

Blamey Barracks Kapooka Redevelopment Project

Application Number: 01820

Commencement Date: 04/05/2023

Status: Locked

1. About the project

1.1 Project details

1.1.1 Project title *

Blamey Barracks Kapooka Redevelopment Project

1.1.2 Project industry type *

Commonwealth Development

1.1.3 Project industry sub-type

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1.1.4 Estimated start date *

04/11/2024

1.1.4 Estimated end date *

31/12/2031

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

<div><div>Description</div><div><p>The action proposed by Department of Defence (Defence) involves redevelopment works to renew, modernise, and sustain capabilities at Blamey Barracks Kapooka (BBK), which is part of Kapooka Military Area (KMA), located south-west of Wagga Wagga in New South Wales.</p><p>The proposed works at BBK is part of the Riverina Redevelopment Program (RRP) which comprises redevelopment and upgrade works at three major bases; Albury Wodonga Military Area (AWMA), RAAF Base Wagga (RBW) and BBK. While the three Defence locations are part of the same works program, they are three distinct projects that are not interdependent, each with a separate Planning and Delivery budget, reporting streams, delivery programs. They are also discrete works that will be managed independently and are only grouped with the “Riverina Redevelopment Program” (RRP) on logistical grounds and for efficiencies in the design and delivery process. The individual projects are not reliant on each other and are located in different geographical locations.</p><p>The program of works under the RRP will support Defence by aligning with the step change toward a contemporary Force, providing exemplar facilities and infrastructure with the flexibility in planning to meet the demand on training facilities from Defence’s recent Force Structure Plan 2020 (FSP20) (Att 13 - BBK Force Structure Plan, entire document). The RRP aims to posture the ADF for growth in soldiers, airmen/airwomen and specialist trades and logistics that are essential to operate future capability.</p><p>The proposed Action relates only to the redevelopment of BBK, which is located approximately 9.5 km south-west of Wagga Wagga in western NSW (Att 1 - BBK General Locality, entire document).</p><p>BBK is the ‘front door’ of the ADF delivering the first experience of Army life to enlistees & their families. The Base has a distinctive place in the Riverina community with histories spanning generations. BBK’s primary function is the delivery of all Army recruit training through 1st Recruit Training Battalion (1 RTB). BBK is an aging base, with major infrastructure developed as ‘Blamey Barracks’ in the 1960s, with</p></div></div>
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limited new facility investments since that time. It lacks appropriate facilities to support contemporary training requirements.

Facility and infrastructure issues include:

- Recruit and pre-recruit Living In Accommodating (LIA) does not meet capacity or diversity requirements, current Defence Accommodation Standards, nor the National Construction Code – Building Code Australia & is currently housing significantly more recruits than design allows.
- The poor condition of roads at BBK impacts the response time of emergency vehicles to respond to training injuries.
- Lack of appropriate facilities, including on-site parking, pedestrian infrastructure to support high visitors during weekly march out parades.
- No additional capacity in the weapons ranges which limits recruit through-put.
- Infrastructure services including electricity, fire fighting water supply, stormwater management, information and communications technology; have poor reliability and not fit for purpose.
- High maintenance costs due to large proportion of aging assets.

Purpose

The purpose of the proposed action is to replace outdated infrastructure that is no longer fit for purpose and poses safety and security risks.

Proposed activities

The total developed footprint will be 25 ha, a small fraction of the total Base area of 1,990 ha. All works will be prepared in accordance with a project specific Construction Environmental Management Plan (CEMP), that will adhere to Defence Standard Operating Procedures outlined in S1.3.2.18 as well as management measures outlined in the technical studies (**Att 11** - BBK Recommended management and mitigation measures, entire document). A template for the CEMP (**Att 14** - Example CEMP, entire document), provides an outline of the anticipated content for the CEMP.

The main activities that will form part of the proposed redevelopment works at BBK include:

Infrastructure: Upgrade, replacement, consolidation and/or installation of infrastructure services including electrical, ICT, Water, Gas, Fuel, Wastewater and Stormwater.

Base wide and Security: Upgrade and replacement of footpaths and internal access roads – 5km new, 5km repair, Internal Roads – 2km new, 5km repair, demolition of aged buildings.

Living in accommodation (LIA): Development of a new LIA - Recruit Development Company and development of a new LIA - A, B, C, and D Company.

Training and Workshop Accommodation: Construction of new facilities and upgrades including; Working Accommodation Joint Military Police Unit (JMPU), Working Accommodation in the Contractors Precinct, HQ Facilities (Support HQ 1 RTB & Battalion HQ), SEG and Enablers Service Connect Hub, Instructor Training Facilities, Medical Training Facilities, New Weapons Ranges.

Support Facilities: Construction of a new multi-function centre, connect hub, explosive ordnance (EO) storage and distribution, Q store, recruit physical training facility gym and land management facilities. Upgrade of the religious facilities.

The Work Elements will involve the following pre-construction, construction and demobilising activities, which have the potential to have a direct or indirect impact on the environment:

Vegetation clearing and removal

- Will involve direct impact to 2.65 ha of native vegetation and indirect impact to 3.06 ha (e.g. areas potentially affected by fragmentation, erosion, sedimentation, weed introduction and spread). Vegetation to be cleared is at or close to areas where existing facilities are sited & so generally already disturbed vegetation. Clearing footprints will be minimised and clearly delineated.
- Impacts to vegetation has been minimised through an iterative design process with field ecologists but will still result in impact to Commonwealth listed Threatened Ecological Communities (TECs) and NSW PCT communities (Refer S4).
- Linear development upgrades align where possible with existing roads. New alignments considers remnant vegetation and retained vegetation will be protected through exclusion fencing and signage indicating no-go zones.
- Fauna impacts during construction may occur. Pre-clearing surveys will be undertaken to identify habitat. A fauna spotter/catcher will be present to relocate any displaced animals and deal with injured animals.
- Clearing will be undertaken in accordance with the CEMP.

Excavation and ground disturbance works / infrastructure services trenching and rehabilitation

- The proposed action is unlikely to cause substantial alteration to natural landscape features, given the current predominately built nature of the site, however there will be some disturbance to vegetated and cleared areas to build structures and service trenching. Impacts will to be minimised by reinstating and revegetating services trenching.
- Impacts to water resources are expected to be minimal (Refer S3.4.1) due to siting and nature of the works, however the proposed new ring road in the Cantonment area may pose some impact on hydrology by increasing hardstand from which surface water can flow into adjoining vegetated areas. Design will include effective drainage to minimise changes in water flow and runoff into surrounding environment.
- Groundwater impacts are considered unlikely due to the depth of groundwater (6-115 m) within the study area. Defence SOPs are considered to be appropriate to mitigate any minor intersections with shallow perched groundwater (Refer S3.4.1).
- Potential for introduction of weeds will be reduced through implementation of soil and vehicle hygiene measures. Weed management of priority weeds will occur within and at the edges of construction area.

- Potential to expose and/or damage cultural heritage at site will be managed by implementing heritage management procedures as outlined in the HMP (**Att 8** - BBK Heritage Management Plan - Part 1, Part 2, Part 3, entire documents) and HIA (**Att 9** - BBK Heritage Impact Assessment, entire document), including provision of cultural heritage awareness training for all personnel and implementing a Chance Find Protocol.

Demolition works of existing buildings / internal building works

- May result in contamination risks including PFAS, at demolition areas (where intrusive subsurface activities will occur) or from demolition activities of existing buildings. The CEMP will address; stockpile management, materials tracking, waste disposal, erosion and sediment control, stormwater management, dust suppression and management of spoil and topsoil.
- A base specific management plan for PFAS is currently being developed and will be implemented for the proposed works.
- Groundwater contamination is unlikely due to the significant depth to groundwater. Defence SOPs are considered appropriate to mitigate any potential for groundwater contamination.

Movement of construction and delivery vehicles, plant and equipment

- May cause injury or death to fauna. Mitigation measures include fauna awareness training for site personnel and speed limits.
- Potential for introduction and spread weeds or pathogens. All plant and equipment would be subject to a biosecurity management plan and would be cleaned prior to entry to site.
- Some disturbance to fauna, residents and surrounding properties may occur from increased light, noise, dust, vibration and traffic volume, however will be minimal as proposed works will be over 1.2 km from nearest onsite community (married quarters precinct) and 1.3 km from nearest offsite suburb (San Isidore). The CEMP will include standard regulation requirements to minimise impact to nearby community.
- During the operational phase, the project is likely to have negligible environmental impact as proposed works is primarily replacement/upgrade of existing operational facilities and will involve the same level of operational and maintenance requirements to that currently undertaken.

Att 2 - BBK Works Plan, entire document, outlines the proposed works at BBK.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

No

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

The Commonwealth government has a number of legislative responsibilities which are applicable to the management of Defence activities on Defence land.

Commonwealth legislation

Commonwealth legislation relevant to the BBK Project includes:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*
- *Native Title Act 1993* (NT Act)
- National Environment Protection (Assessment of Site Contamination) Measure 1999
- International conventions and agreements

Obligations under these Acts are as follows:

EPBC Act

Environmental provisions: The EPBC Act is the overriding legislation governing Defence activities. Defence is subject to the provisions of the EPBC Act for Matters of National Environmental Significance (MNES) (Part 3, Division 1) and, as a Commonwealth agency, is subject to the requirements under Sections 26 and 28 of the Act to consider the impact of its activities on the broader environment. Applicable sections of the EPBC Act include:

1. Part 3, Division 1: Requirements relating to MNES:
 2. Part 3, Division 2: Protection of the environment from actions involving the Commonwealth.
- *World Heritage properties*
 - *National Heritage places*
 - *Wetlands of International Importance*
 - *Listed threatened species and ecological communities*
 - *Migratory species (listed under international agreements)*
 - *Commonwealth Marine Areas*
 - *Great Barrier Reef Marine Park*
 - *Nuclear actions*
 - *A water resource, in relation to coal seam gas development and large coal mining*
 - Section 26(1): Relates to impacts on the environment of actions undertaken on Commonwealth land.

- Section 28(1): Relates to impacts on the environment of actions undertaken by Commonwealth agencies.

The project has assessed impacts to MNES and whole-of-environment aspects and included assessment against The Department of Climate Change, Energy, Environment and Water (DCCEEW) Significant Impact Guidelines; SIG 1.1 - Matters of National Environmental Significance and SIG 1.2 – Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.

Heritage provisions: The EPBC Act also provides a legal framework to protect and manage nationally and internationally important heritage places. The EPBC Act establishes the National Heritage List (NHL), Commonwealth Heritage List (CHL) and the Register of the National Estate (RNE). RNE is a non-statutory register.

Defence, as a Commonwealth agency, under Section 26 and Section 28 needs to avoid or minimise impacts to heritage values. Defence may determine to proceed with a proposal that would result in a heritage impact if it can be demonstrated there is no prudent or feasible alternative, or if the alternatives will impact on capability; to defend Australia and its national interests.

There are Indigenous and historic heritage values within the Project area. Heritage places at BBK are managed under a Heritage Management Plan (HMP), and in accordance with this HMP, a Heritage Impact Assessment has been prepared for the Project.

Aboriginal and Torres Strait Islander Heritage Protection Act 1984

Under the Aboriginal and Torres Strait Islander Heritage Protection Act, Aboriginal cultural property that is significant to Aboriginal people is protected. Cultural property includes any places, objects and folklore that 'are of particular significance to Aboriginals in accordance with Aboriginal tradition'. This includes intangible cultural heritage values; these sites may not necessarily have an archaeological component.

Native Title Act 1993

The *Native Title Act 1993* recognises that Aboriginal and Torres Strait Islander people maintain an interest in their lands and waters. Where continuous use, occupation and/or connection with the land can be established, the Act allows for the establishment of Native Title. The Act also makes provisions for Indigenous Land Use Agreements.

No Native Title claims have been identified during the assessment at BBK.

National Environment Protection (Assessment of Site Contamination) Measure 1999

National Environment Protection Measures (NEPMs) establish a nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices. The *National Environment Protection Measures (Implementation) Act 1998* (the Implementation Act) gives the Australian Government the power to implement NEPMs on its own land and for its own activities.

The ASC NEPM provides the national regulatory framework within which contaminated sites are assessed without exception and is therefore directly relevant and applicable to BBK. Site investigations have been conducted at BBK in accordance with this framework.

International conventions and agreements

Several international conventions and treaties are relevant to the study area:

- Japan Australian Migratory Birds Agreement (JAMBA)
- China Australian Migratory Birds Agreement (CAMBA)
- Republic of Korea Australian Migratory Birds Agreement (ROKAMBA)
- Species native to Australia and included under the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).

Compliance of conventions and agreements is legally ensured through the EPBC Act and are assessed in this report.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

Extensive stakeholder consultation has been conducted with key stakeholders, initially to identify all pertinent existing information and confirm the main concerns resulting from the proposed works. Key stakeholders include:

- Defence Directorate of Environment and Heritage Policy Development (DEHPD)
- Defence Directorate of Environmental Resource Management and Sustainability (DERMS)
- Directorate of PFAS Management (DPFASR)
- Defence Directorate of Contamination Assessment, Remediation and Management (DCARM)
- Defence Directorate of Environmental Protection and Compliance (DEPAC)
- Senior Base Personnel at BBK
- Indigenous stakeholders including the Wagga Wagga Local Aboriginal Land Council.

As the proposed design progressed, stakeholder consultation became a critical aspect of refining the siting of infrastructure to avoid as much as possible impacts to MNES and whole of environment values, in particular the environmental and heritage values at the Base

Consultation has primarily involved small group weekly meetings, but also included formal meetings, presentations, workshops, interdisciplinary site visits and a site walkover with Indigenous representatives.

The weekly consultation meetings were held between the environment team and the Project design team to share knowledge regarding the key environmental values at site, discuss siting and design impacts to these values and develop solutions and mitigation measures to avoid impacts to the environmental values at BBK.

