

Osborne Utilities Relocation

Application Number: **02883**

Commencement Date:
14/04/2025

Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Osborne Utilities Relocation

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 *

01/08/2025

1.1.4 Estimated end date *

01/12/2027

1.2 Proposed Action details

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

Overview

Australian Naval Infrastructure Pty Ltd (ANI) has initiated the Osborne Utilities Relocation Project (the Project) located in the suburb of Osborne and on Torrens Island, South Australia (SA).

The objective of the Project is to relocate below and above ground utilities. Specifically, two gas pipelines and an overhead electricity transmission line to enable vacant land on the Lefevre Peninsula to be fully utilised for industrial purposes (including for its planned use as a Submarine Construction Yard [SCY]). As part of this work, expansion of the Lefevre Substation and decommissioning of overhead electricity transmission line towers on the northern extent of the Lefevre Peninsula are also required.

Project area

The Project is proposed on the northern Lefevre Peninsula and western edge of Torrens Island, which are approximately 19 km northwest of Adelaide, South Australia. The Lefevre Peninsula is located within the City of Port Adelaide Enfield local government area, and Torrens Island is land that is not within a council area.

The Project area is defined as the area that encompasses the extent of all Project elements and disturbance footprints and is approximately 32.48 hectares (ha).

Specifically, the Project area comprises of three proposed relocated utility routes (two gas pipelines and a transmission line), an expansion of the Lefevre Substation, decommissioning areas for overhead electricity transmission line towers, and all ancillary areas required for construction (e.g., construction rights-of-way, etc.) as shown in Att 1 EHIA Report, Figure 3, p. 7.

Relevant area descriptors are:

- Project area - approximately 32.48 ha. This area encompasses all infrastructure and construction areas.
- Disturbance footprint - the same as the Project area (i.e., 32.48 ha).
- Avoidance area - not proposed.
- Retention area - not proposed.

Summary of the proposed action

The proposed action is the relocation of three existing utilities from vacant industrial land on the northern Lefevre Peninsula. One of the utilities requires connection from the existing pipeline network on the western extent of Torrens Island.

The three utilities to be relocated are:

- A high-pressure subsurface gas transmission pipeline managed by Epic Energy South Australia Pty Ltd (Epic Energy)
- A high-pressure subsurface gas transmission pipeline managed by South East Australia Gas Pty Ltd (SEA Gas)
- High voltage (275 kilovolt) overhead power lines managed by ElectraNet Pty Ltd (ElectraNet)

The Project also includes expansion of the existing Lefevre Substation and decommissioning of overhead electricity transmission line towers. The service providers' respective construction and decommissioning areas are shown in Att 1 EHIA Report, Figure 3, p. 7.

Project description

Epic Energy gas pipeline

Approximately 3.8 km of the Pelican Point Lateral Pipeline is proposed to be relocated allow future development of the SCY. The proposed alignment includes an approximately 615 metre (m) long horizontal directional drilling (HDD) at a depth of approximately 14.4 m below the Port River. The proposed alignment

is shown in Att 1 EHA Report, Figure 3, p. 7.

A detailed Project description is provided in Att 1 EHA Report, Section 2.0, p. 6.

SEA Gas pipeline

The last 2 km of the Port Campbell to Adelaide natural gas transmission pipeline (the PCA gas pipeline) is proposed to be relocated allow future development of the SCY. The proposed alignment is shown in Att 1 EHA Report, Figure 3, p. 7.

A detailed Project description is provided in Att 1 EHA Report, Section 2.0, p. 6.

ElectraNet underground transmission line and Lefevre Substation expansion

The existing 275 kilovolt (kV) double circuit line between Pelican Point Power Station and Lefevre Substation is proposed to be relocated to allow future development of the SCY. The proposed alignment is shown in Att 1 EHA Report, Figure 3, p. 7.

ElectraNet, based on ANI's constraints, has determined that realigning and undergrounding the 275 kV transmission line will be the most practical and feasible option for the long-term development and use of the SCY. The required scope of work to facilitate this is:

- Installing 1.9 km of underground 275 kV cable.
- Expansion of Lefevre Substation with a new 275 kV switching station.
- Decommissioning existing redundant overhead transmission line structures.

A detailed Project description is provided in Att 1 EHA Report, Section 2.0, p. 6.

Project activities

The proposed activities required to construct, operate, and maintain each of the three relocated utilities are summarised below.

Pre-construction and pre-clearing:

- Environmental surveys (e.g., pre-clearing)
- Identification and marking of environmentally sensitive areas (e.g., habitat protection areas).
- Implementation of environmental management plan controls (erosion control, weed management, fauna management, etc.)

Construction, clearing, and infrastructure development:

- Conduct construction environmental management plan inductions
- Site survey and set out
- Installation of temporary construction signage and site fencing
- Vegetation clearing along the pipeline and underground transmission line corridors
- Materials acceptance and storage within laydown areas within disturbance footprint
- Management of materials and waste at designated locations within the disturbance footprint
- Topsoil stripping and stockpiling for rehabilitation
- Earthworks and trenching for pipeline installation
- Establishment of HDD pads and pig launcher/receiver
- HDD for pipeline crossing below the Port River
- Installation of pipeline infrastructure, including welding, coating, and lowering into trenches
- Installation of underground transmission line
- Backfilling of trenches and restoration of disturbed areas
- Testing and commissioning of the relocated pipelines and underground transmission line
- Waste management and disposal of construction materials
- Removal of redundant infrastructure, where required

Clean up and demobilisation:

- Removal of environmental controls and signage
- Removal of stockpiles and excess materials
- Restore areas within the disturbance footprint

Ongoing maintenance and operations:

- Routine inspection and maintenance of pipelines and transmission infrastructure
- Rehabilitation of disturbed areas, including recontouring and revegetation
- Monitoring and maintenance of erosion control and rehabilitation areas
- Long-term monitoring of rehabilitated areas to ensure successful regeneration

Land tenure

The Project area is located within numerous land tenures that includes Crown land, private land, road reserves, and rail corridors. Section 2.2.5 of this referral form includes a list of parcel ID numbers and land tenure within the Project area.

Direct and indirect impacts

Project activities that may have a direct or indirect impact on environmental values are summarised below.

Construction, including:

- Vegetation clearance
- Plant, equipment, and material movements
- Earthworks and trenching for pipeline installation
- HDD for pipeline crossing below the Port River
- Installation of infrastructure
- Decommissioning infrastructure
- Demobilisation

Operation and maintenance, including:

- Leaks or spills
- Management of weed and pest species
- Maintenance of infrastructure

Further information on the proposed action can be found in Att 1 EHIA Report, Section 2.0, p. 6.

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)

EPBC Number	Project Title
2023/09662	Osborne North Car Park and Grade Separated Road

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

The proposed action is part of a larger project to construct and operate an SCY at Osborne.

The SCY will be sited on the northern Lefevre Peninsula to the east of the Dry Creek–Port Adelaide railway corridor, including:

- The partially developed area to the east, between the Dry Creek–Port Adelaide railway corridor and Mersey Road North.
- Land to the north of Archie Badenoch Circuit that is east of the Dry Creek–Port Adelaide railway corridor.
- Land to the west and north of Mutton Cove Conservation Reserve extending to the Port Adelaide River.

See Att 1 EHIA Report, Figure 4, p. 18 for a map of the SCY area.

Although subject to design, the SCY would include:

- Fabrication workshops
- Abrasive blasting and painting
- Outfitting and assembly
- Pipe manufacturing
- Warehousing
- Final integration and commissioning
- Launch facility and wet basin
- Industrial services
- Sleeping quarters and amenities
- Office accommodation
- Car parking

Some existing facilities in the southern portion of the submarine construction yard would be repurposed. Dredging is anticipated to create adequate under keel depth for a swing basin, although the need for dredging outside of this would be subject to depths of other maintenance dredging campaigns along the Port Adelaide River.

To transparently address environmental obligations under the EPBC Act, the planned approach for staging and EPBC Act consideration for the Project is anticipated to be as follows:

- Stage one referral - Osborne North car park and grade separated road (2023/09662)
- Stage two - strategic assessment under Part 10 of the Environment Protection and Biodiversity Act 1999 for activities associated with the construction and operation of the SCY
- Stage three referral (this referral) – Osborne utilities relocation

This approach has been discussed as a preferred approach between the Department of Climate Change, Environment, Energy and Water staff and the proponents.

The actions to be referred in stages would be able to be used independently of the larger project because:

- The car park and link road would be able to be used to service the existing ship building facilities within the Osborne North area.
- Relocation of services to outside of the industrial allotments would enable them to be utilised for another purpose, not just for a future submarine construction yard (i.e., the relocation would make that land able to be functional for other purposes if the larger action did not proceed).

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

Overview

Information regarding legislative framework relevant to the proposed action can be found in Att 1 EHIA Report, Section 6.0, p. 56. The below provides a summary of key legislative frameworks.

Commonwealth legislation

Environment Protection and Biodiversity Conservation Act 1999

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), any action that would have, or would be likely to have a significant impact to a matter of environmental significance or, in the case of Commonwealth land or an action undertaken by a Commonwealth agency, the environment generally must be referred to the Department of Climate Change, Energy, the Environment and Water to assess whether a formal assessment and approval under the EPBC Act would be required.

As there are matters of national environmental significance relevant to the Project area, and the proposed action is to be undertaken by a Commonwealth agency, the potential impact of the proposed action on the environment must be considered with regard to:

Significant impact guidelines 1.1: Matters of National Environmental Significance (DCCEEW, 2013a)
Significant impact guidelines 1.2: Actions on, or impacting upon, Commonwealth land and actions by Commonwealth agencies (DCCEEW, 2013b).

