Airservices PFAS Remediation at Canberra Airport, in accordance with the Environmental Remedial Order (ERO) - Fire Training Ground and Main Fire Station at Canberra Airport.

Application Number: **02765** Commencement Date: **31/01/2025** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Airservices PFAS Remediation at Canberra Airport, in accordance with the Environmental Reme

1.1.2 Project industry type *

Transport - Air and Space

1.1.3 Project industry sub-type

Major Development Plan

1.1.4 Estimated start date *

01/12/2025

1.1.4 Estimated end date *

02/06/2027

1.2 Proposed Action details

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

The proposed action comprises remediation of soil impacted with per- and poly-fluoroalkyl substances (PFAS) at two select areas within Canberra Airport, referred to collectively as the Project Areas 1 and 2.

In combination, the project area and hence the disturbance footprint across both Project Areas 1 and 2 approximates 6.47 hectares (ha), including area which will be excavated of approximately 2.9 ha. No avoidance area has been defined.

Primarily, the remediation works would involve decommissioning and removal of infrastructure and the excavation and removal or treatment of impacted soils within and in areas immediately surrounding:

- The Fire Training Ground (FTG) and a section of the nearby swale drain adjacent to the Taxiway Alpha, south west of the FTG. This will be referred to as Project Area 1
- The Main Fire Station (MFS) and the northern section of the Southern Swale Drain (to the south of the MFS, parallel to Scherger Drive). This will be referred to as Project Area 2.

The proposed action responds to and is required to address an Environmental Remediation Order (ERO) issued by the Commonwealth Department of Infrastructure, Transport, Regional Development, Communications, Sports and the Arts (DITRDCSA) to Airservices Australia (Airservices) under the *Airports (Environment Protection) Regulations 1997* on 28 March 2024, and amended on 16 August 2024 (see Attachments A and B). Among other things, the ERO requires the preparation and approval of a Remediation Action Plan (RAP) to detail the remediation approach for the FTG and MFS. The RAPs for the FTG and MFS have been assessed by an Independent Assessor and accepted by the Airport Environment Officer (AEO). The now finalised RAPs establish the scope of the required remediation works under the ERO.

PFAS impacts have occurred within the Project Areas as a result of fire training activities involving the historical use and discharge of Aqueous Film Forming Foam (AFFF) by Airservices and Airservices' predecessors during the provision of critical firefighting capability at Canberra Airport. PFAS-containing AFFF has not been used at the Project Areas since 2010.

Focus areas of the PFAS remediation works include:

- Project Area 1 (FTG)

Excavation Area: shallow soils, the concrete pavement and bund beneath the Large Mock-up Unit (LMU) and associated oil-water separator and wastewater capture system, sewer/stormwater infrastructure within an area of land leased by Airservices, adjacent land administered by Capital Airport Group (CAG) outside of Airservices lease, including a section of the swale drain adjacent to Taxiway Alpha

Disturbance Area: land adjacent the Excavation Area required to support ancillary works (soil stockpile management, handling and treatment areas, office sheds and amenities)

- Project Area 2 (MFS) – shallow soils beneath the unsealed ground to the northwest of the MFS lease area, and to the south of the Smoke Hut in the southern portion of the MFS lease area, potentially a section of an underground stormwater drain and the former AFFF Above-ground Storage Tank (AST) concrete bund. A section of the southern swale drain (south of the MFS, parallel to Scherger Drive) which has shallow soil and sediment impact PFAS within the swale drain will also be remediated. The ancillary works area will be conducted on lease (i.e. no disturbance area).

It is estimated that in combination, around 303 kg (around 295 kg from Project Area 1 (FTG) and around 8 kg from Project Area 2 (MFS)) of PFAS mass would be remediated through the proposed action.

The proposed action subject to this referral relates only to the remediation of PFAS impacted soils, sediments and infrastructure. The potential feasibility and nature of groundwater remediation at Project Area 2 (MFS) is currently being investigated. Pending the outcomes of these feasibility studies, a separate referral may be required if impacts on Matters of National Environmental Significance (MNES) protected under the Environment Protection and Biodiversity Act (EPBC Act) 1999 are foreshadowed.

Please find attached full response to this question in Attachment C.

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

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

No

1.2.4 Related referral(s)

—

1.2.5 Provide information about the staged development (or relevant larger project).

Soil disturbance works undertaken by Canberra Airport Group have commenced adjacent and within the FTG lease area for an airport roadway upgrade project. This is subject to existing EPBC approval (2009/4748). Airservices will coordinate the proposed action with works currently being carried out by Canberra Airport Group to manage potential cumulative impacts, and to facilitate delivery of complementary and coordinated environmental mitigation.

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 proposed action would be conducted in accordance with the following relevant Territory and Federal regulatory legislation, guidelines and approvals:

- *Airport Act 1996* (Cth), *Airports (Building Control) Regulations 1996*, and *Airports (Environmental Protection) Regulation 1997* – regulation and approval of works within an airport lease area
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) – assessment and approval of a controlled action
- *National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure* – guidance on the transport of impacted materials and other wastes
- *Environmental Protection Act 1997* (ACT) and *Environmental Protection Regulation 2005* -regulation of off-Airport interstate waste transport and treatment/ disposal
- *Protection of the Environment Operations Act 1997* (NSW), *Protection of the Environment (General) Regulation 2022*, and *Protection of the Environment Operations (Waste) Regulation 2014* – as it relates to regulation of off-Airport interstate waste transport and treatment/ disposal
- *Environmental Protection Act 2017* (VIC) and *Environmental Protection Regulation 2021* – as it relates to regulation of off-Airport interstate waste transport and treatment/ disposal.

In relation to the management of PFAS, Airservices undertakes management actions consistent with the National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM) and PFAS National Environmental Management Plan 3.0 (NEMP).

A number of other applicable Federal and State legislation, management frameworks and guidance documents are also relevant:

- Workplace Health and Safety Act 2011
- National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure
- CRC Care National Remediation Framework and other guidance on considerations for sustainability in remediation of contaminated sites

Building and construction activities at Canberra Airport are regulated under the *Airports Act 1996* and the *Airports (Building Control) Regulations 1996*. Under this legislation, approval is required for any ‘building activity’, as defined by Section 98 of the Act.

‘Earthworks and demolition’ are included in this definition, and therefore the works associated with the remediation project will require approval under the Act.

