input type="checkbox"/> Dir. Other	<input type="checkbox"/> (by GM)

Following a review of the information presented in this form, please consider the following question (a response is optional).

Do you consider the proposal requires formal environmental impact assessment?		
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Not sure
If yes, what level of assessment?		
<input type="checkbox"/> Assessment on Proponent Information	<input type="checkbox"/> Public Environmental Review	

PROPONENT DECLARATION (to be completed by the proponent)

I, Andrew Duffield, (full name) declare that I am authorised on behalf of Main Roads WA (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

Signature		Name (print)	Andrew Duffield.
Position	Regional Manager	Company	Main Roads.
Date	7/3/14		

PART A - PROPONENT AND PROPOSAL INFORMATION

(All fields of Part A must be completed for this document to be treated as a referral)

1 PROPONENT AND PROPOSAL INFORMATION

1.1 Proponent

Name	Main Roads WA Great Southern Region
Joint Venture parties (if applicable)	
Australian Company Number (if applicable)	
Postal Address (where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)	Main Roads WA PO Box 503 Albany WA 6331
Key proponent contact for the proposal: <ul style="list-style-type: none">• name• address• phone• email	Mr Lindsay McCartin PO Box 503, Albany WA, 6331 618 9892 0531 Lindsay.mccartin@mainroads.wa.gov.au
Consultant for the proposal (if applicable): <ul style="list-style-type: none">• name• address• phone• email	Craig Grabham GHD 61 62228081 Craig.Grabham@ghd.com

1.2 Proposal

Title	Ravensthorpe Heavy Haulage Route
Description	<p>The South Coast Highway (SCH) is the main inter-regional route between the Goldfields-Esperance and Great Southern Regions, and links the towns of Albany, Ravensthorpe and Esperance.</p> <p>The SCH, which has operated as a significant freight route for many years, climbs steeply through the town Ravensthorpe. Most heavy vehicles climb the Ravensthorpe Hill without incident. However, a small minority fail to negotiate the steep grade and stall on the hill. Anecdotally there are reports of between 20 and 50 heavy vehicles per year being stranded while attempting the incline.</p> <p>Main Roads Western Australia (Main Roads) is proposing to construct a heavy haulage route which will bypass the township of Ravensthorpe to the north. The proposed Ravensthorpe Heavy Haulage Route (RHHR) will provide an alternative heavy vehicle route around Ravensthorpe which eliminates the "stall" risk for heavy vehicles and addresses the safety issues arising from trucks losing traction on the steep hill through Ravensthorpe town site.</p> <p>The Project also includes the realignment of the Hopetoun Road intersection with the SCH. The</p>

	<p>Hopetoun Road currently intersects with the SCH in a 'Y' Junction configuration opposite the Ravensthorpe School. The opportunity to realign the Hopetoun Road intersection with the SCH is being undertaken to improve safety and the level of service of this intersection. The new intersection will be at right angles to the SCH and will form part of a roundabout with the SCH / heavy haulage route intersection. Additionally, the intersection and Hopetoun Road will be relocated away from the Ravensthorpe School.</p>
<p>Extent (area) of proposed ground disturbance.</p>	<p>The proposed works will include the construction of approximately 4.4 km of new road that will bypass the Ravensthorpe Town Site and 1.9 km of road reconstruction of the South Coast Highway. The Project Area is located in the Shire of Ravensthorpe, to the north and east of the Ravensthorpe township (Figure 1). The proposed works include the construction of the RHHR that will bypass Ravensthorpe town to the north and the realignment of the Hopetoun Road to the east of Ravensthorpe town..</p> <p>The Project Area is 32.8 hectares (ha) in total, comprising three (3) sections outlined below.</p> <p>Section 1 SCH SLK 287.5 to 289.1, RHHR SLK 288.6 to 289.4</p> <p>Includes a 1.5 km stretch of the SCH which is 20-40 m wide (6.2 ha) and is located on the SCH/RHHR intersection at the western end of the Project Area. This section also includes 1.2km of the RHHR which is located in pasture paddocks.</p> <p>Section 2 RHHR SLK 289.4 to 291.9</p> <p>This section is 1.7 km long, 40-70 m wide (12.27 ha) and is located in the central part of the Project Area to the north of Ravensthorpe. This section is predominately the RHHR and side road connections.. This Section includes 250 m of re-alignment of Floater Rd.</p> <p>Section 3 SCH SLK 290.8 to 291.6 and Hopetoun Road Realignment SLK 0 to SLK 1.1</p> <p>A 14.4 ha section that includes 0.8 km along SCH, 700 m of the Hopetoun road realignment and the SCH/RHHR/Hopetoun Road intersection</p>
<p>Timeframe in which the activity or development is proposed to occur (including start and finish dates where applicable).</p>	<p>All Sections are scheduled for construction from October 2014 to May 2015. Preconstruction works are scheduled to commence from February to June 2014.</p>
<p>Details of any staging of the proposal.</p>	<p>As above.</p>

