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Published on: 4 July 2023 Statement No. 1205

# STATEMENT THAT A SIGNIFICANT AMENDMENT TO AN APPROVED PROPOSAL MAY BE IMPLEMENTED

(Environmental Protection Act 1986)

MANUWARRA RED DOG HIGHWAY PROJECT (SIGNIFICANT AMENDMENT)

Proposal: The proposal is to amend the existing Manuwarra Red

Dog Highway Project, formerly known as the New Road from Tom Price to Karratha Project, to construct and operate a dual carriageway approximately 251 km in

length between Tom Price and Karratha.

**Proponent:** Commissioner of Main Roads Western Australia

Australian Business Number 50 860 676 021

**Proponent address:** Don Aitken Centre, Waterloo Crescent

EAST PERTH WA 6004

Assessment number: 2273

Report of the Environmental Protection Authority: 1736

**Previous Assessment Number: 1244** 

**Previous Report of the Environmental Protection Authority: 1159** 

**Previous Statement Number: 677** 

**Introduction**: The proposal is a significant amendment to the existing 'Road from Karratha to Tom Price Shires of Ashburton & Roebourne' approved proposal which was agreed to be implemented under Ministerial Statement 677.

Pursuant to section 45 of the *Environmental Protection Act 1986*, it is now agreed that:

 the significant amendment to the approved proposal described and documented in the proponent's Proposal Content Document (Revision 4, January 2023), may be implemented;

- 2. Ministerial Statement 677 for the existing 'Road from Karratha to Tom Price Shires of Ashburton & Roebourne' approved proposal is superseded under section 40AA(6)(b) of the *Environmental Protection Act 1986*; and
- 3. the implementation of the significantly amended proposal (being the existing approved proposal as amended by the significant amendment proposal) is subject to the following implementation conditions and procedures.

# **Conditions and procedures:**

Part A: Proposal extent

Part B: Environmental outcomes, prescriptions and objectives

Part C: Environmental management plans and monitoring

Part D: Compliance and other conditions

# **PART A: PROPOSAL EXTENT**

# A1 Limitations and Extent of Proposal

A1-1 The proponent must ensure that the proposal is implemented in such a manner that the following maximum extents are not exceeded:

Proposal element	Location	Maximum extent
Physical elements		
Stage 4 development envelope subject to this significant amendment, including	Figure 1	Clearing of no more than 646 <b>ha</b> of native vegetation in a <b>'Good'</b> or better condition, including 100 <b>ha</b> of temporary clearing, within a 7,142 <b>ha</b> development envelope.

## PART B - ENVIRONMENTAL OUTCOMES, PRESCRIPTIONS AND OBJECTIVES

## **B1** Disturbance Footprint Report

B1-1 The proponent shall prepare and submit a Disturbance Footprint Report to the CEO that identifies the final disturbance footprint for **stage 4** of the proposal prior to construction. The Disturbance Footprint Report may be submitted in stages and must demonstrate, at every stage, that the maximum clearing extents specified under conditions A1-1, B2-1(3) and B3-1(1) will be met for all stages combined.

## **B2** Flora and Vegetation

- B2-1 The proponent must ensure that the implementation of **stage 4** of the proposal achieves the following environmental outcomes:
  - (1) no **disturbance** of *Hibiscus* sp. Mt Brockman (E. Thoma ET 1354), *Josephinia* sp. Woodstock (A.A. Mitchell PRP 989), *Aristida lazaridis, Euphorbia inappendiculata* var. *inappendiculata*, and *Euphorbia inappendiculata* var. *queenslandica* as recorded in the **baseline biological survey**;
  - (2) no disturbance of areas not reasonably expected to be required for ongoing operations of the following environmental values, as recorded in the baseline biological survey:
    - (a) 'Themeda grasslands on cracking clays (Hamersley Station, Pilbara)' threatened ecological community, represented by vegetation types C4, C5 and P6;
    - (b) 'Brockman Iron cracking clay communities of the Hamersley Range' priority ecological community, represented by vegetation type C3;
    - (c) potential groundwater dependent vegetation, represented by vegetation types D1, D2 and D3; and
    - (d) priority flora.
  - (3) **disturb** no more than the following environmental values, as recorded in the **baseline biological survey**:
    - (a) 15 **ha** of the 'Themeda grasslands on cracking clays (Hamersley Station, Pilbara)' threatened ecological community, represented by vegetation types C4, C5 and P6;
    - (b) 12 ha of the 'Brockman Iron cracking clay communities of the Hamersley Range' priority ecological community, represented by vegetation type C3;

- (c) 20.1 **ha** of potential groundwater dependent vegetation, represented by vegetation types D1, D2 and D3;
- (d) 13.2 **ha** of the vegetation on cracking clays locally significant vegetation community, represented by vegetation type C2;
- (e) 80.9 **ha** of the grove-intergrove mulga locally significant vegetation community, represented by vegetation types M1 and M2; and
- (f) 0.2 ha of the cracking clays community represented by vegetation type P7.
- (4) no **adverse impacts**, beyond the extents identified in condition B2-1(3), to the following environmental values as recorded in the **baseline biological survey**:
  - (a) 'Themeda grasslands on cracking clays (Hamersley Station, Pilbara)' threatened ecological community, represented by vegetation types C4, C5 and P6;
  - (b) 'Brockman Iron cracking clay communities of the Hamersley Range' priority ecological community, represented by vegetation type C3;
  - (c) potential groundwater dependent vegetation represented by vegetation types D1, D2 and D3;
  - (d) vegetation on cracking clays locally significant vegetation community, represented by vegetation type C2;
  - (e) grove-intergrove mulga locally significant vegetation community, represented by vegetation types M1 and M2; and
  - (f) cracking clays community represented by vegetation type P7.
- B2-2 The proponent must prepare an environmental management plan, that satisfies the requirements of condition C4 and demonstrates how achievement of the flora and vegetation environmental outcomes in condition B2-1(4), will be monitored and substantiated, and submit it to the **CEO**, on advice of the **DBCA**.
- B2-3 The proponent must revegetate all areas of native vegetation cleared, but not reasonably expected to be required for ongoing operations within the **stage 4** development envelope, within twenty-four (24) months of completion of **construction activities** until revegetation achieves a **'Good'** quality of vegetation.

B2-4 The proponent shall undertake ongoing weed control and management of kapok (*Aerva javanica*) and ruby dock (*Rumex vesicarius*) within Millstream-Chichester National Park within 50 m of the proposal during operation of the road.