A list of formal meetings and presentations undertaken for the project to date including date, form of consultation, attendees and the relevant key environmental outcomes effected through the consultation process is presented in **Att 3 - Stakeholder Engagement Summary** 07-09-23.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

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☒ **Confirm that you have read and understand this Privacy Notice ***

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	68706814312
Organisation name	DEPARTMENT OF DEFENCE
Organisation address	Brindabella Business Park, 2 Brindabella Cct, Canberra Airport, ACT, 2609.

Referring party details

Name	Berlinda Bowler
Job title	Director, Directorate of Environmental Planning, Assessment & Compliance
Phone	1800333362
Email	berlinda.bowler@defence.gov.au
Address	BP26-2-B029, Brindabella Business Park, 26 Brindabella Cct, Canberra Airport, ACT, 2609

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN 68706814312

Organisation name Department of Defence

Organisation address Brindabella Business Park, 2 Brindabella Cct, Canberra Airport, ACT, 2609.

Person proposing to take the action details

Name Dan Palmer

Job title LTCOL

Phone 0403757632

Email daniel.palmer2@defence.gov.au

Address 26 Brindabella Circuit, Canberra Airport, Australian Capital Territory 2609

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

As trusted custodians and stewards of over three million hectares of Commonwealth land embracing five World Heritage Areas, Defence has an excellent history of responsible environmental management. Defence is the largest Commonwealth landholder and one of the largest overall landholders in Australia. It is geographically dispersed and complex, comprising a wide variety of facilities of differing ages, uses and condition. The Defence estate consists of around 700 owned and leased properties, comprises 25,000 buildings and 6,000 other structural assets, as well as some 150,000 items of fixed plant and equipment. Defence is committed to maintaining the trust of the Australian community and environmental regulators by ensuring the estate is managed for the long-term sustainable environment and heritage protection across it, whilst also supporting Australian Defence Force capability to defend Australia and its national interests. This commitment was reaffirmed by the Defence Secretary and the Chief of Defence Force on the release of the Defence Environmental Policy and 2016-2036 Strategy.

Defence has a long history of environmental compliance with the EPBC Act. Defence has submitted 50 Part 7 referrals for consideration under the EPBC Act since the Act commenced in 2000. Thirty-three of these referrals were made during the first five years of operation of the Act when limited information was available to guide proponents on whether potential environmental impacts were likely to trigger assessment and approval under the EPBC Act. Since the publication of the EPBC Act Significant Impact Guidelines 1.1 and Significant Impact Guidelines 1.2 in 2006, Defence has made only 17 referrals, with just one in the past five years. Seven of the last eight referrals submitted by Defence have been related to heritage. Defence is currently managing the compliance for nine active EPBC Act approvals that were determined controlled actions. Defence has recorded one formal non-compliance with EPBC Act approval conditions for the Defence Training Facilities at Greenbank Training Area (EPBC 2011/5896), which has been resolved.

Defence has a proven track record of successfully protecting and competently managing the very broad range of MNES and whole of environment that occur across its vast estate.

Referrals by Defence since 2010 include:

2023/9496 – Greenvale Training Area Initial Works

2023/9595 – Greenvale Training Area Main Works

2019/8514 – Point Cook Road, Point Cook/Victoria/Demolition of structures at RAAF Williams - Point Cook

2014/7324 – RAAF Base Williamstown/NSW/Removal of heritage buildings from RAAF Base, Williamstown, NSW

2014/7123 – RAAF Base, Sthrn Amberley Road, Amberley/QLD/Removal of heritage buildings at RAAF Base

2012/6462 – Holsworthy/NSW/Moorebank Units Relocation Project, Holsworthy Training Area, NSW

2012/6430 – Fleet Base East, Garden Island/NSW/Garden Island Hammerhead Crane Proposed Removal, NSW

2012/6376 – Port Phillip Bay/VIC/Point Wilson Explosives Area Waterside Infrastructure Remediation

2011/6039 – Department of Defence/Commonwealth/Gallipoli Barracks, Enoggera/QLD/Demolition of four buildings

2011/5896 – Greenbank 20 km SSW of Brisbane & 17 km E of Ipswich/Queensland/Defence Training Facilities at the Greenbank Training Area

2010/5747 – RAAF Base Tindal, Williamstown and Salt Ash Air Weapons Range/New South Wales/Flying operations of the F-35 Joint Strike Fighter

2010/5316 – South of the Eyre Highway/SA/Expansion of the Cultana Training Area

2008/4410 – RAAF Base Amberley, Southern Amberley Rd, west of Ipswich/QLD/Australian Super Hornet Flying Operations at RAAF Base Amberley

2008/4251 – Williams Road RAAF Williams Point Cook/VIC/Removal

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

Overview

Defence mandates the implementation of standard procedures, policies and doctrines (Standard Operating Procedures - SOPs), across all Defence project sites and operations.

The Defence Environment and Heritage Manual (2019) (**Att 15** - Defence Environment and Heritage Manual 2019, entire document), provides the instruction and guidance of Defence's legislative obligations and environment and heritage goals, so that activities undertaken on the Defence Estate and actions on behalf of Defence align with;

1. Defence Environmental Policy 2016 (**Att 16** - Defence Environmental Policy 2016, entire document), and
2. Defence Environmental Strategy 2016-2036 (**Att 17** - Defence Environmental Strategy 2016-2036, entire document).

The Defence Landscape Management Manual (**Att 18** - Defence Landscape Management Manual) provides specific instructions and reference guidance materials to support the implementation of the Defence Environment and Heritage Manual (2019) (**Att 15** - Defence Environment and Heritage Manual 2019, entire document).

Defence Environment and Heritage Manual

Defence uses a comprehensive Environmental Impact Assessment (EIA) process to understand and manage the impacts of its activities and projects on environment and heritage values. The specific requirements of the EIA process for each activity or project varies depending upon the degree of predicted, actual and perceived environmental risk. Where it is identified that some activity, work or new equipment may pose a real risk of potentially significant environmental impacts, Defence requires that assessments are undertaken in accordance with requirements of the EPBC Act. Regardless of the process used, environmental issues identified are then managed to mitigate the potential for adverse impacts to occur. Of particular relevance in this document is Chapter 3 (Heritage management) and Chapter 5 (Native Species and Ecological Communities).

Defence Environmental Policy

The Secretary for Defence and the Chief of the Defence Force have endorsed the Defence Environmental Policy (2016) which demonstrates Defence's commitment to environmental management. The policy supports Defence's Environmental Vision, which states "Defence would be a leader in sustainable environmental management to support the Australian Defence Force's capability to defend Australia and its national interests".

The Defence Environmental Vision is underpinned by four pillars:

- **Compliance:** Defence complies with its legislative and regulatory obligations regardless of where it operates and complies with the spirit and intent of state and territory environmental management legislation where it does not conflict with Commonwealth legislation.

- **Efficiency:** Defence applies efficient and innovative environmental resource management in the delivery of Defence capability and environmental outcomes.
- **Trust:** Defence conducts its activities in an environmentally responsible manner that enhances its reputation and fosters the confidence of the community, industry and regulators.
- **Accountability:** Defence takes ownership of, and responsibility for, environmental outcomes when performing its activities.

The Defence Environmental Policy defines goals and commitments under five strategic aims:

- Strategic aim 1 - Defence would deliver a sustainable estate across Defence maritime, land and aerospace areas, activities and operations.
- Strategic aim 2 - Defence would understand and manage its environmental impacts.
- Strategic aim 3 - Defence would minimise future pollution risks and manage existing contamination risks.
- Strategic aim 4 - Defence would improve the efficiency of its resources consumption and strengthen resource security.
- Strategic aim 5 - Defence would recognise and manage the Defence estate heritage values.

Defence Environmental Strategy 2016 – 2036

Environmental protection and management of future development and maintenance of a base to support current and future capability is guided by the overarching Defence Environment Strategy 2016 -2036 which is focused on five strategic environment related aims. (Refer to **Att 17** - Defence Environment Strategy 2016-2036).

Defence Environment and Heritage Manual

Provides a framework for implementation, communication, monitoring and reporting centred around actions and guided by principles. The plan stems from the Defence Environmental Strategy and has a five-year horizon. (Refer to **Att 15** - Defence Environment and Heritage Manual 2019).

Defence Landscape Management Manual

The Defence Landscape Management Manual provides policy implementation direction and minimum requirements for undertaking certain land management activities in line with Defence's legislative obligations and stewardship goals. The Defence Landscape Management Manual applies to all Defence personnel, contractors, consultants or outsourced service providers (through the terms of their contract) undertaking work on behalf of Defence across all Defence properties. The Defence Landscape Management Manual provides specific instructions and reference to guidance materials to support the implementation of the Defence Environment and Heritage Manual, specifically in relation to domestic biosecurity, native species and ecological communities, soil management and bushfire management. (Refer to **Att 18** - Defence Landscape Management Manual 2021). Of particular relevance in this document is Chapter 5 (Threatened Species and Ecological Communities) and Chapter 7 (Native Vegetation).

Other Defence policies and guidelines

- Guidance on the Preparation of an Environmental Report (V3) (August 2020).
- Defence Estate Heritage Strategy
- Defence PFAS Construction and Maintenance Framework
- Defence Contamination Management Manual
 - Annex B – Investigations, Remediation and Management
 - Annex C – Planning to Minimise and Manage Stockpiling
 - Annex J – Infrastructure Demolition
 - Annex K – Management of PFAS Contamination
- Defence Guidelines for consideration of sustainability in remediation of contaminated sites
- Defence Manual for Management & Remediation of petroleum hydrocarbons contaminated soils and sediments
- Defence Security & Estate Group Asbestos Management Plan (AMP)
- Defence Pollution Prevention Manual
- Defence Environmental Management Systems
- Defence Building Works Manual Edition 1 Amendment 4 (2020)

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN

68706814312

Organisation name

Department of Defence

Organisation address Brindabella Business Park, 2 Brindabella Cct, Canberra Airport, ACT, 2609.

Proposed designated proponent details

Name Dan Palmer

Job title LTCOL

Phone 0403757632

Email daniel.palmer2@defence.gov.au

Address 26 Brindabella Circuit, Canberra Airport, Australian Capital Territory 2609

1.3.4 Identity: Summary of allocation

✔ Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN 68706814312

Organisation name DEPARTMENT OF DEFENCE

Organisation address Brindabella Business Park, 2 Brindabella Cct, Canberra Airport, ACT, 2609.

Representative's name Berlinda Bowler

Representative's job title Director, Directorate of Environmental Planning, Assessment & Compliance

Phone 1800333362

Email berlinda.bowler@defence.gov.au

Address BP26-2-B029, Brindabella Business Park, 26 Brindabella Cct, Canberra Airport, ACT, 2609

✔ Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN 68706814312

Organisation name Department of Defence

Organisation address Brindabella Business Park, 2 Brindabella Cct, Canberra Airport, ACT, 2609.

Representative's name Dan Palmer

Representative's job title LTCOL

Phone 0403757632

Email daniel.palmer2@defence.gov.au

Address 26 Brindabella Circuit, Canberra Airport, Australian Capital Territory 2609

✔ Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

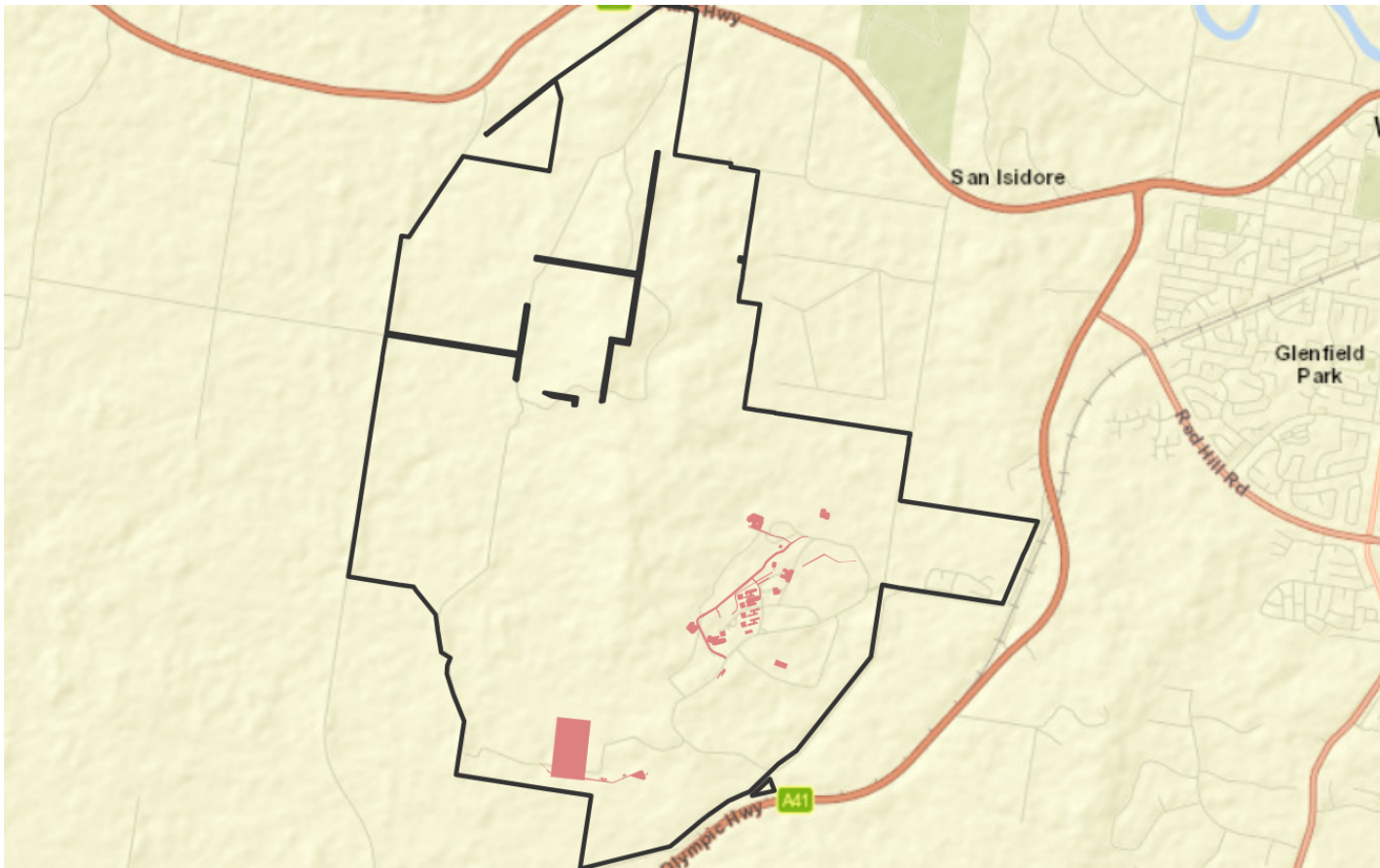
1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Person proposing to take the action

2. Location

2.1 Project footprint



2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Blamey Barracks Kapooka, Camp Access Road, Kapooka, NSW, 2661.