Is the proposal a strategic proposal?	No.
Is the proponent requesting a declaration that the proposal is a derived proposal? If so, provide the following information on the strategic assessment within which the referred proposal was identified: <ul style="list-style-type: none"> • title of the strategic assessment; and • Ministerial Statement number. 	No.
Please indicate whether, and in what way, the proposal is related to other proposals in the region.	The proposal is not related to other proposals in the region.
Does the proponent own the land on which the proposal is to be established? If not, what other arrangements have been established to access the land?	The land is owned by a combination of private owners and the State of WA. Consent is being obtained from all relevant landowners as per Table 3 in the EIA.
What is the current land use on the property, and the extent (area in hectares) of the property?	The Project is located within the Shire of Ravensthorpe, to the north of the Ravensthorpe town site. The majority of the alignment is located in land zoned rural, with two parcels of land zoned recreational. A summary of the land use types and areas intersected by the Project Area is provided in Table 3 of the EIA.

1.3 Location

Name of the Shire in which the proposal is located.	Shire of Ravensthorpe
For urban areas: <ul style="list-style-type: none"> • street address; • lot number; • suburb; and • nearest road intersection. 	N/A
For remote localities: <ul style="list-style-type: none"> • nearest town; and • distance and direction from that town to the proposal site. 	The Project is located directly north of the town of Ravensthorpe. See Figure 1 of the EIA.
Electronic copy of spatial data - GIS or CAD, geo-referenced and conforming to the following parameters: <ul style="list-style-type: none"> • GIS: polygons representing all activities and named; • CAD: simple closed polygons representing all activities and named; • datum: GDA94; • projection: Geographic (latitude/longitude) 	Enclosed

or Map Grid of Australia (MGA); • format: Arcview shapefile, Arcinfo coverages, Microstation or AutoCAD.	
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1.4 Confidential Information

Does the proponent wish to request the EPA to allow any part of the referral information to be treated as confidential?	No
If yes, is confidential information attached as a separate document in hard copy?	N/A

1.5 Government Approvals

Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.	No		
Is approval required from any Commonwealth or State Government agency or Local Authority for any part of the proposal? If yes, please complete the table below.	Yes		
Agency/Authority	Approval required	Application lodged Yes / No	Agency/Local Authority contact(s) for proposal
DER (if not assessed by EPA)	Clearing Permit	No	None as yet

PART B - ENVIRONMENTAL IMPACTS AND PROPOSED MANAGEMENT

2. ENVIRONMENTAL IMPACTS

2.1 Flora and Vegetation

2.1.1 Do you propose to clear any native flora and vegetation as a part of this proposal?

[A proposal to clear native vegetation may require a clearing permit under Part V of the EP Act (Environmental Protection (Clearing of Native Vegetation) Regulations 2004)]. Please contact the Department of Environment and Conservation (DEC) for more information.