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. *

As a requirement under the ERO issued to Airservices, Airservices will develop and implement a Community Communication and Engagement Strategy, having regard to the guidance in Section 4 of the Communication Engagement, of the PFAS NEMP. The strategy will guide any future public consultation related to the management of PFAS impacts at Canberra Airport, including the proposed action and be available through multiple channels including but not limited to the websites of Airservices and the Department of Infrastructure, Transport, Regional Development, Communications, Sports and the Arts (DITRDCSA). Any consultation would be coordinated and collaboratively delivered with the AEO, the ACT EPA and Canberra Airport. These parties attend regular Canberra Airport PFAS Roundtable meetings.

No public consultation regarding the proposed action has been completed to date, as the proposed action is to be conducted within and adjacent to Airservices lease areas which are themselves entirely within the Canberra Airport boundary.

No Indigenous engagement is required as there are no areas of indigenous heritage significance located within the Project Areas. Notwithstanding, interested Indigenous stakeholders may be involved in broader community communications and engagement activities, consistent with the Community Communication and Engagement Strategy once finalised and as relevant given the location and nature of the works.

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.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint.

Alternatively, email us at privacy@awe.gov.au.

☑ **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	20093846925
Organisation name	AECOM AUSTRALIA PTY LTD
Organisation address	4006 QLD

Referring party details

Name	Chelsea Borys
Job title	Environmental Scientist
Phone	1800 868 654
Email	chelsea.borys@aecom.com
Address	Level 4/68 Northbourne Ave, Canberra ACT 2601

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	59698720886
Organisation name	AIRSERVICES AUSTRALIA
Organisation address	2601 ACT

Person proposing to take the action details

Name	James Comley
Job title	PFAS Technical Lead
Phone	+61 2 6268 4111
Email	james.comley@airservicesaustralia.com
Address	Da Vinci Building 101, 2A Boronia Road, Brisbane Airport QLD 4008, Australia

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. *

Historical examples of similar PFAS remediation projects conducted by Airservices in an environmentally responsible manner include, but are not limited to:

- Soil remediation works at the former fire training ground at Launceston Airport (January 2025 – June 2025)
- Concrete pad treatment works at the current fire training ground at Sydney Airport (January 2025)
- Interim (Phase 1) groundwater PFAS remediation at the MFS at Canberra Airport.

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

Airservices operates under an Environmental Management System (EMS) (see attached) that aligns to the International Standard ISO 14001, and the proposed action would be executed under appropriate environmental management plans.

The AEO has full visibility of the works and will act as regulator during the conduct of the works.

As a demonstration of compliance with ISO 14001, Airservices has certified two sites against the requirements of the Standard (Canberra Airport in ACT, and Gold Coast Airport in Queensland).

The environmental policy within the EMS (see Attachment D) displays the organisation's intention and principles in relation to its overall environmental objectives and targets. The proposal will be undertaken in accordance with the environmental policy and EMS and is demonstrated by the level of environmental assessment of the Site undertaken; the adaptation of the design to address issues raised by key stakeholders, and development and implementation of site environmental management plans that address construction and operation of the site.

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	59698720886
Organisation name	AIRSERVICES AUSTRALIA
Organisation address	2601 ACT

Proposed designated proponent details

Name	James Comley
Job title	PFAS Technical Lead
Phone	+61 2 6268 4111
Email	james.comley@airservicesaustralia.com
Address	Da Vinci Building 101, 2A Boronia Road, Brisbane Airport QLD 4008, Australia

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	20093846925
Organisation name	AECOM AUSTRALIA PTY LTD
Organisation address	4006 QLD
Representative's name	Chelsea Borys
Representative's job title	Environmental Scientist
Phone	1800 868 654
Email	chelsea.borys@aecom.com
Address	Level 4/68 Northbourne Ave, Canberra ACT 2601

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	59698720886
Organisation name	AIRSERVICES AUSTRALIA
Organisation address	2601 ACT
Representative's name	James Comley
Representative's job title	PFAS Technical Lead
Phone	+61 2 6268 4111
Email	james.comley@airservicesaustralia.com
Address	Da Vinci Building 101, 2A Boronia Road, Brisbane Airport QLD 4008, Australia

