



Clearing Permit Decision Report

1. Application details and outcome

1.1. Permit application details

Permit number:	CPS 9475/3
Permit type:	Purpose permit
Applicant name:	Main Roads Western Australia
Application received:	7 December 2022
Application area:	500 hectares
Purpose of clearing:	Road upgrades
Method of clearing:	Mechanical clearing
Properties:	Various properties in the locality of Nullagine: Bonney Downs-Hillside Road Reserve (PIN 11734448), Crown Reserve (R11082) Crown Reserve (R12347) Crown Reserve (R12348) Crown Reserve (R13687) Crown Reserve (R13688) Crown Reserve (R18938) Crown Reserve (R2804) Crown Reserve (R32645) Crown Reserve (R3328) Crown Reserve (R9700) De Grey Location 8 (PIN 1017935, 1018299) Lot 120 on Deposited Plan 91989 Lot 171 on Deposited Plan 213166 Lot 93 on Deposited Plan 220468 Marble Bar Road Reserve (PIN 11450438, 11733777, 11733778, 11733779, 11733780, 11733781, 11733782, 11733783, 11734470, 11734863, 11734864, 11734865; 11734866, 11736120, 11736121, 11736122, 11997700) Road Reserve (PIN 11734450) Skull Springs Road Reserve (PIN 11450436) Unallocated Crown Land (PIN 1012676) Unallocated Crown Land (PIN 1114532) Unallocated Crown Land (PIN 957119) Unallocated Crown Land (PIN 957121) Unallocated Crown Land (PIN 957170)
LGA area:	Shire of East Pilbara
Locality:	Nullagine

1.2. Description of clearing activities

On 10 May 2022, Clearing Permit (Purpose Permit) CPS 9475/2 was granted to Main Roads Western Australia (Main Roads) to clear up to 500 hectares of native vegetation, within a 701.5 hectare clearing area, as part of the Marble

Bar Road Upgrades Project. The project is immediately adjacent to the existing Marble Bar Road for a length of approximately 100 kilometres, in the locality of Nullagine in the Shire of East Pilbara. The purpose of the clearing is to support road upgrades to this section of the Marble Bar Road, including sealing the currently unsealed road and constructing the Nullagine township bypass to facilitate hauling with improved safety.

An application for an amendment to Purpose Permit CPS 9475/2 was received by the Department of Water and Environmental Regulation (DWER) on 7 December 2022. The purpose of the proposed amendment is to reduce and revise the authorised clearing area boundary associated with Purpose Permit CPS 9475/2 as well as the inclusion of five small addition areas at intersections required for road upgrade. Due to a revision to the alignment of the Nullagine bypass, the clearing boundary has been revised and reduced to 647 hectares. The revised clearing boundary includes approximately 4.25 hectares that was not included within the CPS 9475/2 authorised clearing area. No additional land parcels are required for the amendment.

The CPS 9475/3 amendment would still allow the clearing of up to 500 hectares of native vegetation within an amended 647 hectare clearing area (Section 1.5, Figure 1) to allow for the implementation of refinements to the proposed road alignment around the township of Nullagine (Section 1.5, Figure 2-5).

The five small additional intersection areas are required:

- To align the existing Skull Springs Road, resulting in safe geometric alignment and therefore now curves off the existing Skull Springs alignment.
- As the new intersection with the McPhee Road has now been moved to higher ground to avoid the floodway and the risk of flooding close to the river.
- The profile of the road for the remaining three additional intersection upgrades had to be lifted to ensure a smooth vertical geometry with the upgraded Marble Bar Road.

1.3. Decision on application and key considerations

Decision:	Granted
Decision date:	03 March 2023
Decision area:	Up to 500 hectares of native vegetation as depicted in Section 1.5 (Figure 1).

1.4. Reasons for decision

The application to amend Purpose Permit CPS 9475/2 under section 51K of the *Environmental Protection Act 1986* (the EP Act) was received by DWER on 7 December 2022. DWER advertised the application for public comment and no submissions were received.