This referral considers the proposed action in relation to the nine matters of national environmental significance:

- World heritage properties
- National heritage properties
- Wetlands of international importance
- Threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- Great Barrier Reef Marine Park
- Nuclear actions (including uranium mines)
- Water resources, in relation to coal seam gas and coal mining development.

Whole of the environment matters, including:

- Landscapes and soils
- Coastal landscapes and processes
- Ocean forms, ocean processes and ocean life
- Water resources
- Pollutants, chemicals and toxic substances
- Plants
- Animals
- People and communities
- Heritage (including Aboriginal heritage, historic heritage and natural heritage)

The proposed action occurs partially within the Osborne SCY Strategic Assessment Area, and partially outside. The Strategic Assessment (in accordance with Part 10 of the EPBC Act) was submitted in January 2025 for activities associated with the construction and operation of the SCY.

This referral reviews the above matters and includes a summary of the assessments of significance. The full assessments are included in Att 1 EHIA Report, Section 9.0 and 1.0, pp. 82-118.

Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 provides for the preservation and protection of places, areas and objects of particular significance to Indigenous Australians.

No declared significant Aboriginal areas, Aboriginal objects, or remains have been identified in the Project area.

State legislation

Aboriginal Heritage Act 1988

Aboriginal heritage in South Australia is managed under the *Aboriginal Heritage Act 1988* and is administered by the Aboriginal Affairs and Reconciliation Division of the Department of Premier and Cabinet. All Aboriginal sites, objects and / or remains, whether previously recorded or not, are provided with statutory protection under the *Aboriginal Heritage Act 1988*. Under Section 23 of the Aboriginal Heritage Act 1988, it is an offence to damage, disturb or interfere with Aboriginal sites, objects or remains unless written authorisation from the Minister for Aboriginal Affairs and Reconciliation has been obtained.

There are no known Aboriginal archaeological sites, objects or remains documented from within the Project area. No prior authorisation would be required under the *Aboriginal Heritage Act 1988*. If an Aboriginal site is discovered during ground disturbing works, authorisation would be required before continuing with the works.

Environment Protection Act 1993

The Environment Protection Act 1993 (EP Act) provides the protection of the environment, including land, air and water. The EP Act includes subordinate legislation including the Environment Protection Regulations 2009, and environment protection policies for specific areas, such as waste, water, air and noise. A licence may be required under the EP Act for activities during construction works, such as the storage of chemicals associated with construction. Under the South Australian Environment Protection Act 1993, Part 4, all persons have a 'General Environmental Duty' to not undertake an activity that pollutes or might pollute the environment.

National Parks and Wildlife Act 1972

The National Parks and Wildlife Act 1972 (NPW Act) provides formal legal recognition for threatened flora and fauna species in South Australia. Species are listed in the NPW Act as endangered, vulnerable or rare.

There is potential for threatened fauna species protected under the NPW Act to occur within the Project area, and some are known to occur in the region surrounding the proposed action.

Native Vegetation Act 1991

The Native Vegetation Act 1991 (NV Act) and the Native Vegetation Regulations 2017 (NV Regulations) are the key pieces of legislation related to managing native vegetation on private and public land in South Australia. They promote the conservation, management and regeneration of native vegetation and also seek to ensure personal and public safety. The NV Act sets out the process for applying to clear native vegetation, and the NV Regulations outline clearance activities exempt from the NV Act.

The NV Act is not applicable to terrestrial vegetation on the Lefevre Peninsula or Torrens Island.

Planning Development and Infrastructure Act 2016

The Planning Development and Infrastructure Act 2016 (PDI Act) is supported by a suite of subordinate regulations, as well as practice directions and guidelines which are issued by the State Planning Commission. The Planning Development and Infrastructure (General) Regulations 2017 (PDI Regulations) support the PDI Act by prescribing detailed processes, procedures and guidelines for planning, building and land division assessment.

The Planning and Design Code includes the desired and performance outcomes for land use and development on State land where specific zones, sub-zones, and overlays apply. This legislation is relevant to the Project, as part of the Project area is located on State land subject to the requirements of the Planning and Design Code. Where development is proposed on State land, consent under the PDI Act would be required.

The construction and operation of the Epic Energy and SEA Gas scope of work would be undertaken in accordance with the provisions of the ER Act and is not considered to be classified as a 'high impact activity' under Section 98 of the Energy Resources Act 2000. Consequently, the PDI Act does not apply to the Epic Energy or SEA Gas scope of work, other than the application of the Building Rules to any building work carried out (as per Section 161(3) of the PDI Act).

ElectraNet's scope of work will require development approval under the PDI Act.

The Project area is within an area where the regulated/significant tree provisions of the PDI Act apply. If regulated or significant trees need to be removed, development approval may be required, depending on exemptions of this provision under the ER Act.

For the larger project to construct and operate an SCY at Osborne, the Minister for Planning has declared that an impact assessed process under s.108(1)(c) of the PDI Act will apply, requiring the preparation on an Environmental Impact Statement (EIS). The EIS was submitted in January 2025.

Energy Resources Act 2000 and Energy Resources Regulations 2013

The *Energy Resources Act 2000* (ER Act) regulates of the petroleum, gas storage, pipeline transmission and geothermal energy industries in SA.

Pipeline licences for SEA Gas and Epic Energy are regulated under the ER Act and the Energy Resources Regulations 2013. A variation to the licences is required to enable the relocation of gas pipelines.

Historic Shipwrecks Act 1981

Historic shipwrecks in SA State waters are protected by the *Historic Shipwrecks Act 1981* (HS Act) and the Historic Shipwrecks Regulations 2017.

The closest (found) shipwreck sites are located in Mutton Cove Conservation Reserve approximately 297 m from the Project area. Another shipwreck site (not found) is mapped near Torrens Island, approximately 73 m from the Project area. As no shipwrecks occur within the Project area, a permit is not required under the HS Act.

Adelaide Dolphin Sanctuary Act 2005

The *Adelaide Dolphin Sanctuary Act 2005* (ADS Act) establishes a sanctuary to protect the dolphin population of the Port River estuary and Barker Inlet and its natural habitat. It also provides protection of the Port River estuary and Barker Inlet.

As the Project will cross the Port River in the Adelaide Dolphin Sanctuary, the ADS Act and Adelaide Dolphin Sanctuary Management Plan apply to the Project.

Heritage Places Act 1993

The *Heritage Places Act 1993* (HP Act) makes provision for the identification, recording, and conservation of places and objects of non-Aboriginal heritage significance.

IHC (2024a; 2024b; 2024c) assessed the Project area as being low risk (or moderate in undeveloped soils) for encountering undocumented built heritage and archaeological features of significance. However, if a registered place or item is identified and cannot be avoided, consultation with the relevant organisation and local councils will be required to confirm permits or approvals.

Summary

In summary, the proposed action will require state approvals as discussed above.

To meet Commonwealth EPBC Act requirements, this referral has been prepared to assess significant impacts to MNES and the environment matters in accordance DCCEEW (2013a; 2013b), as the proposed action is being undertaken by a Commonwealth agency.

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. *

Since its establishment in 2017, ANI has prioritised best practices in community and stakeholder engagement, fostering positive relationships and ensuring transparent communication that the community now expects as standard.

ANI is dedicated to maintaining continuous channels for engagement with the local community throughout all stages of the project lifecycle, from design and construction to operation.

To connect with the community, ANI utilises a range of methods, including hosting community drop-in sessions, participating in local interest group meetings, and conducting targeted letterbox campaigns. The ANI website (ANI, 2025a) provides public information about the future development of the Osborne Naval Shipyard (ONS), including the future Submarine Construction Yard (SCY) ensuring that key details are readily accessible.

Additionally, the South Australian Government has established a cross-agency coordination group to ensure the alignment and input of government stakeholders as the Project progresses. ANI also maintains regular communication with the City of Port Adelaide Enfield's administration and key community interest groups in the affected areas. Project updates are shared with local residents and businesses at key milestones to keep the community informed of significant activities. A point of contact is provided available for feedback and questions.

ANI's Community and Stakeholder Relations Manager holds regular meetings with local businesses and representatives from local interest groups to keep them informed about current and upcoming development activities at ONS. Consultation for the Utilities Relocation Project will be undertaken during detailed design as planning for construction activities to deliver the Project occurs.

Since August 2023, ANI has hosted meetings specifically focused on the proposed construction of the future SCY and existing ONS with these interest groups. These meetings have primarily focussed on the SCY and the Grade Separated Road Projects located immediately adjacent to, and within the Project area respectively, however, the future need for service relocations has previously been identified. These ongoing meetings with stakeholders will continue with further information for the Utilities Relocation Project to be provided during detailed design and when planning for construction activities.

In May 2024, ANI held a community drop-in session to support the state-based Development Application for the Grade Separated Road project. This session offered the community and interested stakeholders an opportunity to meet with the project team, ask questions, and provide feedback. The session was well received by attendees.

In February 2025, the Environmental Impact Statement (EIS) for the construction and operation of the proposed nuclear-powered submarine construction yard was made available for public consultation. Four drop-in information sessions were held in mid-February 2025 across Adelaide, Port Adelaide, and Osborne, where the community had the chance to engage with ANI staff, discuss the project, the EIS, and the development application process.

The Australian Submarine Agency (ASA) has been leading a separate strategic assessment process to evaluate the impacts of the SCY on nationally and internationally listed plants, animals, habitats, and places under the Environment Protection and Biodiversity Conservation Act 1999. Given the overlapping themes, ANI chose to undertake the EIS community consultation drop-in sessions collaboratively with the ASA.

Over 150 people attended the four sessions, including local residents and the community, the Deputy Premier, Port Adelaide Enfield Elected Members, and industry representatives.

