

OEPA Implementation Audit Report

Statement(s)	1008
Proposal	Roe Highway Extension
Proponent	Main Roads Western Australia
Proponent Contact	Mr John Braid, Principal Environmental Officer (9323 6183) john.braid@mainroads.wa.gov.au
Lead Auditor	Doug Koontz – Preston Consulting
Date of Audit	27-30 March 2017 (Evidence Collection)
OEPA File Number	AC09-2015-0025-2
Objectives	Assess/verify the proponent's implementation of the proposal in accordance with Statement 1008
Scope	Implementation conditions 6, 7, 8, 9, 10, 11 and 12 of Statement 1008 for the date period 11 February to 10 March 2017
Documents Reviewed	Statement 1008 Infrastructure Plan (Condition 6); Construction EMP (Condition 7); Drainage Management and Monitoring Plan (Condition 8); Wetlands Monitoring and Management Plan (Condition 9); Flora and Vegetation Monitoring and Management Plan (Condition 10); Fauna Management Plan (Condition 11); Land Acquisition and Management Plan (Condition 12); Wetland Restoration Plan (Condition 12); Arium Lily Control Program (Condition 12); and <i>Typha orientalis</i> Control Program (Condition 12).
Attachments	Attachment One – Roe Highway Extension (Roe 8) Implementation Audit 5 April 2017.

Background

The proposal is to construct and operate a dual carriageway road from the current terminus of Roe Highway at Kwinana Freeway in Jandakot to Stock Road in Coolbellup, as documented in Schedule 1 of Statement 1008.

This second Audit Report covers the implementation of Statement 1008 published on 2 July 2015 for the Roe Highway Extension proposal by Main Roads Western Australia (MRWA) during the period 11 February 2017 to 10 March 2017.

Audit Findings

1. The audit found that MRWA has displayed a high level of commitment and performance in implementing the proposal in accordance with the MS 1008 conditions and approved environmental management plans.
2. The audit again identified the issue of appropriate signage of mulch stockpiles as detailed in the previous audit dated 20 March 2017. During the audit period MRWA was in non-compliance with one of the management actions detailed in the Construction Environmental Management Plan dated November 2016 (CEMP). The CEMP requires MRWA to erect appropriate signage for topsoil and mulch stockpiles for the purpose of ensuring diseases, pathogens and weeds are not introduced into disease and weed free areas in the proposal area.

This issue has since been addressed by way of a notice to MRWA dated 28 March 2017 requiring signage of mulch stockpiles to be erected by 31 March 2017.

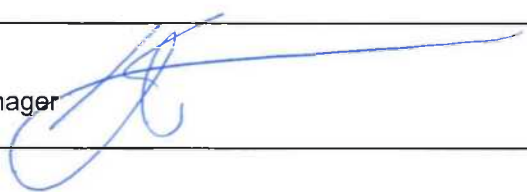

As required by the notice MRWA responded to the OEPA on 31 March 2017 confirming that appropriate signage has been erected at all mulch stockpiles in accordance with the management action required by the Construction Environmental Management Plan dated November 2016 (CEMP). Photographs of several signs at mulch stockpiles in accordance with the CEMP were provided.

The risk of spread of disease or weeds is considered low given that the mulch stockpiles remain in situ and site environmental plans detail hygiene measures.

Required Actions and Recommendations

The OEPA notes that the non-compliance identified during this second audit period again identified the issue of appropriate signage of mulch stockpiles. Actions required by the notice dated 28 March 2017 in relation to appropriate signage of mulch stockpiles has been addressed by MRWA which has confirmed in its correspondence dated 31 March 2017 that appropriate signage has been erected at all mulch stockpiles in accordance with the management action required by the Construction Environmental Management Plan dated November 2016 (CEMP).

No further action is required in relation to the audit findings.

Report Prepared by: Doug Koontz – Lead Environmental Auditor – Preston Consulting	Date: 5 April 2017
Reviewed by: Ian Munro – Manager Compliance Branch	Date: 5 April 2017
Endorsed by: Kim Taylor – General Manager 	Date:  April 2017



Preston
Consulting

ROE HIGHWAY EXTENSION (ROE 8)

SECOND IMPLEMENTATION AUDIT

5 APRIL 2017
PREPARED FOR THE OFFICE OF THE ENVIRONMENTAL PROTECTION AUTHORITY
PREPARED BY PRESTON CONSULTING PTY LTD
Rev 1

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CONTENTS

1	PURPOSE AND SCOPE OF AUDIT.....	1
2	AUDIT PROCESS	1
3	AUDITOR QUALIFICATION	3
4	AUDIT FINDINGS	3
	APPENDIX 1: ASSESSMENT TABLES	4



1 PURPOSE AND SCOPE OF AUDIT

The Office of the Environmental Protection Authority (OEPA) commissioned Preston Consulting Pty Ltd (Preston Consulting) to conduct an independent environmental audit of the implementation of the Roe Highway Extension (Roe 8). Roe 8 is being developed by the Building Roe 8 Alliance (BR8) between Main Roads WA and CPB Contractors.

The purpose of the audit was to provide the OEPA with a daily independent assessment of implementation by Main Roads WA and BR8 of relevant environmental obligations applying to site preparation activities.

'Site preparation' was defined as works conducted during the initial commencement of Roe 8, including fauna trapping and relocation, vegetation clearing and topsoil stripping, groundwater bore drilling and environmental monitoring. Site preparation does not include major construction works such as the development of bridges, road formations, drainage infrastructure and/or road intersections.

The scope of the audit included conditions of Ministerial Statement (MS) 1008 and the commitments of all approved Environmental Management Plans (EMPs) approved under MS 1008. These EMPs are listed below:

- Infrastructure Plan (Condition 6);
- Construction EMP (Condition 7);
- Drainage Management and Monitoring Plan (Condition 8);
- Wetlands Monitoring and Management Plan (WMMP) (Condition 9);
- Flora and Vegetation Monitoring and Management Plan (Condition 10);
- Fauna Management Plan (Condition 11);
- Land Acquisition and Management Plan (Condition 12);
- Wetland Restoration Plan (Condition 12);
- Arum Lily Control Program (Condition 12); and
- *Typha orientalis* Control Program (Condition 12).

2 AUDIT PROCESS

This Report covers an audit period that commenced on 11 February 2017 and concluded on 10 March 2017. The audit included the following activities:

- Daily site inspections (Monday to Friday, and every Saturday when works were underway); and
- Formal audit meeting and evidence collection (27 - 30 March 2017).

The daily site inspections were conducted by one of the Preston Consulting audit team comprising:

- Doug Koontz - Lead Auditor;
- Gavin Edwards - Auditor; and
- Phil Scott - Director.



Active work areas were inspected and assessed for performance against MS 1008 conditions and EMP commitments. Objective evidence was obtained through site observations and random selection and review of field records and documents.

The daily site inspections occurred from Monday to Friday during the audit period. Saturday inspections also occurred if construction works were planned. The time of inspections varied each day, and was often targeted to ensure that an auditor was on site during key activities such as vegetation clearing.

Brief reports were prepared and submitted to the OEPA on a daily basis summarising the findings of the inspection and identifying any issues that may require further investigation or assessment.

The formal audit meeting was held at 1:00 pm on 27 March 2017 at the BR8 Perth office located at 202 Pier St, Perth. BR8 is authorised by the Project Proponent, Main Roads WA, to develop Roe 8, and both organisations have defined responsibilities for implementing the MS 1008 conditions and EMP commitments.

The following BR8 personnel attended the opening meeting and were involved throughout the audit process:

- Jamie Shaw – Environment and Heritage Manager; and
- Lyn Van Gorp – Environmental Approvals Advisor.

Evidence collection and assessment was undertaken from 27 - 30 March 2017.

It was evident through the audit process that the term 'construction' used in MS 1008 and EMPs often referred to a specific work area, construction phase or activity, rather than Roe 8 in its entirety. Most EMPs lacked a clear definition for 'construction' or detail about which work area, construction phase or activity would trigger specific management actions. The audit therefore took a conservative definition whenever there was a lack of clarity in a condition or commitment.

The audit was conducted using an assessment table that had been prepared for the 'site preparation' phase of Roe 8 as defined in the Purpose and Scope of Audit above. MS 1008 conditions and EMP commitments that were clearly not relevant to 'site preparation' were not included in the assessment table. This process was conducted by excluding the following MS 1008 conditions and EMP commitments:

1. MS 1008 conditions that were administrative in nature and did not relate to the works being conducted on site;
2. MS 1008 conditions that required the development of management plans or survey reports. All management plans or survey reports required by MS 1008 have already been completed and approved by the EPA;
3. MS 1008 conditions that referred to Roe 8 timing that was not applicable to the audit period (i.e. Condition 12-13: "within 12 months of the completion of the proposal");
4. EMP commitments that referred to Roe 8 timing that was not applicable to the audit period (i.e. "during operation"); and
5. EMP commitments that relate solely to distinct infrastructure items (i.e. drainage culverts, noise walls) that were not going to be constructed during the 'site preparation' stage of Roe 8.



For the purposes of this audit, Section 1.1.2 (Project Activities) of the WMMP was used as a reference for the activities that would trigger the monitoring requirements listed in the WWMP:

- Construction of road formation and associated infrastructure including, road drainage basins, principal Shared Paths (pedestrian and cycle paths), retaining walls, fauna underpasses and culverts, bridges and overpasses and noise attenuation walls;
- Installation of street and PSP lighting;
- Realignment of a short section of Murdoch Drain; and
- Rehabilitation of areas disturbed for construction.