In making this decision, the Delegated Officer had regard for the CPS 9475/1 and CPS 9475/2 Decision Reports (DWER 2021 and DWER 2022), relevant datasets (Appendix A.2.), the results of relevant flora, vegetation and fauna surveys (Biota 2021; Pilbara Environmental 2021; WoodGIS 2020), the clearing principles set out in Schedule 5 of the EP Act, and any other matters considered relevant to the assessment. The Delegated Officer also took into consideration the purpose of the clearing to upgrade and seal a public road to improve community safety, including the diversion of heavy vehicles around the Nullagine townsite.

The Delegated Officer has determined that:

- The applicant has suitably demonstrated avoidance and minimisation measures through liaison with native title holders to reduce the overall development footprint, and realign the proposed route of the Nullagine township bypass into an area of native vegetation.
- The potential impact of proposed clearing on the Priority 1 Wona Land System listed by the Department of Biodiversity, Conservation and Attractions (DBCA) as a Priority Ecological Community (PEC) is unchanged from the CPS 9475/2 assessment;
- The potential impact of proposed clearing on the Priority 3 Mosquito Land System listed by the DBCA as a PEC is reduced by 54.37 hectares from the CPS 9475/2 assessment;
- The potential impact of proposed clearing on flora taxa of conservation significance is unchanged from the CPS 9475/2 assessment;
- The potential impact of proposed clearing on significant fauna habitat and fauna species of conservation significance is unchanged from the CPS 9475/2 assessment;
- The potential impact of proposed clearing on native vegetation associated with watercourses remains unchanged from the CPS 9475/2 assessment; and

- The risk of weeds impacting native vegetation directly adjacent to the application area is unchanged from the CPS 9475/2 assessment.

In determining to grant a clearing permit subject to conditions, the Delegated Officer found that the revised alignment proposed, and associated decrease in the overall clearing boundary, is not likely to lead to an unacceptable risk to the environment. The Delegated Officer decided to grant an amended clearing permit. Permit CPS 9475/3 has been amended to revise the alignment of the authorised clearing area around the township of Nullagine with a subsequent reduction of the clearing area boundary from 701.5 hectares to 647 hectares.

The Delegated Officer noted that PECs and Priority flora will be impacted by the proposed clearing, however no additional impacts are expected from the previous assessment of CPS 9475/2. It is considered that the loss of the vegetation associated with the PECs and Priority flora as a result of the clearing will not impact the conservation status of the communities and taxa present, and will not significantly impact their local or regional occurrence. All clearing permit conditions stipulated in CPS 9475/2 have been maintained, including to:

- avoid, minimise and reduce the impacts and extent of clearing;
- implement weed control measures to minimise the risk of introduction and spread of weeds into adjacent native vegetation;
- avoid clearing riparian vegetation where practicable;
- where a watercourse is impacted, maintain the existing surface flow by use of appropriate culverts;
- undertake slow, progressive, one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity; and
- undertake pre-clearance surveys for the Greater Bilby and Brush-tailed Mulgara by qualified personnel, and implement appropriate relocation programs if and when required.

The assessment is consistent with that undertaken for clearing permit CPS 9475/2, and can be found within Decision Report CPS 9475/2 (DWER 2022).