2.2.2 Where is the primary jurisdiction of the proposed action? *

New South Wales

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

BBK is wholly located on Commonwealth owned land, as represented by the Department of Defence. BBK is part of the federal electorate of Riverina. The land within BBK is classified as a Special Purpose Zone (Refer **Att 4** - Attachment 4 - BBK Land tenure, entire document).

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

Locality

Blamey Barracks Kapooka (BBK) is located approximately 9.5 km south-west of Wagga Wagga southern NSW, within the broader Kapooka Military Area. BBK shares its north-eastern border with the Wagga Wagga suburb of San Isidore. The Base is approximately 1,990 hectares (ha) in size. BBK is accessible via Camp Access Road from the Olympic Highway. Its northern and eastern borders are close to Sturt Highway and Olympic Highway and an adjacent railway line.

The general location is presented in **Att 1** - BBK General Locality, entire document.

Historic and current vegetation

The BBK site was partially cleared prior to 1965 with the exception of the areas to the north-west (**Att 20**: Aerial image of remnant vegetation across BBK circa 1965, entire figure). Vegetation present more broadly across BBK consists of a mosaic of landscaped gardens and maintained grass under remnant trees, particularly adjacent to existing infrastructure, and remnant vegetation including substantial regrowth since past clearing. Large, old-growth trees are sparse due to past clearing. Larger areas of more intact vegetation occur to the west and north-west of the Project area (disturbance area), with the Project area occurring at the edge of these large areas of contiguous vegetation.

Historic site usage

The site that now supports BBK was initially established in 1942 during the Second World War (WWII). Initially part of the Royal Australian Engineers Centre, thousands of engineers were trained in basic soldiering skills as well as engineering duties. In addition 47,000 regular soldiers also trained at the barracks from 1942 to 1945. The location was also the camp for members of the Australian Women's Army Service.

Following WWII the barracks became the 1st Recruit Training Battalion (1RTB) and in 1952 and 1953, 1RTB was joined by 2nd Recruit Training Battalion in temporary buildings on the site.

Current site usage

The current BBK is an ageing base, with limited new facility investments. Most of the current facilities were constructed during 1965 and 1966 and it now lacks appropriate facilities to support contemporary training requirements. BBK still provides initial recruit training to all regular and reserve recruits for the Army. The Base contains facilities for training, housing Base personnel and recruits, and for housing the families of Base personnel, which consist of permanent staff and recruits. There are approximately 1,000 permanent staff. Maximum recruit capacity is 1,800, although the number of recruits fluctuates as they are cycled through in stints that generally do not exceed 80 days.

BBK facilities are clustered in the southern and eastern areas of BBK, with the majority of the Base being devoted to a large, open training area that includes minimal man-made structures. Large areas are devoid of vegetation since the 1960's when significant vegetation clearance occurred.

BBK is divided into five operational precincts:

- Cantonment Precinct
- Kapooka Village / Married Quarters Precinct
- Range Complex Precinct including the Range Danger Area
- Wandjina Precinct
- Churches Plain Precinct.

The proposed project scope is limited to the cantonment and range precincts and will comprise only a small fraction of the total Base area (i.e. 25 ha of a total 1,990 ha) and will be concentrated in the south-east section of the base.

The Cantonment precinct is located south-west of the Base entry, and consists of LIA, a formal parade ground, and a variety of ancillary facilities such as a mess hall, gym, chapel, and dental centre.

The Range Complex precinct contains shooting ranges and weapons training areas and has a safety template that comprises about 25% of BBK. The Training Area occupies the central, northern, and western sections of BBK and is largely devoid of buildings. Field craft and obstacle courses are situated in the southern part of BBK along with the weapons ranges.

Current zoning

The land within BBK is classified as a Special Purpose Zone and is therefore not addressed by local planning schemes. There will be no changes to zoning required. Zoning is shown in **Att 4 - BBK Land Tenure**, entire document.

Adjoining areas zoning and landuse

The Base's location on the outskirts of Wagga Wagga is located to nearby urban growth. Notable features surrounding BBK include:

- Suburb of San Isidore, which directly borders the north-eastern boundary of BBK and is predominately zoned large lot residential.
- Sturt Highway and Olympic Highway with its adjacent railway line run close to BBK's northern and eastern borders and is zoned as infrastructure.
- Churches Plain Road, runs along much of BBK's western boundary.
- Approx 2km to the north of BBK, is the Murrumbidgee River and its associated floodplain.
- Approximately 2.5 km to the south of BBK is the township of Uranquinty, which is zoned as village.
- Uranquinty Power Station, a 640 MW natural gas-fired power station is located to the west of Uranquinty.
- The remaining areas surrounding BBK are predominantly zoned for primary production and used for grazing and cereal cropping.
- Land uses located on the eastern side of Olympic Highway include environmental conservation, general residential, and public recreation land areas.

Nearby road infrastructure

BBK is accessible via Camp Access Road from the Olympic Highway. Its northern and eastern borders are close to Sturt Highway and Olympic Highway and an adjacent railway line. Churches Plain Road runs along a portion of its western border.

Traffic movements in and around BBK during construction

To deconflict construction traffic and daily Base operations, the RRJV is proposing to construct a dedicated construction entry, located north of the existing visitor carpark on Kapooka Road. This will allow construction traffic to access work elements from the northern side of the Base, via the new ring road, minimising our impact with Base operations by removing the need for vehicles to use Kapooka Drive, which acts as the main Base access road. To enable this, a small section of Kapooka Road which is currently unsealed will be paved as part of our site establishment works. This paving will allow the new construction access point the capability of facilitating all vehicle movements, including B-Double trucks.

All vehicle access to and from Blamey Barracks during construction, will be facilitated utilising existing road infrastructure, with all traffic accessing Camp Access Road from the Olympic Highway. Vehicles will follow Camp Access Road towards the Base, then turn Right onto Kapooka Road towards the new construction entry.

Deliveries that are oversized, or have the potential to create delays to traffic within the local area, upon approach to, or exit from BBK, will be scheduled outside of peak hours and coordinated with Base Stakeholders, to ensure that movements such as these do not impact daily operations.

The RRJV will not allow access for construction vehicles from the Sturt Highway to protect adjoining properties from dust that will be generated by traffic movements on an unsealed road. The new construction entry will be the main point of access for the life of the project, and will be constructed in such a way, that it will provide additional capability to the Base once construction is complete.

Contamination

As a long-term, working Base, contamination is known to be or is potentially present in or near some of the project's proposed locations. An intrusive contamination investigation was undertaken in two stages, targeting the footprints of the proposed action. Results are detailed in the Pre-construction Contamination Assessment (PCA) Report (Refer **Att 5** - BBK Pre-construction Contamination Assessment, entire document).

Key findings included:

- No soil contaminant concentrations were identified to be above the SAC protective of human health.
- PFAS was detected in the soil of the footprint of all work elements investigated, with the exception of the proposed Contractor's Precinct (WE2.4). (Refer **Att 2** - BBK Works Plan, entire document).
- The highest PFAS concentrations were located in samples collected from the New Multi-Function Centre siting option (WE 2.1), which is consistent with this area intersecting with a high-risk contaminated site record (CSR). This area was formerly used as the transport yard and fire station.
- The preferred management approach for excess material will be re-use on Site. The Project does not intend to generate surplus spoil. Based on initial cut and fill analysis that was generated in 50% SDR phase, more fill will be required than that available from on site earthworks.
- Widespread detections of PFOS above the SAC protective of ecological health were detected across the New Multi-Function Centre (WE 2.1) area and isolated detections were observed at the Medical Training Facility, Q Store and Warehousing and the Gym and Fitness Training siting options.
- The majority of the soil is classified as Category 3 and Category 4 in accordance with the Defence PFAS Construction and Maintenance Framework (2021) (Refer **Att 19** - Defence PFAS Construction and Management Framework 2021, entire document). One sample collected from the footprint of the proposed Multi-Function Centre was classified as Category 2 in accordance with the Defence PFAS Construction and Maintenance Framework (2021) (Refer **Att 19** - Defence PFAS Construction and Management Framework 2021, entire document).
- Groundwater was not encountered during drilling. A limited number of existing groundwater monitoring wells exist in the vicinity of the siting options investigated. These monitoring wells were gauged, and the standing water levels was either >5 m below ground level (bgl) or the monitoring well was dry. It is considered unlikely that shallow groundwater (<2 m bgl) will be encountered during construction.

3.1.2 Describe any existing or proposed uses for the project area.

BBK is an operational base situated on 1,990 hectares (ha) that contains facilities for training and housing Base personnel and recruits. The base also includes housing for the families of Base personnel. These facilities are located in the southern and eastern areas of BBK, with the majority of the Base being devoted to a large, open, relatively unstructured training area.

The Base's location on the outskirts of Wagga Wagga has seen it experience significant nearby urban growth. This has been most pronounced along its north-eastern border, which is shared with the growing suburb of San Isidore.

The majority of land surrounding BBK is predominantly zoned for primary production and is used for grazing and cereal cropping. Other nearby land uses include environmental conservation, general residential, and public recreation. Areas zoned for these land uses are largely located on the eastern side of Olympic Highway, over a kilometre from the Base's eastern boundary.

BBK's primary function is the delivery of all Army recruit training through 1 RTB. Courses run from two to 11 weeks and include instructor, Army Reserve recruit, recruit conditioning, indigenous pre-recruitment and Regular recruit courses.

BBK is one of only two bases in Australia which support recruit and technical and logistics trade training for Army and Air Force. It is divided into five operational precincts as described below and presented in **Att 6**: BBK Precincts, entire document).

- Cantonment Precinct: Contains the administrative, accommodation and training facilities, including gymnasium, pool, sporting facilities, golf course, fitness track and obstacle course. Contains three sub-precincts: accommodation and administration, social, and stores and warehouse. The buildings associated with the Blamey Barracks era of construction are contained in this precinct.
- Kapooka Village / Married Quarters Precinct: located in the easternmost point of the Base. Includes 56 houses, ancillary facilities such as a public school, kindergarten, community hall and recreation facilities.
- Range Complex Precinct including the Range Danger Area (RDA): Comprises the majority of BBK's area, occupying the central, northern, and western sections. Includes shooting ranges and weapons training areas. The RDA covers approximately 25% of BBK.
- Wandjina Precinct: Extending across the north-east portion of the site, this precinct contains the vegetated lower slopes of the main ridgeline, together with flat open pastureland and is used for training.
- Churches Plain Precinct: Located across the west portion of the site, the eastern side of the precinct contains the vegetated steep slopes of the ridgeline with flat open pastureland. The vegetated areas are used for navigation and patrol training, with the open areas providing limited training opportunities.

The proposed works are limited to facilities construction and upgrade within the Cantonment and Range Complex precincts. The Base is becoming increasingly incapable of meeting Defence's training and logistics capability requirements due to the age of extant facilities and infrastructure, and under-investment into the Defence estate. The proposed works are necessary to enable the base to be fit for purpose to meet Australia's strategic objectives with regard to training outcomes for recruits.

The operational use of BBK will not change as a result of the proposed works.

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

Natural features and values

There are no World Heritage properties within 10 km of the Base. The closest world heritage property is the Greater Blue Mountains Area, located approximately 330 km north-east from the Base.

There are no National Heritage properties within 10 km of the Base. The closest National Heritage place is the Snowy Mountains Scheme, located approximately 130 km to the south-east of the Base.

The Base is not located near Ramsar listed wetlands. The closest Ramsar listed wetlands are the Fivebough and Tuckerbil Wetlands, located approximately 100 km to the north-west and in a separate catchment to BBK.

The Referral area contains known or potential habitat for a number of threatened flora and fauna species and threatened ecological communities listed under the EPBC Act as discussed in Section 3.2 of this referral.

The wider Kapooka Military Area supports historic and Indigenous heritage values as listed in Section 3.3 of this referral.

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

The topography of BBK is characterised by a ridgeline, which runs north/south along the centre of the Base. The ridge is a local maximum, with elevation decreasing towards all sides of the Base. Maximum elevation within the Base is 370 metres Australian Height Datum (m AHD) towards the centre, while its minimum is 190 m AHD to the north, where the Base approaches the Murrumbidgee River's floodplain.

Regional topography is typified by ridges and minor tablelands, which increase in height to the east of the Base and decrease in height to the west of the Base. There is a north-south oriented ridgeline immediately west of the main operational area of BBK, which peaks at approximately 370 m AHD. The land east of the ridgeline slopes down to the east toward an unnamed creek at approximately 230 m AHD and the land west of the ridgeline slopes down toward Sandy Creek, approximately 1 km west of BBK, at approximately 200 m AHD.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

General description

BBK is located in the South Western Slopes and the Inland Slopes Bioregions, as well as the Wonga Hills and Ranges, and the Coffin Rock Granite Hills Landscapes. Vegetation at the Base is primarily concentrated around the Base's central ridgeline, with areas of relatively intact woodland present on the upper slopes. Woodland throughout the Base has been modified by historical agricultural practices, particularly grazing.