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? *

Yes

1.4.10 Enter purchase order number *

60722305_2.03

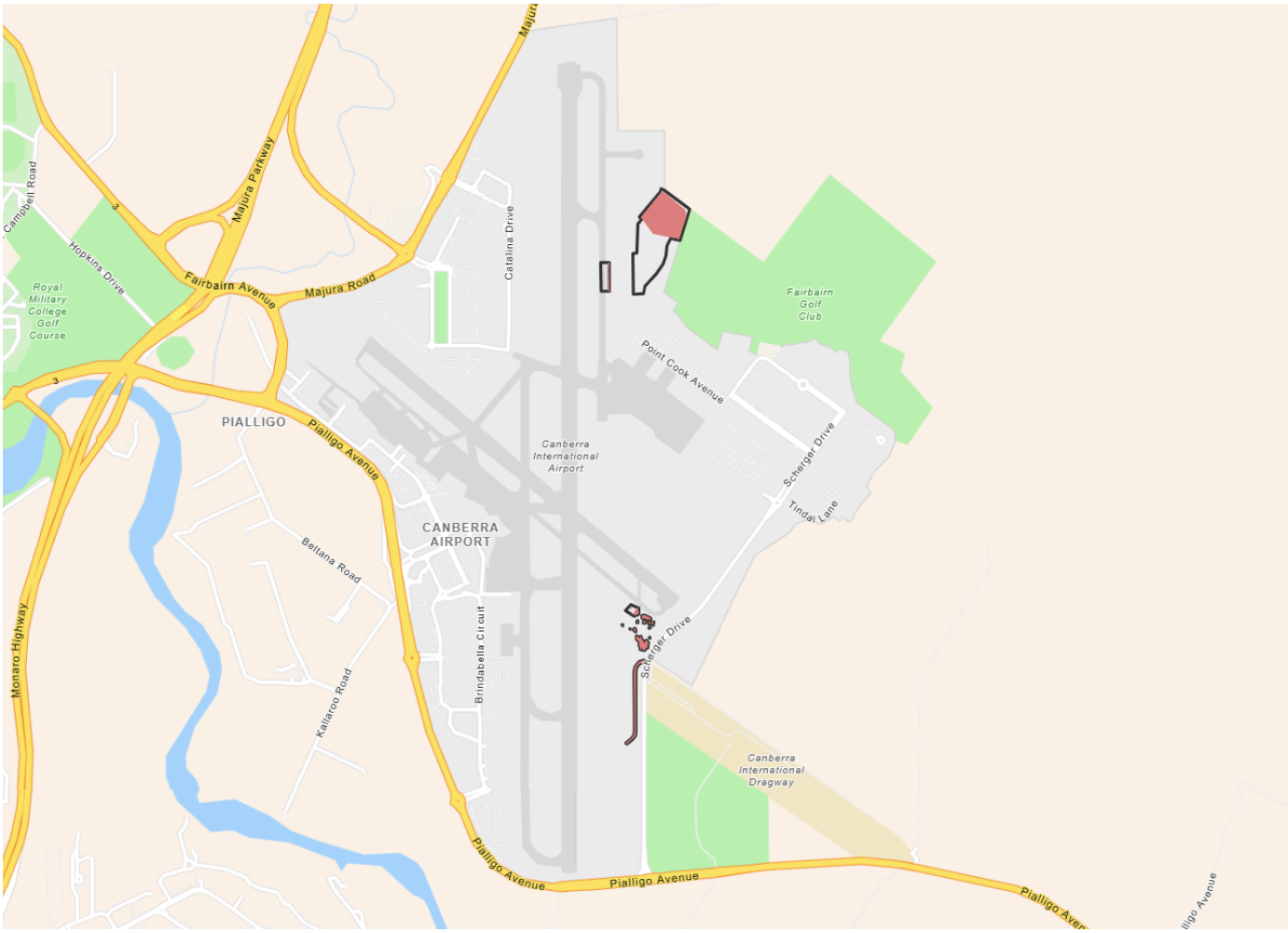
1.4 Payment details: Payment allocation

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

Referring party

2. Location

2.1 Project footprint



Project Area: 6.50 Ha **Disturbance Footprint:** 2.91 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Gate 9, Scherger Dr, Canberra Airport ACT

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

National

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? *

Airservices holds leases over the fire training ground and main fire station. These leases with Capital Airport Group (Canberra Airport) are commercial-in-confidence.

The proposed action would extend beyond these lease areas and onto Canberra Airport land in some areas, including the western extent of Project 1 Area (the FTG Disturbance Footprint and swale drain adjacent to Alpha Taxiway), the north western extent of Project Area 2 (MFS disturbance footprint and the northern section of the southern swale drain). This land is owned by the Commonwealth and is leased to Canberra Airport.

Access to the swale drain may need to be made via the Taxiway Alpha route (to the west of the drain), in order to avoid impacting areas of NTG, mapped to the east of the Taxiway Alpha swale labelled S3 in Attachment B, Significant Impact Assessment for EPBC Act species and communities.

3. Existing environment

3.1 Physical description

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

The Project Areas comprise a highly disturbed landscape which has been anthropogenically altered to meet the needs of an operational airport. The FTG and MFS are both situated on areas of filled land and are drained by man-made drainage swales that ultimately flow to the Molonglo River.

Due to the operational nature of the Canberra Airport, the Project Areas are considered to have a limited capacity for the land to support biodiverse ecological communities of value, particularly as the majority of remnant vegetation was cleared prior to Airservices occupancy of the lease areas during the development of the Airport.

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

The current and proposed land uses for the Project Areas are described as aviation (commercial/industrial land use).

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

Due to the highly disturbed extent of the altered natural landscape at the Canberra Airport, no outstanding natural features of important/unique values have been identified in the Project Areas.

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 FTG sits at an elevation of approximately 575 m above Australian Height Datum (AHD) and, partially due to historical backfilling activities, sits approximately four metres higher in elevation than the runway area, with a steep grassed embankment sloping down towards the west and southwest. Within the FTG lease area boundary, the Large Mock-up Unit (LMU) is the high point in the centre with observed minor radial slope down towards the north, south, east and west ARFFS lease area boundaries. The MFS sits at an elevation of approximately 573 m AHD. The topography is predominately flat with a gradual slope down towards the west and southwest.

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.

Ecological investigations and assessments have been carried out to inform this referral and are provided as an attachment to the referral (Attachment E). These ecological investigations and assessments have considered a Study Area, which includes the Project Areas and additional surrounding land that may be required to access areas to be remediated as part of the proposed action.

The ecological investigations and assessments have focused on ecological values protected under the EPBC Act, including listed threatened and migratory species, and threatened ecological communities. This involved:

- An initial desktop review and assessment of likelihood of occurrence
- A field inspection of the Study Area, informed by the likelihood of occurrence assessment. The field inspection was carried out on 21 March 2025 by two ecologists and focused on vegetation community and habitat value mapping. The field inspection did not include targeted surveys for individual species
- Preparation of significant impact assessments for relevant species and communities, informed by the outcomes of the field inspection.

A full response to this question has been attached (Attachment F).

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

Ecological investigations and assessments have been carried out to inform this referral and are provided as an attachment to the referral (Attachment E). These ecological investigations and assessments have considered a Study Area, which includes the Project Areas and additional surrounding land that may be required to access areas to be remediated as part of the proposed action.

The ecological investigations and assessments have focused on ecological values protected under the EPBC Act, including listed threatened and migratory species, and threatened ecological communities. This involved:

- An initial desktop review and assessment of likelihood of occurrence
- A field inspection of the Study Area, informed by the likelihood of occurrence assessment. The field inspection was carried out on 21 March 2025 by two ecologists and focused on vegetation community and habitat value mapping. The field inspection did not include targeted surveys for individual species
- Preparation of significant impact assessments for relevant species and communities, informed by the outcomes of the field inspection.

Vegetation communities

The Study Area was assessed for the occurrence of native vegetation that would meet the key diagnostic characteristics and condition thresholds for protection as a threatened ecological community under the EPBC Act. Only one threatened ecological community (TEC) was found to be likely to occur within the Study Area, being the NTG critically endangered ecological community.

Vegetation identified in the Study Area was compared against key diagnostic characteristics for the NTG. Four patches of native vegetation within the Study Area met the key diagnostic characteristic and satisfied condition thresholds under the Moderate to High condition threshold category. No patches met the conditions for High to Very High condition threshold.