1.5. Site maps

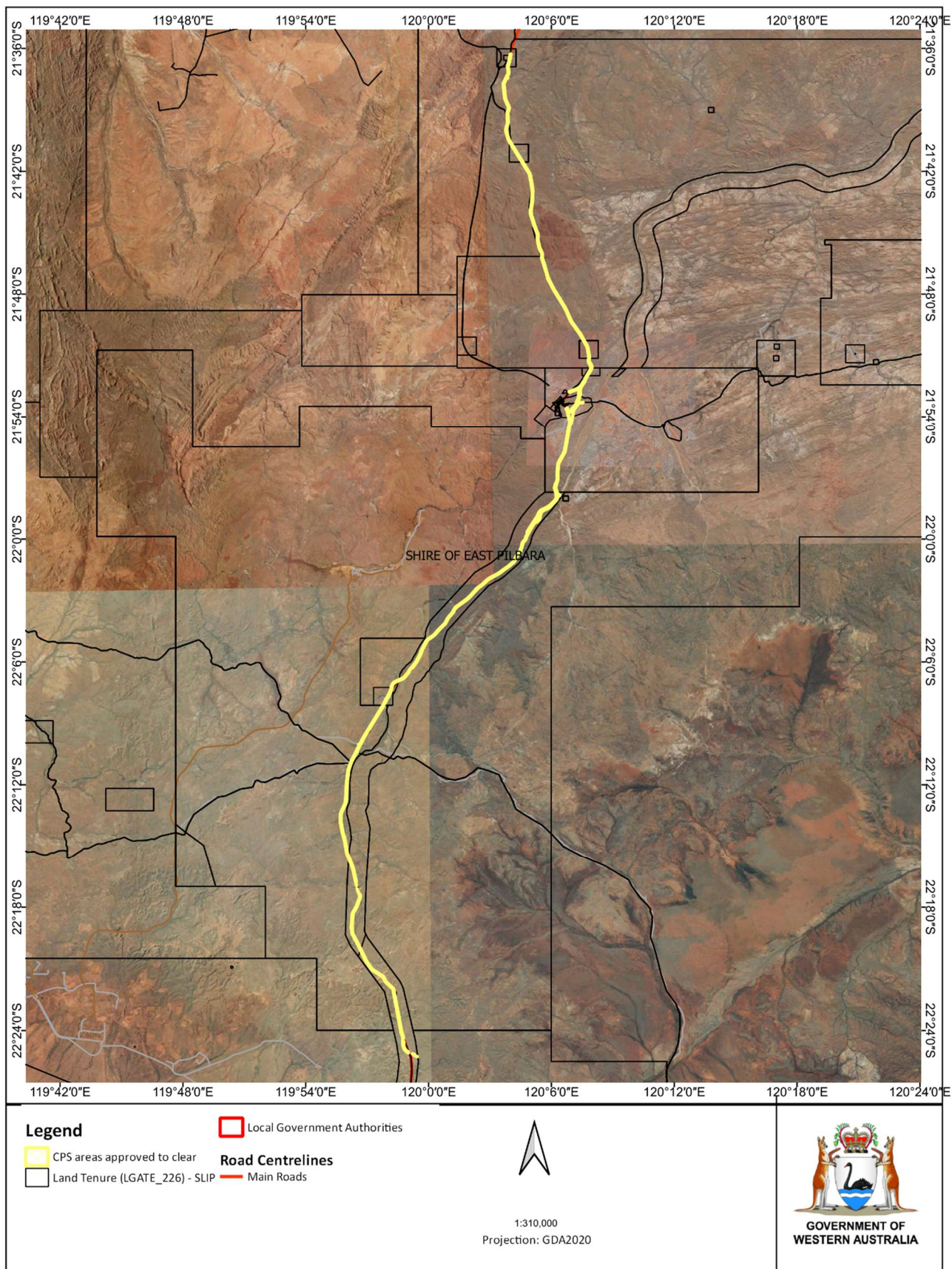


Figure 1: Map (total) of the revised clearing boundary. The areas crosshatched yellow indicate the areas within which authorised clearing can occur under the granted clearing permit.



Figure 2: Deviation between the amended clearing boundary (CPS 9475/3 - yellow) and the original clearing boundary (CPS 9475/2 - pink) (Main Roads 2022a)