The western side of the Base consists of a flat, grass plain that continues to be used for cattle grazing in some areas. The desktop assessment indicates that over 110 ha of native vegetation is present within the study area, with a further 10 ha of planted native vegetation located to the north of the study area near the Cantonment area. Trees outside these clusters are scattered throughout the Base and are a mix of remnant indigenous trees, planted indigenous trees, planted native trees, and planted exotic trees.

Ecological Surveys

Three separate ecological assessments of the Project site were undertaken by specialist ecological consultants EcoLink Consulting in 2022 and 2023 as follows:

- September 2022 - Ecological Constraints Assessment to identify biodiversity values within the Project area.

- April 2023 - Vegetation assessment to map areas likely to be impacted by an updated design.
- May 2023 - Vegetation assessment to map hollow-bearing trees (HBTs) and map areas of impact based on further design refinement.

While the fieldwork was undertaken by EcoLink, the findings were reported by EMM Consulting in; **Att 7** - BBK Biodiversity Assessment Report, entire document.

Native vegetation was mapped with patches stratified based on condition (referred to as a 'vegetation zone' in the NSW Biodiversity Assessment Method (BAM) (DPIE, 2020)) and then further assessed against relevant Commonwealth conservation and listing advice to determine their alignment with any TECs listed under the EPBC Act.

Threatened Ecological Communities (TECs)

The ecological investigations identified the presence of two TECs that are Commonwealth Matters of National Environmental Significance (MNES) protected under the EPBC Act. A third TEC listed from the PMST Search for the broader project area was not present at Site.:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland, which is listed as Critically Endangered under the EPBC Act. Confirmed presence at Site.
- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia, which is listed as Endangered under the EPBC Act. Confirmed presence at Site.
- Weeping Myall Woodlands, which is listed as Endangered under the EPBC Act. Not observed within study area.

The ecological assessments identified that the early project designs would have resulted in substantial clearing of the Box Gum TECs, particularly the Critically Endangered Ecological Community (CEEC) White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland TEC, however the Defence & Infrastructure Life Cycle phases sets out a systematic approach to infrastructure development. As part of this process, alternative locations, consisting of rigorous and comprehensive options assessment, are undertaken to arrive at the optimal design solution, considering impacts to the environment. Minimising impacts to the TECs, has been a focus of this process. Through discussions between the environmental and design teams the siting and design was amended to substantially minimise vegetation clearance.

The total impact to the Grey Box Grassy Woodlands EEC is 0.01 ha (0.01 ha direct with no indirect impact). Grey Box Grassy Woodlands are known to occur extensively in the region around Wagga Wagga, with the region referenced in the Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia - EPBC Act policy statement (DSEWPac 2012). EcoLogical (2010) maps 95 ha of Grey Box Grassy Woodlands in BBK, while regional vegetation mapping (OEH 2016) indicates that there is 146 ha modelled within BBK and 422 ha modelled within the locality (within 10 km of the project). The total impact accounts for 0.007% of the community within BBK, and 0.002% with the locality. An assessment of the significance of impacts of the endorsed design to the Grey Box Grassy Woodlands TEC has been prepared in accordance with Matters of National Environmental Significance: Significant impact guidelines 1.1 (DoE 2013). This assessment is presented in Appendix B of **Att 7: Biodiversity Assessment Report**, entire report.

The total impact to the White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland TEC is 2.56 ha (1.39 ha direct impact and 1.17 ha indirect impact due to fragmentation). The BBK area and broader Wagga Wagga region are known to support large areas of White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland, with 433 ha mapped by EcoLogical (2010) in BBK as cited in **Att 7: Biodiversity Assessment Report**, entire report (c.f. 232 ha modelled within the BBK area and 1,557 ha modelled within the general locality (DPE (2022)). An assessment of the significance of impacts of the endorsed design to the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC has been prepared in accordance with Matters of National Environmental Significance: Significant impact guidelines 1.1 (DoE 2013). This assessment is presented in Appendix B of **Att 7: Biodiversity Assessment Report**, entire report.

This assessment concluded that the project would not result in a significant impact to this TEC because:

- The project will result in direct impacts to a small area of the community (1.39 ha); however, this is at the edge of existing impacts and represents an insignificant portion of the occurrence of the CEEC (0.01% to 0.09% within the locality) or even at a local scale (0.32% of the CEEC within BBK).
- Impacts are occurring at the edges of existing clearing.
- The project will not modify or destroy abiotic factors necessary for the survival of the TEC.
- The project will not cause a substantial change in the species composition or reduction in the quality or integrity.
- Substantial effort has been placed into refinement of the design to avoid and minimise impacts to the TEC, particularly impacts arising from fragmentation, resulting in a reduction of impacts to the TEC from approximately 16 ha at CDR to 1.39 ha direct impact and 1.17 ha of indirect impacts.

Att 7: Biodiversity Assessment Report, Figure 3.2, presents a figure of the mapped TECs within the broader project area. **Att 7: Biodiversity Assessment Report**, Figure 3.3, presents a figure of the mapped TECs within the direct Project area.

Threatened flora

The EPBC PMST identified eight threatened flora species that may occur in the broader project area. These species are listed below along with their likelihood of occurrence and conservation listing status (Refer **Att 7: Biodiversity Assessment Report**, Appendix C):

- Spear Grass *Austrostipa wakoolica* (low) (endangered)
- Mueller Daisy *Brachyscome muelleroides* (low) (vulnerable)
- Sandhill Spiderorchid *Caladenia arenaria* (low) (endangered)
- Spiny Peppergrass *Lepidium aschersonii* (low) (vulnerable)
- Winged Peppergrass *Lepidium monoplacoides* (low) (endangered)

- Tarengo Leekorchid *Prasophyllum petilum* (low) (endangered)
- Slender Darling-pea *Swainsona murrayana* (low) (vulnerable)
- Small Purple-pea *Swainsona recta* (low) (endangered).

No threatened flora species were previously recorded in the study area and none are considered to have a moderate to high likelihood of occurrence in the study area based on the presence of suitable habitat.

The field ecological surveys undertaken for the Referral area corroborated the results of previous studies and the species listed likelihood of occurrence outcomes as no threatened flora species listed under the EPBC Act were observed.

Threatened fauna

EPBC PMST identified 33 threatened fauna species that are known or have the potential to occur in the broader project area.

One threatened fauna species, (the Swift Parrot, *Lathamus discolor*) has previously been recorded within the study area but was not observed during the Project field ecological surveys).

One threatened fauna species (the Superb Parrot, *Polytelis swainsonii*) was recorded in the study area during the project field surveys undertaken in September 2022 and April 2023). One hollow-bearing tree provides suitable breeding habitat for the Superb Parrot, in line with the breeding habitat characteristics identified DAW (2022), National Recovery Plan for the Superb Parrot (*Polytelis swainsonii*), Section 1.8. The site is situated at the edge of an extensive area of intact vegetation, and large numbers of suitable breeding hollows will remain in connected and contiguous habitats.

Based on the presence of suitable habitat, an additional six threatened fauna species listed under the EPBC Act are considered to have a moderate to high likelihood of occurrence in the study area and are listed below.

- Regent honeyeater, *Anthochaera Phrygia* (moderate) (critically endangered)
- Swift parrot, *Lathamus Discolor* (previously recorded) (critically endangered)
- Hooded Robin (south-eastern form) *Melanodryas cucullata cucullata* (moderate) (endangered)
- Koala *Phascolarctos cinereus* (moderate) (endangered)
- Southern Whiteface *Aphelocephala leucopsis* (moderate) (vulnerable)
- Supurb Parrot *Polytelis swainsonii* (recorded) (vulnerable)
- Grey-headed Flying-fox *Pteropus poliocephalus* (high) (vulnerable)
- Diamond firetail *Stagonopleura guttata* (moderate) (vulnerable)

Significant impact tests were completed against DCCEEW's Significant Impact Assessment Guidelines 1.1 for the species known to, or likely to occur within the project area. The tests determined that the proposed action is not likely to result in a significant impact to any of these species. These assessments are presented in **Att 7: Biodiversity Assessment Report, Appendix D.**

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

Soil condition

The Wagga Wagga 1:100,000 soil landscape series sheet (8327) indicates BBK includes the following soil landscape groups: Belfrayden, East Bowmen, Currawarna, Kurrajong Plain, Livingstone, Lloyd, Pulletop, Yarragundry, Becks Lane, Becks Lane variant a, Benloch variant a, Glenmornon. The soil types at BBK predominantly comprise chromosol, kandosol and sodosol soils.

No naturally occurring asbestos (NOA), acid sulfate soils (ASS) or occurrences of mining subsidence are indicated within BBK.

Regional vegetation description

BBK is classified as being situated within the South Western Slopes and the Inland Slopes Bioregions, as well as the Wonga Hills and Ranges, and the Coffin Rock Granite Hills Landscapes. Vegetation in the Base is primarily found around the Base's central ridgeline, with areas of relatively intact woodland present on the upper slopes. Woodland throughout the Base has been modified by historical agricultural practices, particularly grazing, and the western side of the Base consists of a flat, grass plain that continues to be used for cattle grazing in some areas.

Trees outside these clusters are scattered throughout the Base and are a mix of remnant indigenous trees, planted indigenous trees, planted native trees, and planted exotic trees.

Vegetation condition

Historically, large portions of the site were partially cleared prior to 1965, excepting woodland areas on low rises to the north-west of the study area (Refer **Att 20** - Aerial image of Remnant Vegetation across BBK circa 1965, entire image). As a result of this past clearing, vegetation present on the broader BBK site now consists of a mosaic of landscaped gardens and maintained grass under remnant trees, particularly adjacent to existing infrastructure, and remnant vegetation. including substantial regrowth since past clearing. Large, old-growth trees are sparse due to this past clearing and areas of remnant vegetation include a substantial amount of regrowth and immature trees. Adjacent to and within the study area, planting of native trees has occurred for amenity, resulting in the mosaic of vegetation outlined above. Larger areas of more intact vegetation occur to the west and north-west of the study area (disturbance area), with the study area occurring at the edge of these large areas of contiguous vegetation. The RRJV Environment Manager (Pers. Comm. October 2023), indicated that weed infestation has been managed annually at BBK (Refer **Att 21** - 2022-2021 Annual report KMA Vegetation Monitoring, entire report. The most common weed species include Patterson curse, St John's wort thistle and wild oats plantain, with a moderate weed density. There is limited mid and understory vegetation on site due to regular mowing and also to an over-abundance of kangaroos who feed on regenerating vegetation (Refer **Att 21** - 2022-2021 Annual report KMA Vegetation Monitoring, entire report).

Vegetation community composition

There are five Plant Community Types (PCTs) as defined under the NSW classification system likely to be present within the study area:

- PCT 110 Western Grey Box
- PCT 277 Blakely's Red Gum
- PCT 185 Dwyer's Red Gum
- PCT 267 White Box
- PCT 346 White Box - Blakely's Red Gum.

These PCTs are expected to be primarily concentrated around the slopes of the ridge located in the centre of BBK. PCT 110 is present on the western slopes of the ridge, PCT 267 is located on the eastern slopes of the ridge, and PCT 277 is present on the eastern and northern edges of the study area. PCT 185 and PCT 346 are confined to small patches in the south-west and north of the desktop assessment study area respectively.

Field investigations identified the presence of two PCTs within the study area:

- PCT 110 – Western Grey Box - Cypress Pine shrubby woodland on stony footslopes in the NSW South Western Slopes Bioregion and Riverina Bioregion
- PCT 267 – White Box - White Cypress Pine - Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion.

These PCTs have been mapped according to condition class, either as moderate or high condition and correspond to the following Commonwealth TECs that are discussed in detail in Section 3.2.1 of this Referral:

- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia, which is listed as Endangered under the EPBC Act - corresponds to PCT 110.
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland, which is listed as Critically Endangered under the EPBC Act - corresponds to PCT 267.

As indicated in Section 3.2.1 of this referral, the project is not expected to result in a significant impact to these TECs.

Flora species

A total of 120 flora species were recorded across the study area during the October 2022 and April 2023 field investigations. This comprised 77 indigenous species and 43 exotic species. A list of all flora species is provided **Att 7** - Biodiversity Assessment Report, in Appendix C.

No threatened flora species listed under the EPBC Act and NSW BC Act were considered to have potential to occur within the study area.

Potential impacts from Project

Regional vegetation mapping (OEH, 2012) models 4,489 ha of native vegetation within the locality, including 1,557 ha of White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland and 422 ha of Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia. This clearing will occur on the edge of existing disturbance resulting from the construction and operation of the Kapooka Military Area. The project will result in clearing of 2.56 ha (or 0.06%) of native vegetation including the 1.40 ha of TECs listed under the EPBC Act as discussed in Section 3.2.1. At this scale these impacts are considered minor to insignificant.

The project will result in removal of five hollow-bearing trees. Four of these trees support small hollows with hollow entrances less than 5 cm in diameter. These do not provide suitable breeding habitat for the Superb Parrot (one of the MNES species known to inhabit the broader locality), as indicated the DAWE (2022) Superb Parrot Recovery Plan, Section 1.8, which outlines breeding habitat characteristics. One hollow-bearing tree provides suitable breeding habitat for the Superb Parrot, in line with the breeding habitat characteristics identified in Section 1.8 of the Superb Parrot Recovery Plan. Further, the site is situated at the edge of an extensive area of intact vegetation, and large numbers of suitable breeding hollows will remain in connected and contiguous habitats.

With regard to the new weapons range, the vegetation to the immediate right of the existing weapons range consists of planted trees, generally in rows and including *Pinus radiata*, *Cupressus marocarpa* and some planted *Eucalyptus* mallee species and mixed wattle species. The dense vegetation shown to the far right has been assessed as comprising plantation of mixed species, including exotics – Radiata pines, *Brachychiton rupestris*, Acacia species including *A. baileyana*. None of the vegetation in this area meets the criteria of a Clth listed TEC or a Victorian listed EVC. The new weapons range has been orientated so that there will be minimal impact to the remnant vegetation to the right of the existing weapons range (Refer **Att 22** - New Weapons Range image Plan, entire plan).