None of these activities were noted during the audit period.

This Audit Report was prepared by Gavin Edwards and Doug Koontz.

3 AUDITOR QUALIFICATION

This audit was led by Doug Koontz. Doug has over 40 years of experience in environmental management. Doug has been lead auditor for a number of similar construction projects around Australia. He is certified as a Lead Auditor under the Exemplar Global Environmental Auditor Scheme (Certificate No. 005969) with the following scope of registration:

- Environmental Management Audit;
- Environmental Management System Audit;
- Environmental Report Verification;
- Compliance Audit; and
- ISO14001:2015 Audit.

4 AUDIT FINDINGS

In summary, the assessment found that Main Roads WA and BR8 were displaying a high level of commitment and performance in implementing the MS 1008 conditions and EMP commitments applicable to the works being completed. Minor areas of potential improvement were identified, mostly relating to administrative matters and these did not result in any observable environmental impacts beyond the scope of the approval during the audit period.

Detail of the audit findings are provided in the assessment tables in Appendix 1.

This is the second audit conducted for Roe 8.



APPENDIX 1: ASSESSMENT TABLES



Table 1: Assessment of performance of Ministerial Statement 1008 Conditions (relevant to site preparation)

Notes:

1. 'Site preparation' refers to works conducted during the commencement of Roe 8, including fauna trapping and relocation, vegetation clearing and topsoil stripping, groundwater bore drilling and environmental monitoring. It does not include major construction such as the development of bridges, embankments, drainage infrastructure and road intersections.
2. Table 1 has been reviewed to exclude administrative conditions and those conditions that are not relevant to 'site preparation'.
3. Table 1 has been reviewed to exclude those conditions that require the development of a compliance assessment plan, management plans or survey reports. The compliance assessment plan and all management plans or survey reports required by MS 1008 have already been completed and approved by the EPA.
4. Based on the EPA approval of management plans and survey reports required by MS 1008, it is assumed that each plan and survey report meets the requirements of each relevant MS 1008 condition.
5. Table 1 has been refined to take into account that all management plans and survey reports have been made publicly available as required by MS 1008.

CONDITION NUMBER	CONDITION	EVIDENCE	ASSESSMENT
4-6	The proponent shall submit to the CEO the first Compliance Assessment Report (CAR) 15 months from the date of issue of this statement addressing the 12 month period from the date of issue of this statement and then annually from the date of submission of the first CAR. The CAR shall: (1) be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf; (2) include a statement as to whether the proponent has complied with the conditions; (3) identify all potential non-compliances and describe corrective and preventative actions taken; (4) be made publicly available in accordance with the approved Compliance Assessment Plan; and (5) indicate any proposed changes to the Compliance Assessment Plan required by condition 4-1.	Sight CAR	This requirement did not apply during the audit period. The next CAR is due to be submitted in October 2017.
7-3	The proponent shall not abstract groundwater during construction within 1.5 km of the wetland boundaries of North Lake, Bibra Lake and Roe Swamp as identified in the most up to date Geomorphic Wetland Swan Coastal Plain dataset (custodians the Department of Parks and Wildlife (DPaW)).	Sight location of groundwater abstraction bores and assess distance to wetland boundaries.	A second production bore was drilled and pump-tested during the audit period. A map was viewed by the auditor that provided a 1.5 km buffer distance. This map demonstrated that this production bore was not within 1.5 km of the wetland boundaries of North Lake, Bibra Lake and Roe Swamp as identified in the most up to date Geomorphic Wetland Swan Coastal Plain dataset (custodians DPaW). It was also noted that marker tape demarcated the 1.5 km buffer boundary. The production bore was developed outside this boundary.
7-4	The proponent shall not undertake dewatering activities prior to or during construction of the proposal.	Inspect groundwater bores installed and utilised on site to ensure they are not used for dewatering purposes.	Production bore inspected numerous times during audit period. Drilling, development and pump testing were the only activities undertaken.
7-5	The proponent shall minimise excavation activities in the development envelope in areas mapped as 'high to moderate' using the most up to date Acid Sulfate Soils risk mapping by the Department of Environment Regulation.	Assess any excavations planned for areas mapped as 'high to moderate' against the Infrastructure Plan to ensure the excavation is necessary.	No excavations in areas mapped as 'high to moderate' have been conducted during the audit period
7-10	The proponent shall implement the approved revisions of the Construction Environmental Management Plan (CEMP) required by conditions 7-8 and 7-9.	Sight evidence of implementation.	Evidence sighted, refer to Table 2.
8-3	Prior to commencement of construction, the proponent shall implement the approved Drainage Management and Monitoring Plan (DMMP) in order to collect baseline data	Sight evidence of	Evidence sighted, refer to Table 2.



CONDITION NUMBER	CONDITION	EVIDENCE	ASSESSMENT
	and continue implementation until otherwise agreed by the CEO.	implementation.	
9-5	Prior to commencement of construction, the proponent shall implement the approved WMMP, and continue implementation until otherwise agreed by the CEO (The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the <i>Environmental Protection Act 1986</i> , or his delegate.).	Sight evidence of implementation.	Evidence sighted, refer to Table 2.
9-9	In the event that the monitoring indicates that the trigger criteria specified in the WMMP have been exceeded the proponent shall: (1) immediately implement the management and/or contingency actions specified in the WMMP and continue implementation of those actions until the trigger criteria are being met, or until the CEO has confirmed by notice in writing that it has been demonstrated that the outcome in condition 9-1 is being and will continue to be met and implementation of the management and/or contingency actions is no longer required; (2) investigate to determine the likely cause of the trigger criteria being exceeded and to identify any additional contingency actions required to prevent the trigger criteria being exceeded in the future; and (3) provide a report to the CEO within seven days of an event, referred to in condition 9-9, occurring. The report shall include: (a) details of management and/or contingency actions implemented; and (b) the findings of the investigation required by condition 9-9(2).	Investigation report.	N/A. Monitoring was not required during the audit period. Refer to the WMMP section in Table 2.
10-5	Prior to commencement of construction, the proponent shall implement the approved Flora and Vegetation Monitoring and Management Plan (FVMMP), and continue implementation until otherwise agreed by the CEO.	Sight evidence of implementation.	Evidence sighted, refer to Table 2.
10-9	In the event that the monitoring indicates that the trigger criteria specified in the FVMMP have been exceeded the proponent shall: (1) immediately implement the management and/or contingency actions specified in the FVMMP and continue implementation of those actions until the trigger criteria are being met, or until the CEO has confirmed by notice in writing that it has been demonstrated that the outcome in condition 10-1 is being and will continue to be met and implementation of the management and/or contingency actions is no longer required; (2) investigate to determine the likely cause of the trigger criteria being exceeded and to identify any additional contingency actions required to prevent the trigger criteria being exceeded in the future; and (3) provide a report to the CEO within seven days of an event, referred to in condition 10-9, occurring. The report shall include: (a) details of management and/or contingency actions implemented; and (b) the findings of the investigation required by condition 10-9(2).	Investigation report.	N/A. Monitoring was not required during the audit period. The next monitoring requirement is in Spring 2017.
11-3	Prior to commencement of construction, unless otherwise agreed by the CEO, the proponent shall implement the approved Fauna Management Plan required by condition 11-2, to the satisfaction of the CEO.	Sight evidence of implementation.	Evidence sighted, refer to Table 2.
12-3	The proponent shall implement the Land Acquisition and Management Plan (LAMP), prior to commencement, or as otherwise agreed by the CEO, until the CEO advises implementation may cease.	Sight evidence of implementation.	Evidence noted. Land transfer evidence provided in LAMP submitted to OEPA and approved on 30 November 2016.
12-5	Prior to commencement of construction, or as otherwise agreed by the CEO, the proponent shall acquire, or fully fund the acquisition of, the land identified in the approved LAMP for the purpose of conservation.	Sight evidence of implementation.	Land transfer evidence provided in LAMP submitted to OEPA and approved on 30 November 2016.



CONDITION NUMBER	CONDITION	EVIDENCE	ASSESSMENT
12-9	Prior to commencement of construction, or as otherwise agreed by the CEO, the proponent shall implement the Wetland Restoration Plan until the CEO advises implementation may cease.	Sight evidence of implementation.	Letter from John Braid (Principal Environment Officer – Main Roads WA) to the OEPA dated 2 December 2016, stated that evidence of implementation of the Wetland Restoration Plan was seed collection that was conducted in early 2016.
12-16	Prior to commencement of construction, or as otherwise agreed by the CEO, the proponent shall implement the <i>Typha orientalis</i> Control Program and continue implementation until the CEO advises implementation may cease.	Sight evidence of implementation.	Letter from John Braid (Principal Environment Officer – Main Roads WA) to the OEPA dated 2 December 2016, stated that evidence of implementation of the <i>Typha orientalis</i> Control Program was preparations for a baseline survey in April/May 2017. Other evidence of implementation includes a reconnaissance site visit and liaison with DPaW.



Table 2: Assessment of Performance of Environmental Management Plans (relevant to site preparation)

Notes:

1. 'Site preparation' refers to works conducted during the commencement of the Project, including fauna trapping and relocation, vegetation clearing and topsoil stripping, groundwater bore drilling and environmental monitoring. It does not include major construction such as the development of bridges, embankments, drainage infrastructure and road intersections.
2. Table 1 has been reviewed to exclude those commitments that are not relevant to 'site preparation'.
3. If relevant monitoring commitments are repeated within the management actions then they are only listed once in this table.

PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN					
WEEDS					
Weed baseline assessment	<p>A baseline weed survey will be undertaken to identify:</p> <ul style="list-style-type: none"> populations of Declared Plants, as defined by the Department of Agriculture and Food WA (DAFWA) areas with aggressive weeds not suitable for use in construction activities, such as landscaping and revegetation areas areas that have a weed cover of greater than 30%. <p>The results of the survey and list of aggressive weeds will be provided to DPaW. Areas containing these characteristics will be marked as high risk and will be managed in accordance with the Construction Environmental Management Plan (CEMP).</p>	During the construction phase of the project	Not stated	Copy of survey report	<p>Audit noted that a report titled: 'Comprehensive Phytophthora Dieback Assessment and Weed Mapping of Roe 8 Development Footprint' was developed by Terratree Pty Ltd for AECOM Australia Pty Ltd, with the final report released on 9 December 2016.</p> <p>The report includes details of:</p> <ul style="list-style-type: none"> populations of Declared Plants; Areas with aggressive weeds not suitable for use in construction activities, such as landscaping and revegetation areas; and Areas that have a weed cover of greater than 30%. <p>Audit noted that an email was sent by BR8 to DPaW on 12 December 2016. The email included the above report as an attachment.</p>
High risk weed areas	Undertake a baseline survey to determine high risk weed areas (in accordance with FVMMP – topsoil map).	Prior to clearing	Construction contractor	Copy of survey report	<p>Audit noted that a report titled: 'Comprehensive Phytophthora Dieback Assessment and Weed Mapping of Roe 8 Development Footprint' was developed by Terratree Pty Ltd for AECOM Australia Pty Ltd, with the final report released on 9 December 2016, prior to clearing.</p> <p>The report included details of high risk weed areas that are not suitable for topsoil reuse.</p>
	Provide the result of the baseline survey to DPaW, including the list of aggressive weeds that were identified.	Prior to clearing	Construction contractor	Sight evidence of report submission to DPaW	<p>Audit noted that an email was sent by BR8 to DPaW on 12 December 2016. The email included the above report as an attachment.</p>
	Demarcate areas which have been identified as high risk.	Prior to clearing	Construction contractor	Sight evidence of implementation	<p>Audit noted that BR8 developed and issued Site Environmental Plans (SEPs) prior to each area of clearing. The SEPs applied management actions relevant to high risk weed areas across the whole site, regardless of weed risk.</p>
Personnel	<p>Undertake hygiene training as part of the site induction, which should include:</p> <ul style="list-style-type: none"> procedures for clean-on-entry and exiting the development envelope management of high risk areas details of designated roads and access tracks required record keeping, including incident reporting. 	Prior to personnel commencing work on site	All personnel.	Noted inclusion in site induction material	<p>Lead Auditor attendance at general Project induction (7/12/2016).</p> <p>General induction included requirements for site hygiene including using designated roads and tracks, and clean-down and inspection of vehicles prior to entering development sites. Incident reporting covered.</p> <p>Register of inductees circulated at induction.</p> <p>Noted that work area/ activity specific inductions are also required for relevant personnel.</p>



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
Vehicles and machinery	Restrict site access to designated entry and exit points.	At all times	All personnel	Sight evidence of implementation	Audit noted that access to all work sites are restricted to designated entry and exit points.
	Erect signage which outlines hygiene management procedures at each entry and exit point from the site and at exit points from high risk areas. The signs should include the following procedures: <ul style="list-style-type: none"> brush down contaminated vehicles and machinery in dry weather wash down contaminated vehicles and machinery used in clearing with water during wet weather. 	Site entry/exit points: During construction until earthworks and excavation work have been completed. High risk areas: during construction until such time that topsoil have been removed from the high risk areas.	Construction contractor	Sight evidence of implementation	Audit noted that signage that included the required procedures had been installed at the entry and exit points of work areas. Audit noted that SEPs included hygiene procedures. Audit noted evidence of the brushing down of potentially contaminated vehicles and machinery on numerous occasions. It was also noted that compressed air has been used on machinery to remove soil. Audit has not noted water being used or evidence of water being used for wash down purposes on site.
	Inspect vehicles and machinery prior to entry/exit into the site and prior to exit from high risk areas to ensure it is free from soil/organic material.		All personnel	Sight evidence of implementation	Audit noted that a hygiene register was completed and signed by drivers, confirming that vehicles are inspected prior to leaving the off-site yard each morning. Numerous completed and signed 'Plant and Equipment Clean Down Declaration' forms were viewed during the audit, and drivers have previously been noted completing these forms at the pre-start meetings. Audit noted evidence of the inspection and brushing down of potentially contaminated vehicles and machinery on numerous occasions. It was also noted that compressed air was used on machinery to remove soil.
	Ensure vehicles and machinery not free from soil/organic material are cleaned down prior to entry/exit from site and prior to exiting a high risk area.		All personnel	Sight evidence of implementation	Audit noted that a hygiene register was completed and signed by drivers, confirming that vehicles are inspected prior to leaving the off-site yard each morning. Numerous completed and signed 'Plant and Equipment Clean Down Declaration' forms were viewed during the audit, and drivers have previously been noted completing these forms at the pre-start meetings. Audit noted evidence of the inspection and brushing down of potentially contaminated vehicles and machinery on numerous occasions. It was also noted that compressed air was used on machinery to remove soil.
	Record all hygiene operations undertaken in a Project hygiene register. The register must indicate checks of vehicle/machinery for soil/organic material and clean down where required. Each entry in the register should be signed by the driver.	During construction	All personnel	Sight hygiene registers	Audit noted that drivers and machinery operators are required to complete 'Plant and Equipment Clean Down Declaration' forms prior to first entering a work area or when moving between work areas. These forms were submitted to Supervisors / Environmental Representatives on a daily basis for signing. Signed forms were then saved by BR8 and then uploaded to a register. Completed and signed 'Plant and Equipment Clean Down Declaration' forms from 15 - 28 February 2017 were requested from the Register and viewed as part of the audit. Several forms have previously been viewed on site on a random basis during the daily inspections. The forms viewed were signed by the driver.
Topsoil and mulch	Ensure topsoil and mulch from high risk areas is stockpiled within high risk areas and separately from stockpiles from lower risk areas.	During clearing	Construction contractor	Sight evidence of implementation	Audit did not note any evidence of the stripping or stockpiling of topsoil during daily inspections. Mulched vegetation had been stockpiled on a temporary basis within its own risk area. The daily inspections did not note any mulch stockpiles that were moved to other areas during the audit period.



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
	Ensure stockpiles have appropriate signage, including source location and whether it is from a high risk area.	During clearing	Construction contractor	Sight evidence of implementation	Audit did not note any evidence of the stripping or stockpiling of topsoil during daily inspections. Mulched vegetation had been stockpiled on a temporary basis within its own risk area. Audit noted that these individual mulch stockpiles did not have appropriate signage. No evidence was noted during the daily inspections that stockpiles had been moved from their source location. BR8 responded to a similar finding in the previous audit report. BR8 stated that the stockpiles identified during the audit did not have appropriate signage as they were going to be taken to a central stockpile area and grouped according to risk classification. This central stockpile area was going to be fitted with appropriate signage as per requirements. Relocation of mulch piles to longer-term storage area had not yet occurred at the end of the audit period. <i>Note: BR8 informed the auditor during the formal audit meeting on 27 March 2017 that signage had now been installed on each temporary mulch stockpile. Photographs of several temporary mulch stockpiles were provided on 30 March 2017 which showed appropriate signage on each stockpile that was photographed.</i>
	Dispose of topsoil and mulch from high risk areas offsite at a licensed facility, by re-using it within infested areas high risk areas or by burying under at least 1 m of fill.	During construction	Construction contractor	Sight evidence of implementation	Audit did not note the disposal of topsoil or mulch during the daily inspections.
Imported materials	Ensure all imported landscaping and revegetation materials (i.e. soil, mulch, seedlings) brought onsite are weed free.	Prior to entering site	Construction contractor	Sight evidence of implementation	Audit did not note any landscaping or revegetation activities during the daily inspections.
Weed monitoring	Visual inspection of Development Envelope for new Declared Plant or aggressive weed infestations.	Weekly until earthworks and excavation have been completed	Construction contractor	Sight inspection reports	Audit included the assessment of BR8 Weekly Environment and Sustainability Inspection Checklists (WESICs) reports which covered the entire audit period. The WESICs include the requirement for visual inspection for new Declared Plant or aggressive weed infestations. This requirement was completed in every WESIC viewed.
	Review hygiene register and conduct random inspections of vehicles to ensure that all vehicles are subject to hygiene management procedures on entering/exiting site and on exiting high risk areas.	Site entry/exit points: weekly during construction until earthworks and excavation work have been completed. High risk areas: weekly during construction until such time that topsoil have been removed from the high risk areas.	Construction contractor	Sight inspection reports	Audit included the assessment of WESICs which covered the entire audit period. The WESIC includes the requirement for inspections of weed hygiene measures and brush down / wash down points. This requirement was completed in every WESIC viewed.
	Site inspection to monitor the integrity of the demarcation of high risk areas.	Monthly during construction	Construction contractor	Sight inspection reports	Audit included the assessment of WESICs which covered the entire audit period.