Ongoing regular consultation with Traditional Owners through the Kurna Yerta Aboriginal Corporation (KYAC) Board regarding the future Submarine Construction Yard (SCY) continues to occur. As part of this, consultation conversations regarding the need for these services relocations has been had during meetings with KYAC Board.

In addition, ANI has developed a Reflect Reconciliation Action Plan (ANI, 2023) and continues to actively engage with a range of stakeholders on Aboriginal cultural values. ANI also implements culturally inclusive procurement practices.

In addition to ANI's consultation, Epic Energy has independently consulted with Indigenous stakeholders for relevant sections of their proposed alignment, including Torrens Island.

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 Liam Seed
Job title Principal Environmental Scientist
Phone 0483149499
Email liam.seed@aecom.com
Address Level 18, 91 King William Street, Adelaide SA 5000

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 45051762639
Organisation name AUSTRALIAN NAVAL INFRASTRUCTURE PTY LTD
Organisation address 5017 SA

Person proposing to take the action details

Name John Mortimer
Job title Director Major Projects
Phone 0419868880
Email john.mortimer@ani.com.au
Address 61 Veitch Road, Osborne, SA 5017

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. *

ANI does not have any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.

One previous referral has been undertaken under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act referral 2023/09662 – Osborne North Car Park and Grade Separated Road).

In terms of environmental record, ANI is accredited to ISO 14001 – Environmental Management Systems and has implemented environmentally sustainable practices in the operation and maintenance of the common user facilities including:

- Solar charging of mobile plant Installation of solar panels on buildings
- Use of environmentally friendly lubricants and hydraulic oils
- Filtered drainage systems for cleaner stormwater management, and Internal and external LED lighting

In the expansion and modernisation of the Osborne Naval Shipyard, environmentally sustainable initiatives have been installed in the Osborne Naval Shipyard south shipyard and are being considered in the design of other shipyard projects. This includes initiatives that consider:

- Energy efficiency and renewable energy sources, including provisions for the installation of solar panels on buildings and in carparks, and the installation of clear cladding to allow natural light into main production buildings.
- Changerooms are modularised to allow for sections to be opened and closed, necessitating energy usage only in the areas needed to accommodate current personnel numbers.
- Rainwater harvesting as an alternative water source, including collection, storage, and reuse around the yard.
- Pollution prevention measures to minimise emissions and discharges of pollutants during construction and ultimately, operation. Increased sustainable plantings using flora indigenous to the area, ensuring plants can flourish in local conditions with minimal need for additional watering.
- Material reuse, which has included the relocation and reuse of bulk materials excavated from ONS construction sites as a base for proposed new carparks.

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

ANI's Environmental Policy (ANI, 2023) includes the following objectives:

- Promote a strong and consistent environmental protective culture across our organisation, including with our contractors, licensees and visitors.
- Through continual improvement develop systems and processes to protect the environment and minimise or, where possible, eliminate ANI's impact on the environment.
- Comply with, or exceed, the requirements of ANI's EPA licence and any other legislative requirements.
- Ensure appropriate resources are available, training undertaken and communication provided to protect the environment as far as reasonably practicable.

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? *

No

1.3.3.2 Is Proposed designated proponent an organisation or business? *

Yes

Proposed designated proponent organisation details

ABN/ACN 67250046148
Organisation name Australian Submarine Agency
Organisation address 2609 ACT

Proposed designated proponent details

Name Arna Ward
Job title a/Director Infrastructure
Phone (08)81150072
Email asa.osborne.enquiries@defence.gov.au
Address 25 Catalina Drive, Majura Park ACT 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	20093846925
Organisation name	AECOM AUSTRALIA PTY LTD
Organisation address	4006 QLD
Representative's name	Liam Seed
Representative's job title	Principal Environmental Scientist
Phone	0483149499
Email	liam.seed@aecom.com
Address	Level 18, 91 King William Street, Adelaide SA 5000

✔ 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	45051762639
Organisation name	AUSTRALIAN NAVAL INFRASTRUCTURE PTY LTD
Organisation address	5017 SA
Representative's name	John Mortimer
Representative's job title	Director Major Projects
Phone	0419868880
Email	john.mortimer@ani.com.au
Address	61 Veitch Road, Osborne, SA 5017

✔ 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.

ABN/ACN	67250046148
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Organisation name	Australian Submarine Agency
Organisation address	2609 ACT
Representative's name	Arna Ward
Representative's job title	a/Director Infrastructure
Phone	(08)81150072
Email	asa.osborne.enquiries@defence.gov.au
Address	25 Catalina Drive, Majura Park ACT 2609

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? *

Third party

1.4.12 Is the third party an organisation? *

Yes

1.4.13 Do they have an existing ABN or ACN? *

Yes

1.4.14 ABN/ACN *

45051762639

1.4.16 Organisation name *

AUSTRALIAN NAVAL INFRASTRUCTURE PTY LTD

1.4.17 Organisation's primary address *

61 Veitch Road, Osborne, SA 5017

1.4.18 First name *

Brett

1.4.19 Last name *

Pendlebury

1.4.20 Job title *

Development and Approvals Manager

1.4.21 Phone *

0409099747

1.4.22 Email *

brett.pendlebury@ani.com.au

1.4.23 Address *

61 Veitch Road, Osborne, SA 5017

2. Location

2.1 Project footprint



Project Area: 32.47 Ha Disturbance Footprint: 32.47 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Falie Reserve, Mersey Road North, Osborne SA 5018

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

South Australia

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? *

The Project area is located within numerous land tenures that includes Crown land, private land, road reserves, and rail corridors.

The Project area is located within the following properties listed under Parcel ID numbers:

- D90964 Q302 – Crown land
- D90964 Q304 – Crown land
- D128471 A802 – Crown land
- D121984 A503 – tenure to be confirmed
- D76309 A22 – Crown land
- D121984 A506 – Private (Osborne Substation)
- Mersey Road North – City of Port Adelaide Enfield
- D136951 A3004 – Australian Naval Infrastructure (Falie Reserve)
- Archie Badenoch Circuit - City of Port Adelaide Enfield
- D136945 A3002 – Australian Naval Infrastructure (future SCY development area)
- D74306 Q7 - Australian Rail Track Corporation (ARTC) rail corridor
- D64682 A208 – Crown land (Outer Harbor grain rail corridor)
- D118046 A110 – Australian Naval Infrastructure (future SCY development area)
- D82690 A103 – Australian Naval Infrastructure (future SCY development area)
- D111191 A302 – Australian Naval Infrastructure
- D65566 A4 – tenure to be confirmed
- D72242 A5 - tenure to be confirmed
- C20006 FCP - tenure to be confirmed
- C20006 F21 – tenure to be confirmed
- D64682 Q210 – tenure to be confirmed
- D64682 Q209 – tenure to be confirmed
- D73109 A2 – tenure to be confirmed
- D73109 A3 – tenure to be confirmed
- D65385 A254 – Private (Viterra Outer Harbour)
- Pelican Point Road – Department for Infrastructure and Transport
- D128291 A998 – tenure to be confirmed
- D52266 A28 – Private (Pelican Point Power Station)
- D52266 A29 – Private (Pelican Point Power Station)
- D131998 A602 – Australian Naval Infrastructure (future SCY development area)
- D87145 A501 – tenure to be confirmed

3. Existing environment

3.1 Physical description

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

Context

The Project is proposed on the northern Lefevre Peninsula and western edge of Torrens Island, which are approximately 19 km northwest of Adelaide, SA. The Lefevre Peninsula is located within the City of Port Adelaide Enfield local government area, and Torrens Island is land that is not within a council area.

On the Lefevre Peninsula, the Project area is bounded by industrial land to the north and the Mutton Cove Conservation Reserve and the Port River to the east. The western boundary borders Pelican Point Road with adjoining commercial and industrial land uses. Intersecting the Project area in a north-south direction is the Dry Creek–Port Adelaide railway line. Falie Reserve is located in the southern section the Project area.

On Torrens Island, the Project area is partially within the Torrens Island Conservation Park where the existing high-pressure gas pipeline is location. The Torrens Island Project area is bounded by access vacant land (with access roads and existing utilities present) on all sides. The Port River and right-of-ways for existing utilities are located to the west.

Current condition - overview

The Project area on the Lefevre Peninsula is disturbed land that has been elevated as a result of filling of a former estuarine environment. The Project area on Torrens Island has also been subjected to industrial development, access tracks, and other development but to a lesser extent.

The Project area contains some remnant vegetation found in varying condition. Att 1 EHIA Report, Section 5.2.6, pp. 43-47 provides further detail on vegetation types within the Project area.

Landscaping and planting have occurred within Falie Reserve and along the embankments of stormwater basins. In other areas of the Project area, some vegetation has become established on filled areas.

Except for Mutton Cove Conservation Reserve and small areas of Torrens Island, the entire Project area has been previously cleared, and comprises planted, and established vegetation including weeds and introduced species.

See Att 1 EHIA Report, Section 4.0, p. 25 for additional Project area context, and Att 1 EHIA Report, Section 5.0, p. 31 for further details on existing conditions.

Climate

The Lefevre Peninsula has a Mediterranean climate characterised by warm, dry summers and mild winters (GoSA 2024a). The average rainfall in the region is 433 mm, mainly between May and September (Southfront 2018).

In summer, winds occur mostly from the south and southwest. During winter months, winds are from the north, northeast, northwest, west, and southwest (GHD 2023a).

Topography

The Lefevre Peninsula was historically characterised by sand dunes to the west and flat low-lying land to the east (Southfront 2018). The creation of Port Adelaide has resulted in low-lying swamp areas in the east being filled with excess spoil from dredging the harbour (GHD 2023a).

Elevations of Lefevre Peninsula range from 0.5 m Australian Height Datum (AHD) in Semaphore and South Ethelton to above 15 m AHD within sand dune areas of the west (Southfront 2018).