(please tick) Yes

If yes, complete the rest of this section.

No

If no, go to the next section

2.1.2 How much vegetation are you proposing to clear (in hectares)?

Up to a total of 24 ha of vegetation will be cleared for the Project (see EIA and EMP GHD 2013).

2.1.3 Have you submitted an application to clear native vegetation to the DEC (unless you are exempt from such a requirement)?

Yes

No

If yes, on what date and to which office was the application submitted of the DEC?

It is intended that Main Roads Statewide Purpose Clearing Permit (CPS 818) will be used for this project.

2.1.4 Are you aware of any recent flora surveys carried out over the area to be disturbed by this proposal?

Yes

No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

A botanical survey and a targeted spring flora survey were undertaken for the Project site in 2013 by Great Southern Biologic. See Appendix C of the EIA (GHD 2013).

2.1.5 Has a search of DEC records for known occurrences of rare or priority flora or threatened ecological communities been conducted for the site?

Yes

No

If you are proposing to clear native vegetation for any part of your proposal, a search of DEC records of known occurrences of rare or priority flora and threatened ecological communities will be required. Please contact DEC for more information.

A total of 31 species of rare or priority flora were identified as potentially occurring within 20 km of the Project Area as a result DPaW searches (see EIA, 2013).

Searches for conservation significant flora were undertaken during the field surveys in June and September 2013. No Threatened flora were recorded during the surveys. One Priority flora species *Acacia bifaria* (Priority 3) was found in the Project area and one Priority flora species *Grevillea sulcata* (Priority 1) was recorded adjacent the Project Area.

A likelihood of occurrence assessment, which takes into account the habitats present, known taxa distribution and previous records, was completed for the Threatened flora taxa identified in the desktop assessment. This assessment concluded that all taxa with the exception of the *Acacia bifaria* were unlikely to occur within the Project Area (GHD 2013). The likelihood assessment was informed by a botanical and targeted spring flora survey of the Project Area.

No Federal or State listed Threatened Ecological Communities were identified within the Project Area during the field survey.

A PMST search (DSEWPaC 2013a) did not indicate any federally listed TECs within 20 km of the Project Area. A search of the DEC TEC and Priority Ecological Communities (PEC) database (DEC 2013c) identified nine PEC in the nearby Ravensthorpe Range, and within the region. All of these grow on soils and landforms that do not occur within the Project Area (see EIA and EMP, GHD 2013).

2.1.6 Are there any known occurrences of rare or priority flora or threatened ecological communities on the site?

Yes No **If yes**, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

Searches for conservation significant flora were undertaken during the field surveys in June and September 2013. No Threatened flora were recorded during the surveys. One Priority flora species *Acacia bifaria* (Priority 3) was found in the Project Area.

No Federal or State listed Threatened Ecological Communities were identified within the Project Area during the field survey.

2.1.7 If located within the Perth Metropolitan Region, is the proposed development within or adjacent to a listed Bush Forever Site? (You will need to contact the Bush Forever Office, at the Department for Planning and Infrastructure)

Yes No **If yes**, please indicate which Bush Forever Site is affected (site number and name of site where appropriate).

The Project is not within the Perth Metropolitan Region.

2.1.8 What is the condition of the vegetation at the site?

Section 1

One vegetation community (*Eucalyptus oleosa* subsp. *corvina* – Eole) occurs in Section 1. The majority of Section 1 is cleared (Completely Degraded). The vegetation that does occur in Section 1 ranges in condition from Very Good to Completely Degraded.

Section 2

Three vegetation communities (*Eucalyptus oleosa* subsp. *corvina* – Eole, *Eucalyptus salmonophloia* – Esal, *Melaleuca hamata* – Mham) occur in Section 2. The vegetation within Section 2 is largely in Excellent to Very Good condition, with a small amount of cleared area in Completely Degraded condition.