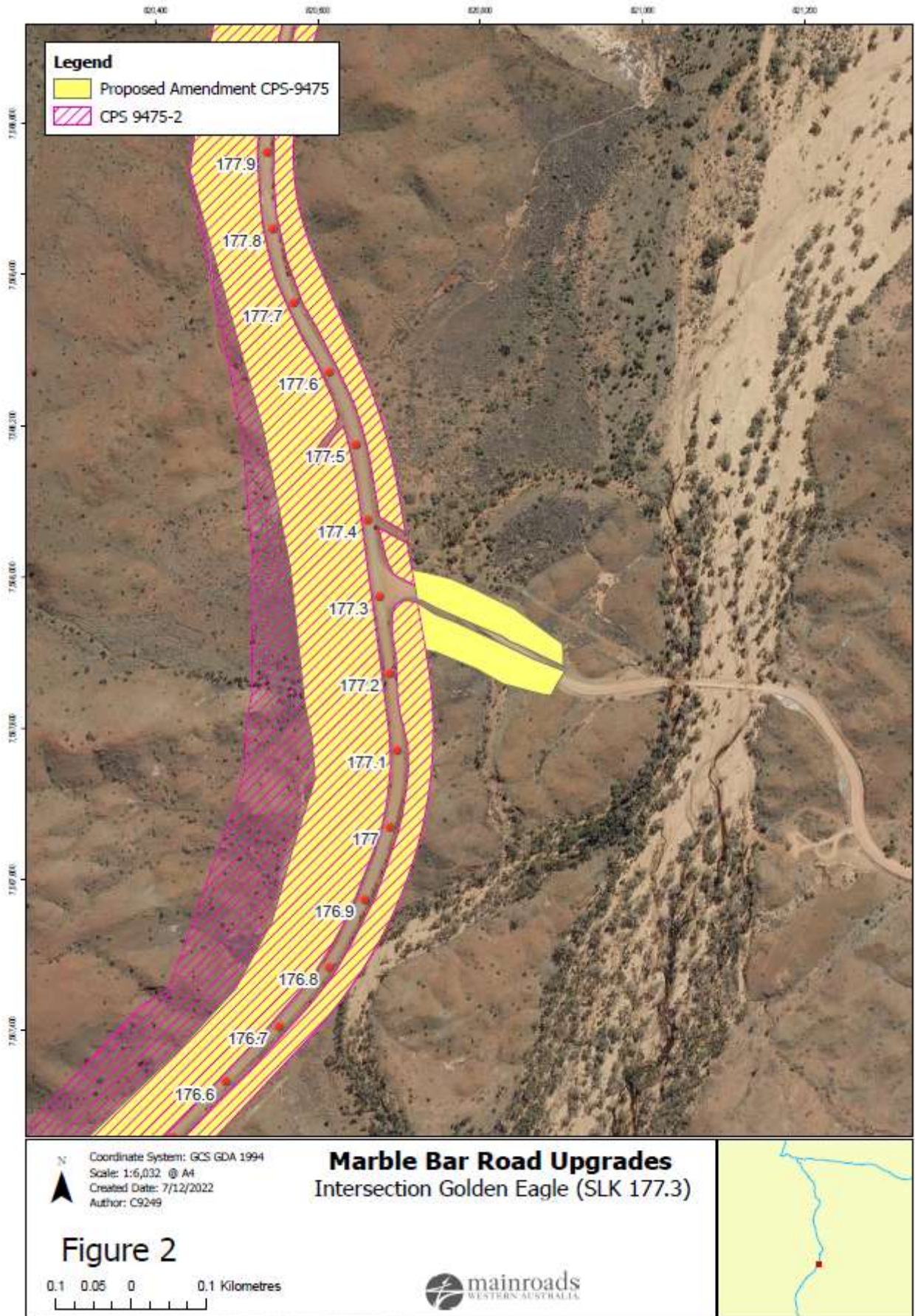


Figure 3: Deviation between the amended clearing boundary (CPS 9475/3 - yellow) and the original clearing boundary (CPS 9475/2 - pink) (Main Roads 2022a)