Torrens Island is a low-lying coastal plain characterised by intertidal mangrove areas, mudflats, and coastal dunes (Bourman at al. 2016). Elevations on Torrens Island range from approximately 0 m AHD 6 m AHD (GA 2024).

Within the Project area, the topography ranges between 0.14 m AHD to 4.6 m.

Mutton Cove Conservation Reserve

Mutton Cove is a protected area of approximately 48 ha (hundred of Adelaide – Allotment 22 (Deposited Plan 76309) located on the Lefevre Peninsula immediately adjacent to the Project area. The reserve contains grey mangrove woodland and saltmarsh with two shipwreck (Jupiter and Excelsior) located within it (IC 2021).

Falie Reserve

Falie Reserve is located on Mersey Road North, opposite Mutton Cove Conservation Reserve. It is an informal recreation reserve. The Reserve also acts as a stormwater management system, and hosts replanting of local endemic species (Renewal SA, 2022).

Zoning and land use

Land within and adjoining the Project area is zoned as:

- **Strategic employment:** The Strategic Employment Zone seeks development that generates wealth and employment for the state. It calls for a range of industrial, logistical, warehousing, storage, research and training land uses with compatible business activities. Related to the setting and land use, development should be arranged to support the efficient movement of goods and materials in the vicinity of ports, enhance existing business clusters and maintain access to waterfront areas for uses that benefit direct water access such as ship building.
- **Community facilities:** the Community Facilities Zone seeks to provide a range of community, educational, recreational and health care facilities.
- **Conservation:** The Conservation zone seeks enhancement of the natural environment and natural ecological processes for their ability to reduce the effects of climate change, for their historic, scientific, landscape, habitat, biodiversity, carbon storage and cultural values and provision of opportunities for the public to experience these through low-impact recreational and tourism development.
- **Open space:** The Open Space Zone seek to provide areas of natural and landscaped open space to provide for biodiversity, tree canopy cover, urban cooling and visual relief to the built environment for the health and enjoyment of the community
- **Coastal Water and Offshore Islands:** seeks to provide protection and enhancement of the natural marine and coastal environment and recognition of it as an important ecological, commercial, tourism and recreational resource and passage for safe watercraft navigation.

A sub-zone for Ports is also mapped over a portion of the Project area. The Ports Sub Zone provided for a range of port related activities that support the ongoing strategic and economic state significance of the area for the handling of export and import commodities.

The Lefevre Peninsula (of which the Project area forms a part) comprises various land use and development including residential, industrial, and recreational and open space areas.

See Att 1 EHIA Report, Figure 6, p. 30 for a map of land use and planning zones.

Road access

On the Lefevre Peninsula, the Project area is accessible via road from Pelican Point Road, a local road connecting the north of the Lefevre Peninsula from Victoria Road. On Torrens Island, the Project area is accessible vis Grand Trunkway. These roads will be used to transport workers, plant, and equipment to and from the site.

No changes to the roads are required to support the Project, as the existing roads already provide access for Port operations, employees of ship building business and other industrial users within the Osborne area.

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

Most of the Project area on the Lefevre Peninsula is used for industrial or transport purposes.

Key industrial areas within or adjacent to the Project area include the Lefevre Substation, Ampol Fuel Terminal – Pelican Point, Viterra Outer Harbour, and the Pelican Point Power Station. Key transport uses include local roads: Pelican Point Road and Mersey Road North. The Dry Creek–Port Adelaide railway also occurs within the Project area.

Future land uses intersecting the Project area include the construction of a SCY (see map of SCY area in Att 1 EHIA Report, Figure 4, p. 18) and a Skills and Training Academy on Plan Parcel D111191 A302.

Public open space in the Project area on the Lefevre Peninsula includes Falie Reserve and Mutton Cove Conservation Reserve. Falie Reserve is considered to have a dual use as a stormwater management basin and an informal recreational area. Mutton Cove Conservation Reserve contains grey mangrove woodland and saltmarsh with two historic shipwrecks.

On Torrens Island, the Project area occurs partially within the Torrens Island Conservation Park and vacant land. The Project area on Torrens Island has previously been disturbed with the construction of access tracks and utilities (e.g., gas pipelines and electricity transmission lines).

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

The Project area has previously been disturbed for the construction of industry. However, natural features are present within the Project area near the Port River as described below.

Mutton Cove Conservation Reserve

Mutton Cove is a protected area of approximately 48 ha, containing grey mangrove woodland and saltmarsh with two shipwrecks, Jupiter and Excelsior located within it (IC 2021).

Torrens Island Conservation Park

The Project area is located partially within Torrens Island Conservation Park. Torrens Island Conservation Park supports natural features including mangroves, samphire and coastal dunes, providing important habitat to native fauna species, and in 1998 it was declared a Conservation Park (NPWS 2024).

Port River Estuary

Surrounding the Lefevre Peninsula to the north and east is the Port Adelaide River. The Port Adelaide River is part of the Barker Inlet and Port River estuary, which surrounds Torrens Island and Garden Island. The estuary comprises a series of interconnected creeks and channels, and are lined by mudflats, mangroves and samphire.

Adelaide Dolphin Sanctuary

The Port Adelaide River and adjacent areas are part of the Adelaide Dolphin Sanctuary. The sanctuary extends from North Haven on the western side of Lefevre Peninsula, north along the coast north to Port Gawler and the intertidal area of Port Adelaide River. The Adelaide Dolphin Sanctuary also extends within the Mutton Cove Conservation Reserve.

Barker Inlet St Kilda Wetland

The Project area is within the mapped extent of the Barker Inlet and St Kilda Wetland. The wetland is listed in the Directory of Important Wetlands in Australia because of its significant ecological value (DCCEEW 2024c).

Refer to Att 1 EHIA Report, Section 4.4, p. 25 for natural features outside of the Project area.

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 current terrestrial landscape of the Project area is typically flat with exception of constructed drainage swales or other stormwater and drainage features. The Project area has been built up over time using fill material. Existing ground level across the Project area ranges between 0.14 m AHD to 4.6 m AHD.

The Lefevre Peninsula and some extents of Torrens Island landscapes have typically been altered due to the importation of fill, which has created the level and topography of the Project area. This fill is understood to comprise various materials including dredged material from the Port Adelaide River and waste products from a variety of industries including ash and cinders, iron pyrites and Penrice grit (GHD 2023a).

The Project includes an HDD crossing approximately 14.5 m below the Port River riverbed. The Port River is approximately 455 m wide at the crossing location and maintained (i.e., dredged) at various depths.

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.

Threatened ecological communities

During field surveys, one EPBC Act threatened ecological community (TEC) was observed within the Project area—Subtropical and Temperate Coastal Saltmarsh TEC—which is listed as Vulnerable under the EPBC Act (Att 2 EPBC Self-assessment, Section 3.2, p. 31).

The Subtropical and Temperate Coastal Saltmarsh TEC occurs within the Project area in Mutton Cove Conservation Reserve, directly adjacent to Mutton Cove Conservation Reserve, and on Torrens Island.

As an EPBC listed TEC, it is afforded protection under the EPBC Act. However, listed ecological communities in the vulnerable category are not subject to environmental approvals under the EPBC Act:

‘Species in the extinct and conservation dependant categories of species listed under the EPBC Act, and listed ecological communities in the vulnerable category of ecological communities listed under the EPBC Act, are not matters of national environmental significance (MNES) for the purposes of Part 3 of the EPBC Act (requirements for environmental approvals)’ (DCCEEW 2013a).

Regardless of the above, the Subtropical and Temperate Coastal Saltmarsh TEC is still considered in this assessment, as threatened flora and fauna species are supported by it.

Further ecological information and the likelihood of impacts assessment for the listed Subtropical and Temperate Coastal Saltmarsh TEC are provided in Att 2 EPBC Self-assessment, Section 3.2, p. 31.

Flora

EPBC Act listed threatened flora species

The ecology assessment identified four EPBC Act listed threatened flora species with the potential to occur in the Project area (Att 2 EPBC Self-assessment, Section 3.2.2, p. 34):

- Greencomb Spider-orchid (*Caladenia tensa*) (EPBC Act: Endangered)
- Pale Leek-orchid (*Prasophyllum pallidum*) (EPBC Act: Vulnerable)
- Sandhill Greenhood (*Pterostylis arenicola*) (EPBC Act: Vulnerable)
- Bead Glasswort, Bead Samphire (*Tecticornia flabelliformis*) (EPBC Act: Vulnerable)

A likelihood of impacts assessment (Att 2 EPBC Self-assessment, Section 3.2.2, p. 34.) was conducted for the four EPBC Act listed threatened flora species. Only one of the flora species (Bead Glasswort) was assessed as ‘Possible’ to be impacted by the Project. Consequently, Bead Glasswort was further assessed through an SIA (see Att 2 EPBC Self-assessment, Section 3.2.2, p. 34).

None of the four EPBC Act listed threatened flora species identified in the ecology assessment were observed during field surveys (including targeted surveys for Bead Glasswort) in the Project area (Att 2 EPBC Self-assessment, Section 3.2.2, p. 34).

NPW Act listed threatened flora species

The ecology assessment identified 12 NPW Act listed threatened flora species with the potential to occur in the Project area (see Att 2 EPBC Self-assessment, Table 23, p. 110 for the species list).

A likelihood of impacts assessment (see Att 2 EPBC Self-assessment, Table 23, p. 110) was conducted for the 12 NPW Act listed threatened flora species. Only one of the flora species (*Atriplex australasica*) was assessed as ‘Possible’ to be impacted by the Project. Consequently, *Atriplex australasica* was further assessed through an SIA (see Att 2 EPBC Self-assessment, Section 5.3, p. 107).