Section 3

Two vegetation communities (*Eucalyptus oleosa* subsp. *corvina* – Eole, *Eucalyptus salmonophloia* – Esal) occur in Section 3. The majority of the vegetation of Section 3 ranges from Very Good to Good–Fair condition, with cleared areas (within the townsite) and some areas of vegetation in Completely Degraded condition.

2.2 Fauna

2.2.1 Do you expect that any fauna or fauna habitat will be impacted by the proposal?

- (please tick) Yes **If yes**, complete the rest of this section.
 No **If no**, go to the next section.

2.2.2 Describe the nature and extent of the expected impact.

There are eight habitat types within the Project Area:

- Salmon Gum woodland
- Salmon Gum woodland with degraded understorey
- Mixed Eucalyptus woodland
- Mixed Eucalyptus woodland with degraded understorey
- Melaleuca Shrubland
- Modified Native vegetation
- Completely modified
- Creek line

Each of these habitat types are well represented in the immediate vicinity of the Project Area and in the broader Ravensthorpe district. The Project Area of approximately 32.8 ha consists of up to 19.5 ha of fauna habitat associated with remnant vegetation. The remaining 13.3 ha consists of completely modified

habitats which have very little (e.g. maintained lawns) to no value for native fauna (e.g. bitumen roads).

A detailed assessment of fauna habitat is included in Section 3.10 of the EIA (GHD 2013).

2.2.3 Are you aware of any recent fauna surveys carried out over the area to be disturbed by this proposal?

Yes

No

If yes, please attach a copy of any related survey reports and provide the date and name of persons / companies involved in the survey(s).

If no, please do not arrange to have any biological surveys conducted prior to consulting with the DEC.

Fauna surveys were undertaken in June and October 2013 by GHD (Appendix D of the EIA (GHD 2013)).

2.2.4 Has a search of DEC records for known occurrences of Specially Protected (threatened) fauna been conducted for the site?

Yes

No

(please tick)

The desktop searches identified 21 terrestrial conservation significant fauna species potentially occurring within 20 km of the Project Area including ten Threatened, one Schedule 1 and ten Priority species. An assessment of the likelihood of conservation significant fauna species occurring in the Project Area was conducted (GHD 2013 - Appendix D).

2.2.5 Are there any known occurrences of Specially Protected (threatened) fauna on the site?

Yes

No

If yes, please indicate which species or communities are involved and provide copies of any correspondence with DEC regarding these matters.

No fauna species of conservation significance were recorded within the Project Area during the fauna field surveys.

Carnaby's Black Cockatoo was identified as potentially occurring in the Project area. No Carnaby's Black Cockatoos were recorded within the Project Area during the field surveys. Evidence of foraging by the species was recorded during the June field survey, but not in the October survey. Two groups of Carnaby's Black Cockatoo of approximately 35 individuals per group were recorded in two separate locations, approximately 5 km from the Project Area during the survey period. No evidence of breeding was recorded during the targeted Cockatoo survey in October (which was scheduled to coincide with the breeding period for the species). Furthermore, the species was not recorded in the Ravensthorpe area at all during the October survey period. Given the results of the October targeted survey, it is considered unlikely that the species breeds in the Project Area.

A targeted survey for Malleefowl (*Leipoa ocellata*) was conducted in June 2013. Opportunistic observations for evidence of this bird species were conducted during the survey and no evidence of Malleefowl was recorded.

Opportunistic observations for evidence of the Chuditch (*Dasyurus geoffroi*) were conducted for the duration of the survey. No evidence of Chuditch was found.

Western Brush Wallaby (*Macropus irma*) (Priority 4), Ravensthorpe Range Slider (*Lerista viduata*) (Priority 1) and Peregrine Falcon (*Falco peregrinus*) (Schedule 1) are all considered likely or possible to occur within the Project Area. Although targeted efforts were made to survey for these species they were not recorded during the field surveys.