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
					<p>Audit observed area that was still marked by white tape and excluded from clearing due to the presence of Bridal Creeper which is a declared pest. The infestation was assessed and is proposed to be removed in accordance with weed management procedures.</p> <p>Audit noted that every work area was fenced with designated access and weed hygiene signage. The WESIC required the inspection of access controls, fencing and weed hygiene measures. These requirements were completed in every WESIC viewed.</p>
	Site inspection to ensure that high risk weed material is stockpiled separately from other low risk stockpiles and has appropriate signage documenting source location.	Monthly during construction	Construction contractor	Sight inspection reports	<p>Audit noted that the WESIC did not include a specific checklist item to ensure that high risk weed material is stockpiled separately from other low risk stockpiles or to have appropriate signage documenting source location.</p> <p>The WESIC did contain a general checklist item to check that the "Placement of compounds, stockpiles and laydown areas are in suitable locations", however it is unclear whether this item adequately addresses part of the listed requirement. The comments against this item in the reports do not provide further clarification, with the 26 February report providing the most information, simply stating "All within approved locations inside PDE".</p> <p>Audit noted during the daily inspections that mulch was stockpiled within its source location.</p> <p><i>Note: BR8 informed the auditor during the information gathering process on 28 March 2017 that the WESIC had been reviewed and revised to include this requirement. A copy of the revised 'issued for use' WESIC was provided on 30 March 2017.</i></p>
	Inspect imported landscaping material to ensure that it is weed free and that any seedlings are sourced from accredited nurseries.	As required on importation to site	Construction contractor	Sight inspection reports	Audit did not note any landscaping or revegetation activities during the daily inspections.
DUST					
Personnel	Undertake dust training as part of the site induction, which should include: <ul style="list-style-type: none"> information on the potential for construction activities to cause dust information on the effects of dust on the environment details of designated roads and access tracks procedures for dust suppression. 	Prior to personnel commencing work on site	All personnel	Noted inclusion in site induction material	<p>Lead Auditor attendance at general Project induction (7/12/2016):</p> <p>General induction included requirements for dust management including the listed information. Incident reporting covered. Register of inductees circulated at induction.</p> <p>Noted that work area/ activity specific inductions are also required for relevant personnel.</p>
Construction works	Avoid dust generating activities during unfavourable weather conditions (e.g. high wind speed) and unfavourable wind directions relative to sensitive areas, where practicable.	During construction	Construction contractor	Sight evidence of implementation	Dust-generating activities noted during the audit included vegetation clearing, sizing, mulching and vehicle movements. These activities were inspected daily and on rare occasions these activities produced minor short-term dust plumes that extended across site boundaries.
	Water carts are to be operational at all times in dry and windy conditions (October to April).	During construction	Construction contractor	Sight evidence of implementation	<p>Audit noted the use of water carts within each work area on numerous occasions. Water carts have been noted during the daily inspections watering down:</p> <ul style="list-style-type: none"> Cleared areas and access tracks; Vegetation stockpiles prior to mulching; and



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
					<ul style="list-style-type: none"> Areas to be cleared via a water cannon. <p>Audit noted that clearing had been completed in several areas and Gluon (dust suppressant) had been applied in those areas to control dust instead of using water carts. No dust lift was noted in these areas during the daily inspections and therefore this strategy was deemed appropriate.</p>
	Commence dust suppression immediately on visual evidence of dust lift.	During construction	Construction contractor	Sight evidence of implementation	<p>Audit included a daily assessment of dust on site and it did not note visual evidence of notable dust lift, even during dry conditions with strong winds. Soils appear to be sandy and do not produce notable dust unless disturbed.</p> <p>Water carts have been noted to be in use within work areas on numerous occasions.</p> <p>Audit noted that clearing had been completed in the majority of work areas and Gluon (dust suppressant) had been applied to control dust instead of using water carts. No dust lift was noted in these areas during the daily inspections and therefore this strategy was deemed appropriate.</p>
	Implement semi-permanent dust control treatments (e.g. hydromulching, dust stabilisers, tarps or geo-textile materials) on stockpiles that are to be left for longer than one month.	During construction	Construction contractor	Sight evidence of implementation	Audit did not identify any soil stockpiles noted during the audit period. Temporary mulch stockpiles were present however these were never noted to be a source of dust emissions during the daily inspections.
	Minimise cleared surfaces to that required for construction activities.	During construction	Construction contractor	Sight evidence of implementation	Audit noted that clearing was not completed to the edge of the final clearing footprint during the audit period, with some minor exceptions where the final design has been completed.
	Schedule vegetation clearing to occur immediately before planned earthworks to minimise potential for dust, where practicable.	During construction	Construction contractor	Project schedule	Audit has previously noted that the latest project schedule has 1-3 months delay between clearing and other works. The schedule was relatively high-level and does not include works such as temporary fauna fencing, access tracks etc. which would need to be completed prior to earthworks. The timeframes were considered reasonable.
	Stabilise cleared areas and any dry, dust-prone areas or stockpiles to prevent dust lift off.	During construction	Construction contractor	Sight evidence of implementation	<p>Audit included a daily assessment of dust on site and no visual evidence of significant dust lift off was noted during the audit period, even during dry conditions with strong winds. Soils appear to be sandy and do not produce notable dust unless disturbed.</p> <p>Gluon (dust suppressant) has been applied to stabilise all cleared areas where works had been completed, with the exception of the southern freeway loop west of the Kwinana Freeway. Evidence of Gluon preparation had been noted during the audit period.</p>
	Apply water spray to exposed soil during open activities, such as loading and unloading of material.	During construction	Construction contractor	Sight evidence of implementation	Audit did not note any loading or unloading of soil during the daily inspections. Water carts have been noted to be in use within work areas on numerous occasions.
Vehicle movement	Restrict site access to designated roads, access tracks and construction areas.	During construction	Construction contractor	Sight evidence of implementation	Audit noted that all works areas were fenced and site access was restricted to designated entry and exit points. Work areas include earthen access tracks, and limestone access tracks within the wetland area, west of Baker Court and on the eastern side of Kwinana Freeway.



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
	Establish and enforce vehicle speed limits for unsealed areas with an objective to minimise dust generation.	During construction	Construction contractor	Sight evidence of implementation	Audit noted that SEPs issued to all workers prior to work in each area include vehicle speed limits of 20 km/hr for all unsealed roads.
Monitoring	Site inspection to conduct visual observations of dust deposition on vegetation adjacent to cleared and constructed areas.	Weekly	Construction contractor	Sight inspection reports	Audit included the assessment of WESICs which covered the entire audit period. The WESICs included the requirement for inspections of dust deposition on vegetation adjacent to cleared and constructed areas. This requirement was completed in every WESIC viewed.
DISEASE AND PATHOGEN					
Baseline assessment	Undertake a baseline dieback assessment to determine the dieback status of the development envelope.	Prior to clearing	Construction contractor	Copy of baseline assessment report	Audit noted that a report titled: 'Comprehensive <i>Phytophthora</i> Dieback Assessment and Weed Mapping of Roe 8 Development Footprint' was developed by Terratree Pty Ltd for AECOM Australia Pty Ltd, with the final report released on 9 December 2016. The report includes details of the dieback status of the development envelope.
Potential dieback areas	Undertake a risk assessment to determine unmappable and uninterpretable areas that may contain dieback.	Prior to construction	Construction contractor	Copy of baseline assessment report	Audit noted that a report titled: 'Comprehensive <i>Phytophthora</i> Dieback Assessment and Weed Mapping of Roe 8 Development Footprint' was developed by Terratree Pty Ltd for AECOM Australia Pty Ltd, with the final report released on 9 December 2016. The report includes a risk assessment to determine unmappable and uninterpretable areas that may contain dieback.
	Demarcate areas which have been classified as infested, unmappable, and uninterpretable that may contain dieback based on risk assessment undertaken.	Prior to construction	Construction contractor	Sight evidence of implementation	Audit noted that the wetland area contained areas that have been classified as uninterpretable, with a section classified as uninfested in the centre. These areas were inspected on several occasions during the daily inspections and it was noted that boundaries between these classification areas were demarcated by temporary fencing.
Personnel	Undertake hygiene training as part of the site induction, which should include: <ul style="list-style-type: none"> procedures for clean-on-entry to and exiting the development envelope procedures for minimising the risk of spread of dieback within the development envelope informing all personnel that they must remain on designated roads and access tracks and that they should remain in approved access areas associated record keeping, including incident reporting. 	Prior to personnel commencing work on site	All personnel	Noted inclusion in site induction material	Lead Auditor attendance at general Project induction (7/12/2016): General induction included requirements for site hygiene including using designated roads and tracks, and clean-down and inspection of vehicles prior to entering development sites. Incident reporting covered. Register of inductees circulated at induction. Noted that work area/ activity specific inductions are also required for relevant personnel.
Vehicles and machinery	Restrict access to the site to designated entry and exit points	At all times	All personnel	Sight evidence of implementation	Audit noted that all works areas were fenced and site access was restricted to designated entry and exit points.
	Erect signage which outlines hygiene management procedure at site entry and exit points, and at exit points from infested, unmappable and uninterpretable areas that may contain dieback. The signs should include the following procedures: <ul style="list-style-type: none"> brush down contaminated vehicles/machinery in dry weather 	During construction	Construction contractor	Sight evidence of implementation	Audit noted that signage that included the required procedures was installed at the entry and exit points of sites. Evidence of the brushing down of potentially contaminated vehicles and machinery was noted on numerous occasions. It was also noted that compressed air was used on machinery to remove