Flora

The Study Area ranges from highly disturbed weedy pasture to high quality native grassland with a range of native grass and forbs. The Study Area is grassland dominated and shows no signs of being a derived grassland with no evidence of trees occurring at any time across the Study Area. However, there is a patch of planted relatively young eucalypts and other shrubs for ornamental purposes near the MFS (Project Area 2) in the south. These plants do not form part of a grassland patch and are not considered natural vegetation in the Study Area.

Grassland surrounding the FTG is extremely disturbed by construction activity, vehicle activity, and mowing. The existing native vegetation directly surrounding the FTG comprises mostly Couch grass (*Cynodon dactylon*) and Windmill grass (*Chloris truncata*). Areas that have been heavily mowed nearby are dominated by the highly invasive African lovegrass (*Eragrostis curvula*) that becomes an almost homogenous population towards the ridge in the west. Several other disturbance specialist weeds occur in this highly disturbed area.

One patch of NTG identified near the FTG and within the Project Area 1 footprint (approximately 3.7 ha in total size) appears to have retracted from previous ecological assessments carried out at Canberra Airport largely due to the uncontrolled highly invasive African lovegrass extending further and degrading the grassland. The patch contains a range of native grass species such as Wallaby grass (*Rytidosperma spp*). and Red-leg Grass (*Bothriochloa macra*) and native forbs such as Common Everlasting (*Chrysocephalum apiculatum*) and Narrow-leaf New Holland Daisy (*Vittadinia muelleri*), which are a core component of native vegetation in all patches across the Study Area. Overall species diversity in the patch was not particularly high. Heavy mowing disturbance has likely prevented any taller shrubs or species entering or persisting in the area. The dominant or sometimes co-dominant native Red-leg Grass across much of the Study Area is growing in an extremely prostrate flat form, likely as a response to mowing activities.

Two patches of NTG between the FTG and the Taxiway Alpha drainage line are separated from the patch referred to above by access tracks and roadways and are of a very similar floristic structure to abovementioned patch. These patches of NTG will not be impacted as part of any remediation works. Areas of these patches near roadway disturbance and wet drainage lines are heavily impacted by the perennial non-native Dallas grass (*Paspalum dilatatum*).

The Taxiway Alpha drainage line contains almost no native vegetation and is dominated by Dallas grass, Drain Flat-sedge (*Cyperus eragrostis*), and Broadleaf Dock (*Rumex obtusifolious*). The vegetation between the taxiway and drainage line contains discrete patches of native vegetation or a generally low cover of natives.

Based on the low floristic value of vegetation between Taxiway Alpha and the swale, remediation works will access the swale from the Taxiway (west) side of the drain to avoid impacts to NTG patches mapped to the east of the swale.

The vegetation directly beside the MFS is a mixed non-native pasture that does not represent the NTG community. The associated drainage lines contain patches of Spikerush (*Eleocharis sp.*), with some scattered Red-leg Grass extending onto the margins and slopes. Overall weed coverage is heavily dominated by African lovegrass with a mix of Dallas grass within the wetter areas.

The area to the north of the MFS contains a large patch of NTG that extends further outside of the Study Area to the north-west. This patch of NTG contains a dominant cover of Wallaby grass, notably higher than northern patches (around the FTG) and a high coverage of native daisies (Asteraceae). This area is referred to as S4 in Attachment B, Significant Impact Assessment for EPBC Act species and communities.

Based on assessment of vegetation and habitat values within the Study Area, it has been concluded that the Study Area provides suitable habitat for:

- Hoary Sunray (Leucochrysum albicans subsp. tricolor)
- Button Wrinklewort (Rutidosis leptorhynchoides).

An ecology survey of the Northern Road Corridor conducted in 2020 (Northern Road Fairbairn Construction and Operations Strategy, Canberra Airport, 2020) approved as a condition to EPBC Act Referral 2009/4778 (varied 28 May 2020) indicated that these species were not present within the Northern Road Corridor which is immediately adjacent to and intersects Project Area 1.

Nevertheless, given the absence of recent targeted survey data for these species, for the purpose of Attachment B, Significant Impact Assessment for EPBC Act species and communities, their presence has conservatively been assumed.

Soil and Geology

FTG (Project Area 1):

Historical intrusive investigations undertaken at the FTG have generally characterised subsurface soil conditions as reworked/ reclaimed gravelly clay fill from the surface to a maximum depth of approximately 3 metres below ground level (mbgl). Fill materials are underlain by natural stiff brown clay, with minor alluvial gravel and ironstone inclusions. Natural clays have been observed to become stiffer with depth until an extremely weathered claystone bedrock is encountered at depths between 6.0 mbgl and 8.0 mbgl. The weathered claystone was underlain by a high strength, very hard siltstone from approximately 10 mbgl to the maximum depth investigated at this lease area of 19 mbgl.

Depths of soils proposed to be excavated for remediation at the FTG is up to 2.0 mbgs.

MFS (Project Area 2):

Historical intrusive investigations undertaken at and near the MFS have characterised subsurface soil conditions as minor sandy clay fill to typical depths of less than 0.5 mbgl underlain by stiff, low plasticity sandy and silty clays with minor alluvial gravels to depths between 6.5 mbgl and 12 mbgl. Beneath the MFS and immediate surrounds, clays are underlain by weathered claystone and high strength siltstone bedrock to the maximum depth investigated of 17 mbgl.

Depths of soils proposed to be excavated for remediation at the MFS up to 1.0 mbgs.

Please see full response to this question in Attachment I.

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.

The Canberra Airport has been historically subject to detailed heritage investigations, as reflected in the *Canberra Airport Masterplan* (Capital Airport Group, 2020) and managed through the supporting *Canberra Airport Environment Strategy* (Capital Airport Group, 2020) (Attachment G).

Heritage values identified in relation the Airport include:

- Former RAAF Base Fairbairn – located to the east and north east of the proposed action. This heritage area lies entirely outside the Project Areas and would not be directly or indirectly affected by the proposed action. The Former RAAF Base Fairbairn is managed under an approved Heritage Management Plan
- A small strip of land at the southern tip of the Airport identified as having moderate Aboriginal cultural heritage significance (archaeological). Further investigations in this area in consultation with Registered Aboriginal Organisations identified no cultural heritage items or values, and part of this area was subsequently developed as a carpark. A remaining unsurveyed area in the south eastern corner of the Airport has been assessed as having moderate heritage sensitivity (archaeological) and is managed through the *Canberra Airport Environment Strategy* (Capital Airport Group, 2020). This area is well beyond the Project Areas and would not be directly or indirectly affected by the proposed action.