### **B3** Terrestrial fauna

- B3-1 The proponent must ensure that the implementation of **stage 4** of the proposal achieves the following environmental outcomes:
  - (1) **disturb** no more than:
    - (a) 0.15 ha of mesas, caves, cliffs and free faces (HS) habitat type;
    - (b) 3.85 ha of rocky gullies (RG) habitat type;
    - (c) 86.7 ha of rocky hills and slopes with low spinifex and scattered trees (RHS) habitat type;
    - (d) 90.4 ha of Eucalyptus fringed major drainage lines and associated tributaries (MDE) habitat type;
    - (e) 0.03 ha of Melaleuca forest/major drainage lines (MDM) habitat type; and
    - (f) 183.3 ha of Floodplains (CP) habitat type.
  - (2) no adverse impacts to ghost bat (*Macroderma gigas*) caves from construction activities.

## Clearing for construction

- B3-2 Prior to **ground disturbing activities** the proponent shall undertake the following actions:
  - (1) for any clearing proposed during the grey falcon (*Falco hypoleucos*) nesting period, within seven (7) days prior to clearing, survey all potential breeding trees within the Eucalyptus fringed major drainage lines and associated tributaries (MDE) habitat type; and
  - (2) where nesting grey falcon (*Falco hypoleucos*) are identified under condition B3-2(1), avoid clearing the **breeding tree** until such time that the tree is no longer occupied for breeding by grey falcon (*Falco hypoleucos*).
- B3-3 Prior to **ground disturbing activities** the proponent shall undertake the following actions:
  - (1) within seven (7) days prior to clearing, using a licensed **fauna spotter** undertake **pre-clearance surveys** to detect the presence of northern quoll (*Dasyurus hallucatus*) within:

- (a) the mesas, caves, cliffs and free faces (HS) habitat type; and
- (b) the rocky gullies (RG) habitat type.
- (2) where northern quoll (*Dasyurus hallucatus*) is detected under condition B3-3(1), **ground disturbing activities** shall not commence until either:
  - (a) the individual has been relocated by a **fauna spotter**; or
  - (b) the individual has been observed by the **fauna spotter** to have moved on from the area to adjoining **suitable habitat**; and/or
  - (c) the **fauna spotter** considers that the individual no longer occurs in the area.
- B3-4 The proponent shall undertake the following actions during **construction** activities:
  - (1) ensure the presence of **fauna spotters** during clearing activities; and
  - (2) **construction activities** must cease in any area where northern quoll (*Dasyurus hallucatus*) or Pilbara olive python (*Liasis olivaceus barroni*) are identified until:
    - (a) the individual has been relocated by a **fauna spotter**; or
    - (b) the individual has been observed by the **fauna spotter** to have moved on from the area to adjoining **suitable habitat**; and/or
    - (c) the **fauna spotter** considers that the individual no longer occurs in the area.
- B3-5 The proponent shall produce and provide a report on fauna management no later than sixty (60) days after the completion of **construction activities** to the **CEO**. The report shall include the following:
  - (1) details of fauna inspections;
  - (2) the number and type of fauna removed and relocated and actions taken;
  - (3) details of the **fauna spotter** commissioned;
  - (4) results of pre-clearance surveys; and
  - (5) vertebrate fauna mortalities.
- B3-6 The proponent shall not undertake any clearing within the **mesas**, **caves**, **cliffs** and free faces (HS) habitat type or the rocky gullies (RG) habitat type during the northern quoll (*Dasyurus hallucatus*) breeding season.

- B3-7 The proponent shall not undertake **construction activities** within a one (1) kilometre buffer of the **mesas**, **caves**, **cliffs and free faces (HS) habitat** type or **rocky gullies (RG) habitat** type during **night-time** hours.
- B3-8 The proponent shall not undertake any **construction activities** within 200 metres of the **ghost bat** (*Macroderma gigas*) caves.
- B3-9 Blasting activities shall only take place during **day-time** hours.
- B3-10 In the event that blasting is required within 500 metres of **ghost bat** (*Macroderma gigas*) caves, the proponent must prepare an environmental management plan that satisfies the requirements of condition C4 and demonstrates how achievement of the ghost bat (*Macroderma gigas*) environmental outcome in condition B3-1(2) will be monitored and substantiated, and submit it to the **CEO**, on advice of the **DBCA**.

## Signage

B3-11 Prior to operation, the proponent must install signage on both sides of the road, alerting road users to the likelihood of encountering northern quoll (*Dasyurus hallucatus*) within a one (1) kilometre buffer of the **mesas**, **caves**, **cliffs and free faces (HS) habitat** type or **rocky gullies (RG) habitat** type.

## Road fencing

B3-12 Barbed wire fencing, if required, must be installed with the top strand as a single-strand wire and with suitable **bat deflectors**.

## Speed limits

- B3-13 During construction, vehicle and machinery speed limits within the **stage 4** development envelope shall not exceed:
  - (1) 80 km/hr during day-time hours;
  - (2) 60 km/hr at night-time; and
  - (3) 40 km/hr at night-time within a one (1) kilometre buffer of the mesas, caves, cliffs and free faces (HS) habitat or rocky gullies (RG) habitat type.

### Lighting

B3-14 The proponent shall ensure that:

- (1) there is no permanent lighting established within the **stage 4** development envelope during operation other than required for safety reasons and under other legislation; and
- (2) all required artificial lighting used during **construction activities** must use **directional and/or shielded lighting**, and avoid direct light spill

within 500 m of ghost bat (*Macroderma gigas*) caves and within northern quoll (*Dasyurus hallucatus*) critical habitat.

### B4 Inland waters

- B4-1 The proponent must implement **stage 4** of the proposal to achieve the following environmental outcomes:
  - (1) no adverse impacts to surface water quality within Weelamurra Creek, Barnett Creek and Caves Creek, and associated significant drainage lines:
  - (2) no adverse impacts to surface water flow regimes within Weelamurra Creek, Barnett Creek and Caves Creek, and associated significant drainage lines; and
  - (3) no **adverse impacts** to permanent and semi-permanent pools present within **Weelamurra Creek**.
- B4-2 The proponent must prepare an environmental management plan that satisfies the requirements of condition C4 and demonstrates how achievement of the inland waters environmental outcomes in condition B4-1 will be monitored and substantiated, and submit it to the **CEO**.