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
	<ul style="list-style-type: none"> wash down contaminated vehicles machinery with water and an appropriate reagent during wet weather. 				soil. Water was not used for wash down purposes on site during any of the daily inspections.
	Inspect vehicles and machinery prior to entry/exit into the site and prior to exit from infested, unmappable and uninterpretable areas that may contain dieback to ensure it is free from soil/organic material.	Site entry/exit points: During construction until earthworks and excavation work have been completed. Areas that may contain dieback: during construction until earthworks and excavation work have been completed in these areas.	All personnel	Sight evidence of implementation	Audit noted that a hygiene register was completed and signed by drivers, confirming that vehicles are inspected prior to leaving the off-site yard each morning. Numerous completed and signed 'Plant and Equipment Clean Down Declaration' forms were viewed during the audit, and drivers have previously been noted completing these forms at the pre-start meetings. Audit noted evidence of the inspection and brushing down of potentially contaminated vehicles and machinery on numerous occasions. It was also noted on several occasions that compressed air was used on machinery to remove soil on site.
	Ensure vehicles and machinery not free from soil / organic material are cleaned down prior to entry / exit from site and prior to exiting infested, unmappable and uninterpretable areas that may contain dieback.		All personnel	Sight evidence of implementation	Audit noted that a hygiene register was completed and signed by drivers, confirming that vehicles are inspected prior to leaving the off-site yard each morning. Numerous completed and signed 'Plant and Equipment Clean Down Declaration' forms were viewed during the audit, and drivers have previously been noted completing these forms at the pre-start meetings. Audit noted evidence of the inspection and brushing down of potentially contaminated vehicles and machinery on numerous occasions. It was also noted on several occasions that compressed air was used on machinery to remove soil on site.
	Ensure runoff from washdown areas is contained, to prevent the spread of disease.		All personnel	Sight evidence of implementation	Audit did not identify any washdown areas on site. All on site cleaning of vehicles and equipment viewed during the audit was by brushes or compressed air.
	Record all hygiene operations undertaken in a hygiene register. The register must indicate checks of vehicle/machinery for soil/organic material and clean down where required. Each entry in the register should be signed by the driver.	During construction	All personnel	Sight hygiene registers	Audit noted that drivers and machinery operators are required to complete 'Plant and Equipment Clean Down Declaration' forms prior to first entering a work area or when moving between work areas. These forms were submitted to Supervisors / Environmental Representatives on a daily basis for signing. Signed forms were then saved by BR8 and then uploaded to a register. Completed and signed 'Plant and Equipment Clean Down Declaration' forms from 15 - 28 February 2017 were requested from the Register and viewed as part of the audit. Several forms have also previously been viewed on site on a random basis during the daily inspections. The forms viewed were signed by the driver.
Topsoil and mulch	Ensure topsoil and mulch from uninfested, infested, uninterpretable and unmappable areas are stockpiled separately within their classified area.	During clearing	Construction contractor	Sight evidence of implementation	Audit did not note any topsoil stockpiled on site during the daily inspections. Mulch had been stockpiled on a temporary basis within their classification area.
	Ensure stockpiles have appropriate signage, including source location and dieback classification (i.e. uninfested, infested, unmappable or uninterpretable).	During clearing	Construction contractor	Sight evidence of implementation	Audit did not note any topsoil stockpiled on site during the daily inspections. Temporary mulch stockpiles did not have appropriate signage during the audit period. Audit noted that temporary mulch stockpiles were not moved from their source location during the audit period. Audit noted that hygiene measures are also included in SEPs issued for each work area.



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
					BR8 responded to a similar finding in the previous audit report. BR8 stated that the mulch stockpiles identified during the audit did not have appropriate signage as they were temporary and were going to be taken to a central stockpile area and grouped according to risk classification. This central stockpile area was going to be fitted with appropriate signage as per requirements. Relocation of mulch piles to longer-term storage area had not yet occurred at the end of the audit period. <i>Note: BR8 informed the auditor during the formal audit meeting on 27 March 2017 that signage had now been installed on each temporary mulch stockpile. Photographs of several temporary mulch stockpiles were provided on 30 March 2017 which showed appropriate signage on each stockpile that was photographed.</i>
	Dispose of topsoil and mulch from infested, unmappable and uninterpretable areas that may contain dieback offsite at a licensed facility or by re-using it within areas of the same classification.	During construction	Construction contractor	Sight evidence of implementation	Audit did not note the disposal of topsoil or mulch during the audit period.
Construction materials	Ensure all imported landscaping and revegetation materials (i.e. soil, mulch, seedlings) brought onsite are disease and pathogen free.	Prior to purchasing	Construction contractor	Sight evidence of implementation	Audit did not note any landscaping or revegetation materials brought to site during the audit period.
Monitoring	Review and sign off on hygiene register form and inspection of random selection of plant used for clearing exiting the site to ensure all vehicles and machinery are free from soil/organic material prior to entry into the development envelope and on exit from infested, unmappable and uninterpretable areas that may contain dieback.	Quarterly during construction until earthworks and excavation work has been completed	Construction contractor	Sight hygiene register and inspection reports	Audit included an assessment of WESICs which covered the entire audit period. The WESICs include the requirement for inspections of dieback hygiene measures and brush down / wash down points. This requirement was completed in every WESIC viewed.
	Review incident register to ensure that all vehicles, are subject to hygiene management procedures on entering/exiting site on exit from infested, unmappable and uninterpretable areas that may contain dieback.	Weekly during construction	Construction contractor	Sight inspection reports	Audit included an assessment of WESICs which covered the entire audit period. The WESICs include the requirement for inspections of dieback hygiene measures and brush down / wash down points. This requirement was completed in every WESIC viewed.
	Site inspection to monitor the integrity of the demarcation of infested, unmappable and uninterpretable areas that may contain dieback.	Monthly during construction until earthworks and excavation work has been completed	Construction contractor	Sight inspection reports	Audit included an assessment of WESICs which covered the entire audit period. Audit noted that the WESIC did not include a specific checklist item to monitor the integrity of the demarcation of infested, unmappable and uninterpretable areas that may contain dieback. <i>Note: BR8 informed the auditor during the information gathering process on 28 March 2017 that the WESIC had been reviewed and revised to include this requirement. The revised 'issued for use' WESIC was provided on 30 March 2017.</i>
	Site inspection to ensure that topsoil and mulch from uninfested, infested, uninterpretable and unmappable areas are stockpiled separately within their classified area.	Monthly during construction	Construction contractor	Sight inspection reports	Audit included an assessment of WESICs which covered the entire audit period. Audit noted that the WESIC did not include a specific checklist item to ensure that topsoil and mulch from uninfested, infested, uninterpretable and unmappable areas are stockpiled separately within their classified area. The WESIC did contain a general checklist item to check that the "Placement of compounds, stockpiles and laydown areas are in suitable locations", however it is unclear whether this item



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
					adequately addresses the listed requirement. The comments against this item in the reports do not provide further clarification, with the 26 February report providing the most information, simply stating "All within approved locations inside PDE". Audit noted during the daily inspections that mulch was stockpiled within its classified area. <i>Note: BR8 informed the auditor during the information gathering process on 28 March 2017 that the WESIC had been reviewed and revised to include this requirement. The revised 'issued for use' WESIC was provided on 30 March 2017.</i> BR8 responded to a similar finding in the previous audit report. BR8 stated that the stockpiles identified during the audit did not trigger this inspection requirement as they were yet to be taken to a central stockpile area and grouped according to risk classification. This central stockpile area was to be inspected as per requirements. Relocation of mulch piles to a longer-term storage area had not yet occurred at the end of the audit period.
	Review construction contracts and invoices to check for evidence that imported material is disease or pathogen free and that any seedlings are sourced from accredited nurseries	As required on importation to site	Construction contractor	Sight evidence of implementation	Audit did not note any imported materials brought to site during the audit period.
ACID SULFATE SOILS (ASS) AND OTHER CONTAMINANTS					
ASS identification	Undertake detailed sampling of high ASS risk areas identified in the development envelope in accordance with <i>Acid Sulfate Soil Guidelines Series Identification and Investigation of Acid Sulfate Soils and Acidic Landscapes</i> (DER, 2015).	Prior to impacting ASS	Construction contractor	Sampling reports	Audit noted that ASS was not impacted during the audit period.
ASS management	Develop a detailed ASS Management Plan (ASSMP) based on findings from above sampling and in accordance with <i>Treatment and Management of Soils and Water in ASS Landscapes</i> (DER, 2015) in consultation with the Department of Environment Regulation (DER).	Prior to impacting ASS	Construction contractor	Sight ASSMP and evidence of DER consultation	Audit noted that ASS was not impacted during the audit period. <i>Note: an ASS Interim Management Plan has been prepared by BR8 and was issued on 14 March 2017.</i>
Other contaminants	Review groundwater and sediment sampling results from wetland and drainage surveys to determine if there is the potential for other contaminants to be present in the development envelope.	Prior to impacting ASS	Construction contractor	Sight relevant report	Audit noted that ASS was not impacted during the audit period.
	If the above review concludes that project construction will result in the disturbance of contaminated material a detailed investigation and remediation programme of the location where contamination may occur will be undertaken in accordance with the contaminated sites guidelines (DER 2014). Any identified contamination reports detailing investigation, assessment, monitoring, management or remediation of contamination referred to DER should be accompanied by a Mandatory Auditor's Report in accordance with regulation 31 (1)(c)(ii) of the Contaminated Sites Regulations 2006.	During construction (if required)	Construction contractor	Sight relevant report if applicable	This requirement did not apply during the audit period.
Personnel	Undertake ASS and potential contaminate training as part of the site induction, which should include: <ul style="list-style-type: none"> information on the how ASS are formed and potential high risk areas identification of potential contaminated areas 	Prior to personnel commencing work on site	All personnel	Noted inclusion in site induction material	Information noted during site induction attended by Lead Auditor on 7/12/2016.