The Project Areas are not expected to contain heritage values based on previous heritage investigations and assessments for the Airport, and noting the highly disturbed nature of the Project Areas.

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

As outlined above, an area of remaining moderate Aboriginal cultural heritage sensitivity exists in the south eastern corner of the Canberra Airport and is managed under the *Canberra Airport Environment Strategy* (Capital Airport Group, 2020) (Attachment G). This area is well beyond the Project Areas and would not be directly or indirectly affected by the proposed action.

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. *

Project Area 1 (FTG) is located within the Woolshed Creek Catchment which is approximately 774.7 ha in area and captures run-off generated in the northern portion of the Airport. The Woolshed Catchment encompasses the FTG, off-lease areas on the Airport and off-Airport areas to the west (Majura Commercial Park), north-east (Department of Defence Majura Training Area) and to the south-east (Fairbairn Golf Club and Former RAAF Fairbairn) of the FTG. The concrete pad directly beneath the LMU in the centre of the FTG lease area is bunded. Water that collects within the concrete bund is directed to and processed through an oil water separator prior to discharge to sewer. Previously, a first flush system at the FTG would divert stormwater to drainage swale adjacent to Taxiway Alpha, where it would drain to Woolshed creek. This first flush system is now decommissioned with all stormwater directed through the separator to sewer. Outside of the LMU bunded area, surface water flow drainage pathways are not well defined. Surface water flow in Woolshed Creek is intermittent.

Project Area 2 (MFS) is located in the Molonglo River Catchment which is approximately 575 ha in area and captures run-off generated in the southern portion of the Airport. The Molonglo River Catchment encompasses the MFS, off-lease areas on the Airport and off-Airport areas to the north-east, east and south-east (Commonwealth land) of the MFS. Based on sub-surface infrastructure plans, surface water generated at the MFS lease area collects in on-lease area stormwater pits, before being directed in a southerly direction where it discharges off-lease into the ephemeral Southern Swale Drain.

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	Yes	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 items near the Project Areas.

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 items near the Project Areas.

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 closest RAMSAR site (The Hattah - Kulkyne Lakes) is located between 600-700 km downstream of the Project Areas. The proposed action would not directly affect this site and it is unlikely to indirectly affect the site given:

- The relatively small scale of the proposed action
- The necessarily comprehensive surface water management measures required for remediation of PFAS-impact materials
- The primary objective of the proposed action being to remove PFAS impacted materials from the environment and prevent potential for further migration of PFAS downstream and off-lease.

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	Common name
No	No	Anthochaera phrygia	Regent Honeyeater
No	No	Aphelocephala leucopsis	Southern Whiteface
No	No	Aprasia parapulchella	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard
No	No	Botaurus poiciloptilus	Australasian Bittern
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Callocephalon fimbriatum	Gang-gang Cockatoo
No	No	Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo
No	No	Chalinolobus dwyeri	Large-eared Pied Bat, Large Pied Bat
No	No	Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)
No	No	Dasyurus maculatus maculatus (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)
No	No	Delma impar	Striped Legless Lizard, Striped Snake-lizard
No	No	Dodonaea procumbens	Trailing Hop-bush
No	No	Euastacus armatus	Murray Crayfish
No	No	Eucalyptus aggregata	Black Gum
No	No	Falco hypoleucos	Grey Falcon
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Grantiella picta	Painted Honeyeater
No	No	Hirundapus caudacutus	White-throated Needletail
No	No	Lathamus discolor	Swift Parrot

Direct impact	Indirect impact	Species	Common name
No	No	Lepidium aschersonii	Spiny Peppercress
No	No	Lepidium ginninderrense	Ginninderra Peppercress
Yes	Yes	Leucochrysum albicans subsp. tricolor	Hoary Sunray, Grassland Paper-daisy
No	No	Litoria aurea	Green and Golden Bell Frog
No	No	Litoria castanea	Yellow-spotted Tree Frog, Yellow-spotted Bell Frog
No	No	Maccullochella macquariensis	Trout Cod
No	No	Maccullochella peelii	Murray Cod
No	No	Macquaria australasica	Macquarie Perch
No	No	Melanodryas cucullata cucullata	South-eastern Hooded Robin, Hooded Robin (south-eastern)
No	No	Neophema chrysostoma	Blue-winged Parrot
No	No	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	No	Polytelis swainsonii	Superb Parrot
No	No	Pomaderris pallida	Pale Pomaderris
No	No	Prasophyllum petilum	Tarengo Leek Orchid
No	No	Pteropus poliocephalus	Grey-headed Flying-fox
No	No	Rostratula australis	Australian Painted Snipe
Yes	Yes	Rutidosis leptorhynchoides	Button Wrinklewort
No	No	Senecio macrocarpus	Large-fruit Fireweed, Large-fruit Groundsel
No	No	Stagonopleura guttata	Diamond Firetail
No	No	Swainsona recta	Small Purple-pea, Mountain Swainson-pea, Small Purple Pea
Yes	Yes	Synemon plana	Golden Sun Moth
No	No	Thesium australe	Austral Toadflax, Toadflax

Direct impact	Indirect impact	Species	Common name
No	No	Tympanocryptis lineata	Canberra Grassland Earless Dragon, Lined Earless Dragon

Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	Yes	Natural Temperate Grassland of the South Eastern Highlands
No	No	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. *

The proposed action will result in the temporary removal of 2.42 ha of NTG as part of the remediation works.

Whilst ecology surveys conducted in the immediate surrounds to Project Area 1 have not indicate their presence, in the absence of recent targeted survey data in the Study Area for Hoary Sunray (*Leucochrysum albicans subsp. tricolor*), Button Wrinklewort (*Rutidosis leptorhynchoides*), and Golden Sun Moth (*Synemon plana*), these species have conservatively assumed to be present in suitable habitat within the disturbance areas.

Given the temporary nature of the remediation works, and rehabilitation of the area at completion, whilst impacts are unavoidable, they will be transient in nature. The works are not anticipated to result in any long-term residual impact on these MNES.