# **B5** Aboriginal Cultural Heritage

- B5-1 The proponent must implement the proposal to meet the following environmental outcomes:
  - (1) no **disturbance** of the **HRZ\_01** heritage restriction zone; and
  - (2) subject to reasonable health and safety requirements, no interruption of ongoing access to land utilised for traditional use or custom by the Yindjibarndi People and/or the Wintawari Guruma People.
- B5-2 The proponent must implement the proposal to meet the following environmental objectives:
  - (1) avoid, where practicable, and otherwise minimise disturbance to significant sites within Eastern Guruma country;
  - (2) avoid, where practicable, and otherwise minimise disturbance to significant sites within Yindjibarndi country;
  - (3) avoid, where possible, and otherwise minimise indirect impacts to **Aboriginal cultural heritage** within and surrounding the development envelope;
  - (4) ongoing consultation and engagement with the Wintawari Guruma Traditional Owners regarding the **stage 4** alignment and minimising impacts to the preliminary Four Mile Heritage Restriction Zone; and

- ongoing consultation and engagement with Traditional Owners about achievement of the outcomes and objectives in condition B5-1, condition B5-2 and condition B4-1 for the life of the proposal.
- B5-3 The proponent must, in consultation with the Yindjibarndi People, revise and update the 'Cultural Heritage Management Plan for the Proposed Stages 3 and 4a Upgrade of the Karratha Tom Price Road in the Pilbara Region of Western Australia' (Version 2, 2018), to demonstrate how achievement of the social surroundings environmental outcomes will be substantiated, how the social surroundings objectives will be achieved, and satisfy the requirements of conditions C4 and condition C5, and submit it to the **CEO**.
- B5-4 The proponent must, in consultation with the Wintawari Guruma People, prepare an Aboriginal heritage management plan that demonstrates how achievement of the social surroundings environmental outcomes will be substantiated, how the social surroundings objectives will be achieved, and satisfies the requirements of condition C4 and condition C5, and submit it to the CEO.
- B5-5 Prior to commencement of **ground disturbing activities**, the proponent ensures that all construction staff and contractors are aware of the known Aboriginal sites within the proposed areas to be **disturbed** and of their obligations under the *Aboriginal Heritage Act 1972* or the *Aboriginal Cultural Heritage Act 2021*.

### **B6** Pilbara Environmental Offsets Fund

- B6-1 The proponent must contribute funds to the **Pilbara Environmental Offsets Fund** calculated pursuant to condition B6-2, to achieve the objective of counterbalancing the significant residual impacts to:
  - (1) 'Good' to 'Excellent' condition native vegetation;
  - (2) 'Themeda grasslands on cracking clays (Hamersley Station, Pilbara)' threatened ecological community;
  - (3) 'Brockman Iron cracking clay communities of the Hamersley Range' priority ecological community;
  - (4) **northern quoli (***Dasyurus hallucatus***) critical habitat**, subject to any reduction approved by the **CEO** under condition B6-8;
  - (5) **ghost bat (***Macroderma gigas***) critical habitat**, subject to any reduction approved by the **CEO** under condition B6-8; and
  - (6) northern quoll (*Dasyurus hallucatus*) supporting habitat, ghost bat (*Macroderma gigas*) supporting habitat, Pilbara leaf-nosed bat (*Rhinonicteris aurantia*) supporting habitat and Pilbara olive python

(*Liasis olivaceus barroni*) supporting habitat, subject to any reduction approved by the **CEO** under condition B6-8.

- B6-2 The proponent's contribution to the **Pilbara Environmental Offsets Fund** must be paid biennially, with the amount to be contributed calculated based on the clearing undertaken in each year of the biennial reporting period in accordance with the rates in condition B6-3. The first biennial reporting period must commence from **ground disturbing activities** of the environmental value(s) identified in condition B6-3.
- B6-3 Calculated on the 2021-2022 financial year, the contribution rates are:
  - (1) \$841 AUD (excluding GST) per **ha** of the following environmental values cleared as a result of the proposal within the Chichester **IBRA** subregion:
    - (a) 'Good' to 'Excellent' condition native vegetation; and
    - (b) northern quoll (*Dasyurus hallucatus*) supporting habitat, ghost bat (*Macroderma gigas*) supporting habitat, Pilbara leaf-nosed bat (*Rhinonicteris aurantia*) supporting habitat and Pilbara olive python (*Liasis olivaceus barroni*) supporting habitat.
  - (2) \$890 AUD (excluding GST) per **ha** of the following environmental values cleared as a result of the proposal within the Hamersley **IBRA** subregion:
    - (a) 'Good' to 'Excellent' condition native vegetation; and
    - (b) northern quoll (*Dasyurus hallucatus*) supporting habitat, ghost bat (*Macroderma gigas*) supporting habitat, Pilbara leaf-nosed bat (*Rhinonicteris aurantia*) supporting habitat and Pilbara olive python (*Liasis olivaceus barroni*) supporting habitat.
  - (3) \$1,780 AUD (excluding GST) per **ha** of the following environmental values cleared as a result of the proposal within the Fortescue **IBRA** subregion:
    - (a) 'Good' to 'Excellent' condition native vegetation; and
    - (b) northern quoll (*Dasyurus hallucatus*) supporting habitat, ghost bat (*Macroderma gigas*) supporting habitat, Pilbara leaf-nosed bat (*Rhinonicteris aurantia*) supporting habitat and Pilbara olive python (*Liasis olivaceus barroni*) supporting habitat.
  - (4) \$1,780 AUD (excluding GST) per **ha** of the following environmental values cleared as a result of the proposal within the Hamersley **IBRA** subregion:

- (a) 'Themeda grasslands on cracking clays (Hamersley Station, Pilbara)' threatened ecological community;
- (b) 'Brockman Iron cracking clay communities of the Hamersley Range' priority ecological community;
- (c) northern quoll (Dasyurus hallucatus) critical habitat; and
- (d) **ghost bat (Macroderma gigas) critical habitat**.
- B6-4 The rates in condition B6-3 change annually each subsequent financial year in accordance with the percentage change in the **CPI** applicable to that financial year.
- B6-5 To achieve the objective in condition B6-1 the proponent must prepare a Manuwarra Red Dog Highway Project Impact Reconciliation Procedure and submit to the **CEO**. This procedure must:
  - (1) spatially define the environmental value(s) identified in condition B6-1;
  - (2) spatially define the areas where offsets required by condition B6-1 are to be exempt;
  - (3) include a methodology to calculate the amount of clearing undertaken during each year of the biennial reporting period for each of the environmental values identified in condition B6-3;
  - (4) state that clearing calculations for the first biennial reporting period will commence from **ground disturbing activities** in accordance with condition B6-2 and end on the second 30 June following commencement of **ground disturbing activities**;
  - (5) state that clearing calculations for each subsequent biennial reporting period will commence on 1 July of the required reporting period, unless otherwise agreed by the **CEO**; and
  - (6) be prepared in accordance with Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports (or any subsequent revisions).
- B6-6 The proponent must submit an Impact Reconciliation Report in accordance with the **confirmed** Impact Reconciliation Procedure in condition B6-5.
- B6-7 The Impact Reconciliation Report required pursuant to condition B6-6 must provide the location and spatial extent of the clearing undertaken as a result of the proposal during each year of each biennial reporting period.
- B6-8 The proponent may apply in writing and seek the written approval of the **CEO** to reduce all or part of the contribution payable under condition B6-2 where:

- (1) a payment has been made to satisfy a condition of an approval under the Environment Protection and Biodiversity Conservation Act 1999 in relation to the proposal; and
- (2) the payment is made for the purpose of counterbalancing impacts of the proposal on matters of national environmental significance.
- B6-9 The **CEO** may grant approval to discount the amount payable under condition B6-1(4), condition B6-1(5) and condition B6-1(6) if the **CEO** is satisfied that the payment will offset the significant residual impacts of the proposal.
- B6-10 Condition C2 applies to the **confirmed** Impact Reconciliation Procedure required by condition B6-5 as if it were an environmental management plan.
- B6-11 Failure to implement a **confirmed** Impact Reconciliation Procedure or submit an Impact Reconciliation Report as required by condition B6-6 represents a non-compliance with these conditions.

# B7 Original proposal environmental management plans

- B7-1 The proponent is required to implement the post-construction requirements of the following management plans for **stage 3**, which the **CEO** has approved in writing:
  - (1) Karratha Tom Price Stage 3a South, 3b and 4a Vegetation Protection and Rehabilitation Management Plan (Version 2, 2018);
  - (2) Karratha Tom Price Stage 3a North Vegetation Protection and Rehabilitation Management Plan (Version 3, December 2018);
  - (3) Weed Control and Management Program Karratha Tom Price Stages 3 and 4a (Version 1, 2018);
  - (4) Karratha Tom Price Stage 3 and 4a Surface Drainage Management Plan (Version 3, 2018); and
  - (5) Karratha Tom Price Stage 3a North National Park Management Plan (Version 3, 2018).

## PART C - ENVIRONMENTAL MANAGEMENT PLANS AND MONITORING

- C1 Environmental Management Plans: Conditions Related to Commencement of Implementation of the Proposal
- C1-1 The proponent must not undertake:
  - (1) **ground disturbing activities** that may result in any impact to the environmental values specified under condition B2-1(4) or condition B4-1 until the **CEO** has confirmed in writing that the environmental management plan(s) required by condition B2-2 and condition B4-2 meets the requirements of that condition and condition C4;
  - (2) blasting activities until the **CEO** has confirmed in writing that the environmental management plan required by condition B3-10 meets the requirements of that condition and condition C4;
  - (3) **ground disturbing activities** within **Yindjibarndi country** that may result in any impact to **Aboriginal cultural heritage** until the **CEO** has confirmed in writing that the environmental management plan required by condition B5-3 meets the requirements of that condition and condition C4 and C5;
  - (4) **ground disturbing activities** within **Eastern Guruma country** that may result in any impact to **Aboriginal cultural heritage** until the **CEO** has confirmed in writing that the environmental management plan required by condition B5-4 meets the requirements of that condition and condition C4 and C5; and
  - (5) **ground disturbing activities** until the **CEO** has confirmed in writing that the Manuwarra Red Dog Highway Project Impact Reconciliation Procedure required by condition B6-5 meets the requirements of that condition.
- C2 Environmental Management Plans: Conditions Relating to Approval, Implementation, Review and Publication
- C2-1 Upon being required to implement an environmental management plan under Part B, or after receiving notice in writing from the **CEO** under condition C1-1 that the environmental management plan(s) required in Part B satisfies the relevant requirements, the proponent must:
  - (1) implement the most recent version of the **confirmed** environmental management plan; and
  - (2) continue to implement the **confirmed** environmental management plan referred to in condition C2-1(1), other than for any period which the **CEO** confirms by notice in writing that it has been demonstrated that the relevant requirements for the environmental management plan have

been met, or are able to be met under another statutory decision-making process, in which case the implementation of the environmental management plan is no longer required for that period.

## C2-2 The proponent:

- (1) may review and revise a **confirmed** environmental management plan provided it meets the relevant requirements of that environmental management plan, including any consultation that may be required when preparing the environmental management plan; and
- (2) must review and revise a **confirmed** environmental management plan and ensure it meets the relevant requirements of that environmental management plan, including any consultation that may be required when preparing the environmental management plan, as and when directed by the **CEO**.
- C2-3 Despite condition C2-1, but subject to conditions C2-4 and C2-5, the proponent may implement minor revisions to an environmental management plan if the revisions will not result in new or increased **adverse impacts** to the environment or result in a risk to the achievement of the limits, outcomes or objectives which the environmental management plan is required to achieve.
- C2-4 If the proponent is to implement minor revisions to an environmental management plan under condition C2-3, the proponent must provide the **CEO** with the following at least twenty (20) business days before it implements the revisions:
  - (1) the revised environmental management plan clearly showing the minor revisions:
  - (2) an explanation of and justification for the minor revisions; and
  - (3) an explanation of why the minor revisions will not result in new or increased **adverse impacts** to the environment or result in a risk to the achievement of the limits, outcomes or objectives which the environmental management plan is required to achieve.
- C2-5 The proponent must cease to implement any revisions which the **CEO** notifies the proponent (at any time) in writing may not be implemented.
- C2-6 **Confirmed** environmental management plans, and any revised environmental management plans under condition C2-4(1), must be published on the proponent's website and provided to the **CEO** in electronic form suitable for online publication by the Department of Water and Environmental Regulation within twenty (20) business days of being implemented, or being required to be implemented (whichever is earlier).

# C3 Conditions Related to Monitoring

- C3-1 The proponent must undertake monitoring capable of:
  - (1) substantiating whether the proposal limitations and extents in Part A are exceeded; and
  - (2) **detecting** and substantiating whether the environmental outcomes identified in Part B are achieved (excluding any environmental outcomes in Part B where an environmental management plan is expressly required to monitor achievement of that outcome).
- C3-2 The proponent must submit as part of the Compliance Assessment Report required by condition D2, a compliance monitoring report that:
  - (1) outlines the monitoring that was undertaken during the implementation of the proposal;
  - (2) identifies why the monitoring was capable of substantiating whether the proposal limitation and extents in Part A are exceeded;
  - (3) for any environmental outcomes to which condition C3-1(2) applies, identifies why the monitoring was scientifically robust and capable of **detecting** whether the environmental outcomes in Part B are met;
  - (4) outlines the results of the monitoring;
  - (5) reports whether the proposal limitations and extents in Part A were exceeded and (for any environmental outcomes to which condition C3-1(2) applies) whether the environmental outcomes in Part B were achieved, based on analysis of the results of the monitoring; and
  - (6) reports any actions taken by the proponent to remediate any potential non-compliance.