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
	<ul style="list-style-type: none"> information on visual and olfactory observations which may indicate disturbance or the presence of contaminating material e.g. hydrocarbon smell, asbestos. 				
Monitoring	Monitor as per the ASSMP to ensure that any potential ASS are managed appropriately	As per ASSMP	Construction contractor	ASS monitoring results	Audit noted that BR8 had developed an ASS Sampling and Analysis Plan to provide data for the future development of an ASSMP. The ASS Sampling and Analysis Plan states that "an investigation and sampling program is only considered to be required where excavation is proposed." Audit did not note any significant excavations, therefore ASS monitoring was not required during the audit period. <i>Note: an ASS Interim Management Plan has been prepared by BR8 and was issued on 14 March 2017.</i>
	Review groundwater and sediment monitoring results (from Drainage Management and Monitoring Plan (DMMP) and Wetland Management and Monitoring Plan (WMMP))	As per DMMP and WMMP	Construction contractor	Sight relevant report	Audit confirmed that groundwater monitoring results have been reviewed by BR8, with the results collated into a table and compared against trigger levels.
Contingency actions	<p>If contaminating materials identified during construction activities then:</p> <ol style="list-style-type: none"> 1. Cease work and notify site supervisor. 2. Investigate cause. 3. Contain site of potential contamination (e.g. bunding) to prevent any spread of contaminants and fence to prevent any unauthorised access until status of the material has been confirmed and corrective actions implemented (if required). 4. Sample and analyse material to confirm contamination status of material and remediation requirements. 5. If contamination confirmed, report to DER. 6. Develop and implement Remediation Action Plan if required on advice from DER. 7. Work will commence once the status of the material has been confirmed and corrective actions implemented (if required). 	As required	Construction contractor	Sight evidence of implementation	<p>Audit noted that previously dumped suspected asbestos material was identified on site on numerous occasions. The management of suspected asbestos was noted to be identical for all areas, and the following was noted on several occasions:</p> <ol style="list-style-type: none"> 1. Work was ceased within the area that contained suspected asbestos; 2. The cause of the material was investigated and determined to be illegal dumping; 3. The area was contained by placing tarpaulins over the material, spraying it down with water and fencing the perimeter; 4. The suspected material was analysed; 5. Material that was confirmed as being asbestos remained within the fenced area on site; 6. DER, Department of Health and Worksafe have been informed of its presence on several occasions; and 7. Audit noted that a draft Asbestos Management Plan was developed by BR8 and was provided to DER, DoH and Worksafe for comment. This Plan was finalised on 7 March 2017 and a copy was viewed during the audit.
GENERAL					
Auditing	This CEMP will be audited every six months during construction to ensure compliance and relevance of the proposed actions.	Every six months, commencing May 2017	Not stated.	Sight audit report	This requirement did not apply during the audit period.
DRAINAGE MANAGEMENT AND MONITORING PLAN					
Baseline Wetland Condition Survey and Baseline Drainage Monitoring Program	A Baseline Wetland Condition Survey and Baseline Drainage Monitoring Program will be undertaken to inform drainage management and development decisions as required by 8-3. The Scope for the Baseline Survey is provided in Appendix 4. A summary of the results of that baseline survey will be incorporated into this DMMP following its completion and the results will also be provided to the OEPA prior to construction.	Prior to construction	Not stated.	Sight baseline survey report and evidence of submission to OEPA	<p>Audit noted a copy of the <i>Baseline Wetland Condition Survey and Drainage Monitoring, September 2015 – February 2016</i> report.</p> <p>Audit also noted a letter dated 2 December 2016 from Kim Taylor, General Manager of the OEPA which stated that the above report had been provided to the OEPA.</p>



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
Review and revision	The DMMP will be reviewed on an annual basis to ensure that the plan takes into consideration amendments to operations, monitoring results, audits, continuous improvement and changes in regulatory and corporate requirements. Amendments to the plan will be undertaken in accordance with condition 8-4, 8-5 and 8-6 and provided to the CEO of the OEPA for approval prior to implementation.	Annually	Not stated	Revised DMMP	This requirement did not apply during the audit period. The DMMP was issued on August 2016 and therefore a review is not required until August 2017.
WETLANDS MONITORING AND MANAGEMENT PLAN <i>Note: for the purposes of this audit Section 1.1.2 (Project Activities) of the WMMP was used as a reference for the activities that would trigger the monitoring requirements listed in the WWMP. None of these activities were conducted during the audit period.</i>					
Surface water	Conduct field monitoring of primary parameters listed in Table 4 of the WMMP	Fortnightly during construction	Not stated	Monitoring results	Monitoring was not required during the audit period as work undertaken by BR8 to-date was not consistent with the list of Project Activities provided in Section 1.1.2 of the WMMP. The audit noted that a wetland monitoring program continued through the audit period, with results compared against the trigger levels listed in Table 4 of the WWMP.
	Conduct laboratory analysis of primary parameters listed in Table 4 of the WMMP	Monthly during construction	Not stated	Monitoring results	Monitoring was not required during the audit period as work undertaken by BR8 to-date was not consistent with the list of Project Activities provided in Section 1.1.2 of the WMMP. The audit noted that a wetland monitoring program continued through the audit period, with results compared against the trigger levels listed in Table 4 of the WWMP.
	Conduct monitoring of secondary parameters listed in Table 4 of the WMMP	Annually in October during construction	Not stated	Monitoring results	Requirement does not apply during audit period.
Bio-indicators	Conduct monitoring of the species richness and/or abundance of aquatic macro-invertebrates	Annually in spring during construction	Not stated	Monitoring results	Requirement does not apply during audit period.
	Conduct monitoring of waterbirds	Once in January / February during construction	Not stated	Monitoring results	Audit noted that waterbird monitoring was conducted on 26 and 27 February, and 1 March 2017 completed during the audit period with the findings published in <i>Waterbird Monitoring Report</i> dated 16 March 2017.
Groundwater	Conduct field monitoring of primary parameters listed in Table 5 of the WMMP	Fortnightly during construction	Not stated	Monitoring results	Monitoring was not required during the audit period as work undertaken by BR8 to-date was not consistent with the list of Project Activities provided in Section 1.1.2 of the WMMP. The audit noted that a groundwater monitoring program continued through the audit period, with results compared against the trigger levels listed in Table 5 of the WWMP.
	Conduct laboratory analysis of primary parameters listed in Table 5 of the WMMP	Monthly during construction	Not stated	Monitoring results	Monitoring was not required during the audit period as work undertaken by BR8 to-date was not consistent with the list of Project Activities provided in Section 1.1.2 of the WMMP. The audit noted that a groundwater monitoring program continued through the audit period, with results compared against the trigger levels listed in Table 5 of the WWMP.
	Conduct monitoring of secondary parameters listed in Table 5 of the WMMP	Annually in October during construction	Not stated	Monitoring results	Requirement does not apply during audit period.



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
Sediment	Conduct laboratory analysis of secondary parameters listed in Table 6 the WMMP	Annually during construction	Not stated	Monitoring results	Requirement does not apply during audit period.
Contingency measures	In the event monitoring indicates that the trigger and guideline values specified in Table 4, Table 5 and Table 6 have been exceeded, the following actions will occur: 1. Immediately implement management and/or contingency actions specified in Table 7 • continue to implement actions until trigger and guideline values are met or until CEO of OEPA confirms in writing that actions are no longer required. 2. Investigate the cause of the trigger and guideline values being exceeded and identify any further contingency actions required to prevent trigger and guideline values from being exceeded in the future. 3. Provide a report to the CEO of the OEPA within seven days of trigger and guideline values being exceeded. The report shall include: • details of management and/or contingency actions implemented • findings of the investigation conducted.	In the event monitoring indicates that the trigger and guideline values specified in Table 4, Table 5 and Table 6 have been exceeded.	Not stated	Monitoring results	Monitoring was not required during the audit period as work undertaken by BR8 to-date was not consistent with the list of Project Activities provided in Section 1.1.2 of the WMMP. Therefore contingency measures were not required to be implemented during the audit period.
Contingency measures	Contingency measures undertaken will be reported in the annual report (refer to Section 4.2 of WMMP).	Annually	Not stated	Annual Compliance Report	This requirement did not apply during the audit period as the first annual compliance report is not required until October 2017.
Auditing	Internal audits will be undertaken	Every three months	Not stated	Audit report	Requirement does not apply during audit period.
FLORA AND VEGETATION AND MONITORING MANAGEMENT PLAN					
Flora and vegetation	Conduct baseline vegetation and flora survey as per the requirements of the FVMMP	Prior to construction	Not stated	Baseline survey report	Audit noted that the document: <i>Roe Highway Extension Baseline Flora and Vegetation Condition Survey</i> was prepared in December 2015. The document described the baseline vegetation and flora survey that was completed in October 2015.
	Conduct ongoing vegetation and flora monitoring as per the requirements of the FVMMP	Annually during Spring	Not stated	Monitoring report	Requirement does not apply during audit period. <i>Note: BR8 has indicated that an additional vegetation and flora baseline survey was conducted (report still in draft form and not viewed during the audit).</i>
Soil Moisture	Conduct soil moisture baseline survey as per the requirements of the FVMMP	Prior to construction	Not stated	Baseline survey report	Audit noted that the document: <i>Roe Highway Extension Baseline Flora and Vegetation Condition Survey</i> was prepared in December 2015. The document described the soil moisture baseline survey that was completed in October 2015.
	Conduct ongoing soil moisture monitoring as per the requirements of the FVMMP	Annually during Spring	Not stated	Monitoring report	Requirement does not apply during audit period. <i>Note: BR8 has indicated that additional baseline soil moisture data was collected (report still in draft form and not viewed during the audit).</i>
Auditing	Internal audits will be undertaken once a year during construction, and compliance audits will be undertaken annually during construction	Annually	Not stated	Audit report	Requirement does not apply during audit period.
FAUNA MANAGEMENT PLAN					