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

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

The ecological investigations and assessments carried out for the proposed action and attached in a report to this referral include assessment of the potential for significant impacts to the four protected matters identified above. The assessment applied the criteria in the Significant Impact Guidelines (see Attachment E). However, given the temporary nature of the remediation works, and rehabilitation of the area at completion as a condition of the approval sought, the works are not anticipated to result in any long-term a residual impact on these MNES.

For the NTG community, the potential for a significant impact has been identified based on:

- Reduction in the extent of the ecological community – the proposed action would remove 2.42 ha of native vegetation considered forming part of the ecological community and associated 4.16 ha of buffer
- Adverse effects on habitat critical to the survival of the ecological community - due to fragmentation and loss of the community across its range, all areas that are considered part of the community within the Study Area and associated buffers are considered critical to the survival of the community
- Modification or destruction of abiotic (non-living) factors (such as water, nutrients, or soil) necessary for the ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns - soil removal as part of the proposed action is likely to impact surface water drainage patterns temporarily before following remedial works take place to restore surface soils
- Substantial reduction in the quality or integrity of an occurrence of the ecological community – the proposed action is likely to produce disturbance that can lead to disturbance specialist weeds such as African lovegrass establishing within affected patches of the grassland. Areas beside the grassland forming part of the buffer zone would also be impacted by works potentially introducing further invasive species pressure to the community.

Although unlikely based on ecology surveys conducted in the immediate surrounds, the presence of the Hoary Sunray (*Leucochrysum albicans subsp. tricolor*) in the Study Area has conservatively been assumed. The potential for a significant impact has therefore been identified based on:

- Leading to a long-term decrease in the size of a population - the individuals removed in the 2.42 ha of NTG may represent the loss of the majority of the total individuals in available habitat within the landscape. The Airport population may also be considered contiguous with the large known population in Mount Ainslie Nature Reserve due to open grassland connectivity and distance (~2 km) between the two sites
- Reduction in the area of occupancy of the species - removal of 2.42 ha of NTG for the proposed action would both remove area of habitat considered critical for the survival of the species and remove individuals of the species reducing the overall area occupied by the species
- Adverse effect on habitat critical to the survival of a species – no habitat is currently listed as critical to the survival of the species under section 207A of the EPBC Act. However, NTG of the ACT are considered likely critical habitat to the survival of Hoary Sunray
- Disruption to the breeding cycle of a population – lack of genetic diversity is considered a threatening process for the species. The loss of a sub-population within the Study Area may lead to a reduction in genetic diversity and overall breeding output of the species
- Resulting in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat – soil disturbance around or within NTG that is considered critical habitat for the species is likely to introduce invasive species to the habitat. African lovegrass is common within and adjacent to the habitat and is likely to increase with habitat disturbance
- Interference with the recovery of the species - if individuals are lost within the 2.42 ha of NTG to be removed it may represent a third of the overall individuals in available habitat within the landscape. 76 records of the species as individuals or population points occur within Mount Ainslie Nature Reserve that is approximately 2 km from the Study Area and considered potentially contiguous

through grassland habitat. Loss of individuals from project impacts may represent a significant loss to the regional population.

Although unlikely based on ecology surveys conducted in the immediate surrounds, the presence of the Button Wrinklewort (*Rutidosis leptorhynchoides*) in the Study Area has conservatively been assumed. The potential for a significant impact has therefore been identified based on:

- Leading to a long-term decrease in the size of a population - if individuals are present within the 2.42 ha of NTG to be removed, this may represent a third of the overall individuals in available habitat within the landscape. The Majura Training Area was estimated to have a stable population of 27,991 in 2010. It is likely that the individuals that would be lost were once an extension of this Majura Training Area, given its proximity (100-300 m). If present in similar densities to the neighbouring population, this would represent a significant loss to the regional population
- Reduction in the area of occupancy of the species – the area of occupancy of the Majura Training Area population is 0.63 ha. If Button Wrinklewort is present within the 2.42 ha of NTG to be lost from the Study Area, this would represent a significant loss of an area of occupancy
- Adverse effects on habitat critical to the survival of a species – any habitat that encompasses populations of >10 individuals is considered as habitat critical to the survival of the species. The density of individuals in the Majura Training Area is approx. 4 per 1 m2 across the 0.63 ha where they occur. If present in similar densities to the neighbouring population, this would represent a significant loss to the regional population
- Disruption to the breeding cycle of a population – if individuals occur within the 2.42 ha of NTG in the Study Area, this would equate to a loss of 96,800 individuals as a result of the proposed action (based on population densities recording in the nearby Majura Training Area). If present in similar densities to the neighbouring population, this would represent a significant loss to the regional population of breeding individuals
- Modification, destruction, removal, isolation or decrease the availability or quality of habitat to the extent that the species is likely to decline – if individuals are present within the 2.42 ha of NTG to be removed, this may represent a 34% of available habitat within the landscape. The Majura Training Area population is within 0.63 ha where they occur and therefore that would be a significant loss
- Resulting in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat – the 2.42 ha of NTG to be removed has been, and continues to be, invaded by many invasive weed species. 4.16 ha of buffer surrounding the habitat would also be disturbed. The highly invasive African lovegrass has established in the grassland and surrounding areas. Due to the competitiveness of the species in disturbed landscapes there is significant threat of the weed establishing further following the proposed action
- Interference with the recovery of the species - if individuals are present within the 2.42 ha of NTG to be removed, this may represent a third of the overall individuals in available habitat within the landscape. The Majura Training Area was estimated to have a stable population of 27,991 in 2010 (NSW Office of Environment and Heritage, 2012). It is likely that the individuals that would be lost within the Study Area were once an extension of this Majura Training Area, given its proximity (100-300 m). Density of individuals in Majura Training Area is approx. 4 per 1 m2 across the 0.63 ha where they occur. If present in similar densities to the neighbouring population, this would represent a significant loss to the regional population.

The Golden Sun Moth (*Synemon plana*) has been previously recorded within the Study Area (2018) in low numbers. In the absence of recent survey data and noting previous records, its presence in the Study Area has been assumed. The potential for a significant impact has been identified based on:

- Adverse effect on habitat critical to the survival of a species – habitat critical to the survival is defined as any grassland inhabited by breeding individuals. Therefore 2.42 ha of this habitat would be lost, assuming that the individuals recorded seven years ago remain.