# C4 Environmental Management Plans: Conditions Relating to Monitoring and Adaptive Management for Outcomes Based Conditions

- C4-1 The environmental management plan(s) required under condition B2-2 and condition B4-2, and the environmental management plans required under condition B3-10, condition B5-3 and condition B5-4 must contain provisions which enable the substantiation of whether the relevant outcomes of those conditions are met, and must include:
  - (1) **threshold criteria** that provide a limit beyond which the environmental outcomes are not achieved:
  - (2) **trigger criteria** that will provide an early warning that the environmental outcomes are not likely to be met;

- (3) monitoring parameters, sites, control/reference sites, methodology, timing and frequencies which will be used to measure threshold criteria and trigger criteria. Include methodology for determining alternate monitoring sites as a contingency if proposed sites are not suitable in the future;
- (4) baseline data;
- (5) data collection and analysis methodologies;
- (6) adaptive management methodology;
- (7) **contingency measures** which will be implemented if **threshold criteria** or **trigger criteria** are not met; and
- (8) reporting requirements.
- C4-2 Without limiting condition C3-1, failure to achieve an environmental outcome, or the exceedance of a **threshold criteria**, regardless of whether threshold **contingency measures** have been or are being implemented, represents a non-compliance with these conditions.
- C5 Environmental Management Plans: Conditions Related to Management Actions and Targets for Objective Based Conditions
- C5-1 The environmental management plans required under condition B5-3 and condition B5-4 must contain provisions which enable the achievement of the relevant objectives of those conditions and substantiation of whether the objectives are reasonably likely to be met, and must include:
  - (1) management actions;
  - (2) management targets;
  - (3) **contingency measures** if **management targets** are not met; and
  - (4) reporting requirements.
- C5-2 The environmental management plans required under condition B5-3 and condition B5-4 are also required to include a map that shows the areas or site of **Aboriginal cultural heritage** significance that will be avoided.
- C5-3 Without limiting condition C2-1, the failure to achieve an environmental objective, or implement a **management action**, regardless of whether **contingency measures** have been or are being implemented, represents a non-compliance with these conditions.

## PART D - COMPLIANCE, TIME LIMITS, AUDITS AND OTHER CONDITIONS

## D1 Non-compliance Reporting

- **D1-1** If the proponent becomes aware of a potential non-compliance, the proponent must:
  - (1) report this to the **CEO** within seven (7) days;
  - (2) implement contingency measures;
  - (3) investigate the cause;
  - (4) investigate environmental impacts;
  - (5) advise rectification measures to be implemented;
  - (6) advise any other measures to be implemented to ensure no further impact; and
  - (7) provide a report to the **CEO** within twenty-one (21) days of being aware of the potential non-compliance, detailing the measures required in conditions D1-1(2) to D1-1(6) above.
- D1-2 Failure to comply with the requirements of a condition, or with the content of an environmental management plan required under a condition, constitutes a non-compliance with these conditions, regardless of whether the **contingency measures**, rectification or other measures in condition D1-1 above have been or are being implemented.

## D2 Compliance Reporting

- D2-1 The proponent must provide an annual Compliance Assessment Report to the **CEO** for the purpose of determining whether the implementation conditions are being complied with.
- D2-2 Unless a different date or frequency is approved by the **CEO**, the first annual Compliance Assessment Report must be submitted within fifteen (15) months of the date of this Statement, and subsequent reports must be submitted annually from that date.
- D2-3 Each annual Compliance Assessment Report must be endorsed by the proponent's Chief Executive Officer, or a person approved by proponent's Chief Executive Officer to be delegated to sign on the Chief Executive Officer's behalf.
- D2-4 Each annual Compliance Assessment Report must:
  - (1) state whether each condition of this Statement has been complied with, including:
    - (a) exceedance of any proposal limits and extents;

- (b) achievement of environmental outcomes;
- (c) achievement of environmental objectives;
- (d) requirements to implement the content of environmental management plans;
- (e) monitoring requirements;
- (f) implement contingency measures;
- (g) requirements to implement adaptive management; and
- (h) reporting requirements;
- include the results of any monitoring (inclusive of any raw data) that has been required under Part C in order to demonstrate that the limits in Part A, and any outcomes or any objectives are being met;
- (3) provide evidence to substantiate statements of compliance, or details of where there has been a non-compliance;
- (4) include the corrective, remedial and preventative actions taken in response to any potential non-compliance;
- (5) be provided in a form suitable for publication on the proponent's website and online by the Department of Water and Environmental Regulation; and
- (6) be prepared and published consistent with the latest version of the Compliance Assessment Plan required by condition D2-5 which the CEO has confirmed by notice in writing satisfies the relevant requirements of Part C and Part D of this Statement.
- D2-5 The proponent must prepare a Compliance Assessment Plan which is submitted to the **CEO** at least six (6) months prior to the first Compliance Assessment Report required by condition D2-2, or prior to implementation of the proposal, whichever is sooner.
- D2-6 The Compliance Assessment Plan must include:
  - (1) what, when and how information will be collected and recorded to assess compliance;
  - (2) the methods which will be used to assess compliance;
  - (3) the methods which will be used to validate the adequacy of the compliance assessment to determine whether the implementation conditions are being complied with;
  - (4) the retention of compliance assessments;

- (5) the table of contents of Compliance Assessment Reports, including audit tables; and
- (6) how and when Compliance Assessment Reports will be made publicly available, including usually being published on the proponent's website within sixty (60) days of being provided to the **CEO**.

#### D3 Contact Details

D3-1 The proponent must notify the **CEO** of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty-eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

# D4 Time Limit for Proposal Implementation

- D4-1 **Stage 4** of the proposal must be substantially commenced within five (5) years from the date of this Statement.
- D4-2 The proponent must provide to the **CEO** documentary evidence demonstrating that they have complied with condition D4-1 no later than fourteen (14) days after the expiration of period specified in condition D4-1.
- D4-3 If the proposal has not been substantially commenced within the period specified in condition D4-1, implementation of the proposal must not be commenced or continued after the expiration of that period.