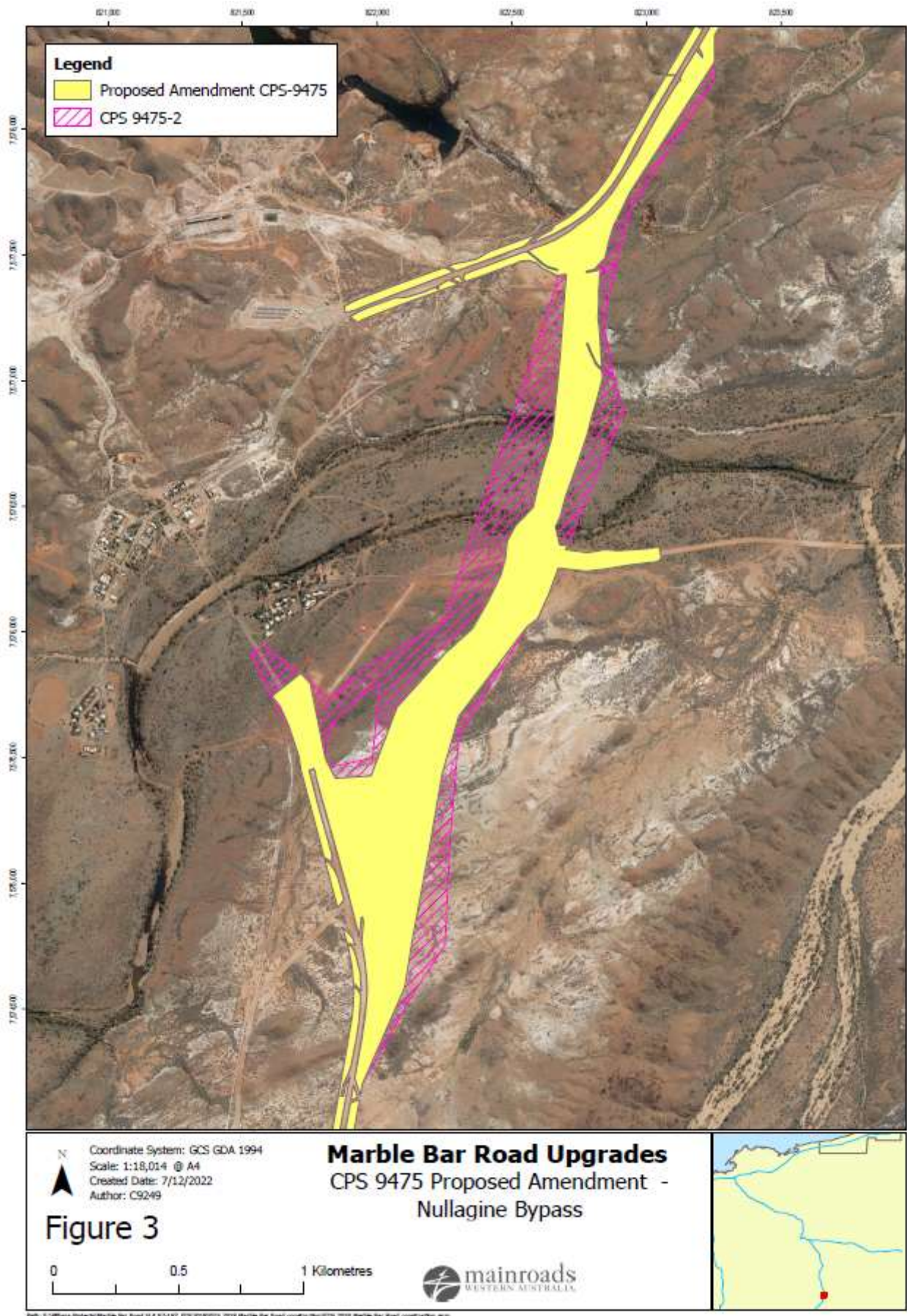


Figure 4: Deviation between the amended clearing boundary (CPS 9475/3 - yellow) and the original clearing boundary (CPS 9475/2 - pink) (Main Roads 2022a)



Figure 5: Deviation between the amended clearing boundary (CPS 9475/3 - yellow) and the original clearing boundary (CPS 9475/2 - pink) (Main Roads 2022a)

1.6. Assessment

Ongoing stakeholder consultation by Main Roads with native title holders has resulted in refinements to the preferred alignment of the Marble Bar Road upgrade project around the Nullagine townsite (Section 1.5, Figures 1-5) (Main Roads 2022a). The amendment entails a reduction in the application area as well as the inclusion of five small additional areas at intersections required for road upgraded (Main Roads 2022a).

Approximately 112.25 hectares has been removed from the CPS 9475/2 authorised clearing area. Approximately 4.25 hectares has been added to the revised clearing boundary that was not previously assessed under CPS 9475/2.