The Rainbow Bee-eater (*Merops ornatus*) was considered likely to occur in the Project Area and is listed as a species under an international agreement by DPaW and migratory under the EPBC Act (as such the species is considered a MNES). The Rainbow Bee-eater is a reasonably common bird in the Ravensthorpe area and there is suitable habitat within the Project Area and surrounds.

2.3 Rivers, Creeks, Wetlands and Estuaries

2.3.1 Will the development occur within 200 metres of a river, creek, wetland or estuary?

- (please tick) Yes **If yes**, complete the rest of this section.
 No **If no**, go to the next section.

No rivers, creeks or surface water bodies listed under the RIWI Act were identified within the Project Area (DoW 2012).

However, a small waterway / drainage line is located within Section 2. The drainage line is ephemeral and freely draining with only a couple of small pools within the Project Area. Drainage is directly into Catlin Creek which runs parallel to the Project Area, approximately 115 m to the north. The vegetation along this small waterway / drainage line (*Eucalyptus* woodland – *Eucalyptus salmanophloia*) will be cleared by the Project.

The Project is not expected to clear vegetation that would alter current surface water drainage in the long term.

2.3.2 Will the development result in the clearing of vegetation within the 200 metre zone?

- Yes No **If yes**, please describe the extent of the expected impact.

The vegetation along this small waterway / drainage line (*Eucalyptus* woodland – *Eucalyptus salmanophloia*) will be cleared by the Project. The Project is not expected to clear vegetation that would alter current surface water drainage in the long term.

2.3.3 Will the development result in the filling or excavation of a river, creek, wetland or estuary?

Yes X No **If yes**, please describe the extent of the expected impact.

2.3.4 Will the development result in the impoundment of a river, creek, wetland or estuary?

Yes X No **If yes**, please describe the extent of the expected impact.

2.3.5 Will the development result in draining to a river, creek, wetland or estuary?

Yes X No **If yes**, please describe the extent of the expected impact.

Are you aware if the proposal will impact on a river, creek, wetland or estuary (or its estuary (or its buffer) within one of the following categories? (please tick)

Conservation Category Wetland	<input type="checkbox"/> Yes	X No	<input type="checkbox"/> Unsure
Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998	<input type="checkbox"/> Yes	X No	<input type="checkbox"/> Unsure
Perth's Bush Forever site	<input type="checkbox"/> Yes	X No	<input type="checkbox"/> Unsure
Environmental Protection (Swan & Canning Rivers) Policy 1998	<input type="checkbox"/> Yes	X No	<input type="checkbox"/> Unsure
The management area as defined in s4(1) of the <i>Swan River Trust Act 1988</i>	<input type="checkbox"/> Yes	X No	<input type="checkbox"/> Unsure
Which is subject to an international agreement, because of the importance of the wetland for waterbirds and waterbird habitats (e.g. Ramsar, JAMBA, CAMBA)	<input type="checkbox"/> Yes	X No	<input type="checkbox"/> Unsure

2.4 Significant Areas and/ or Land Features

2.4.1 Is the proposed development located within or adjacent to an existing or proposed National Park or Nature Reserve?

Yes X No **If yes**, please provide details.

2.4.2 Are you aware of any Environmentally Sensitive Areas (as declared by the Minister under section 51B of the EP Act) that will be impacted by the proposed development?

Yes X No **If yes**, please provide details.

2.4.3 Are you aware of any significant natural land features (e.g. caves, ranges etc) that will be impacted by the proposed development?

Yes X No **If yes**, please provide details.

2.5 Coastal Zone Areas (Coastal Dunes and Beaches)

2.5.1 Will the development occur within 300metres of a coastal area?

(please tick) Yes **If yes**, complete the rest of this section.

X No **If no**, go to the next section.

2.5.2 What is the expected setback of the development from the high tide level and from the primary dune?

N/A

2.5.3 Will the development impact on coastal areas with significant landforms including beach ridge plain, cusped headland, coastal dunes or karst?