Mitigation measures

Unmitigated the project has the potential to result in the introduction of invasive species into retained vegetation, particularly weed species. Mitigation measures have been developed to be consistent with the requirements of recovery plans including that of the White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland CEEC (DCCEEW, 2010) and Small Purple-pea (OEH, 2012). These mitigation measures will be captured in the Project's Construction Environmental Management Plan (CEMP) and will ensure that the potential introduction of invasive weed species is effectively managed and mitigated. Refer to Section 4.1.4.10 of this Referral and **Att 7** - Biodiversity Assessment Report, Section 6 for proposed mitigation and management measures to be implemented during the construction phase of the project.

The project will not involve any use of chemicals which could stunt the growth of native vegetation of any controlled burning practices.

3.3 Heritage

3.3.1 Describe any Commonwealth heritage places overseas or other places recognised as having heritage values that apply to the project area.

Commonwealth heritage places overseas

The Project will not impact on any Commonwealth heritage place overseas, however, there are places recognised as having heritage values within the Project area. These values and their heritage management context are summarised below.

A Heritage Management Plan (HMP) has been prepared by Umwelt (2022), which provides a heritage assessment of the entire KMA and guidance on mitigation and management strategies to avoid impacts to heritage values. A Heritage Impact Assessment (HIA) was undertaken for the Project. The HMP and HIA are presented in **Att 8** - BBK Heritage Management Plan- Part 1, Part 2, Part 3, entire document and **Att 9** - BBK Heritage Impact Assessment, entire document.

Historic heritage

While the Base has no statutory or non-statutory heritage listings, it has been assessed as meeting the Commonwealth heritage criteria for historic values. Historic heritage values are detailed in the HMP, and summarised as follows:

- Historically significant as the 'Home of the Soldier' for over 70 years.
- Socially significant as it has 'deep social and cultural connections that exist between BBK and Australian Army personnel are unparalleled by other military training areas in Australia' (**Att 8** - BBK Heritage Management Plan - Part 1, Section 4, p. 65).
- Containing buildings that date from all phases of development, which include Royal Australian Engineers training during World War II (WWII), migrant hostel by the Department of Immigration and as a dedicated military training area from the 1950s onwards.
- Associated with Field Marshall Thomas Blamey, after whom the 1965 era of development was named.
- Including the Blamey Barracks era of development at BBK. The Blamey Barracks are an intact and representative example of government design and construction from the 1960s, represented by the Blamey Era buildings. There are 38 buildings with heritage values from the Blamey era.

While the HMP places emphasis on the buildings, particularly those relating to the Blamey Barracks era of development, the functional and social significance are identified by base personnel as being of greater import than the buildings. The physical fabric is the means to the end, it is a tool or a teacher, but is not important in and of itself. It is instead the function, the form and the social connections that is of heritage value.

Natural heritage

A Natural Heritage values assessment was undertaken and is presented in **Att 8** - BBK Heritage Management Plan - Part 2, Appendix E.

Underpinning the assessment of ecological and natural heritage values of BBK are the attributes of each of the important natural values. These values and the attributes considered include: biodiversity values (species and ecosystem richness and diversity, presence of rare or endangered species/communities), geodiversity (rare or intact examples of geomorphological processes, exemplary fossil records), ecosystem (where there is a diversity of intact ecosystems including but not limited to threatened ecological communities) and scientific value (where there has been long term monitoring and/or scientific studies of threatened species or communities).

This assessment concludes that the natural values of BBK are partially intact and have a low to moderate level of natural integrity based on the remaining woodland remnants. At a landscape scale, BBK shares similar geodiversity and biodiversity in the broader region, particularly along the north-south ridgeline. Although biodiversity conservation has high value, given the deteriorating condition of Box-Gum Woodland, there are other grassy woodland patches in the region that represent better natural integrity. These changes in condition and integrity are not a natural phenomenon but are a result of past and current human modification.

As a place, BBK does not meet the CHL criteria where the current natural values are represented in an altered state with comparable features in the local region, subregion and bioregion. Within the local region,

these values are generally of greater ecological significance as a result of their being larger contiguous patches with greater connectivity and ecological function.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

Indigenous heritage

More than 20 Indigenous heritage sites are documented across BBK. A site inspection was undertaken with Indigenous stakeholders for the Project and targeted previously undisturbed or minimally disturbed areas within the project footprint. A culturally modified tree was identified in the north-west section of the Cantonment Precinct adjacent to an existing track. This tree will not be impacted by the proposed action.

The two areas of archaeological potential are located within the Project area, however the impacts are not considered to be significant, and mitigation measures (including monitoring during ground disturbance) have been agreed with Indigenous stakeholders. Further information on the heritage values is included in Section 3.3 of this referral and provided in **Att 9** - BBK Heritage Impact Assessment, entire document).

The impact is not considered significant when assessed against DCCEE's Significant Impact Assessment Guidelines 1.2 (Refer **Att 10** - BBK EPBC Act significant impact tests for the whole of the environment matters, entire document).

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

BBK contains a localised ridge line that runs north to south and splits the Base down the centre in terms of topography with the main base facilities located on the eastern side and the range and open area located on the west and northern portions of the site.

Topography at the main base facilities is around 240-270 m AHD, which slopes down in the north-east direction towards the Murrumbidgee River.

The Murrumbidgee River and groundwater from the Wagga Wagga region are the most significant water resources to BBK. The Murrumbidgee River is the closest large body of water, lying approximately 6 km north, and is fed by several smaller tributaries nearby including Sandy Creek and Kapooka Creek. BBK is fully contained within the Murrumbidgee River catchment, which covers an area of approximately 84,000 km.

Water courses on BBK are typically mildly incised and moderately to sparsely grassed, accepting run-off from roadways, verges, and buildings. The majority of water flows are conveyed by surface drainage in open channels or swale drains. There is an open channel within the main base area that conveys the overland flow from the top of catchment towards the north.

Five bores are present on the base, which draw groundwater that sits at between 6 and 115 m below ground level. Groundwater investigations are not considered to be warranted at this stage due to the depth of the groundwater within the study area.

The proposed development will not have any significant impacts on water table levels. It is not expected that the development will intersect the water table due to the local depth of groundwater. Minor intersection of unidentified, discontinuous, and localised lenses of shallow perched groundwater is possible, however can be appropriately managed in accordance with the CEMP if required.

Hydraulic modelling has been undertaken for both the existing and proposed development scenario. The hydraulic model analysis was undertaken for 1%, 2% and 10% AEP flood events to assess flood conditions and mechanisms at the main base area and the downstream areas (for the baseline and proposed scenarios).

The baseline case model results show that the site is affected by overland flooding in the 1%, 2% and 10% AEP flood events. The channel that runs through the main base area conveys the surface water runoff towards downstream north east receptors. Model results show some localised areas affected by floodwater; this is caused by surface water runoff ponding within the terrain depression or areas around the buildings where water is trapped in low points.

The proposed development scenario model results show that the overland flow from the western catchments upstream of the site is collected by the proposed channels and culvert crossings, and conveyed northeast towards the downstream receptors. The hydraulic model results show potential increases in flood levels (up to about 0.02m) to the main base and the downstream area (i.e. outside the site area). However, refinement of the hydraulic model and inclusion of proposed mitigation measures (detention basins) is currently under development and is anticipated to further reduce potential impacts.

There are no direct impacts to rivers or creeks required for the construction or use of the preferred option. Substantial changes to drainage patterns and nearby bodies of water are unexpected. Impacts to water resources resulting from the proposed developments are not anticipated to be significant due to the nature of the works. However, some surface water impacts are likely to be generated during both the construction and operation of the proposed facilities. The proposed new ring road is likely to have the most impact on hydrology in increasing hardstand from which surface water can flow into adjoining areas of threatened species. The designs however will implement effective drainage to ensure that the surrounding environment is not adversely impacted to changes in water flow or exposed to runoff containing harmful grits and oils.

Furthermore, appropriate management during construction will avoid impacts to waterways through a CEMP that puts in place construction stormwater management mitigations.

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	No	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	Yes	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no world heritage properties within 10 km of the Base. The closest world heritage property is the Greater Blue Mountains Area, located approximately 330 km north-east from the Base.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no National heritage properties within 10 km of the Base. The closest national heritage place is the Snowy Mountains Scheme, located approximately 130 km to the south-east of the Base.

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
No	No	Banrock Station Wetland Complex
No	No	Hattah-Kulkyne Lakes
No	No	Riverland
No	No	The Coorong, and Lakes Alexandrina and Albert Wetland

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Base is not located near Ramsar listed wetlands. The closest Ramsar listed wetlands are the Fivebough and Tuckerbil Wetlands, located approximately 100 km, north-west of the Base.

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species
No	No	<i>Anthochaera phrygia</i>
No	No	<i>Aphelocephala leucopsis</i>
No	No	<i>Aprasia parapulchella</i>
No	No	<i>Austrostipa wakoolica</i>
No	No	<i>Botaurus poiciloptilus</i>
No	No	<i>Brachyscome muelleroides</i>
No	No	<i>Caladenia arenaria</i>
No	No	<i>Calidris ferruginea</i>
No	No	<i>Callocephalon fimbriatum</i>
No	No	<i>Calyptorhynchus lathamii lathamii</i>
No	No	<i>Climacteris picumnus victoriae</i>
No	No	<i>Crinia sloanei</i>
No	No	<i>Dasyurus maculatus maculatus</i> (SE mainland population)
No	No	<i>Falco hypoleucos</i>
No	No	<i>Grantiella picta</i>
No	No	<i>Hirundapus caudacutus</i>
No	No	<i>Lathamus discolor</i>
No	No	<i>Leipoa ocellata</i>
No	No	<i>Lepidium aschersonii</i>
No	No	<i>Lepidium monoplacoides</i>
No	No	<i>Litoria raniformis</i>
No	No	<i>Lophochroa leadbeateri leadbeateri</i>
No	No	<i>Macquaria australasica</i>
No	No	<i>Melanodryas cucullata cucullata</i>
No	No	<i>Neophema chrysostoma</i>
No	No	<i>Numenius madagascariensis</i>
No	No	<i>Nyctophilus corbeni</i>
No	No	<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)
No	No	<i>Polytelis swainsonii</i>
No	No	<i>Prasophyllum petilum</i>
No	No	<i>Pteropus poliocephalus</i>
No	No	<i>Rostratula australis</i>
No	No	<i>Stagonopleura guttata</i>

Direct impact	Indirect impact	Species
No	No	Swainsona murrayana
No	No	Swainsona recta

Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	No	Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia
No	No	Weeping Myall Woodlands
Yes	Yes	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Direct and indirect impacts are described in full in **Att 7** - BBK biodiversity Assessment Report, Section 4 and Appendix D.

Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia TEC - Endangered

- Listed as Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- Removal of up to 0.01 ha of this Threatened Ecological Community (TEC).
- No Indirect impacts.
- Grey Box Grassy Woodlands are known to occur extensively in the region around Wagga Wagga, with the region referenced in the Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia - EPBC Act policy statement (DSEWPaC 2012).
- EcoLogical (2010) maps 95 ha of Grey Box Grassy Woodlands in BBK, while regional vegetation mapping (OEH 2016) indicates that there is 146 ha modelled within the BBK and 422 ha modelled within the locality (with 10 kilometres of the project).
- The total impact accounts for 0.007% of the community within the BBK area, and 0.002% with the locality.

White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland TEC - Critically Endangered

- Listed as Endangered under the EPBC Act.
- The total impact to the Critically Endangered Ecological Community (CEEC) is 2.56 ha including 1.39 ha direct impacts (a result of vegetation clearance) and indirect impacts of 1.17 ha (due to fragmentation).
- The BBK area and Wagga Wagga region are known to support large areas of White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland, with 433 ha mapped by EcoLogical (2010) in Kapooka Military Area (c.f. 232 ha modelled within the BBK area and 1,557 ha modelled within the locality (DPE, 2022).

Regent Honeyeater (*Anthochaera phrygia*) - Endangered

The project is considered is unlikely to have a significant impact on the Regent Honeyeater as:

- No individuals of this species were identified during field surveys or from previous assessments.
- Only minor impacts will occur to 2.56 ha of potential foraging habitat for the species, with large areas of contiguous habitat remaining unimpacted.
- Impacts will only occur to the edge of existing clearing,
- The proposed Action will not result in fragmentation of the population.
The proposed Action will not lead to impact on breeding habitat which could disrupt the life cycle of the species and lead to a decrease in the size of the population
The proposed Action will not result in the introduction of harmful invasive species or diseases and will not interfere with the recovery actions identified for the species.
- The project is not located within the four known key breeding areas identified in the Recovery Plan (DoE, 2016).

Swift Parrot (*Lathamus discolor*) - Endangered

The project is considered is unlikely to have a significant impact on the Swift Parrot as:

- This species was not observed during the Project field ecological surveys, although it has been previously identified within the broader Project area.
- The project will impact on a small area of suitable habitat at the edge of existing cleared area.
- Impacted habitat represents 0.31% of the suitable connected habitat available to the species within BBK.

- The project will not disrupt the breeding cycle of the species, reduce the area of occupancy for the species, fragment the population or significantly interfere with the recovery of the species.

Hooded Robin (south-eastern form) (*Melanodryas cucullata cucullata*) - Endangered

The project is considered is unlikely to have a significant impact on the Hooded Robin as:

- The species was not observed during any of the field surveys at the Project area.
- The species tends to persist in substantial areas of remnant habitat of at least 20 ha, and large areas of habitat contiguous with the study area will be retained.
- The proposed Action will not impact on habitat critical to the survival of the species
- The proposed Action is unlikely to significantly reduce the area of occupancy of the species
- Fragmenting an existing population into two or more populations is unlikely
- Disruptions on the breeding cycle of a population are unlikely
- The proposed Action is unlikely to interfere with the recovery of the species.

Koala (*Phascolarctos cinereus*) - Endangered.