The additional 4.25 hectare areas were considered by the primary biological survey undertaken by Biota Environmental Sciences (Biota 2021), a targeted flora survey undertaken by Pilbara Environmental (Pilbara Environmental 2021) and an additional survey that covered the proposed Nullagine bypass undertaken by WoodGIS Environmental Assessment and Management (WoodGIS 2020).

The CPS 9475/1 and CPS 9475/2 assessment against the ten clearing principles identified that the impacts of the proposed clearing present a potential risk to the biological values of significant ecological communities, significant flora, significant fauna habitat, native vegetation associated with a watercourse, and land and water resources (DWER 2021a and DWER 2022).

Significant ecological communities

Of the 4.25 hectares not assessed under CPS 9475/2, the vegetation ranges from completely degraded to excellent condition (Biota 2021).

One PEC listed by the DBCA (DBCA 2020) has been mapped over the revised clearing boundary not previously assessed under CPS 9475/2, being Stony saline clay plains of the Mosquito Land System (Mosquito Land System). Approximately 0.46 hectares of the revised clearing boundary occurs within this mapped PEC. The Mosquito Land System is listed by the DBCA as a Priority 3 PEC.

Vegetation unit P1 (Biota 2021) and Vegetation unit 4a (WoodGis 2020) correspond with the stony saline clay plains of the Mosquito Land System. According to the surveys, none of the additional areas not previously assessed represent the Mosquito Land System. The revised footprint area has removed approximately 54.37 hectares of this PEC from the proposed clearing area (MRWA, 2022a).

Significant flora

No threatened or priority flora taxa have been recorded within the 4.25 hectares of the revised clearing area not previously assessed under CPS 9475/2 (Biota 2021 and WoodGIS 2020).

The proposed amendment has resulted in fewer records of Priority flora taxa within the revised clearing boundary (Table 1). The vegetation units and vegetation condition within the 4.25 hectares of the revised clearing boundary not previously assessed under CPS 9475/2 do not represent an increased risk of Priority flora taxa occurring.

Significant fauna habitat

The fauna habitats mapped over the revised clearing boundary not assessed under CPS 9475/2 do not represent any habitats not identified or assessed under the authorised CPS 9475/2 clearing permit, and no records of any fauna of conservation significance have been made within this area. Historical records of the Threatened (VU) Greater Bilby (*Macrotis lagotis*) (bilby) have been made within the vicinity of the amended application area. Prospective bilby habitat has been described and mapped over the amendment area by Biota (2021). The area not assessed under CPS 9475/2 is predominantly mapped as low prospective bilby habitat. One small area (Figure 5) was not mapped within the Biota 2021 survey, however the adjacent vegetation is mapped as low prospective bilby habitat and moderate prospective bilby habitat. The vegetation appears to be a similar composition and condition with the adjacent vegetation.

No high prospective bilby habitat has been mapped over the area not assessed under CPS 9475/2. In consideration of the fauna habitats present, and their condition, the proposed amendment does not represent an increased risk to the identified fauna species of conservation significance likely to occur over the CPS 9475/3 application area. The clearing permit contains conditions to manage impacts to fauna that may be present at the time of clearing.

Native vegetation associated with a watercourse

One minor perennial river is mapped within the area not assessed under CPS 9475/2 (area within Figure 3). The revised application area has reduced impacts to watercourse by moving the McPhee intersection from the floodplain area (MRWA, 2022a). The proposed amendment does not increase identified impacts to native vegetation associated with a watercourse.

Land and water resources

The area around Nullagine Township is located within a Public Drinking Water Source Area (PDWSA). The revised proposed clearing area has removed a small area that intersected a Wellhead Protection Zone (WHPZ) for a drinking water supply production bore within the Nullagine Water Reserve. The proposed amendment does not increase potential impacts to the quality of surface or underground water.

The areas not assessed under CPS 9475/2 have been mapped as the Robe System, Bonney System, Mosquito System and the River Land System (Vreeswyk *et al.* 2004). In consideration of the vegetation condition, and Land Systems that were previously assessed under CPS 9475/2, the proposed amendment does not increase the risk of wind or water erosion over the revised clearing boundary.