Yes X No **If yes**, please describe the extent of the expected impact.

2.5.4 Is the development likely to impact on mangroves?

Yes X No **If yes**, please describe the extent of the expected impact.

2.6 Marine Areas and Biota

2.6.1 Is the development likely to impact on an area of sensitive benthic communities, such as seagrasses, coral reefs or mangroves?

Yes X No **If yes**, please describe the extent of the expected impact.

2.6.2 Is the development likely to impact on marine conservation reserves or areas recommended for reservation (as described in *A Representative Marine Reserve System for Western Australia*, CALM, 1994)?

Yes X No **If yes**, please describe the extent of the expected impact.

2.6.3 Is the development likely to impact on marine areas used extensively for recreation or for commercial fishing activities?

Yes X No **If yes**, please describe the extent of the expected impact, and provide any written advice from relevant agencies (e.g. Fisheries WA).

2.7 Water Supply and Drainage Catchments

2.7.1 Are you in a proclaimed or proposed groundwater or surface water protection area?

(You may need to contact the Department of Water (DoW) for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

X Yes No **If yes**, please describe what category of area.

The Project is within the Ravensthorpe Surface Water Area.

2.7.2 Are you in an existing or proposed Underground Water Supply and Pollution Control area?

(You may need to contact the DoW for more information on the requirements for your location, including the requirement for licences for water abstraction. Also, refer to the DoW website)

Yes X No **If yes**, please describe what category of area.

2.7.3 Are you in a Public Drinking Water Supply Area (PDWSA)?

(You may need to contact the DoW for more information or refer to the DoW website. A proposal to clear vegetation within a PDWSA requires approval from DoW.)

Yes No **If yes**, please describe what category of area.

The Project is within the Ravensthorpe PDWSA Catchment Area. No impacts to the PDWSA are expected as a result of this Project.

2.7.4 Is there sufficient water available for the proposal?

(Please consult with the DoW as to whether approvals are required to source water as you propose. Where necessary, please provide a letter of intent from the DoW)

Yes No (please tick)

2.7.5 Will the proposal require drainage of the land?

Yes No **If yes**, how is the site to be drained and will the drainage be connected to an existing Local Authority or Water Corporation drainage system? Please provide details.

2.7.6 Is there a water requirement for the construction and/ or operation of this proposal?

(please tick) Yes **If yes**, complete the rest of this section.
 No **If no**, go to the next section.

2.7.7 What is the water requirement for the construction and operation of this proposal, in kilolitres per year? An estimated 20,000 Kilolitres are required for the duration of the Project.d

2.7.8 What is the proposed source of water for the proposal? (e.g. dam, bore, surface water etc.) Dam – Cordingup for Water Corporation

2.8 Pollution

2.8.1 Is there likely to be any discharge of pollutants from this development, such as noise, vibration, gaseous emissions, dust, liquid effluent, solid waste or other pollutants?

(please tick) Yes **If yes**, complete the rest of this section.
 No **If no**, go to the next section.

Noise and vibration impacts are expected during construction, as well as dust and solid wastes.

2.8.2 Is the proposal a prescribed premise, under the *Environmental Protection Regulations 1987*?

(Refer to the EPA's *General Guide for Referral of Proposals to the EPA under section 38(1) of the EP Act 1986* for more information)

Yes No **If yes**, please describe what category of prescribed premise.

2.8.3 Will the proposal result in gaseous emissions to air?

Yes No **If yes**, please briefly describe.

Some air emissions are expected as a result of construction machinery.

2.8.4 Have you done any modelling or analysis to demonstrate that air quality standards will be met, including consideration of cumulative impacts from other emission sources?

Yes No **If yes**, please briefly describe.

2.8.5 Will the proposal result in liquid effluent discharge?

Yes No **If yes**, please briefly describe the nature, concentrations and receiving environment.