One NPW Act threatened flora species, Creeping Boobialla (*Myoporum parvifolium*), was recorded during the field assessments in VA2b. The species is commonly planted in reserves, parks, and road verges. It is a species that is readily available for purchase at local nurseries and was likely planted in VA2b (see Att 2 EPBC Self-assessment, Table 22, p. 105 for the SIA).

Fauna

EPBC Act listed threatened fauna species

The ecology assessment identified 40 EPBC Act listed threatened fauna species with the potential to occur in the Project area (Att 2 EPBC Self-assessment, Section 3.2.3, p. 34).

A likelihood of impacts assessment was conducted for the 40 EPBC Act listed threatened fauna species. Based on habitat types, 13 of these species were assessed as either 'Possible', 'Likely', or 'Certain' to be impacted by the Project (see Att 2 EPBC Self-assessment, Table 6, pp. 35-41). Consequently, these species were further assessed through SIAs (see Att 2 EPBC Self-assessment, Section 5.1.1 to 5.1.2, pp. 91-102).

One EPBC Act listed threatened species, the Sharp-tailed Sandpiper (*Calidris acuminata*) (EPBC Act: Vulnerable, Migratory, Marine) was observed near the Project area during field surveys. No other EPBC Act threatened fauna species were observed within the Project area (see Att 2 EPBC Self-assessment, Section 3.2.3, p. 34).

EPBC Act listed migratory species

The ecology assessment identified 23 EPBC Act listed migratory species with the potential to occur in the Project area (Att 2 EPBC Self-assessment, Section 3.2.4, p. 41).

A likelihood of impacts assessment was conducted for the 23 EPBC Act listed migratory species (see Att 2 EPBC Self-assessment, Table 7, p. 41). Based on habitat types, 13 of these species were assessed as either 'Possible' or 'Certain' to be impacted by the Project. Consequently, these species were further assessed through SIAs (see Att 2 EPBC Self-assessment, Section 5.1.3, pp. 103-106 for the SIAs).

Common Sandpiper (*Actitis hypoleucos*), Red-necked Stint (*Calidris ruficollis*), and Marsh Sandpiper (*Tringa stagnatilis*) were observed during SCY migratory bird surveys at Mutton Cove Inlet (GHD 2024b). This area is within 5 m of the Project area. No other threatened migratory species were observed within the Project area, and none of the three migratory species were observed during the 2025 Succession Ecology surveys (Att 2 EPBC Self-assessment, Section 3.2.4, p. 41).

NPW Act listed threatened fauna species

The ecology assessment identified 32 NPW Act listed threatened fauna species with the potential to occur in the Project area (Att 2 EPBC Self-assessment, Section 5.3.4, p. 109).

A likelihood of impacts assessment was conducted for the 32 NPW Act listed threatened fauna species (see Att 2 EPBC Self-assessment, Table 24, pp. 111-116). Twelve of the fauna species were assessed as either 'Possible', 'Likely', or 'Highly Likely/Known' to be impacted by the Project. Consequently, state listed threatened fauna and native fauna were further assessed through an SIA (see Att 2 EPBC Self-assessment, Table 22, p. 109 for the SIA) (SE 2025).

Three NPW Act fauna were observed during the 2025 Succession Ecology surveys Att 2 EPBC Self-assessment, Section 3.2.3, p. 34):

- Common Sandpiper (*Actitis hypoleucos*) (NPW Act: Rare)
- Little Egret (*Egretta garzetta nigripes*) (NPW Act: Rare)
- Pied Oystercatcher (*Haematopus longirostris*) (NPW Act: Rare)

Habitat types

The below is summary from Att 2 EPBC Self-assessment, Section 1.4, pp. 19-20.

- Whilst all remnant and regenerating vegetation provides habitat for native fauna species, in particular birds, the habitat value within Vegetation Association 1 (VA1) Degraded Chenopod Shrubland and VA2b Degraded Samphire Shrubland is low, given the degraded nature of these vegetation associations. Some habitat value remains for more common species.

- The Project area supports some migratory bird habitat, with suitable habitat in VA2a Subtropical and Temperate Coastal Saltmarsh TEC and VA7 Grey Mangrove Woodland. Limited suitable habitat for migratory birds is present in VA1 Degraded Chenopod Shrubland, VA2b Degraded Samphire Shrubland and VA2c Coastal Saltmarsh due to incursion of weeds, restricted tidal influence, human disturbance, and the presence of infrastructure.
- The Port Adelaide River is a tidal inlet from Gulf St Vincent, recognised as an internationally significant area for migratory shorebirds, and listed as an internationally significant site within the Australian national directory of important migratory shorebird habitat.
- The ecological value of VA2a is high, given this association qualifies as the Subtropical and Temperate Coastal Saltmarsh TEC, listed as Vulnerable under the EPBC Act. This is particularly true for those sections located within on Torrens Island, which contain a high diversity of flora and fauna and support a number of threatened species. Mutton Cove also contains VA2a, however, the quality is compromised by weed incursion, presence of roads, tracks, existing infrastructure, and washed-up waste
- VA2a Subtropical and Temperate Coastal Saltmarsh TEC provides suitable habitat for threatened bird species and migratory birds. The ecological of VA7 Grey Mangrove Woodland is also high in ecological value.
- The remaining vegetation associations consist of planted vegetation and weeds. They include VA4 Planted *Melaleucalanceolata* and *Myoporum insulare* shrubland, VA5 Planted Eucalyptus species, VA6 Mixed native plantings, and VA12 Exotic Grassland with scattered native and exotic shrubs. They offer low ecological value and are degraded in quality due to incursion of weeds. As a result, they are unlikely to support EPBC Act listed flora or fauna species.

See Att 1 EHIA Report, Section 5.2.7.1, p. 47 for a description of all habitat types within the Project area.

Targeted surveys for threatened flora and fauna

Succession Ecology undertook targeted surveys for threatened species *Acanthiza iredalei rosinae* (Slender-billed Thornbill (Gulf St Vincent; EPBC Act: Vulnerable) and *Tecticornia flabelliformis* (Bead Glasswort; EPBC Act: Vulnerable), between 10 and 17 January 2025. No observations of either species were recorded during the targeted surveys. See Att 2 EPBC Self-assessment, Appendix F, p. 131 for further details.

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

Vegetation

The Lefevre Peninsula is highly developed and has been subject to a variety of human activities, which have altered its landscape and ecosystems. Parts of Torrens Island has also been subjected to industrial development, but to a lesser extent.

The landscape within the Project area and surrounds was originally intertidal swamp, mudflats, dunes, and subtidal seabeds, but it has been intensely raised by fill or industrial dumping. This has significantly altered the natural landscape (DEC 2003).

Changes to the natural landscape have been compounded by industrial developments, the installation of seawalls, artificial stormwater systems, roads, tracks, electrical infrastructure, and high-pressure gas infrastructure. However, there are some remaining pockets of remnant vegetation on the Lefevre Peninsula, and extensive remnant vegetation on Torrens Island (Att 2 EPBC Self-assessment, Section 1.4, pp. 19-20).

Succession Ecology (Att 2 EPBC Self-assessment, Section 1.4, pp. 20-21) identified the below vegetation associations (VAs) within the Project area with remnant vegetation found in varying condition.

- VA1 Degraded Chenopod Shrubland (regenerating with some remnant)
- VA2a Subtropical and Temperate Coastal Saltmarsh TEC (remnant)
- VA2b Degraded Samphire Shrubland (regenerating)
- VA2c Samphire Shrubland (regenerating)
- VA4 Planted *Melaleuca lanceolata* and *Myoporum insulare* Shrubland
- VA7 Grey Mangrove Woodland (remnant)

A description of VAs within and surrounding the Project area is provided in Att 2 EPBC Self-assessment, Table 2, p. 23.

During field surveys, one EPBC Act threatened ecological community (TEC) was observed within the Project area (see Att 2 EPBC Self-assessment, Section 3.2.1, pp. 30-31)—Subtropical and Temperate Coastal Saltmarsh TEC—which is listed as Vulnerable under the EPBC Act.

The Subtropical and Temperate Coastal Saltmarsh TEC occurs within the Project area in Mutton Cove Conservation Reserve, directly adjacent to Mutton Cove Conservation Reserve, and on Torrens Island.

Weeds

A total of 51 exotic flora species were identified within the Project area, including 10 Declared Plants (under the *Landscape South Australia Act 2019*), two of which are also Weeds of National Significance. The areas adjacent to the Project area, such as Biodiversity Park, are also dominated by weeds.

The list of exotic flora species identified within the Project area is provided Att 2 EPBC Self-assessment, Appendix G, p. 132.

Soil and geology

The eastern areas of Lefevre Peninsula and Torrens Island are underlain by the St Kilda Formation, which is typically observed to a depth of 10 m below ground level (JBS&G 2024a). The St Kilda Formation consists of stranded beach ridge deposits, shelly silts, and sand overlain in places by modern intertidal and swamp deposits. The western areas of Lefevre Peninsula and Torrens Island are underlain by the Semaphore Sand Member, which consist of white quartz sand (JBS&G 2024a).

Previous soil sampling undertaken in parts of the Project area on Lefevre Peninsula found soils consisted of dredged spoil to depths of 1 m to 1.5 m below ground level. The fill layer comprised of silty sands and sand (containing shell grit and shells), sandy silt, and silt. Gravel, sandy clay, and industrial waste (brick, glass, bitumen, plastic, slag, ash, and cinders) were also found at some locations (JBS&G 2024a).

On Torrens Island, some of the industrial areas on the west side of the island have also been subject to sand mining, placement of fill, and dumping of dredged material (GA 2017).