A portion of the amendment application area intersects Crown Reserve 2804 incorporating the Nullagine Landfill (Figure 3). The landfill is classified as 'possibly contaminated - investigation required' under the *Contaminated Sites Act 2003*, and the current Marble Bar road is within 50 metres of the landfill. Risks to contaminated sites were assessed under application CPS 9475/1 and CPS 9475/2, that also intersected Crown Reserve 2804 incorporating the Nullagine Landfill. DWER's science and planning team (DWER 2021b) has no objection to the proposed clearing on Crown Reserve 2804 provided that an environmental management plan is prepared for any proposed works, including management measures for the possible interception of landfilled materials. Main Roads (2021) advised that whilst the application area intersects Reserve 2804, Main Roads technical guidance states that roads cannot be built over geotechnically incompetent ground, which includes landfills and former landfills. Main Roads (2021) confirmed that the proposed clearing and construction will not disturb the landfill, and operations will not interfere with any potential contamination. Main Roads has established a Community Reference Group (CRG) and stakeholder consultation with the Shire of East Pilbara is ongoing in relation to the Nullagine Landfill. In consideration of the amendment application area, and advice obtained, the proposed amendment does not increase potential impacts to land or water resources.

Public submissions

DWER advertised the CPS 9475/3 amendment application for public comment and no public submissions were received.

Appendix A: References and databases

A.1 References

- Biota Environmental Sciences (Biota) (2021) Marble Bar Road Upgrades – SLK 97 – 179. Biological Survey. Prepared for Main Road Western Australia. March 2021. Biota Environmental Sciences Pty Ltd. Level 1, 228 Carr Place. Leederville, Western Australia, 6007. (DWER Ref: A2059990)
- Department of Biodiversity, Conservation and Attractions (DBCA) (2020). Priority Ecological Communities for Western Australia, Version 30. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, 28 July 2020.
- Department of Water and Environmental Regulation (DWER) (2021a) CPS 9475/1 Decision Report available at: <https://ftp.dwer.wa.gov.au/permit/9475/Permit/>
- Department of Water and Environmental Regulation (DWER) (2021b) Advice received from DWER - Contaminated Sites Science and Planning team regarding potential requirements for proposed clearing associated with CPS 9475/1 in respect to sites contaminated under the *Contaminated Sites Act 2003*, received on the 23 November 2021 (DWER Ref A2067616)
- Department of Water and Environmental Regulation (DWER) (2022) CPS 9475/2 Decision Report available at: <https://ftp.dwer.wa.gov.au/permit/9475/Permit/>
- Main Road Western Australia (Main Roads) (2021) CPS 9475/1 - Supporting Information - Marble Bar Road Upgrades 2021 (DWER Ref: A2060222; A2077724; A2078906; A2070782; DWERDT576767).
- Main Road Western Australia (Main Roads) (2022a) CPS 9475/3 – Application and Supporting Information – Proposed Amendment; Marble Bar Road Upgrades. December 2022 (DWERDT697493).
- Main Road Western Australia (Main Roads) (2022b) CPS 9475/2 - Supporting Information – Proposed Amendment; Marble Bar Road Upgrades. March 2022 (DWERDT576767).
- Pilbara Environmental Pty. Ltd. (Pilbara Environmental) (2021) Marble Bar Road Targeted Flora Survey. Prepared for Main Roads WA by Pilbara Environmental Pty. Ltd. October 2021 (DWER Ref: A2060241).
- van Vreeswyk, A M, Leighton, K A, Payne, A L, and Hennig, P. (2004), An inventory and condition survey of the Pilbara region, Western Australia. Department of Primary Industries and Regional Development, Western Australia, Perth. Technical Bulletin 92.
- WoodGIS (2020) Flora and Vegetation Survey of the Beaton's Creek, unpublished report by WoodGIS Environmental Assessment and Management for Novo Resources Corp (DWER Ref: A2060227).

A.2 GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics

- Remnant Vegetation, All Areas
- Native Vegetation Extent (DPIRD-005)
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)