2.8.6 If there is likely to be discharges to a watercourse or marine environment, has any analysis been done to demonstrate that the State Water Quality Management Strategy or other appropriate standards will be able to be met?

Yes No **If yes**, please describe.

2.8.7 Will the proposal produce or result in solid wastes?

Yes No **If yes**, please briefly describe the nature, concentrations and disposal location/ method.

General construction wastes are expected to be generated by this Project and will be disposed of in accordance with the Project EMP.

2.8.8 Will the proposal result in significant off-site noise emissions?

Yes No **If yes**, please briefly describe.

A road traffic noise assessment was undertaken for the Project (GHD 2013 – Appendix F). The purpose of the assessment was to determine whether the road traffic noise impact from the planned RHHR (and changes to the surrounding road network) is likely to be significant and if so, its degree of significance.

In general, noise impacts on the Ravensthorpe townsite receptors are predicted to decrease following construction of the Project, as the majority of the heavy vehicles will be diverted away from the SCH. Receptors closer to the Project Area are predicted to have an increase in noise impacts. However, for both the build and no-build options, noise impacts are below target noise levels at the majority of receptors.

The only predicted exceedance was during the no build scenarios at Receptor 34 (Ravensthorpe District High School). The schools proximity to the intersection of Hopetoun Road and SCH results in the additive noise exceeding the noise limits. However, the new proposed alignment diverts Hopetoun Road. This means that predicted noise impacts at the high school are below targets in the build scenarios.

Off-site noise emissions during construction are expected however these are not expected to be significant and will be managed under the Project EMP.

2.8.9 Will the development be subject to the *Environmental Protection (Noise) Regulations 1997*?

Yes No

If yes, has any analysis been carried out to demonstrate that the proposal will comply with the Regulations?

Please attach the analysis.

An analysis of noise has been carried out for the operational phase of the Project. In general, noise impacts on the Ravensthorpe townsite receptors are predicted to decrease following construction of the Project, as the majority of the heavy vehicles will be diverted away from the SCH. Works will be carried out during approved hours unless authorised by the local government authority.

2.8.10 Does the proposal have the potential to generate off-site, air quality impacts, dust, odour or another pollutant that may affect the amenity of residents and other "sensitive premises" such as schools and hospitals (proposals in this category may include intensive agriculture, aquaculture, marinas, mines and quarries etc.)?

Yes No

If yes, please describe and provide the distance to residences and other "sensitive premises".

The proposal does have the potential to generate off-site dust impacts during construction. It is expected that these impacts will be managed by the implementation of the Project EMP and therefore will not impact sensitive receptors. In addition, a complaints line will be established and any complaints promptly actioned.

2.8.11 If the proposal has a residential component or involves "sensitive premises", is it located near a land use that may discharge a pollutant?

Yes No Not Applicable

If yes, please describe and provide the distance to the potential pollution source

2.9 Greenhouse Gas Emissions

2.9.1 Is this proposal likely to result in substantial greenhouse gas emissions (greater than 100 000 tonnes per annum of carbon dioxide equivalent emissions)?

Yes No

If yes, please provide an estimate of the annual gross emissions in absolute and in carbon dioxide equivalent figures.

2.9.2 Further, if yes, please describe proposed measures to minimise emissions, and any sink enhancement actions proposed to offset emissions.

2.10 Contamination

2.10.1 Has the property on which the proposal is to be located been used in the past for activities which may have caused soil or groundwater contamination?

Yes No Unsure **If yes**, please describe.