## D5 Public Availability of Data

D5-1 Subject to condition D5-2, within a reasonable time period approved by the **CEO** upon the issue of this Statement and for the remainder of the life of the proposal, the proponent must make publicly available, in a manner approved by the **CEO**, all validated environmental data collected before and after the date of this Statement relevant to the proposal (including sampling design, sampling methodologies, monitoring and other empirical data and derived information products (e.g. maps)), environmental management plans and reports relevant to the assessment of this proposal and implementation of this Statement.

## D5-2 If:

- (1) any data referred to in condition D5-1 contains trade secrets; or
- (2) any data referred to in condition D5-1 contains particulars of confidential information (other than trade secrets) that has commercial value to a person that would be, or could reasonably be expected to be, destroyed or diminished if the confidential information were published,

the proponent may submit a request for approval from the **CEO** to not make this data publicly available and the **CEO** may agree to such a request if the **CEO** is satisfied that the data meets the above criteria.

D5-3 In making such a request the proponent must provide the **CEO** with an explanation and reasons why the data should not be made publicly available.

# D6 Independent Audit

- D6-1 The proponent must arrange for an independent audit of compliance with the conditions of this Statement, including achievement of the environmental outcomes and/or the environmental objectives and/or environmental performance with the conditions of this Statement, as and when directed by the **CEO**.
- D6-2 The independent audit must be carried out by a person with appropriate qualifications who is nominated or approved by the **CEO** to undertake the audit under condition D6-1.
- D6-3 The proponent must submit the independent audit report with the Compliance Assessment Report required by condition D2, or at any time as and when directed in writing by the **CEO**. The audit report is to be supported by credible evidence to substantiate its findings.
- D6-4 The independent audit report required by condition D6-1 is to be made publicly available in the same timeframe, manner and form as a Compliance Assessment Report, or as otherwise directed by the **CEO**.

[signed on 3 July 2023]

Hon Reece Whitby MLA

MINISTER FOR ENVIRONMENT; CLIMATE ACTION

Key decision-making authorities consulted under section 45(2):

Minister for Water Minister for Aboriginal Affairs Minister for Transport

**Table 1: Abbreviations and definitions** 

Acronym or abbreviation	Definition or term
Aboriginal cultural heritage	Means the tangible and intangible elements that are important to the Aboriginal people of the State, and are recognised through social, spiritual, historical, scientific or aesthetic values, as part of Aboriginal tradition to the extent they directly affect or are affected by physical or biological surroundings.
Adverse impacts	Negative change that is neither trivial nor negligible that could result in a reduction in health, diversity or abundance of the receptor/s being impacted, or a reduction in <b>environmental value</b> .  Adverse impacts for vegetation can arise from direct or indirect disturbance, or other impacts from the proposal such as (but not limited to) hydrological change, spread or introduction of <b>environmental weeds</b> , altered fire regimes, introduction or spread of disease, changes in erosion/deposition/accretion and edge effects.  Adverse impacts for terrestrial fauna can arise from direct or indirect disturbance, or other impacts from the proposal such as (but not limited to) vehicle strike, collision with fencing, habitat fragmentation, artificial light and vibration and noise emissions.
Associated significant drainage lines	Major drainage lines associated with Weelamurra Creek, Caves Creek and/or Barnett Creek.
Barnett Creek	Major watercourse identified in Figure 1 of the Fortescue River, Weelamurra Creek and Caves Creek Waterways Summary Report, Manuwarra Red Dog Highway Stage 4 (April 2022).
Baseline biological survey	The flora and vegetation survey results, and fauna survey results, and supporting spatial data described in the report <i>Manuwarra Red Dog Highway Stage 4 Biological Survey</i> , by Biota 2022.
Bat deflectors	A device that can be attached to fencing to increase visibility of the wires to reduce potential mortality and entanglement, and can include items such as a metal disc (10 x 10 cm) between the top and second strand.
Breeding tree/s	Trees that are suitable for use as breeding habitat by grey falcon (Falco hypoleucos).
Caves Creek	Major watercourse identified in Figure 1 of the Fortescue River, Weelamurra Creek and Caves Creek Waterways Summary Report, Manuwarra Red Dog Highway Stage 4 (April 2022).
CEO	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the Environmental Protection Act 1986, or the CEO's delegate.

Acronym or abbreviation	Definition or term
Confirmed	In relation to a plan required to be made and submitted to the <b>CEO</b> , means, at the relevant time, the plan that the <b>CEO</b> confirmed, by notice in writing, meets the requirements of the relevant condition. In relation to a plan required to be implemented without the need to be first submitted to the <b>CEO</b> , means that plan until it is revised, and then means, at the relevant time, the plan that the <b>CEO</b> confirmed, by notice in writing, meets the requirements of the relevant condition.
Construction activities	Activities that are associated with the substantial implementation of <b>stage 4</b> of the proposal, including but not limited to, earthmoving, blasting, vegetation clearing, grading or construction of right of way. Construction activities do not include geotechnical investigations (including potholing for services and the installation of piezometers) and other preconstruction activities where no clearing of vegetation is required.
СРІ	The All Groups Consumer Price Index numbers for Perth compiled and published by the Australian Bureau of Statistics.
Contingency measures	Planned actions for implementation if it is identified that an environmental outcome, environmental objective, <b>threshold criteria</b> or <b>management target</b> are likely to be, or are being, exceeded. Contingency measures include changes to operations or reductions in disturbance to reduce impacts and must be decisive actions that will quickly bring the impact to below any relevant threshold, <b>management target</b> and to ensure that the environmental outcome and/or objective can be met.
Day-time	The period between sunrise and sunset on any given day.
DBCA	The Department of Biodiversity, Conservation and Attractions
Detecting/ Detectable	The smallest statistically discernible effect size that can be achieved with a monitoring strategy designed to achieve a statistical power value of at least 0.8 or an alternative value as determined by the <b>CEO</b> .
Directional and/ or shielded lighting	Means light fittings that are located, directed, or shielded to avoid lighting anything but the target object or area as described in the National Light Pollution Guidelines for Wildlife (January 2020).
Disturb/ disturbance	Flora – result in death, destruction, removal, severing or doing substantial damage to (from EP Act clearing)  Fauna – has the effect of altering the natural behaviour of fauna to its detriment (from BC Act)  Direct – causes or immediately has the disturbance effect.  Indirect – materially contributes to the disturbance effect.
Eastern Guruma country	The area within the Eastern Guruma (WCD2007/001) native title determination area of the Wintawari Guruma People.