The natural soils of the St Kilda Formation are known to be potentially acid forming (GHD 2023a). Both the Lefevre Peninsula and Torrens Island have high probability acid sulfate soil areas mapped (see Att 1 EHIA Report, Figure 7, p. 35).

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.

No Commonwealth heritage places overseas, or other places recognised as having heritage values are located within the Project area.

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

Traditional landscape values

The Lefevre Peninsula and surrounds have a strong Aboriginal history, with the Kurna people utilising it as a rich marine and estuarine landscape resource. The Port Adelaide region was a favoured location for Aboriginal people prior to European arrival due to its proximity to the intertidal creek and mangrove resources, which were available year-round (GHD 2024c).

Heritage values

The Lefevre Peninsula is not listed on the Commonwealth Heritage List (CHL) but has been assessed as having Indigenous heritage values that meet the CHL criteria thresholds (GHD 2024d). Specifically, it holds Commonwealth heritage values as it supports cultural, scientific, social, association, and traditional values (GHD 2024d).

In addition to the above, the Lefevre Peninsula has intangible values for the Kurna people.

Previous studies

Numerous desktop and site assessments have been completed in and around the Project area related to the SCY and other projects (GHD 2024d; IHC 2024b). Additionally, each of the service providers for this Project completed a heritage desktop assessment of their respective routes. The below provides a summary of the relevant assessments.

Known Aboriginal heritage sites and archaeological potential

There are no known Aboriginal sites on the reclaimed north and east margins of the Lefevre Peninsula (including the Project area). Known sites exist outside the Project area on the southern half of the peninsula which were not submerged in pre-European times (IHC 2024b).

No artefacts were identified during previous site assessments for the SCY or other infrastructure projects on the northern extent of Lefevre Peninsula (GHD 2024c; IHC 2024b).

There are no known Aboriginal sites within the Project area on Torrens Island. The closest known Aboriginal site to the Project area on Torrens Island is approximately 2 km north. There is potential for subsurface cultural materials to be present in undeveloped soils on Torrens Island (IHC 2023).

Risk assessment summary – Lefevre Peninsula

The desktop heritage assessment found no known Aboriginal heritage sites recorded within the Project area on the northern Lefevre Peninsula. Considering the Aboriginal heritage context, environmental landforms, geotechnical, geological information, and the level of previous development, the desktop assessment resulted in a low risk assessment of works impacting unknown Aboriginal heritage sites (IHC 2024c; JBS&G 2024a).

Risk assessment summary – Torrens Island

The heritage assessment found no known Aboriginal heritage sites recorded within the Project area itself on Torrens Island.

Considering the Aboriginal heritage context, environmental landforms, geotechnical, geological information, and the level of previous development, the desktop assessment resulted in a low risk assessment of works impacting unknown Aboriginal heritage sites in previously developed soils and pre-European tidal areas, and a moderate/high risk in undeveloped soils (IHC 2024c; JBS&G 2024a).

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. *

Surface water

The Port River is the only natural watercourse within the Project area, with a section of the Project area crossing below the river between Lefevre Peninsula and Torrens Island.

Most of the natural watercourses and swamps on the Lefevre Peninsula have been filled and levelled during development (GHD 2023a). Natural watercourses that remain within the study area, but outside the Project area, are found in Mutton Cove Conservation Reserve. These consist of a central tidal watercourse with several tributaries flowing from it.

Torrens Island has numerous ephemeral tidal lakes and creeks that are present within mangrove areas across the island. The closest watercourse to the Project area on Torrens Island is a tidal watercourse approximately 240 m southeast.

The Port River, Mutton Cove Conservation Reserve, and Torrens Island sections of the Project area also within the mapped extent of the Barker Inlet and St Kilda Wetland. The wetland is listed in the Directory of Important Wetlands in Australia because of its significant ecological value (DCCEEW 2024c).

Catchment summary

Stormwater runoff within the Project area is diverted to the existing stormwater basin/drainage system, which forms part of the catchment area.

Three stormwater basins occur within the Project area (see Att 1 EHIA Report, Figure 8, p. 39). The basins capture stormwater and remove gross pollutants.

The Cultural Park Sedimentation Basin detention basin receives flows from the northern areas. Falie Reserve receives flows from Archie Badenoch Circuit (including properties to the north, Viterra site and basin west of the railway line via an equalising culvert under the rail corridor).

Viterra basins receive flows from the Viterra site and towards Falie Reserve basin via a piped system in Archie Badenoch Circuit.

Stormwater

The Lefevre Peninsula contains numerous stormwater drains and basins. These areas form small catchments that discharge into the Port River or Gulf St Vincent (Southfront 2018).

Within or adjacent to the Project area on the Lefevre Peninsula are four stormwater basins that drain through Falie Reserve and then discharge to the Port River through outfalls on the eastern side of peninsula (see Att 1 EHIA Report, Figure 8, p. 39).

The Project area on Torrens Island is undeveloped except for unsealed roads. Based on the underlying geology of Torrens Island described in Section 5.2.1, stormwater likely infiltrates the soil profile or dissipates through evaporation and evapotranspiration when the soil profile is saturated.

Groundwater

WaterConnect provides data on groundwater bores located near the Project area.

On Lefevre Peninsula, groundwater levels in the Project area varies between 2 m AHD to 5 m AHD (JBS&G 2024a).

On Torrens Island, one groundwater bore (ID 6628-3356) is located approximately 460 m southwest of the Project area near the historical Torrens Island Quarantine Station (GoSA 2024b). In 2023 and 2024, depths to the groundwater level at the bore were 1.07 m.

Generally, both the Lefevre Peninsula and Torrens Island are expected to have poor groundwater quality with high salinity and total dissolved solids (GHD 2024c; GoSA 2024b).

Ramsar wetlands

There are no wetlands of international importance (Ramsar wetlands) located within the same catchment of the study area or neighbouring upstream or downstream catchments.

Further information on water resources is provided in Att 1 EHIA Report, Section 5.2.4, p. 37.

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	Yes	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.

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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.

*

The nearest World heritage property is the 'Willandra Lakes Region', which is located over 400 km northeast of the Project area within NSW. There would be no direct or indirect impact to the values of a World heritage property, due to the project's distance to the heritage place. The project would not impact on a World heritage property.

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.

*

The nearest National heritage place is the 'South Australian Old and New Parliament Houses / The Adelaide Park Lands and City Layout', which is located 15 km southwest of the Project area. There would be no direct or indirect impacts to the values of a national heritage place, due to the project's distance to the heritage place. The project would not impact on a national heritage place.

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.

—

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 nearest Ramsar wetland is 'The Coorong, and Lakes Alexandrina and Albert Wetland', which is located 70 km southwest of the Project area. This Ramsar wetland is neither an upstream nor downstream catchment of the Project area. There would be no direct or indirect impacts to the Ramsar wetland, as the wetland is neither an upstream nor downstream catchment of the Project area. The project would not impact on a Ramsar wetland.

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
Yes	Yes	<i>Acanthiza iredalei rosinae</i>	Slender-billed Thornbill (Gulf St Vincent)
No	No	<i>Aphelocephala leucopsis</i>	Southern Whiteface
No	No	<i>Ardenna grisea</i>	Sooty Shearwater
No	No	<i>Arenaria interpres</i>	Ruddy Turnstone
No	No	<i>Botaurus poiciloptilus</i>	Australasian Bittern
No	No	<i>Caladenia tensa</i>	Greencomb Spider-orchid, Rigid Spider-orchid
Yes	Yes	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
Yes	Yes	<i>Calidris canutus</i>	Red Knot, Knot
Yes	Yes	<i>Calidris ferruginea</i>	Curlew Sandpiper
Yes	Yes	<i>Calidris tenuirostris</i>	Great Knot
No	No	<i>Carcharodon carcharias</i>	White Shark, Great White Shark
No	No	<i>Caretta caretta</i>	Loggerhead Turtle
Yes	Yes	<i>Charadrius leschenaultii</i>	Greater Sand Plover, Large Sand Plover
Yes	Yes	<i>Charadrius mongolus</i>	Lesser Sand Plover, Mongolian Plover
No	No	<i>Chelonia mydas</i>	Green Turtle
No	No	<i>Dermochelys coriacea</i>	Leatherback Turtle, Leathery Turtle, Luth
No	No	<i>Diomedea antipodensis</i>	Antipodean Albatross
No	No	<i>Diomedea epomophora</i>	Southern Royal Albatross
No	No	<i>Diomedea exulans</i>	Wandering Albatross
No	No	<i>Eubalaena australis</i>	Southern Right Whale
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe

Direct impact	Indirect impact	Species	Common name
No	No	<i>Grantiella picta</i>	Painted Honeyeater
No	No	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Limosa lapponica baueri</i>	Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit
Yes	Yes	<i>Limosa limosa</i>	Black-tailed Godwit
No	No	<i>Macronectes giganteus</i>	Southern Giant-Petrel, Southern Giant Petrel
No	No	<i>Macronectes halli</i>	Northern Giant Petrel
No	No	<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin, Hooded Robin (south-eastern)
No	No	<i>Neophema chrysogaster</i>	Orange-bellied Parrot
No	No	<i>Neophema chrysostoma</i>	Blue-winged Parrot
No	No	<i>Neophoca cinerea</i>	Australian Sea-lion, Australian Sea Lion
Yes	Yes	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew
No	No	<i>Pachyptila turtur subantarctica</i>	Fairy Prion (southern)
No	No	<i>Phoebastria fusca</i>	Sooty Albatross
Yes	Yes	<i>Pluvialis squatarola</i>	Grey Plover
No	No	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox
No	No	<i>Rostratula australis</i>	Australian Painted Snipe
No	No	<i>Senecio macrocarpus</i>	Large-fruit Fireweed, Large-fruit Groundsel
No	No	<i>Seriola brama</i>	Blue Warehou
No	No	<i>Stagonopleura guttata</i>	Diamond Firetail
No	No	<i>Sternula albifrons</i>	Little Tern
Yes	Yes	<i>Sternula nereis nereis</i>	Australian Fairy Tern
Yes	Yes	<i>Tecticornia flabelliformis</i>	Bead Glasswort, Bead Samphire
No	No	<i>Thalassarche carteri</i>	Indian Yellow-nosed Albatross
No	No	<i>Thalassarche cauta</i>	Shy Albatross

Direct impact	Indirect impact	Species	Common name
No	No	Thalassarche impavida	Campbell Albatross, Campbell Black-browed Albatross
No	No	Thalassarche melanophris	Black-browed Albatross
No	No	Thalassarche steadi	White-capped Albatross
No	No	Thinornis cucullatus cucullatus	Eastern Hooded Plover, Eastern Hooded Plover
Yes	Yes	Tringa nebularia	Common Greenshank, Greenshank
Yes	Yes	Xenus cinereus	Terek Sandpiper

Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	Yes	Subtropical and Temperate Coastal Saltmarsh

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. *

Threatened species

Context

Only one of the flora species – Bead Glasswort (*Tecticornia flabelliformis*) (EPBC Act: Vulnerable) was assessed as 'Possible' to be impacted by the Project through a likelihood of impacts assessment (see Att 2 EPBC Self-assessment, Section 3.2.2, p. 34).