The proposed Action is considered is unlikely to have a significant impact on the Koala as it:

- There has only been four Koala records within the locality, from 1965 to 2006.
 - Koala were not observed at site during the recent field ecological surveys.
 - Will result in impacts to a very small area of habitat, which represents 0.35% of the available connected habitat.
 - Will result in a very minor reduction in the area of occupancy for the species.
 - Impacts will occur at the edge of existing clearing and will not fragment any potential existing population of the species.
- Habitat to be impacted is unlikely to constitute habitat critical to the survival of the species.
Will not disrupt the breeding cycle for the species, introduce invasive species or diseases or interfere with the recovery of the species.

Grey-headed Flying-fox (*Pteropus poliocephalus*) – Vulnerable

The project is considered is unlikely to have a significant impact on the Grey-headed Flying-fox as:

- No individuals of the species were observed within the project area during the field assessments.
- The project will result in minor and insignificant impacts to the species habitat at either a local or national scale.
- No nationally important camps will be disrupted.
- The project will not disrupt the breeding cycle of the species, will not lead to a decrease in the single mobile population of the species and will not fragment the population.
- The project will not introduce invasive species or diseases or interfere with the recovery of the species.

Southern Whiteface (*Aphelocephala leucopsis*) – Vulnerable

The project is considered is unlikely to have a significant impact on the Southern Whiteface as:

- No individuals of the species were observed within the project area during the field assessments.
- The project will result in minor and insignificant impacts to the species habitat at either a local or national scale.
- Impacts will occur at the edge of existing clearing, with large area of contiguous habitat to be retained, thus avoiding fragmentation.
- The project is unlikely to result in the loss of any animals and is therefore unlikely to lead to a long-term decrease in an important population or reduce the area of occupancy.
- The project will not result in the introduction of invasive species or diseases.

Superb Parrot (*Polytelis swainsonii*) – Vulnerable

The project is considered is unlikely to have a significant impact on the Superb Parrot as:

- Individuals of this species were recorded in the study area during the field surveys undertaken in September 2022 and April 2023.
- The project will impact on a small area of suitable habitat at the edge of existing cleared area.
- Impacted habitat represents 0.31% of the suitable connected habitat available to the species within BBK area with significant areas of foraging and breeding habitat remaining.
- The project will not result in a reduction in the area of occupancy for the important population or result in fragmentation.

Diamond Firetail (*Stagonopleura guttata*) – Vulnerable

The project is considered is unlikely to have a significant impact on the Diamond Firetail as:

- No individuals of the species were observed within the project area during the field assessments.
- The project will result in minor and insignificant impacts to the species habitat at either a local or national scale.
- Impacts will occur at the edge of existing clearing, with large area of contiguous habitat to be retained, thus avoiding fragmentation.
- The project is unlikely to result in the loss of any animals and is therefore unlikely to lead to a long-term decrease in an important population or reduce the area of occupancy.
- The project will not result in the introduction of invasive species or diseases.

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

No

4.1.4.6 Describe why you do not consider this to be a Significant Impact. *

Field ecological surveys mapped the distribution of the two present TECs against the reported remnant distribution of each TEC across the region. Assessment of the potential impact was determined to be not significant for both TECs as summarised below and described in further detail in **Att 7** - BBK Biodiversity Assessment Report, Section 4 and Appendix D.

Grey Box Grassy Woodlands TEC: The total impact to the Grey Box Grassy Woodlands is 0.01 ha of direct impact and no indirect impact. An assessment of the significance of impacts of the endorsed design to the Grey Box Grassy Woodlands EEC has been prepared in accordance with Matters of National Environmental Significance: Significant impact guidelines 1.1 (DoE 2013). This assessment is presented in **Att 7**: BBK Biodiversity Assessment Report, Appendix D. The assessment included that the impacts would be negligible and that the project would not result in a significant impact.

White Box Yellow Box Blakely's Red Gum Woodland and Derived Native Grassland: The total impact to the CEEC is 2.56 ha (1.39 ha direct impact and 1.17 ha indirect impact due to fragmentation). An assessment of the significance of impacts of the endorsed design to the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC has been prepared in accordance with Matters of National Environmental Significance: Significant impact guidelines 1.1 (DoE 2013). This assessment is presented in Appendix D of **Att 7**: BBK Biodiversity Assessment Report, Appendix D. This assessment concluded that the project would not result in a significant impact to this TEC.

Att 7: BBK Biodiversity Assessment Report, Appendix D or Section 3.2.1 of this Referral discusses the full assessment of significance for both TECs which were undertaken in accordance with Matters of National Environmental Significance: Significant impact guidelines 1.1 (DoE 2013).

4.1.4.7 Do you think your proposed action is a controlled action? *

No

4.1.4.9 Please elaborate why you do not think your proposed action is a controlled action. *

The proposed action has been assessed as not likely to have a significant impact on threatened species and ecological communities and therefore under section 75 of the EPBC Act it would not be considered to be a controlled action. **Att 7** - BBK Biodiversity Assessment Report, Appendix D and Section 4.1.4.6 of this referral, provide further detail on why the proposed action is not deemed to be a controlled action against matters relating to threatened species or communities.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Design

Defence has a comprehensive end-to-end process for the development of infrastructure and capability which this project has undergone.

The Defence End to End Life Cycle Phases includes planning, identification of Estate Investment Requirements, Initial Business Case, Capital Facilities and Infrastructure development (CFI), operations and maintenance phase and disposal. As part of this process, alternative locations consisting of rigorous and comprehensive options assessment are undertaken to arrive at the optimal design solution.

The planning phase of this project has consisted of the following key design activities and milestones which include the following options assessments:

- **Master Plan Feasibility Report (MPFR)**: During MPFR, the concept design and reporting is developed to a 5% level which has involved the assessment of multiple site options at a precinct level.
- **Concept Design Report (CDR)**: During CDR stage, the design and reporting is developed to a 30% level. During CDR the precinct level options were refined to building footprints and associated options.
- **Schematic Design Report (SDR)**: During SDR stage, the design and reporting is developed to a 50% level. Further options were assessed to minimise and avoid impacts on EPBC listed TECs and habitat areas.
- **Site Selection Board (SSB)**: Formal assessment of site selection and endorsement.
- **Detailed Design Report (DDR)**: During DDR stage the detailed design and reporting is undertaken with the design progressed to the 90% level on the endorsed site selection locations.

Defence's Standard Operating Procedures required that alternatives to the action proposed are considered during the project's design and development. Alternatives and options are refined or omitted at each design milestone based on a suite of potential constraints to the proposed works including general Environmental, ecological, heritage and contamination constraints.

A detailed summary of the Defence End to End Life Cycle Phases including how environmental and heritage investigations are incorporated and influence the refinement at each stage of siting and design is presented in **Att 12**.

Operation and Construction

A summary of recommended management and mitigation measures directly relating to threatened species and communities are presented below and will be incorporated into a CEMP by the constructor for all works pertaining to preconstruction, construction and operation. Compliance with Defence's Standard Operating Procedures will also be required during construction and operation. Further detail of recommended management and mitigation measures for construction and operation phases are presented in **Att 11**.

Impacts to biodiversity values

- Clearing limits have been established which avoid and minimise impacts to the greatest extent practicable.

Impacts to retained vegetation due to inadvertent clearing

- All works, including ancillary facilities and laydown areas will be retained within the approved disturbance footprint.
- Area of retained vegetation will be protected during construction. This will include fencing of exclusion areas and sign-posting these areas as no-go zones.
- This will be maintained and checked daily through construction.

Impacts to retained vegetation due to sediment and hydrology

- The drainage of the road will be constructed to ensure that increased hardstand does not result in increased surface water runoff and mobilised grits and oils flowing into adjacent areas of retained vegetation.
- Appropriate sediment control measures will be implemented, including sediment, erosion and pollution control measures.

Degradation of retained vegetation due to weeds

- Potential for introduction of weeds will be reduced through implementation of soil and vehicle hygiene measures.
- Monthly checks of construction areas will be undertaken to document any significant growth of priority weeds (Weeds of National Significance or weeds listed as Priority weeds for Riverina Local Land Services Region in the Riverina Regional Strategic Weed Management Plan (LLS, 2017)).
- Weed management of all priority weeds will be undertaken within and at the edges of the construction area.

Impacts to fauna during clearing

- Pre-clearing surveys will be undertaken to document significant habitat features present within the clearing area, including hollows, nests or other features.
- An Ecologist will be present during clearing. Clearing will include the following:
- A staged approach to clearing, clearing non-significant habitat first, allowing animals to vacate the clearing area before significant habitat features are cleared. Staging should ideally be separated by 1-2 days.
- All trees felled will be inspected by the Ecologist to relocate any fauna located during clearing to nearest retained vegetation.
- Any animals injured during clearing works will be taken to a veterinarian.

Impacts to threatened species

- Signage will be implemented on the access road to raise awareness of the potential for Koalas and Parrot species to occur.
- Koala fencing will be constructed in the area to the north of the company lines to prevent Koalas from accessing works areas.

Noise and dust impacts to retained vegetation and fauna habitat

- Noise mitigation measures will be implemented to be protective of sensitive fauna species.
- Dust mitigation measures will be implemented, including use of water carts to control dust and minimise dust impacts to retained vegetation.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Offsets have not been considered as part of the planning investigations to date for the proposed Action.

There is however, an existing revegetation program across the broader Kapooka Military Area (KMA) currently being implemented. The training area in the north and east is open space largely devoid of vegetation and is therefore not conducive to the recruit training needs. This program is therefore an initiative to regenerate vegetation, and thereby improve Defence capability onsite. The program was devised in a manner to provide a biodiversity buffer to existing TEC's on site that are under pressure from training activities.

The revegetation program is comprised of:

- A combination of broad-acre direct seeding with strategic tubestock revegetation.
- Tube stock planting across two main areas in the southwest corner of BBK and on the western side of BBK comprising a total of 36.05 hectares with associated temporary protection fencing totalling 1.93 kms.
- 342 ha direct seeded revegetation in non-vegetated areas along the western, north and north-eastern areas of BBK.

- The species planned to be used are all Acacia species and will include an 80-20 shrub to tree ratio in the open areas and a 70-30 shrub to tree ratio in the Cantonment.

Consultation has occurred with the program managers to ensure that the proposed action does not impact on any of the areas that have been already or are still being planted or seeded.

There are no previous EPBC Act approvals and ongoing conditions/offsets/conservation areas that may apply to or be impacted by this current proposed Action.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species
No	No	Actitis hypoleucos
No	No	Apus pacificus
No	No	Calidris acuminata
No	No	Calidris ferruginea
No	No	Calidris melanotos
No	No	Gallinago hardwickii
No	No	Hirundapus caudacutus
No	No	Motacilla flava
No	No	Myiagra cyano-leuca
No	No	Numenius madagascariensis

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.5.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The project does not support any areas of inter-tidal or other wetlands that many of the migratory shorebird species require. No suitable habitat is located in proximity to the study area or will be indirectly impacted by the project. As a result, the project will not result in impact to important habitat for these species (DoE, 2015).

The Fork-tailed Swift (*Apus pacificus*) and White-throated Needletail (*Hirundapus caudacutus*) are largely aerial species and may overfly the study area on occasion (DoE, 2015).

The White-throated Needletail (*Hirundapus caudacutus*) roosts at night in the crowns of tall trees, mainly in forest habitats (DoE, 2015); however, the canopy within the study area is not as dense as known roost sites. As a result, the study area is considered highly unlikely to provide important habitat for these species.

The Satin Flycatcher (*Myiagra cyano-leuca*) prefers tall forest and wetter habitats such as forested gullies, habitats which are not present in the study area. The species is considered a low likelihood of occurrence, and the study area is considered highly unlikely to provide important habitat for this species. As a result of the above, no further assessment or assessments of significance have been undertaken.

The project will not result in any significant impacts to migratory species.

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is not a nuclear action.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The project area is located approximately 400 km from the east coast of Australia and therefore it is not near a Commonwealth Marine Area.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project area is located in central New South Wales and therefore will not impact on the Great Barrier Reef.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is not a coal mine or coal seam gas development.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The person taking the action is Defence, which is a Commonwealth agency. Although BBK is Commonwealth land, under Section 26(3)(f) of the EPBC Act, requirements for approval of activities involving Commonwealth land do not apply when the person taking the action is the Commonwealth or a Commonwealth agency.

Section 28 regulates actions by the Commonwealth or a Commonwealth agency with a significant impact on the environment.

The action will be undertaken by a Commonwealth agency therefore the 'Whole of the environment matters' are reviewed and assessed in Section 4.1.12.2 Commonwealth or Commonwealth agency to address Section 28.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project area is located in New South Wales and is therefore not located near Commonwealth heritage places overseas.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

Yes

4.1.12.2 Briefly describe the nature and extent of the likely impact on the whole of the environment. *

The proposed action will take place by a Commonwealth Agency. There will be impacts to some whole of environment protected matters. These have been assessed using the EPBC Act Significant Impact Guidelines 1.1 and 1.2. The nature and extent of likely impact on the whole of environment, accounting for the implementation of proposed mitigation measures is detailed in **Att 10** - BBK RPBC Act significant impact tests for the whole of the environment matters, entire document. A summary follows.

Impacts on landscapes and soils - There is unlikely to be a significant impact on landscapes and soils as the proposed action will result in a direct impact to an already developed area of the Base to build structures and provide trenching for underground services. Services trenching will be reinstated, and buildings will fit within the current land use of the site. Landscaping treatment sympathetic with the Base will occur as part of building works. Assessment of the proposed action against significant criteria for landscapes and soils did not result in a significant impact for any of the criterion assessed.

Impacts on water resource - There is unlikely to be a significant impact on water resources at, or immediately up or downstream of BBK. While there are potential pathways for impacted water to reach Sandy Creek, Kapooka Creek, Murrumbidgee River and potentially other tributaries, the proposed action is concentrated in discrete areas within the Base. Some surface water impacts may be generated during the construction and operation of the proposed facilities and the proposed new ring road in the Cantonment area is likely to have an impact on hydrology in increasing hardstand from which surface water can flow into adjoining areas of threatened species. However, resultant impacts to surface waterbodies from the proposed action are not likely to be significant due to the temporary nature of the works, their relatively isolated location and their distance to waterbodies.