Acronym or abbreviation	Definition or term
Environmental value	A beneficial use, or ecosystem health condition.
Environmental weeds	Any plant declared under section 22(2) of the <i>Biosecurity and Agriculture Management Act 2007</i> , any plant listed on the Weeds of National Significance List and any weeds listed on the Department of Biodiversity, Conservation and Attractions' Pilbara Impact and Invasiveness Ratings list, as amended or replaced from time to time.
Eucalyptus fringed major drainage lines and associated tributaries (MDE) habitat	The area defined as the habitat type "Eucalyptus fringed major drainage lines and associated tributaries (MDE)" in the report and supporting spatial data in the <i>Manuwarra Red Dog Highway Stage 4 Biological Survey</i> , by Biota 2022.
Fauna spotter	A person who is qualified and has attained the appropriate licence/s and authorisation/s under the <i>Biodiversity Conservation Act 2016</i> and the <i>Biodiversity Conservation Regulations 2018</i> .
Floodplains (CP) habitat	The area defined as the habitat type "Floodplains (CP)" in the report and supporting spatial data in the <i>Manuwarra Red Dog Highway Stage 4 Biological Survey</i> , by Biota 2022.
Ghost bat ( <i>Macroderma</i> gigas) caves	Three caves showing evidence of ghost bat ( <i>Macroderma gigas</i> ) use, as shown in Map 8 and Map 9 of the <b>baseline biological survey.</b>
Ghost bat ( <i>Macroderma</i> <i>gigas</i> ) critical habitat	All floodplains (CP), mesas, caves, cliffs and free faces (HS), rocky gullies (RG), rocky hills and slopes with low spinifex and scattered trees (RHS), Eucalyptus fringed major drainage lines and associated tributaries (MDE), Melaleuca forest/major drainage lines (MDM), and man-made water bodies (MMW) habitat types within a 12 km radius of ghost bat caves.
Ghost Bat ( <i>Macroderma</i> <i>gigas</i> ) supporting habitat	All floodplains (CP), mesas, caves, cliffs and free faces (HS), rocky gullies (RG), rocky hills and slopes with low spinifex and scattered trees (RHS), Eucalyptus fringed major drainage lines and associated tributaries (MDE), Melaleuca forest/major drainage lines (MDM), and man-made water bodies (MMW) habitat types outside of a ghost bat (Macroderma gigas) critical habitat.
'Good'/'Good' to 'Excellent' condition native vegetation	The condition of native vegetation rated in accordance with the Technical guidance – Flora and vegetation surveys for environmental impact assessment (EPA 2016) including any revision to this technical guidance.

Acronym or abbreviation	Definition or term
Grey falcon (Falco hypoleucos) nesting period	The period between 1 June and 30 November in any calendar year.
Ground disturbing activities	Any activity undertaken in the implementation of <b>stage 4</b> of the proposal, including any clearing, civil works or construction.
На	Hectare.
HRZ_01 heritage restriction zone	Site identified as HRZ_01 in the Yulur Heritage Report titled "Report on the Trip 3 site avoidance archaeological heritage survey of the Manuwarra Red Dog Highway Karratha Tom Price Road Stage 4 Alignment Tom Price Railway Rd SLK38-51 undertaken in Eastern Guruma Country by the Wintawari Guruma representatives and Yulur Heritage' (Version 1, 2021).
IBRA	Interim Biogeographic Regionalisation for Australia.
Km/hr	Kilometres per hour.
Management action/s	The identified actions implemented with the intent of achieving the environmental objective.
Management target/s	A type of indicator to evaluate whether an environmental objective is being achieved.
Melaleuca forest/major drainage lines (MDM) habitat	The area defined as the habitat type "Melaleuca forest/major drainage lines (MDM)" in the report and supporting spatial data in the <i>Manuwarra Red Dog Highway Stage 4 Biological Survey</i> , by Biota 2022.
Mesas, caves, cliffs and free faces (HS) habitat	The area defined as the habitat type "Mesas, caves, cliffs and free faces (HS)" in the report and supporting spatial data in the <i>Manuwarra Red Dog Highway Stage 4 Biological Survey,</i> by Biota 2022.
Night-time	The period between sunset and sunrise on any given day.
Northern quoll ( <i>Dasyurus</i> hallucatus) breeding season	Means the time of year that quolls become sexually active, which is from 1 June to 31 December in any calendar year.
Northern quoll (Dasyurus hallucatus) critical habitat	Mesas, caves, cliffs and free faces (HS) and rocky gullies (RG) habitat types, and all other supporting habitat within a one (1) kilometre radius of the Mesas, caves, cliffs and free faces (HS) and rocky gullies (RG) habitat types, as identified in the baseline biological survey.

Acronym or	Definition or term
abbreviation	
Northern quoll (Dasyurus hallucatus) supporting habitat	All rocky hills and slopes with low spinifex and scattered trees (RHS), Eucalyptus fringed major drainage lines and associated tributaries (MDE) and Melaleuca forest/major drainage lines (MDM) habitat types outside of northern quoll (Dasyurus hallucatus) critical habitat.
Pilbara Environmental Offsets Fund	A special purpose account created pursuant to section 16(1)(d) of the <i>Financial Management Act 2006</i> by the Department of Water and Environmental Regulation.
Pilbara leaf- nosed bat ( <i>Rhinonicteris</i> aurantia) supporting habitat	All mesas, caves, cliffs and free faces (HS), rocky gullies (RG) rocky hills and slopes with low spinifex and scattered trees (RHS), Eucalyptus fringed major drainage lines and associated tributaries (MDE) and Melaleuca forest/major drainage lines (MDM) habitat types.
Pilbara olive python ( <i>Liasis</i> olivaceus barroni) supporting habitat	All floodplains (CP), mesas, caves, cliffs and free faces (HS), rocky gullies (RG), rocky hills and slopes with low spinifex and scattered trees (RHS), Eucalyptus fringed major drainage lines and associated tributaries (MDE) and Melaleuca forest/major drainage lines (MDM) habitat types.
Pre-clearance surveys	Surveys designed to identify the presence or evidence of threatened fauna listed under the <i>Biodiversity Conservation Act 2016</i> prior to <b>ground disturbing activities</b> .
Rocky gullies (RG) habitat	The area defined as the habitat type "Rocky gullies (RG)" in the report and supporting spatial data in the <i>Manuwarra Red Dog Highway Stage 4 Biological Survey</i> , by Biota 2022.
Rocky hills and slopes with low spinifex and scattered trees (RHS) habitat	The area defined as the habitat type "Rocky hills and slopes with low spinifex and scattered trees (RHS)" in the report and supporting spatial data in the <i>Manuwarra Red Dog Highway Stage 4 Biological Survey</i> , by Biota 2022.
Significant sites within Eastern Guruma country	Sites identified as BJD08_45, HRZ_01, MR_EAS_21_001, MR_EAS_21_002, MR_EAS_21_003, MR_EAS_21_004, MR_EAS_21_005, MR_EAS_21_006, MR_EAS_21_007, MR_EAS_21_008, MR_EAS_21_009, MR_EAS_21_010, MR_EAS_21_011, MR_EAS_21_012, S11-181, Mount Margaret 96-1 (Hamersley Plateau), Weelamurra Ceremonial HRZ, Weelamurra Creek Ceremonial Ground, Hawk Pool Restriction Zone, and Four Mile Heritage Restriction Zone (preliminary) in the following reports:  • 'Report on a site avoidance archaeological heritage survey of the Karratha Tom Price Road Stage 4 Alignment Tom Price Railway Rd SLK0-51 undertaken in Eastern Guruma Country by