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. *

We believe the proposed action is unlikely to be a controlled action – providing it is undertaken in a particular manner. The rationale for this is as follows:

1. Impacts to NTG communities are expected to be temporary and transient in nature as the objective of the works are to remediate PFAS impacted soil and then reinstate and rehabilitate the remediated areas to a similar profile and contour to the existing. Reinstatement and rehabilitation will be guided by the development of a Construction and Operations Strategy. The Strategy will outline the steps that will be taken to facilitate restoration of the NTG to a condition equivalent to that prior to the disturbance.
2. The Significant Impact Assessment presented as Attachment E (attached) conducted on individual species (Hoary Sunray, Button Wrinklewort and the Golden Sun Moth) (which assesses that Significant Impacts are possible) is conservatively predicated on an assumed presence of these species. Recent ecology surveys conducted in the immediate surrounds of the Project Area (notable Project Area 1) failed to find individuals.

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. *

The proposed action is required by law under the ERO issued to Airservices under the *Airports (Environment Protection) Regulations 1997* on 28 March 2024, and amended on 16 August 2024.

The extent of land disturbance required for the proposed action has been minimised and limited to those areas that require remediation as documented in the RAPs finalised under the ERO and an area required for ancillary activities required for the remediation within Project Area 1 (stockpiling, staging and treatment of soil treatment) labelled S1 in Attachment B.

The NTG communities in Area S1 are heavily disturbed by mowing with low overall species diversity and are currently impacted by highly invasive African Lovegrass. Additionally, the entirety of the area required for ancillary works to support Project Area 1 has already been assessed for future development as part Canberra Airports EPBC 2009/4748.

Alternative locations for the ancillary activities associated with remediation in Project Area 1 were considered to avoid the transient impacts to the NTG within Area S1 that will occur. Alternative locations would require the movement of significant volumes of excavated (and subsequently treated) PFAS impacted soil (estimated at over 1,000 ‘moxie’ truck movements). This movement introduces significant schedule and commercial risk to the remediation program and is constrained by airside access requirements (including a need to cross active taxiways and aprons) to the South of Project Area 1. Given the prevalence of NTG communities to the north of Project Areas 1 and elsewhere on airport, potential alternative locations merely re-locate impacts to MNES elsewhere.

To avoid impacts to NTG patches labelled S3 in Attachment B mapped to the east of the Taxiway Alpha swale, remediation works will access the swale from the Taxiway (west) side of the drain

For those areas of NTG disturbed, as a condition of the approval sought, Airservices will prepare a Construction and Operations Strategy. This strategy is anticipated to be consistent with the Northern Road Fairbairn Construction and Operations Strategy, Canberra Airport, 2020 approved as a condition to EPBC Act Referral 2009/4778 (varied 28 May 2020).

The Strategy will outline the steps that will be taken to facilitate restoration of the NTG to a condition equivalent to that prior to the disturbance, including the following key measures:

- Pre-works ecological surveys of all NTG to document all native species and weed species present.
- To maximise retention of NTG seedbank, no grubbing or clearing of vegetation or topsoil stripping will be conducted in the ancillary work area in Project Area 1.
- Ancillary work areas will be covered in geofabric material and a suitable depth of certified VENM gravel sheeting.
- Weed control for a minimum of 5 years to remove existing threat of invasive and exotic species encroaching mapped NTG
- Reestablishing NTG by reseeding and replanting, regular watering and additional planting / seeding as required
- Reduced mowing frequency and increased mowing height to maximise seedling / regrowth survival and minimise growth media compactions.
- Biannual ecological monitoring and corrective actions for a minimum of 5 years with reporting to to document the success of rehabilitation

Given the temporary nature of the remediation works, and the rehabilitation of the area at completion, the works are not anticipated to result in any long term impact or loss of NTG.

Mapped areas of NTG outside the footprint of the proposed action would be avoided during the remediation works.

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

No offsets are proposed as part of the 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	Common name
No	No	Actitis hypoleucos	Common Sandpiper
No	No	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Hirundapus caudacutus	White-throated Needletail
No	No	Motacilla flava	Yellow Wagtail

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 proposed action would not directly affect any of the above listed migratory species. The land affected by the proposed action does not represent suitable habitat for any of these 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 proposed action 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 proposed action would not be carried out within or 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 proposed action would not be carried out within or near 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 seam gas or large coal mining 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.

Direct impact	Indirect impact	Commonwealth land area
Yes	Yes	Canberra Airport
No	No	Defence - RAAF BASE FAIRBAIRN

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

Yes

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

The Project Areas are located at Canberra Airport which is Commonwealth Land.

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

No

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

The Proposed Action involves removing PFAS impacted soil from the FTG and MFS, as a result of historical AFFF use by Airservices (and Airservices' predecessors) for critical firefighting capability, thus minimising the potential exposure pathways of human and ecological receptors to PFAS within the remediation area and minimise PFAS flux from the remediation areas.

The remediation works would be strictly controlled to satisfy the requirements of:

- The Environmental Remediation Order (ERO) issued to Airservices on 28 March 2024, and amended on 16 August 2024
- Remediation Action Plans finalised under the ERO, including environmental mitigation and management measures to ensure that the remediation works are carried out in a manner that achieves remediation outcomes while avoiding or minimising impacts to the surrounding environment. In particular, the RAP will document measures to avoid the spread of PFAS impacted materials, including generation of dust and management of surface water runoff
- Validation Sampling Plans (VSP) developed under the ERO to verify that the Project Areas have been appropriately remediated
- The *Canberra Airport Environment Strategy* (Capital Airport Group, 2020).
- As a condition of the approval sought, Airservices will develop a Construction and Operations Strategy to outline the steps that will be taken to facilitate restoration of the NTG to a condition equivalent to that prior to the disturbance.

Works required to achieve the proposed action would be temporary in nature and strictly managed given the nature of the PFAS impacted materials that would be handled.

The Project Areas are significantly distanced from surrounding receivers, including airport users and local businesses. With the exception of some remnant ecological values within and around the Project Areas, the Projects Areas and parts of the Airport that may be indirectly affected by the proposed action, are generally of lower environmental value due to historical development and land disturbance.

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

No

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

With the exception of potential transient impacts on threatened ecological communities and species described in detail in previous sections of this referral, the proposed action would not have a significant impact on the Commonwealth Land and on-going land use as an operational Airport. As noted above, the proposed action would be strictly controlled and managed through environmental mitigation and management measures intended to avoid the risk of spread of PFAS impacted materials. These are documented in Remedial Action Plans (RAPs) finalised under the ERO.