Groundwater impacts have been considered as excavation is required to install underground pipelines associated with gas and sewerage infrastructure. Impacts to groundwater are expected to be negligible given the depth of the groundwater within the study area. An assessment of the proposed action against the significant criteria for water resources did not result in a significant impact for any of the criterion assessed.

Pollutants, chemicals, and toxic substances - There is not likely to be a significant impact relating to contamination as a result of the proposed action. Previous investigations indicate that the main contaminant of concern at BBK is PFAS in soil, groundwater, and surface water. PFAS was detected in all areas investigated except for the working accommodation in the proposed Contractor's precinct. Widespread detections of PFOS above the SAC protective of ecological health were detected across the New Multi-Function Centre site. Hazardous Building materials will be removed in accordance with requirements of the WHS Act and Regulations prior to demolition. No hazardous chemicals will be used during construction. The proposed work area is not known to contain acid sulphate soils.

Assessment of the proposed action against the significant criteria for pollutants, chemicals and toxic substances did not result in a significant impact for any of the criterion assessed. A detailed report is provided in **Att 5** - BBK Pre-construction Contamination Assessment, entire document.

Impacts on plants - Impacts to threatened plants and ecological communities is discussed in Section 4.1.4 of this referral. In terms of NSW flora, there is unlikely to be a significant impact. A total of 120 flora species were recorded across the study area by EcoLink during surveys undertaken for the project, comprising 77 indigenous species and 43 exotic species. No threatened flora species listed under the

NSW Biodiversity Conservation Act (BC Act) were considered to have potential to occur within the study area. Two State listed Plant Community Types (PCTs) are present within the study area:

- PCT 110 – Western Grey Box - Cypress Pine shrubby woodland on stony footslopes in the NSW South Western Slopes Bioregion and Riverina Bioregion (Endangered Ecological Community).
- PCT 267 – White Box - White Cypress Pine - Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion (Critically endangered ecological community)

The project will result in direct clearing of 2.56 ha of State listed native vegetation and 3.06 ha of indirect impacts to native vegetation. **Att 10** -BBK EPBC Act significant impact tests for the whole of the environment matters, entire report. Table 4 presents a detailed breakdown of the PCTs, their relative condition and level of direct and indirect impact resulting from the proposed development. An assessment of the proposed action against the significant impact criteria for plants did not result in a significant impact for any of the criterion assessed.

Impacts on animals - Impacts to threatened fauna is discussed in S4.1.4. In terms of NSW listed fauna species there is not likely to be a significant impact on NSW threatened fauna species. A total of 23 State listed threatened species have been recorded within the study area or are considered to have a moderate to high likelihood of occurrence in the study area. An assessment of the proposed action against the significant impact criteria for animals was undertaken and did not result in a significant impact on any of the species long term population viability by direct impact or through displacement by habitat fragmentation.

Impacts on people and communities - There is unlikely to be a significant impact on people of communities. BBK accommodates a permanent workforce of approximately 1,000 employees, predominantly consisting of Army personnel. Recruits are housed and trained on-site for a period of 80 days for full time recruits. These recruits are housed within LIAs within the Cantonment area. The closest nearby permanent residences are located in the Kapooka married quarters precinct and the neighbouring suburb of San Isidore, which are approximately 1.2 and 1.3 km from BBK of the proposed works respectively. Residents and visitors to the area could be impacted by construction impacts, particularly noise, traffic, and air quality (dust). However, these impacts are a known and understood element of a construction process and so do not represent any unusual impacts that require new management techniques. Portions of the community surrounding BBK are sensitised to Defence activities which have, on occasion, resulted in adverse effects on residential properties in particular San Isidore. Key issues include surface water management and off-site migration of PFAS.

The construction phase will be confined to a discrete area on Base. Assessment of the proposed action against the significant impact criteria for people and communities did not result in a significant impact for any of the criterion.

Heritage (Historic) - There is likely to be a significant impact on historic heritage values at BBK. While the Base has no statutory or non-statutory heritage listings, it has been identified in the HMP (Umwelt 2022) as meeting the Commonwealth heritage list criteria for historic values. These values do not meet National Heritage List or World Heritage List criteria and therefore are not MNES. A Heritage Impact Assessment (HIA) was prepared and considered historic heritage values. Refer to **Att 9** - BBK Heritage Impact Assessment, entire document.

As part of the proposed Action, demolition of 31 of the 38 Blamey Era buildings (with heritage value) is proposed. Assessment against DCCEEW's Significant Impact Assessment Guidelines 1.2 has determined this demolition to be a significant impact under 'whole of environment' as removal would adversely impact the rarity (criterion b), representative (criterion d) and aesthetic (criterion e) heritage values, which are all or in part embodied in the Blamey Barracks era building fabric. During the course of design of the project, two Blamey era buildings originally proposed for demolition (Sergeants and Officers Messes) have been identified for retention, based on feedback from Base stakeholders. No other alternatives for this action have been identified.

However, although the action will remove fabric of a heritage place, the Base personnel, DEHPD and DEPAC have indicated that much of the heritage value of BBK is vested in the historically significant intangible heritage values of the site as the 'Home of the Soldier' for Army for over 70 years. BBK is also of great social significance for the 'deep social and cultural connections that exist between BBK and Australian Army personnel [which] are unparalleled by other military training areas in Australia' (Umwelt 2022). These important values will be retained and significantly enhanced with the proposed development. In addition, given the requirements of housing and training recruits, the proposed replacement buildings will reference the Blamey Era building in form and design as well as in maintenance of existing function.

Heritage (Indigenous) - There is unlikely to be a significant impact on Indigenous heritage. A Heritage Impact Assessment (HIA) was prepared and considered Indigenous heritage values. The HIA is presented in **Att 9** - BBK Heritage Impact Assessment, entire document. A culturally modified tree and two areas of Indigenous archaeological potential have been identified during survey with Indigenous stakeholders. However, the culturally modified tree will be avoided during the Project and the impacts to the areas of archaeological potential will not be significant (management measures have been agreed with the Indigenous stakeholders for these areas).

Management and mitigation measures for potential impacts of these criteria are detailed in **Att 11** - BBK Recommended management and mitigation measures, entire document.

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

None

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

Alternatives have been considered for the proposed works at BBK (See **Att 12** - BBK Project Alternatives, entire document), however all viable options have been confined to the already established Base. Options off BBK Base were not considered feasible given BBK is a long established and dedicated Base for recruit training, with already established and specific precincts that only require upgrade and minor redevelopment.

Siting options for the proposed works at each key precinct are however limited, given BBK is relatively small and compact Base. As part of early design, siting options on Base were considered based on the following requirements:

New weapon ranges (Marksmanship Training Range (MTR(A)): Limited siting options are available due to the large size of the Range Danger Area separation requirements that are necessary for safety reasons from public areas.

Replace Living In Accommodation (LIA), working and training facilities for A, B, C, and D Companies: There are limited siting options that can be operationally effective for recruit LIA. Recruits' time is carefully managed, with every minute accounted for. The Recruit Mess is the central feature in a recruit's day. Most functions for a recruit occur within a 400 m radius of the Recruit Mess to maximise efficiency and reduce injury risk attributed to excessive pedestrian travel. A recruit, even within a compact Base like BBK, will take about 17,000 steps a day. LIA options have therefore been designed to meet the 400 m radius requirement.

EO storage and distribution: The proposed location of the new EO storage facility is required to meet safety separation distance requirement, which limits its siting at the Base.

Zone Plan: All proposed facility locations are consistent with the Zone and Precinct Plan within the BBK Estate Base Plan, except for the following base support activities proposed within the Operational Support Zone:

- **Contractor precinct working accommodation** – the proposed location represents a logical extension of the Base Support Zone and would not impact future expansion of training activities.
- **Base waste and recycling operations** – this is proposed to be co-located within the contractor precinct working accommodation for effective use of land.
- **Gymnasium** – the proposed location of new gym facilities reduces the distance from company lines, providing efficiency to recruit training.

The RRP considered up to five options per scope item during early phases of the Program; the potential impacts of each have been assessed at 5% Feasibility Planning and 30% Concept Design. The exploration of alternatives provided against each of the Work Elements (WE) identifies that the 'no investment' options will detrimentally impact on the Army's ability to efficiently and effectively train recruits.

Consideration has also been given to adaptive reuse of buildings; however, no plausible or feasible adaptive reuse options have been identified for the recruit living in accommodation (LIA) and Headquarters (HQ). Similarly, the mothballing (temporarily deactivating the building while planning is undertaken regarding future use) of the buildings has been considered, but it has been concluded that mothballing would place constraints on the site without benefit to the capacity or capability of BBK whilst also creating uncertainty for the future of the heritage assets and is therefore not plausible or feasible.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 - BBK General locality.JPG Locality of Project site for proposed Blamey Barracks Kapooka Defence Base.	19/08/2023	No	High
#2.	Document	Att 1 - BBK General locality.JPG Locality of Project site for proposed Blamey Barracks Kapooka Defence Base.	20/08/2023	No	High
#3.	Document	Att 11 - Recommended management and mitigation measures 070923.pdf Summary of management and mitigation measures for proposed development.	07/09/2023	No	High
#4.	Document	Att 11 - Recommended management and mitigation measures 070923.pdf Summary of management and mitigation measures for proposed development.	06/09/2023		High
#5.	Document	Att 11 - Recommended management and mitigation measures 070923.pdf Summary of management and mitigation measures for proposed development.	06/09/2023		High
#6.	Document	Att 13_BBK Force Structure Plan 2020.pdf The Australian Defence Force 2020 Force Structure Plan.		No	High
#7.	Document	Att 13_BBK Force Structure Plan 2020.pdf The Australian Defence Force 2020 Force Structure Plan.	01/01/2020	No	High
#8.	Document	Att 14 - Example CEMP.pdf Construction Environmental Management Plan template that will be updated by contractor with all Project conditions and management measures once engaged.	09/11/2023	No	High
#9.	Document	Att 2 - BBK Works Plan.JPG Plan of scope of works proposed at BBK.	20/08/2023	No	High
#10.	Document	Att 8 - BBK Heritage Management Plan REDACTED - Part 1.pdf BBK HMP - Part 1	01/02/2022	No	High
#11.	Document	Att 8 - BBK Heritage Management Plan REDACTED - Part 2.pdf BBK HMP - Part 2	01/02/2022	No	High
#12.	Document	Att 8 - BBK Heritage Management Plan REDACTED- Part 3.pdf BBK EMP - Part 3	01/02/2022	No	High
#13.	Document	Att 9 - BBK Heritage Impact Assessment - NOT REDACTED.pdf Blamey Barracks Kapooka HIA for site proposed for project works - Non redacted version. Not to be made publicly available.	09/07/2023	Yes	High
#14.	Document	Att 9 - BBK Heritage Impact Assessment_REDACTED.pdf BBK Heritage Impact Assessment - Redacted Version	10/07/2023	No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 3 Stakeholder Engagement Summary 07-09-23.pdf Summary of stakeholder engagement consultation for BBK development.	07/09/2023	No	High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 15 - Defence Environment Heritage Manual 2019.pdf Defence environment and Heritage Manual for all Defence property.	29/01/2019	No	High
#2.	Document	Att 15 - Defence Environment Heritage Manual 2019.pdf Defence environment and Heritage Manual for all Defence property.	28/01/2019		High
#3.	Document	Att 15 - Defence Environment Heritage Manual 2019.pdf Defence environment and Heritage Manual for all Defence property.	28/01/2019		High
#4.	Document	Att 16 - Environmental Policy 2016.PDF Defence Environmental Policy	01/06/2016	No	High
#5.	Document	Att 17 - Defence Environment Strategy 2016-2036.pdf Defence Environmental strategy for all Defence property.	31/05/2016		High
#6.	Document	Att 17 - Defence Environment Strategy 2016-2036.pdf Defence Environmental strategy for all Defence property.	01/06/2016	No	High
#7.	Document	Att 18 - Defence Landscape Management Manual 2021.pdf Defence Landscape Management Manual 2021 for all Defence property.	17/12/2021		High
#8.	Document	Att 18 - Defence Landscape Management Manual 2021.pdf Defence Landscape Management Manual 2021 for all Defence property.	16/12/2021		High
#9.	Document	Att 18 - Defence Landscape Management Manual 2021.pdf Landscape Management Manual for Defence Property	17/12/2021	No	High
#10.	Link	Defence Contamination Management Manual https://www.defence.gov.au/business-industry/ind..			High
#11.	Link	Defence Environment and Heritage Manual https://www.defence.gov.au/business-industry/ind..			High
#12.	Link	Defence Environmental Strategy 2016-2036 https://www.defence.gov.au/about/strategic-plann..			High
#13.	Link	Defence Environmental Strategy 2016-2036 https://www.defence.gov.au/about/strategic-plann..			High
#14.	Link	Defence Estate Heritage Strategy https://www.defence.gov.au/about/strategic-plann..			High
#15.	Link	Defence Landscaping Manual 2021 https://www.defence.gov.au/sites/default/files/2..			High
#16.	Link	Defence PFAS Construction and Maintenance Framework https://www.defence.gov.au/business-industry/ind..			High
#17.	Link	Pollution Prevention Management Manual https://www.defence.gov.au/business-industry/ind..			High