Acronym or abbreviation	Definition or term
	<ul> <li>the Wintawari Guruma representatives and Yulur Heritage' (Version 1, 2020);</li> <li>'Report on the trip 2 site avoidance and archaeological heritage survey of the Manuwarra Red Dog Highway Karratha Tom Price Road Stage 4 Alignment Tom Price Railway Rd SLK0-50 undertaken in Eastern Guruma Country by the Wintawari Guruma representatives and Yulur Heritage' (Version 1, 2021); and</li> <li>Report on the Trip 3 site avoidance archaeological heritage survey of the Manuwarra Red Dog Highway Karratha Tom Price Road Stage 4 Alignment Tom Price Railway Rd SLK38-51 undertaken in Eastern Guruma Country by the Wintawari Guruma representatives and Yulur Heritage (Version 1, 2021).</li> </ul>
Significant sites within Yindjibarndi country	Sites identified as MR_YIN_20_001, MR_YIN_20_002, MR_YIN_20_003, MR_YIN_20_004, MR_YIN_20_005, MR_YIN_20_006, MR_YIN_20_007, MR_YIN_20_008, MR_YIN_20_009, MR_YIN_20_010, MR_YIN_20_011, MR_YIN_20_012, MR_YIN_20_013 and MR_YIN_20_011, MR_YIN_20_015, MR_YIN_21_001, MR_YIN_21_002, MR_YIN_21_003, MR_YIN_21_004, and RTF04-01, in the following reports:  • 'Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK58-74 & Tom Price Railway Rd SLK51-106), Pilbara, Western Australia. Trip 1' (2020);  • 'Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Railway Rd SLK51-108), Pilbara, Western Australia. Trip 2' (2020);  • 'Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Railway Rd SLK51-108), Pilbara, Western Australia. Trip 3' (2021);  • 'Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Railway Rd SLK51-108), Pilbara, Western Australia. Trip 3' (2021);  • 'Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Railway Rd SLK51-108), Pilbara, Western Australia. Trip 4' (2021); and  • 'Report of an Aboriginal archaeological Site Avoidance survey of works associated with the Karratha to Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom Price Road Stage 4 Alignment Corridor (Roebourne Wittenoom Rd SLK68-74 & Tom

Acronym or abbreviation	Definition or term
Stage 3	Stage 3 of the Manuwarra Red Dog Highway Project, as shown in Figure 2 and defined by coordinates in Schedule 1.
Stage 4	Stage 4 of the Manuwarra Red Dog Highway project, as shown within Figure 1 and defined by coordinates in Schedule 1.
Suitable habitat	Any habitat known to support northern quoll ( <i>Dasyurus hallucatus</i> ) or Pilbara olive python ( <i>Liasis olivaceus barroni</i> ).
Threshold criteria	The indicators that have been selected to represent limits of impact beyond which the environmental outcome is not being met.
Trigger criteria	Indicators that have been selected for monitoring to provide a warning that if exceeded the environmental outcome may not be achieved. They are intended to forewarn of the approach of the <b>threshold criteria</b> and trigger response actions.
Yindjibarndi country	The combined Ngarluma/Yindjibarndi (WCD2005/001) native title determination area and the Yindjibarndi #1 (WCD2017/010) native title determination area of the Yindjibarndi People.
Weelamurra Creek	Major watercourse identified in Figure 1 of the Fortescue River, Weelamurra Creek and Caves Creek Waterways Summary Report, Manuwarra Red Dog Highway Stage 4 (April 2022).

# Figures (attached)

- Figure 1 Stage 4 development envelope (This map is a representation of the co-ordinates referenced in Schedule 1)
- Figure 2 Development envelope for stage 2, stage 3 and stage 4 (This map is a representation of the co-ordinates referenced in Schedule 1)



Figure 1. Stage 4 development envelope

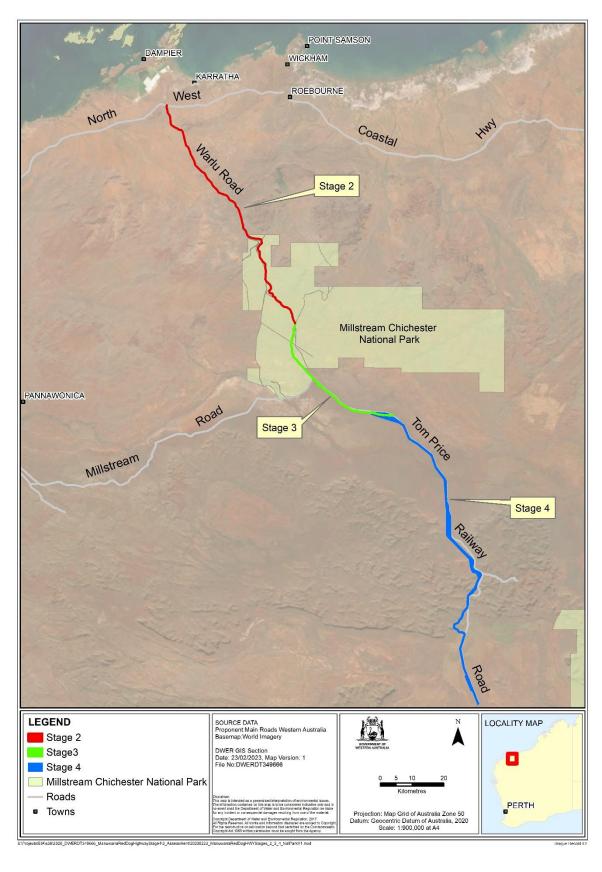


Figure 2. Development envelope for stage 2, stage 3 and stage 4

# Schedule 1

All co-ordinates are in metres, listed in Map Grid of Australia Zone 50 (MGA Zone 50), datum of Geocentric Datum of Australia 1994 (GDA94).

Spatial data depicting the figures are held by the Department of Water and Environmental Regulation. Record no. A2163982.