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
Fauna trapping and translocation	Identify a suitable fauna relocation site and confirm the correct trapping and relocation procedures, in consultation with DPaW. The methodology for identifying the location of relocation site would be determined in liaison with DPaW, and would include the ground truthing of proposed release location if required.	Prior to trapping.	Qualified fauna expert	DPaW correspondence confirming the suitable fauna relocation site	Audit noted emails from DPaW which confirm the suitability of the proposed relocation sites. A valid copy of BR8's <i>Licence to take Fauna for Educational or Public Purpose</i> was noted which details the requirements for the trapping and relocation procedures.
Fauna trapping and translocation	Obtain a licence to take fauna for education or public purposes (fauna relocation and/or education) issued under Section 15 of the <i>Wildlife Conservation Act 1950</i> from DPaW.	Prior to trapping and the installation of fencing	Qualified fauna expert	Fauna licence	Audit noted a valid copy of BR8's <i>Licence to take Fauna for Educational or Public Purposes</i> .
Fauna trapping and translocation	Fauna capture and handling will be conducted in accordance with DPaW's Standard Operating Procedures (SOP's) at the following link: https://www.dpaw.wa.gov.au/plants-and-animals/96-monitoring/standards/99-standardoperating-procedures .	During trapping	Qualified fauna expert	Sight evidence of implementation	Audit included numerous random inspections of fauna traps and processes and did not identify any evidence that indicated fauna capture and handling was not conducted in accordance with DPaW's SOP's, with the exception of methods introduced to reduce the likelihood of deliberate damage (i.e. not marking sites with flagging tape).
Trapping and Translocation Program – Southern Brown Bandicoot	<p>Undertake a 3-4 day Southern Brown Bandicoot trapping and translocation program, in accordance with the appropriate licence issued by DPaW, for all areas of suitable habitat within the development envelope.</p> <p>Each trapping and translocation program is proposed to include:</p> <ul style="list-style-type: none"> • site reconnaissance to determine the likely habitat where Southern Brown Bandicoot will occur • traps will be set across each stage of habitat to be cleared; approximately eight traps per hectare, which will be followed by the progressive clearing/fencing • cage traps will be used; these will be standard dimension of about 25 cm by 25 cm by 50 cm ('possum traps') suitable for the bandicoot • traps will be set and checked for each trapping night and Southern Brown Bandicoot relocated • traps will be checked in the morning prior to closure and then reopened in the afternoon, regardless of temperature • each trapping program will be undertaken for 3 - 4 days and will continue until no Southern Brown Bandicoots are caught for 2 consecutive trapping nights or as otherwise determined by a fauna expert • in hot weather (i.e. above 30°C and/or for consecutive days) traps will be closed after checking and reopened in the late afternoon to avoid captures in the heat of the day which can result in mortality • in periods large volumes of rain traps will be closed after checking and reopened in the late afternoon to avoid capturing and drowning due to flooding • following each trapping phase a report will be provided detailing the methodology, number of animals relocated and the locations to which they were released <p>The brief reports will be provided to DPaW.</p>	Trapping and translocation program to be completed within the 7 days prior to each clearing stage.	Qualified fauna expert	Sight evidence of implementation and trapping reports	<p>Audit included numerous random on-site inspections of fauna traps, and a review of three trapping reports, chosen at random.</p> <p>An assessment against each requirement is provided below:</p> <ul style="list-style-type: none"> • All three trapping reports included details of the duration of the trapping program. All programs were noted to have been undertaken for at least 3 days; • All three trapping reports stated that site reconnaissance occurred, and evidence of this was previously noted onsite on several occasions; • All three trapping reports included details of the number of traps set per hectare. All trapping programs included sufficient trap numbers; • Cage traps were inspected on site on numerous occasions. All were standard dimension of about 25 cm by 25 cm by 50 cm ('possum traps'); • Trap inspection records were previously viewed on site on numerous occasions and all identified that traps were checked for each trapping night. All three trapping reports viewed provided information of the relocation of any Southern Brown Bandicoot; • Cage traps have previously been inspected on numerous occasions. BR8 made the decision in late December 2016 to close all cage traps during the day, regardless of temperature. All cage traps inspected during the day from this point onwards were closed. All three trapping reports stated that cage traps were closed after they were checked each morning; • One of the three trapping reports reviewed stated that one Southern Brown Bandicoot was caught on the final night of the trapping program. A fauna expert provided a letter to BR8 describing why the trapping program could be considered complete. This letter was viewed during the audit. The fauna expert is an experienced zoologist who has operated in this region for more than ten years (curriculum vitae details for several fauna handlers provided to the



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					<p>auditor);</p> <ul style="list-style-type: none"> Two of the three trapping reports reviewed confirmed that no Southern Brown Bandicoots were caught for two consecutive trapping nights; All three trapping reports included the required information; and Emails were viewed during the audit that confirmed that all three trapping reports had been provided to DPaW.
Translocation Program – Southern Brown Bandicoot	<p>From Section 4.2.2:</p> <p>To determine the success of the trapping and relocation program, Main Roads also propose to undertake Southern Brown Bandicoot relocation monitoring post release as detailed in Table 8. The relocation monitoring program is proposed to include:</p> <ol style="list-style-type: none"> 1. Site reconnaissance by the qualified fauna expert prior to trapping to determine the likely habitat where Southern Brown Bandicoot occur. 2. Traps for monitoring will be set for a minimum of 4 nights (or as recommended by a fauna expert) across the relocation site; approximately eight traps will be set per hectare in the area in which they were relocated. 3. Traps will be set and checked for each trapping night for tagged Southern Brown Bandicoots. 4. In hot weather (i.e. above 35°C and/or for consecutive days) traps will be closed after checking and reopened in the late afternoon to avoid captures in the heat of the day which can result in mortality. <p>Following each trapping phase, a report will be provided detailing the methodology, number of relocated Southern Brown Bandicoots that were recorded.</p>	Every 6 months for 2 years post release, with the first monitoring event to be undertaken within 3 months of release.	Qualified fauna expert	Sight evidence of implementation and trapping reports	Requirement did not apply during the audit period.
Trapping and Translocation Program – Targeted Reptiles	<p>During warmer months undertake a 3-4 day targeted reptile trapping and translocation program, specifically for <i>Ctenotus gemmula</i>, <i>Lerista lineata</i>, <i>Neelaps calonotos</i> and <i>Morelia spilota imbricata</i>, in accordance with the appropriate licence issued by DPaW, for all areas of suitable habitat within the development envelope.</p> <p>Targeted reptile trapping will include the following:</p> <ol style="list-style-type: none"> 1. Site reconnaissance will be undertaken by the qualified reptile expert prior to trapping to determine the optimal locations for traps, and methods of trapping. 2. A variety of methods will be used for capturing targeted reptiles dependent upon the habitat type present in each stage; the site conditions; and the prevailing weather conditions. These may include single pits, pit trap lines (10 L and 20 L pit sizes) as well as manual capture with traps and pits checked during the day. 3. Each trapping program will run for 3 - 4 days and will continue until no <i>Ctenotus gemmula</i>, <i>Lerista lineata</i>, <i>Neelaps calonotos</i> and <i>Morelia spilota imbricata</i> species are trapped for two consecutive nights or as otherwise determined by a trapping expert. <p>Following each trapping phase a summary report will be provided detailing the methodology, number of animals relocated and the locations to which they were released.</p>	7 days prior to clearing of vegetation in each stage containing suitable habitat from October to April (on the advice of a qualified reptile expert).	Qualified fauna expert	Sight evidence of implementation and trapping reports	<p>Audit included numerous random on-site inspections of reptile traps, and a review of three trapping reports, chosen at random.</p> <p>An assessment against each requirement is provided below:</p> <ul style="list-style-type: none"> All three trapping reports included details of the duration of the trapping program. All programs were noted to have been undertaken for at least 3 days; All three trapping reports stated that site reconnaissance occurred, and evidence of this has previously been noted onsite on several occasions; Pit traps, pit trap lines and manual captures were noted on numerous occasions during the audit; Trap inspection records have previously been viewed on site on numerous occasions and all identified that traps and pits were checked during the day; All three trapping reports confirmed that no <i>Ctenotus gemmula</i>, <i>Lerista lineata</i>, <i>Neelaps calonotos</i> or <i>Morelia spilota imbricata</i> were caught for two consecutive trapping nights; All three trapping reports, included the required information; and Emails were viewed that confirmed that all three trapping reports had been provided to DPaW.