A Preliminary Site Contamination Investigation (PSI) (GHD 2013 – Appendix B) has been undertaken for the Project Area with the following results:

- A search of the DEC Contaminated Sites Database shows that no contaminated sites were present within the Project Area, however a parcel of four sites is located approximately 50 m from the Project Area;
- The property comprising four parcels was identified adjacent to the western extent of Section 3 (i.e. along the SCH) and classified as "Contaminated - remediation required" due to the presence of hydrocarbons (dissolved and free phase) within soil and groundwater from petrol and diesel sources. Summary records for the property indicate that impacted groundwater extends from the property in a south-easterly direction. The full extent of the impacts have not been determined, however are indicated to be present at least 130 metres to the east and 25 metres to the south. The land has been used as a service station and was confirmed as such during the site walkover; and
- A site walkover identified a number of items of interest including an industrial property, a rural property, rubbish items, stockpiles of dumped rock and sand materials, Asbestos Contaminated Materials (ACM) fragments, a former mine, a caravan dump point, a water treatment plant, a water storage dam and a chemical storage yard.

2.10.2 Has any assessment been done for soil or groundwater contamination on the site?

Yes No **If yes**, please describe.

GHD conducted a Preliminary Site Contamination Investigation in September 2013 that consisted of a site walkover and assessment of historic land use (See Appendix B of the EIA (GHD 2013).

2.10.3 Has the site been registered as a contaminated site under the *Contaminated Sites Act 2003*? (on finalisation of the CS Regulations and proclamation of the CS Act)

Yes No **If yes**, please describe.

2.11 Social Surroundings

2.11.1 Is the proposal on a property which contains or is near a site of Aboriginal ethnographic or archaeological significance that may be disturbed?

Yes No Unsure **If yes, please describe.**

An archaeological and ethnographic investigation confirmed that the proposed alignment will not disturb any sites of significance. Aboriginals representing the WC98/70 native title claim group and the Esperance Nyungars met with Main Roads and Brad Goode and Associates on-site on 17th April 2012. The purpose of this meeting was to present the purpose of the Project as well as discuss the specifications of the clearance sought for the construction of the Project. The alignment options were presented at this site visit.

As a result of the consultation no new ethnographic sites of significance were found. The survey also nominated the preferred alignment

2.11.2 Is the proposal on a property which contains or is near a site of high public interest (e.g. a major recreation area or natural scenic feature)?

Yes No **If yes, please describe.**

2.11.3 Will the proposal result in or require substantial transport of goods, which may affect the amenity of the local area?

Yes No **If yes, please describe.**

3. PROPOSED MANAGEMENT

3.1 Principles of Environmental Protection

3.1.1 Have you considered how your project gives attention to the following Principles, as set out in section 4A of the EP Act? (For information on the Principles of Environmental Protection, please see EPA Position Statement No. 7, available on the EPA website)

- | | | |
|--|---|-----------------------------|
| 1. The precautionary principle. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. The principle of intergenerational equity. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. The principle of the conservation of biological diversity and ecological integrity. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Principles relating to improved valuation, pricing and incentive mechanisms. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 5. The principle of waste minimisation. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

3.1.2 Is the proposal consistent with the EPA's Environmental Protection Bulletins/Position Statements and Environmental Assessment Guidelines/Guidance Statements (available on the EPA website)?

X Yes No

The flora assessment was consistent with a Level 1 assessment in accordance with the Environmental Protection Authority (EPA) Guidance Statement No. 51, Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (EPA 2004).

The fauna assessment was consistent with a Level 1 survey (reconnaissance survey) with regard to the requirements of the EPA Guidance Statement No. 56 Assessment of Environmental Factors for Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia (EPA 2004) and the DPaW and EPA's Technical Guide Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA and DEC 2010).

4 Consultation

4.1.1 Has public consultation taken place (such as with other government agencies, community groups or neighbours), or is it intended that consultation shall take place?

X Yes

No

If yes, please list those consulted and attach comments or summarise response on a separate sheet.

A planned consultation programme has been applied to this Project over a 12 month period. Consultation has included the distribution of newsletters, public meetings and letters sent to all constituents of the Shire of Ravensthorpe.

A public meeting held on March 28th 2012 invited people to nominate their opinions and preferences regarding the alignment options for the bypass and the upgrade of the intersection of the Hopetoun Road.