Based on habitat types in the Project area, 13 fauna species (birds) were assessed as either 'Possible', 'Likely', or 'Certain' to be impacted by the by the Project through a likelihood of impacts assessment (see Att 2 EPBC Self-assessment, Section 3.2.3, p. 34):

- Slender-billed Thornbill (Gulf St Vincent) (*Acanthizairedalei rosinae*)(EPBC Act: Vulnerable)
- Sharp-tailed Sandpiper (*Calidris acuminata*) (EPBC Act: Vulnerable)
- Red Knot (*Calidris canutus*) (EPBC Act: Vulnerable)
- Curlew Sandpiper (*Calidris ferruginea*) (EPBC Act: Critically Endangered)
- Great Knot (*Calidris tenuirostris*) (EPBC Act: Vulnerable)
- Greater Sand Plover (*Charadrius leschenaultii*) (EPBC Act: Vulnerable)
- Lesser Sand Plover (*Charadrius mongolus*) (EPBC Act: Endangered)
- Black-tailed Godwit (*Limosa limosa*) (EPBC Act: Endangered)
- Eastern Curlew (*Numenius madagascariensis*) (EPBC Act: Critically Endangered)
- Grey Plover (*Pluvialis squatarola*) (EPBC Act: Vulnerable)
- Australian Fairy Tern (*Sternula nereis nereis*) (EPBC Act: Vulnerable)
- Common Greenshank (*Tringa nebularia*) (EPBC Act: Endangered)
- Terek Sandpiper (*Xenus cinereus*) (EPBC Act: Vulnerable)

Potential impacts

Flora species - Bead Glasswort

Direct

- Clearance and/or disturbance of up to 0.28 ha of vegetation in Bead Glasswort suitable habitat areas

Indirect

- Habitat degradation caused by erosion and sedimentation, altered hydrological regime, or introduction or spread of weeds
- Habitat degradation as a result of an incident during construction or operation that results in a loss of containment

Fauna species (birds)

Direct

- Reduction of up to 3.45 ha of low, moderate, and high-quality foraging, roosting, or sheltering habitat for Slender-billed Thornbill
- Reduction up to 12.77 ha of low, moderate, and high-quality foraging, roosting, or sheltering habitat for the remaining threatened bird species
- Direct mortality or injury of individuals due to vehicle strike
- Disturbance or disruption to foraging or roosting behaviour due to noise generation, light generation, and/or vibration

Indirect

- Habitat degradation caused by erosion and sedimentation, altered hydrological regime, or introduction or spread of weeds
- Habitat degradation as a result of an incident during construction or operation that results in a loss of containment

- Increased predation on birds due to reduced vegetation cover

Threatened ecological communities

Context

The Subtropical and Temperate Coastal Saltmarsh threatened ecological community (TEC) (EPBC Act: Vulnerable) occurs within the Project area in Mutton Cove Conservation Reserve, directly adjacent to Mutton Cove Conservation Reserve, and on Torrens Island. See Att 2 EPBC Self-assessment, Section 3.2.1, p. 31 for further details.

Potential impacts

Direct

- Clearance and/or disturbance of approximately 2.56 ha of vegetation within the Subtropical and Temperate Coastal Saltmarsh TEC

Indirect

- Habitat degradation caused by erosion and sedimentation, altered hydrological regime, or introduction or spread of weeds
- Habitat degradation as a result of an incident during construction or operation that results in a loss of containment

Nature, scale, and extent of potential impacts

The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation.

Following identification of all the potential impacts of the Project, an assessment of the severity of the impacts was completed following the guidance in DCCEEW (2013b). The assessment concluded that the severity of potential impacts is expected to be minor, short term, localised and of low intensity. See Att 1 ERIA Report, Section 7.2, p. 65 for details.

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. *

Overview

Significant impact assessments (SIAs) against the criteria in *Matters of National Environmental Significance: Significant Impact Guidelines 1.1* (DCCEE 2013a) are documented in Att 2 EPBC Self-assessment, Tables 16-18, pp. 91-102 for 13 listed threatened fauna species. Separately, an assessment of significance was completed for the Subtropical and Temperate Coastal Saltmarsh threatened ecological community (TEC), as an SIA was not required (see below summary).

The SIAs and the assessment of significance concluded that the Project is unlikely to have a significant impact on listed threatened species and ecological communities. The following sections provide a summary of the assessment results.

Threaten flora species summary (Bead Glasswort)

There is a subpopulation of Bead Glasswort on Torrens Island Conservation Park (DCCEE 2024d), however, there is low potential for the migration of colonies, as the western sabkha is backed by filled industrial land.

On Torrens Island, the Project is expected to impact 0.28 ha of suitable habitat for Bead Glasswort. On the assumption that known distribution is across 152.4 ha, the Project will directly impact 0.28 ha, or 0.18% of the known habitat available of the eastern shores of the Gulf St Vincent.

Targeted surveys for the species conducted January 2025 did not observe any Bead Glasswort in the Project area.

Based on this Succession Ecology assessment (Att 2 EPBC Self-assessment, Section 3.2.1, p. 31), the Project is unlikely significantly affect habitat critical to the survival of Bead Glasswort.

Threatened fauna species summary

The Project area is on the southern fringes of the 43,673 ha area of the Gulf St Vincent. This area is listed as internationally or nationally significant habitat area for some of the threatened bird species assessed.

The proposed Project is anticipated to directly impact up to 3.45 ha and 12.77 ha (conservative estimate) of suitable habitat for Slender-billed Thornbill and the remaining threatened bird species respectively. As this clearance is on the southern margin of the Gulf St Vincent habitat area (Weller et al. 2020), the clearance is not expected to fragment the populations of any species.

There is remaining state-protected suitable habitat near the Project area, including Mutton Cove, Torrens Island, and Bird Island. The area of impact is already in or adjacent to highly disturbed areas and is contained within a wider landscape that is dominated by industrial land uses.

Succession Ecology undertook targeted surveys for threatened species Slender-billed Thornbill (Gulf St Vincent (*Acanthiza iredalei rosinae*) (EPBC Act: Vulnerable) between 10 and 17 January 2025. No observations of the species were recorded during the targeted surveys.

Threatened ecological communities summary

The Subtropical and Temperate Coastal Saltmarsh TEC is listed as Vulnerable under the EPBC Act and is not considered to be a protected matter (Part 3, Division 1, Subdivision C, Section 18A, Item 4[b] of the EPBC Act). As such, a detailed assessment against the *Matters of National Environmental Significance: Significant Impact Guidelines 1.1* was not undertaken nor required.

Regardless of the above, the Subtropical and Temperate Coastal Saltmarsh TEC is still considered in this assessment, as threatened flora and fauna species are supported by it.

The Succession Ecology assessment has concluded that the Project is unlikely to have a significant impact on Subtropical and Temperate Coastal Saltmarsh TEC for the reasons described below (Att 2 EPBC Self-assessment, Section 3.2.1, pp. 31-32).

This Project is unlikely to be detrimental to the survival of the Subtropical and Temperate Coastal Saltmarsh TEC. It occurs in the coastal areas of six Australian states. In SA, there are extensive supratidal saltmarsh communities that occur above the reach of astronomical tides but are inundated by weather assisted tides (i.e., storm surges).

The Subtropical and Temperate Coastal Saltmarsh TEC occurs in large areas behind the open coastline of sheltered waters, including the Gulf St Vincent, where it is estimated that it covers approximately 12,700 ha (DCCEEW 2013c).

The Project requires the removal of up to 2.56 ha of the Subtropical and Temperate Coastal Saltmarsh TEC, representing 0.02% of its total area in the Gulf St Vincent. The 2.56 ha identified for removal occurs on the fringes of the saltmarsh community of the Port Adelaide and Osborne area.

Where the Subtropical and Temperate Coastal Saltmarsh TEC occurs in Mutton Cove, it is bordered by industrial infrastructure. Similarly on Torrens Island, the Subtropical and Temperate Coastal Saltmarsh TEC in the Project area is already isolated by a pre-existing raised gravel road. As such, the Project is unlikely to further fragment the Subtropical and Temperate Coastal Saltmarsh TEC or substantially reduce its quality or integrity.

The Project will directly modify the hydrology via removal of vegetation, establishment of a hardstand, and dewatering for construction. However, it will not directly or indirectly impact the remaining Subtropical and Temperate Coastal Saltmarsh TEC on Torrens Island.