PARAMETER	MANAGEMENT ACTION	TIMING	RESPONSIBILITY	EVIDENCE	ASSESSMENT
Trapping and Translocation Program – Targeted Reptiles	<p>During cooler months undertake a 3-4 day targeted reptile trapping and translocation program, specifically for <i>Ctenotus gemmula</i>, <i>Lerista lineata</i>, <i>Neelaps calonotos</i> and <i>Morelia spilota imbricata</i>, in accordance with the appropriate licence issued by DPaW, for all areas of suitable habitat within the development envelope.</p> <p>1. Targeted reptile trapping will include the following:</p> <ul style="list-style-type: none"> active searching with three prong cultivator or something similar each trapping program will be undertaken for 3 - 4 days and will continue until no <i>Ctenotus gemmula</i>, <i>Lerista lineata</i>, <i>Neelaps calonotos</i> and <i>Morelia spilota imbricata</i> species are trapped for two consecutive nights or as otherwise determined by a trapping expert following each trapping phase a report will be provided detailing the methodology, number of animals relocated and the locations to which they were released <p>the brief reports will be provided to DPaW.</p>	5 weeks prior to clearing of vegetation in each stage containing suitable habitat from May to September (on the advice of a qualified reptile expert).	Qualified fauna expert	Sight evidence of implementation and trapping reports.	Requirement did not apply during the audit period.
Clearing Controls – Black Cockatoo	Where possible clear potential Carnaby's Black Cockatoo or Forest Red-tailed Black Cockatoo (black cockatoo) nesting trees outside the black cockatoo breeding season.	January - July	Qualified fauna expert	Sight evidence of implementation	<p>Audit period was outside the black cockatoo nesting season and therefore the clearing of potential black cockatoo nesting trees was able to occur. The Fauna Management Plan does not contain any management requirements for black cockatoo during this period. Audit noted however that surveys continued prior to clearing to identify potential black cockatoo nesting trees and determine which trees could be retained. Several SEPs were reviewed for areas cleared during the audit period which contained requirements for the retention of potential black cockatoo nesting trees.</p> <p>These retained trees were noted on several occasions with a buffer zone in place, or the site boundary was moved to exclude these trees.</p>
Clearing Controls – Black Cockatoo	Inspect any areas to be cleared for evidence of active nesting/breeding activity by Black Cockatoo, during breeding season. If active Black Cockatoo nesting activity is observed during the survey implement the contingency measure detailed in Table 9.	Within the 7 days prior to each clearing stage during August – December only	Qualified fauna expert	Inspection reports	This requirement did not apply during the audit period.
Fauna Fencing	<p>Install fauna fencing to exclude terrestrial vertebrate fauna from the construction footprint and the operational highway.</p> <p>Fauna fencing will:</p> <ul style="list-style-type: none"> comprise of a mesh fence to a height of no less than 1.2 m and be dug into the ground to a depth of no less than 350 mm include temporary fauna fencing during construction, but will conform to the standards required for permanent fencing be designed to exclude the Southern Brown Bandicoot within the development envelope include escape gates to allow fauna trapped in the road reserve an exit route. <p>Note that Section 4.2.2 clarifies the fencing requirement further: Traps will be set across each stage of habitat to be cleared at approximately 8 traps per hectare of clearing which will be followed by the progressive clearing and fencing of the area.</p>	During construction	Main Roads	Sight evidence of implementation	<p>Audit noted that this requirement was deemed to apply to the post-clearing construction period, as confirmed by the statement in Section 4.2.2 of the Fauna Management Plan: <i>Traps will be set across each stage of habitat to be cleared at approximately 8 traps per hectare of clearing which will be followed by the progressive clearing and fencing of the area.</i></p> <p>Post-clearing construction had not commenced during the audit.</p>



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Fauna fencing (Progress Dve to Bibra Dve only)	Temporary fence aligned through areas of open ground and tracks: <ul style="list-style-type: none"> Fencing to be installed along open ground and where possible aligned with tracks Fencing not to be erected outside of the approved Project Development Envelope (PDE) 	Not stated	Not stated	Sight evidence of implementation	Previous audit identified that fencing in this area was installed prior to this audit period, and according to requirements.
	Temporary fence aligned through open woodland: <ul style="list-style-type: none"> Fencing to be installed between trees and other large vegetation, taking care to minimise disturbance of ground cover wherever practicable Branches overhanging fence line from outside the PDE may be trimmed back as far as the PDE boundary only Branches overhanging fence line from within the PDE may be trimmed back as far as necessary to provide access for fence installation Vegetation may be pruned back to ground level where necessary for fence installation Temporary fauna-proof mesh will either be dug into the ground where it is clear, or pinned to the ground to prevent fauna movement into the trap zone Fencing not to be erected outside of the approved PDE 	Not stated	Not stated	Sight evidence of implementation	The previous audit identified that fencing in this area was installed prior to this audit period, and according to requirements, with shade cloth pinned to the ground. A daily inspection noted that the fence was modified during this audit period within Wetland Areas 1-3, and along the southern fenceline in Wetland Area 4. In these areas the shade cloth was dug into the ground to an estimated depth of 350 mm. The management action allows both of the methods listed above and therefore the fence was installed according to requirements for the duration of the audit period.
	Temporary fence aligned through areas of dense vegetation: <ul style="list-style-type: none"> Trimming and/or removal of vegetation will be avoided and minimised where practicable Branches overhanging fence line from outside the PDE may be trimmed back as far as the PDE boundary only Branches overhanging fence line from within the PDE may be trimmed back as far as necessary to provide access for fence installation A Positrack will be used to remove vegetation to ground level along a maximum corridor width of 2m along the fence line Qualified fauna handlers will inspect the site within 24 hours before the use of a Positrack to recover as many reptiles and other fauna as possible Fauna handlers will walk the alignment the day of the use of a Positrack to recover as many reptiles and other fauna as possible. This will include inspecting under bushes for Southern Brown Bandicoots and creating disturbance to encourage fauna to move away from the disturbance area Fencing not to be erected outside of the approved PDE 	Not stated	Not stated	Sight evidence of implementation	Previous audit identified that fencing in this area was installed prior to this audit period, and according to requirements.
Vehicle strike	During construction the following will be considered: <ul style="list-style-type: none"> appropriate speed limits will be set, signposted and adhered to on all access roads to avoid fauna strike all vehicles will yield right-of-way to fauna speed restrictions will apply in areas between dusk and dawn where there is a high risk of fauna/vehicle collisions these areas and restrictions will be routinely revised based on records of physical encounters/near misses.	As required.	Main Roads	Sight evidence of implementation	Audit noted on numerous occasions that SEPs issued to all workers prior to work in each area include vehicle speed limits of 20 km/hr for all unsealed roads.
Review and reporting	The Fauna Management Plan will be reviewed on an annual basis, or as otherwise determined, to ensure that the plan takes into consideration amendments to operations, monitoring results, audits,	Annual basis (i.e. first review prior to 2 December 2017), or	Main Roads	Sight evidence of implementation	Requirement did not apply during the audit period.



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	continuous improvement and changes in regulatory and corporate requirements.	as otherwise determined			
Review and reporting	A monitoring report will be prepared after each monitoring event, summarising the results produced prior to the preparation of the Annual Compliance Report.	After each monitoring event	Qualified fauna expert	Monitoring reports	Audit included a review of three trapping programs, chosen at random. A trapping report was prepared for all three trapping programs.
Other statements of note not otherwise listed	Roles and responsibilities: The fauna handler: <ul style="list-style-type: none"> • Must be on-site at all times during clearing operations • Conduct daily inspections of pits and trenches • Must be on-call during construction activities other than clearing 	During construction	Fauna handler	Sight evidence of implementation	Audit noted the presence of fauna handlers on site during all clearing operations viewed during daily inspections. Audit included the inspection of all work areas and did not note any pits or trenches that could trap fauna that remained open for more than 24 hours. Audit noted that fauna handlers were on-site or on call during clearing activities.
Pre-trapping tree lopping (Coolbellup Rd to Stock Rd, and Stock Rd loops)	<ul style="list-style-type: none"> • Trees identified for lopping will be inspected by a fauna specialist and marked on drawings • A fauna specialist will identify an appropriate route for an elevated work platform (EWP) to access the tree • On the day of lopping, a fauna specialist will inspect the access route and area beneath the tree canopy and hand forage for target fauna • A licenced operator will manoeuvre the EWP into position, under the observation of a fauna specialist • The licenced operator will determine whether the tree contains hollows and if so, will inspect for evidence of occupation by black cockatoos • If it is confirmed that there are no active black cockatoo nests tree branches and the tree top will be lopped and allowed to drop to the ground • Working from a safe distance, the fauna specialist will observe and opportunistically collect any target fauna disturbed by the works 	Prior to the commencement of trapping program	Environment Manager	Sight evidence of implementation	Audit did not note the lopping of any trees prior to the commencement of any trapping programs.
TYPHA ORIENTALIS CONTROL PROGRAM					
<i>Typha orientalis</i> control	Undertake a pre-control survey to confirm the extent and percentage cover of the * <i>T. orientalis</i> infestation within the target areas shown in Figure 4 and to determine baseline condition at ongoing monitoring quadrats (refer to Section 5 of the Program).	Prior to herbicide application (January 2018)	Weed control contractor	Survey report	Requirement did not apply during the audit period.