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

The proposed action would be carried out in strict accordance with RAPs finalised under the ERO issued to Airservices Australia (Airservices) under the *Airports (Environment Protection) Regulations 1997* on 28 March 2024, and amended on 16 August 2024.

As noted above in relation to potential impacts on threatened ecological communities and species, direct impacts to mapped areas of NTG and the species that may inhabit it are unavoidable although will be transient in nature due to the commitments to rehabilitate the disturbed areas. The extent of land disturbance required for the proposed action has been minimised and limited to those areas that require remediation under the ERO and associated RAPs. Mapped areas of NTG outside the footprint of the proposed action would be avoided during the remediation works.

The RAP(s) for remediations works comprising the proposed action are required to document in detail a remediation approach that achieves the required outcomes of the ERO in a manner that avoids or minimises the risk of further PFAS spread. The RAP(s) are therefore required to include comprehensive and effective measures to:

- Contain, segregate, manage and collect for treatment and/ or disposal, surface water runoff from Project Areas that is or may be impacted with PFAS. In doing so, surface management controls will also limit the emission of other surface water pollutants, particularly suspended solids
- To the extent that groundwater dewatering may be required in excavated areas, contain, segregate, manage and collect for treatment and/ or disposal, groundwater that is or may be impacted with PFAS. The need for broader groundwater remediations works is currently subject to further investigation and is separate to the proposed action
- Minimise the generation of dust and avoid the emission of dust beyond the boundaries of the Project Areas.

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

No offsets are proposed for potential impacts on Commonwealth Land. It is noted that the proposed action is principally focused on removal of PFAS impacted materials and would therefore result in a net improvement in environmental values of the Project Areas and Commonwealth Land.

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 proposed action would not be carried out within or near any 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 proposal has been assessed in accordance with the *EPBC Act Policy Statement 1.2 Significant Impact Guidelines for actions, on, or impacting upon Commonwealth Land, and actions by Commonwealth Agencies* as Attachment H and full response to this question in Attachment I.

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:

- Threatened Species and Ecological Communities (S18)

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)
- 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. *

The proposed action responds to and is required to address an Environmental Remediation Order (ERO) issued to Airservices 28 March 2024, and amended on 16 August 2024 (see Attachment A and B). Among other things, the ERO requires the preparation and finalisation of a Remediation Action Plan (RAPs). The RAPs have been assessed by an independent assessor and accepted by the Airport Environment Officer (AEO). The now finalised RAPs establish the scope of the required remediation works under the ERO.

The extent of disturbance of NTG associated with the action has been minimised and limited to those areas that are required to achieve the scopes under the finalised RAPs. Mapped areas of NTG outside the footprint of the proposed action would be avoided during the remediation works.

Whilst impacts to NTG are unavoidable, impacted areas will be reinstated. The works are not therefore anticipated to result in any long-term residual impacts on NTG.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A_ Enviornmental Remedial Order for PFAS Pollution Canberra Airport 2024.pdf Environmental Remedial Order	12/06/2025	Yes	High
#2.	Document	Att B_ERO_timeline_update_response_16Aug24.pdf Environmental Remedial Order Amendment	12/06/2025	Yes	High
#3.	Document	Att C_Section 1.2.1_Overview.pdf Response for Section 1.2.1, as word count for response exceeds limit of text box.	12/06/2025	Yes	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 D_C-POL0030 (1).pdf Airservices Environmental, Social and Governance Policy	12/06/2025	Yes	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att E_SIAs EPBC Act Sp & Comm_20250603_Rev0.pdf Ecological investigation and assessment for the project areas.	12/06/2025	Yes	High
#2.	Document	Att F_Section 3.2_Flora and Fauna.pdf Response for Section 3.2.1 as word count for response exceeds limit of text box.	12/06/2025	Yes	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att E_SIAs EPBC Act Sp & Comm_20250603_Rev0.pdf Ecological investigation and assessment for the project areas.	11/06/2025	Yes	High
#2.	Document	Att I_Section 4.1.12_Impact(Comm).pdf Full response to question 4.1.12, that exceeds character limit in online form field.	11/06/2025	Yes	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 G_CAG_EnvironmentStrategy_2020.pdf Canberra Airport Environment Strategy, 2020	12/06/2025	Yes	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att G_CAG_EnvironmentStrategy_2020.pdf Canberra Airport Environment Strategy, 2020	11/06/2025		High

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att E_SIAs EPBC Act Sp & Comm_20250603_Rev0.pdf Ecological investigation and assessment for the project areas.	11/06/2025	Yes	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 E_SIAs EPBC Act Sp & Comm_20250603_Rev0.pdf Ecological investigation and assessment for the project areas.	11/06/2025	Yes	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 H_SigImpact Guidelines 1.pdf Significant Impact Guidelines 1.2	12/06/2025	Yes	High
#2.	Document	Att I_Section 4.1.12_Impact(Comm).pdf Full response to question 4.1.12, that exceeds character limit in online form field.	12/06/2025	Yes	High

4.3.8 Why alternatives for your proposed action were not possible

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A_ Enviornmental Remedial Order for PFAS Pollution Canberra Airport	11/06/2025	Yes	High

2024.pdf Environmental Remedial Order					
#2.	Document	Att B_ERO_timeline_update_response_16Aug24.pdf Environmental Remedial Order Amendment	11/06/2025	Yes	High

5.2 Declarations

Completed Referring party's declaration

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

ABN/ACN	20093846925
Organisation name	AECOM AUSTRALIA PTY LTD
Organisation address	4006 QLD
Representative's name	Chelsea Borys
Representative's job title	Environmental Scientist
Phone	1800 868 654
Email	chelsea.borys@aecom.com
Address	Level 4/68 Northbourne Ave, Canberra ACT 2601

☑ 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, **Chelsea Borys of AECOM AUSTRALIA PTY LTD**, 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	59698720886
Organisation name	AIRSERVICES AUSTRALIA
Organisation address	2601 ACT
Representative's name	James Comley

Representative's job title	PFAS Technical Lead
Phone	+61 2 6268 4111
Email	james.comley@airservicesaustralia.com
Address	Da Vinci Building 101, 2A Boronia Road, Brisbane Airport QLD 4008, Australia

☑ 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, **James Comley of AIRSERVICES AUSTRALIA**, 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, **James Comley of AIRSERVICES AUSTRALIA**, 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. *