2.2.5 Tenure of the action area relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 4 - BBK Land tenure.JPG Land tenure at BBK	20/08/2023	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 - BBK General locality.JPG Locality of Project site for proposed Blamey Barracks Kapooka Defence Base.	19/08/2023		High
#2.	Document	Att 19 - Defence PFAS Construction and Maintenance Framework 2021.pdf Defence PFAS Construction and Maintenance Framework Guidance for managing the risks of PFAS contamination on the Defence Estate.	01/08/2021	No	High
#3.	Document	Att 19 - Defence PFAS Construction and Maintenance Framework 2021.pdf Defence PFAS Construction and Maintenance Framework Guidance for managing the risks of PFAS contamination on the Defence Estate.	31/07/2021		High
#4.	Document	Att 2 - BBK Works Plan.JPG Plan of scope of works proposed at BBK.	19/08/2023		High
#5.	Document	Att 20 - Aerial image of remnant vegetation accross BBK circa 1965.pdf Aerial image showing the extent of vegetation clearance that had occurred across the broader BBK region pre-1965.	15/11/2023	No	High
#6.	Document	Att 4 - BBK Land tenure.JPG Land tenure at BBK	19/08/2023		High
#7.	Document	Att 5 - BBK Pre-construction Contamination Assessment.pdf BBK Contamination assessment report for project area	20/07/2023	Yes	High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 6 - BBK Precincts.JPG Precincts at BBK.	20/08/2023	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#2.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#3.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#4.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	20/08/2023	No	High
#5.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#6.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#7.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#8.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#9.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#10.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#11.	Link	Biodiversity Assessment Method 2020 https://www.environment.nsw.gov.au/research-and-..			High
#12.	Link				

		Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-Eastern Aus https://www.dcceew.gov.au/environment/biodiversi..	High
#13.	Link	Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-Eastern Aus https://www.dcceew.gov.au/environment/biodiversi..	High
#14.	Link	National Recovery Plan for the Superb Parrot (<i>Polytelis swainsonii</i>) https://www.dcceew.gov.au/environment/biodiversi..	High
#15.	Link	NSW State Vegetation Type Map (Pre-Clearing) https://datasets.seed.nsw.gov.au/dataset/nsw-sta..	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 20 - Aerial image of remnant vegetation accross BBK circa 1965.pdf Aerial image showing the extent of vegetation clearance that had occurred across the broader BBK region pre-1965.	14/11/2023	No	High
#2.	Document	Att 21 - 2022-2021 Annual Report KMA Vegetation Monitoring.pdf Vegetation monitoring results for 2021-2022 for the EPBC Listed Box gum woodland at Kapooka Military Area	02/05/2022	No	High
#3.	Document	Att 21 - 2022-2021 Annual Report KMA Vegetation Monitoring.pdf Vegetation monitoring results for 2021-2022 for the EPBC Listed Box gum woodland at Kapooka Military Area	01/05/2022		High
#4.	Document	Att 22 - BBK New Weapons Range Image Plan.pdf Overlay of new weapons range compared to old weapons range			High
#5.	Document	Att 23 - BBK New Weapons Range Image Plan.pdf The new weapons rage plan overlayed over the old weapons range and an aerial of surrounding areas.	30/10/2023	No	High
#6.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#7.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023		High
#8.	Link	National Recovery Plan for the Superb Parrot (<i>Polytelis swainsonii</i>) https://www.dcceew.gov.au/environment/biodiversi..			High
#9.	Link	Small Purple-Pea (<i>Swainsona recta</i>) National Recovery Plan https://www.dcceew.gov.au/environment/biodiversi..			High
#10.	Link	Small Purple-Pea (<i>Swainsona recta</i>) National Recovery Plan https://www.dcceew.gov.au/environment/biodiversi..			High
#11.	Link	Wagga Wagga data series sheet 1:100,000 https://datasets.seed.nsw.gov.au/dataset/soil-la..			High
#12.	Link	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland National Recover https://www.dcceew.gov.au/environment/biodiversi..			High

3.3.1 Commonwealth heritage places overseas or other places that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 8 - BBK Heritage Management Plan- Part 1_NOT REDACTED.pdf Heritage Management Plan - Part 1 NON-REDACTED VERSION	01/02/2022	Yes	High

#2.	Document	Att 8 - BBK Heritage Management Plan- Part 2_NOT REDACTED.pdf Heritage Management Plan - Part 2 NON-REDACTED VERSION	01/02/2022	Yes	High
#3.	Document	Att 8 - BBK Heritage Management Plan- Part 3_NOT REDACTED.pdf Heritage Management Plan - Part 3 NON-REDACTED VERSION	01/02/2022		High
#4.	Document	Att 8 - BBK Heritage Management Plan REDACTED - Part 1.pdf Blamey Barracks Kapooka HMP - Part 1	01/02/2022	No	High
#5.	Document	Att 8 - BBK Heritage Management Plan REDACTED - Part 2.pdf Blamey Barracks Kapooka HMP Part 2	01/02/2022	No	High
#6.	Document	Att 8 - BBK Heritage Management Plan REDACTED- Part 3.pdf Blamey Barracks Kapooka HMP Part 3	01/02/2022	No	High
#7.	Document	Att 9 - BBK Heritage Impact Assessment.pdf Blamey Barracks Kapooka HIA for site proposed for project works - Non redacted version. Not to be made publicly available.	10/07/2023	Yes	High
#8.	Document	Att 9 - BBK Heritage Impact Assessment_REDACTED.pdf BBK Heritage Impact Assessment - Redacted version	09/07/2023		High
#9.	Document	Att 9 - BBK Heritage Impact Assessment_REDACTED.pdf BBK Heritage Impact Assessment - Redacted Version	09/07/2023		High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 10 - BBK EPBC Act significant impact tests for the whole of the environment matters.pdf EPBC Act Significant Impact Tests associated with Whole of Environment Matters at BBK proposed works area.	20/08/2023	No	High
#2.	Document	Att 9 - BBK Heritage Impact Assessment_REDACTED.pdf BBK Heritage Impact Assessment - Redacted version	09/07/2023		High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#2.	Link	Draft National Recovery Plan for the Regent Honeyeater (Anthochaera phrygia) https://www.dcceew.gov.au/environment/biodiversi..			High
#3.	Link	NSW State Vegetation Type Map (Pre-Clearing) https://datasets.seed.nsw.gov.au/dataset/nsw-sta..			High

4.1.4.6 (Threatened Species and Ecological Communities) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#2.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#3.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#4.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High
#5.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..			High

#6.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..	High
#7.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..	High
#8.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..	High
#9.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..	High

4.1.4.9 (Threatened Species and Ecological Communities) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023	No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 11 - BBK Recommended management and mitigation measures.pdf Project specific management and mitigation measures recommended for proposed impacts associated with the Project scope of works.	19/08/2023	No	High
#2.	Document	Att 12 - BBK Project Alternatives.pdf Project alternatives and Defence end to end life cycle phases for infrastructure projects.	19/08/2023	No	High
#3.	Link	Riverina Regional Strategic Weed Management Plan 2023-2027 https://www.lls.nsw.gov.au/__data/assets/pdf_fil..			High

4.1.5.3 (Migratory Species) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	EPBC Act Policy Statement 3.21 - Industry Guidelines for avoiding, assessing and mitigating impacts https://www.dcceew.gov.au/environment/epbc/publi..			High
#2.	Link	EPBC Act Policy Statement 3.21 - Industry Guidelines for avoiding, assessing and mitigating impacts https://www.bing.com/search?q=EPBC+Act+Policy+St..			High
#3.	Link	EPBC Act Policy Statement 3.21 - Industry guidelines for avoiding, assessing and mitigating impacts https://www.dcceew.gov.au/environment/epbc/publi..			High
#4.	Link	EPBC Act Policy Statement 3.21 - Industry Guidelines for avoiding, assessing and mitigating impacts https://www.dcceew.gov.au/environment/epbc/publi..			High

4.1.10.2 (Commonwealth Land) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
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#1.	Document	Att 10 - BBK EPBC Act significant impact tests for the whole of the environment matters.pdf EPBC Act Significant Impact Tests associated with Whole of Environment Matters at BBK proposed works area.	19/08/2023 No	High
#2.	Document	Att 10 - BBK EPBC Act significant impact tests for the whole of the environment matters.pdf EPBC Act Significant Impact Tests associated with Whole of Environment Matters at BBK proposed works area.	19/08/2023 No	High
#3.	Link	Significant impact guidelines 1.2 - Actions on, or impacting upon, Commonwealth land and Actions by https://www.dcceew.gov.au/environment/epbc/publi..		High

4.1.10.5 (Commonwealth Land) Why you consider the direct and/or indirect impact to be a Significant Impact

Type	Name	Date	Sensitivity Confidence
#1.	Document	Att 10 - BBK EPBC Act significant impact tests for the whole of the environment matters.pdf EPBC Act Significant Impact Tests associated with Whole of Environment Matters at BBK proposed works area.	19/08/2023 No High

4.1.10.9 (Commonwealth Land) Why you do not think your proposed action is a controlled action

Type	Name	Date	Sensitivity Confidence
#1.	Link	Significant impact guidelines 1.2 - Actions on, or impacting upon, Commonwealth land and Actions by https://www.dcceew.gov.au/environment/epbc/publi..	High

4.1.10.10 (Commonwealth Land) Avoidance or mitigation measures proposed for this action

Type	Name	Date	Sensitivity Confidence
#1.	Document	Att 10 - BBK EPBC Act significant impact tests for the whole of the environment matters.pdf EPBC Act Significant Impact Tests associated with Whole of Environment Matters at BBK proposed works area.	19/08/2023 High
#2.	Document	Att 11 - BBK Recommended management and mitigation measures.pdf Project specific management and mitigation measures recommended for proposed impacts associated with the Project scope of works.	19/08/2023 No High
#3.	Document	Att 12 - BBK Project Alternatives.pdf Project alternatives and Defence end to end life cycle phases for infrastructure projects.	19/08/2023 No High
#4.	Document	Att 5 - BBK Pre-construction Contamination Assessment.pdf BBK Contamination assessment report for project area	19/07/2023 High
#5.	Document	Att 7 - BBK Biodiversity Assessment Report.pdf Biodiversity assessment report for proposed work areas at BBK.	19/08/2023 High
#6.	Document	Att 8 - BBK Heritage Management Plan REDACTED - Part 1.pdf Blamey Barracks Kapooka HMP - Part 1	31/01/2022 High
#7.	Document	Att 8 - BBK Heritage Management Plan REDACTED - Part 2.pdf Blamey Barracks Kapooka HMP Part 2	31/01/2022 High
#8.	Document	Att 8 - BBK Heritage Management Plan REDACTED- Part 3.pdf Blamey Barracks Kapooka HMP Part 3	31/01/2022 No High
#9.	Document	Att 9 - BBK Heritage Impact Assessment.pdf Blamey Barracks Kapooka HIA for site proposed for project works	10/07/2023 No High
#10.	Document	Att 9 - BBK Heritage Impact Assessment.pdf Blamey Barracks Kapooka HIA for site proposed for project works	09/07/2023 High
#11.	Link		

Defence Contamination Management Manual https://www.defence.gov.au/business-industry/ind..		High
#12. Link	Defence Contamination Management Manual https://www.defence.gov.au/business-industry/ind..	High
#13. Link	Defence PFAS Construction and Maintenance Framework https://www.defence.gov.au/business-industry/ind..	High

4.1.12.2 (Commonwealth or Commonwealth Agency) Nature and extent of the likely impact on the whole of the environment

Type	Name	Date	Sensitivity	Confidence
#1. Document	Att 10 - BBK EPBC Act significant impact tests for the whole of the environment matters.pdf EPBC Act Significant Impact Tests associated with Whole of Environment Matters at BBK proposed works area.	19/08/2023	No	High
#2. Document	Att 10 - BBK EPBC Act significant impact tests for the whole of the environment matters.pdf EPBC Act Significant Impact Tests associated with Whole of Environment Matters at BBK proposed works area.	19/08/2023		High
#3. Document	Att 11 - Recommended management and mitigation measures 070923.pdf Summary of management and mitigation measures for proposed development.	06/09/2023		High
#4. Document	Att 5 - BBK Pre-construction Contamination Assessment.pdf BBK Contamination assessment report for project area	19/07/2023		High
#5. Document	Att 5 - BBK Pre-construction Contamination Assessment.pdf BBK Contamination assessment report for project area	19/07/2023		High
#6. Document	Att 9 - BBK Heritage Impact Assessment_REDACTED.pdf BBK Heritage Impact Assessment - Redacted version	09/07/2023		High
#7. Document	Att 9 - BBK Heritage Impact Assessment_REDACTED.pdf BBK Heritage Impact Assessment - Redacted version	09/07/2023		High

4.3.8 Why alternatives for your proposed action were not possible

Type	Name	Date	Sensitivity	Confidence
#1. Document	Att 12 - BBK Project Alternatives.pdf Project alternatives and Defence end to end life cycle phases for infrastructure projects.	20/08/2023	No	High

5.2 Declarations

✔ Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	68706814312
Organisation name	DEPARTMENT OF DEFENCE
Organisation address	Brindabella Business Park, 2 Brindabella Cct, Canberra Airport, ACT, 2609.
Representative's name	Berlinda Bowler
Representative's job title	Director, Directorate of Environmental Planning, Assessment & Compliance
Phone	1800333362

Email **berlinda.bowler@defence.gov.au**

Address **BP26-2-B029, Brindabella Business Park, 26 Brindabella Cct, Canberra Airport, ACT, 2609**

- ☒ Check this box to indicate you have read the referral form. *
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. *
- ☒ By checking this box, I, **Berlinda Bowler of DEPARTMENT OF DEFENCE**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

☒ Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	68706814312
Organisation name	Department of Defence
Organisation address	Brindabella Business Park, 2 Brindabella Cct, Canberra Airport, ACT, 2609.
Representative's name	Dan Palmer
Representative's job title	LTCOL
Phone	0403757632
Email	daniel.palmer2@defence.gov.au
Address	26 Brindabella Circuit, Canberra Airport, Australian Capital Territory 2609

- ☒ Check this box to indicate you have read the referral form. *
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. *
- ☒ I, **Dan Palmer of Department of Defence**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

☒ Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

- ☒ Check this box to indicate you have read the referral form. *
- ☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

☒ I, **Dan Palmer of Department of Defence**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

☒ I would like to receive notifications and track the referral progress through the EPBC portal. *