In Mutton Cove Conservation Reserve, the Subtropical and Temperate Coastal Saltmarsh TEC extends into the northern area in varying capacity because of historical land uses, infrastructure (seawall, paths), and mangrove encroachment. Mitigation measures will be implemented to avoid tidal restriction or other changes to the hydrological regime during construction (see Att 1 EHIA Report, Table 26, p. 67 for mitigation measures).

Nature, scale, and extent of potential impacts

The SIAs considered the nature, scale, and duration of impacts as follows:

- The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation.
- These impacts are expected to be minor and manageable through standard environmental management measures.
- The scale of the impact is localised, with works confined to a linear corridor within an already modified landscape.
- The duration of the construction phase is approximately 18-24 months, after which the area will be rehabilitated in accordance with relevant environmental requirements.

An assessment of the severity of the impacts was completed following the guidance in DCCEEW (2013b). The assessment concluded that the severity of potential impacts is expected to be minor, short term, localised and of low intensity. See Att 1 EHIA Report, Section 7.2, p. 65 for details.

Overall, the action is not expected to result in significant or long-term environmental impacts to threatened species or ecological communities.

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 is not considered a controlled action in relation to listed threatened species and ecological communities for the following reasons:

- SIAs have been undertaken in accordance with *Matters of National Environmental Significance: Significant Impact Guidelines 1.1* (DCCEE 2013a) (see Att 2 EPBC Self-assessment, Tables 16-18, pp. 91-102) and determined that the proposed action is unlikely to have a significant impact on any listed threatened species.
- 'Species in the extinct and conservation dependant categories of species listed under the EPBC Act, and listed ecological communities in the vulnerable category of ecological communities listed under the EPBC Act, are not matters of national environmental significance (MNES) for the purposes of Part 3 of the EPBC Act (requirements for environmental approvals)' (DCCEE 2013a).
- Regardless of the above, the Subtropical and Temperate Coastal Saltmarsh TEC is still considered in this assessment as a listed MNES, as threatened flora and fauna species are supported by it. The assessment has concluded that:
 - This Project is unlikely to be detrimental to the survival of the Subtropical and Temperate Coastal Saltmarsh TEC. It requires the removal of up to 2.56 ha of the Subtropical and Temperate Coastal Saltmarsh TEC, representing 0.02% of its total area in the Gulf St Vincent
 - Targeted surveys for the species conducted January 2025 did not observe any Bead Glasswort in the Project area. Although the Project area contains 0.28 ha of suitable habitat for the species, this does not constitute habitat critical to the survival of the species and the Project is unlikely significantly affect habitat of Bead Glasswort.
 - Targeted surveys for threatened species Slender-billed Thornbill (Gulf St Vincent between 10 and 17 January 2025 did not observe the species. The proposed action will result in the clearing up to 3.45 ha and 12.77 ha (conservative estimate) of suitable habitat for Slender-billed Thornbill and the remaining threatened bird species respectively. The vegetation is within a heavily disturbed industrial landscape with low, moderate, and high-quality habitat for threatened species. Higher quality habitat occurs nearby and will remain unaffected, allowing for the continued movement and foraging of threatened species within the broader landscape.
 - The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation
 - Potential impacts are localised, minor in scale, and temporary, with construction activities to occur over an approximate period of 18-24 months.
 - Standard mitigation measures, including pre-clearing fauna surveys and management of potential impacts (e.g. noise generation, light generation, and/or vibration), will be implemented to further reduce the likelihood of impacts.

On this basis, the proposed action is not expected to have a significant impact on threatened species or ecological communities, and should not be considered a controlled action.

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. *

Overview

Details of the minimum management and mitigation measures are included in Att 1 EHIA Report, Table 26, pp. 67-68. These measures align with accepted practices for construction in South Australia. The Contractor will be required to prepare the Construction Environmental Management Plan in accordance with the South Australian South Australian Environment Protection Authority (EPA) Industry guideline (EPA 2024b).

Management and mitigation measures for threatened flora species and ecological communities

Standard construction environmental management, including preparation of a Project specific flora management plan (including threatened ecological communities). Preliminary mitigation measures for flora management include:

- Avoid restricting tidal influence within the Mutton Cove Conservation Reserve inlet during construction. The inlet must allow tides to continue to flow to into the Mutton Cove Conservation Reserve tidal creeks.
- Where practicable, design the Project to minimise impacts to VA2a Subtropical and Temperate Coastal Shrubland TEC
- If practicable, on Torrens Island impacts to the Subtropical and Temperate Coastal Shrubland TEC could be minimised by shifting the infrastructure to occur within VA7 Mangroves
- Project boundaries and 'no go' zones with significant vegetation or habitats will be fenced off
- Where practicable, revegetate disturbed areas with local provenance native species where remnant vegetation has been cleared
- Although Beaded Glasswort was not found within the Project area during the targeted surveys, if the species is observed at the time of construction:
 - Seed will be collected from the plants, cleaned, stored, and propagated for replanting outside of the Project disturbance footprint.
 - Any individuals in the impact area will be collected and relocated outside of the Project area. This will be undertaken by a suitability qualified ecologist with a Class A Permit Native Vegetation Collection, in consultation with the Department for Environment and Water
- Post construction rehabilitation management will involve the monitoring of rehabilitation success in comparison to the objectives outlined in construction environmental management plans (CEMPs) and maintenance of the rehabilitation processes to implement corrective actions, if required
- Re-spreading topsoil and vegetation over the ROW upon construction completion to encourage recolonisation of native plant species
- Disturbed areas should be appropriately stabilised as soon as possible following construction (this includes removal of control measures, such as sediment fences when they are no longer required)
- Implementation of mitigation measures listed under the erosion and sediment control, surface water, weeds and pathogen, and leaks or spills of chemicals sections in Att 1 EHIA Report, Table 27, p. 69

Management and mitigation measures for threatened fauna species

Standard construction environmental management, including preparation of a Project specific fauna management plan. Preliminary mitigation measures for threatened fauna species include:

- Prior to clearance of vegetation on Torrens Island and Mutton Cove within VA2a, a suitably qualified fauna catcher will ensure no Slender-billed Thornbill nests are present in low shrubs
- Begin clearance at the farthest point from contiguous habitat
- The Project will be designed to minimise clearance of vegetation
- Avoid or minimise impacts in VAs with high ecological value (i.e., VA2a Subtropical and Temperate Coastal Shrubland TEC and VA7 Grey Mangrove Woodland)
- Minimise impacts to any potential remaining VA2b vegetation in Falie Reserve
- Minimise disturbance to VA1 and VA2c

- Utilise long-reach cranes to avoid encroaching into Mutton Cove Conservation Reserve when decommissioning overhead electricity transmission line towers
- Where practicable, crane access areas for decommissioning the overhead electricity transmission line towers will be established on disturbed areas (e.g., access tracks, roads, cleared areas, etc.)
- Project boundaries and 'no go' zones with significant vegetation or habitats will be fenced off
- Where practicable, revegetate disturbed areas with local provenance native species where remnant vegetation has been cleared
- Avoid stormwater, wastewater, nutrient, or pathogen export outside of the Project area
- Implementation of mitigation measures listed under the erosion and sediment control, surface water, weeds and pathogen, and leaks or spills of chemicals sections of Att 1 EHIA Report, Table 27, p. 69
- An ecologist will conduct a pre-clearance survey of the ROW, Subtropical and Temperate Coastal Saltmarsh TEC, mixed native plantings and any other areas of disturbance
- Where practicable, minimise the intensity of light used for of the Project
- Shorebirds are sensitive to short-wavelength (blue/violet) and ultraviolet lights, so where practicable long-wavelength (red) lights should be used
- Where the design allows, use suitable commercial lighting to minimise impacts to shorebirds (DCCEEW 2023):
 - Light types suitable for use near migratory shorebird habitat include low-pressure sodium vapour, high-pressure sodium vapour, filtered light emitting diode (LED), filtered metal halide, and filtered white LED
 - Light types not suitable for use near migratory shorebird habitat include white LED, metal halide, white fluorescent, halogen, and mercury vapour
- Where practicable, undertake loud construction activities outside of migratory bird season (October to March) in areas of sensitive coastal habitats such as VA1, VA2a, and VA7 within or adjacent to the Project area
- All employees and contractors will be made aware of the fauna within the Project area as part the site induction (particularly the sensitivities within Mutton Cove Conservation Reserve, Torrens Island, and adjacent to the Port River), and their obligations in ensuring disturbance is kept within the Project area

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

No offsets have been identified as being required.

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
Yes	Yes	<i>Actitis hypoleucos</i>	Common Sandpiper
No	No	<i>Apus pacificus</i>	Fork-tailed Swift
No	No	<i>Ardenna carneipes</i>	Flesh-footed Shearwater, Fleshy-footed Shearwater
No	No	<i>Ardenna grisea</i>	Sooty Shearwater
No	No	<i>Arenaria interpres</i>	Ruddy Turnstone
No	No	<i>Balaenoptera edeni</i>	Bryde's Whale
Yes	Yes	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris alba</i>	Sanderling
Yes	Yes	<i>Calidris canutus</i>	Red Knot, Knot
Yes	Yes	<i>Calidris ferruginea</i>	Curlew Sandpiper
Yes	Yes	<i>Calidris melanotos</i>	Pectoral Sandpiper
Yes	Yes	<i>Calidris pugnax</i>	Ruff
Yes	Yes	<i>Calidris ruficollis</i>	Red-necked Stint
Yes	Yes	<i>Calidris subminuta</i>	Long-toed Stint
Yes	Yes	<i>Calidris tenuirostris</i>	Great Knot
No	No	<i>Caperea marginata</i>	Pygmy Right Whale
No	No	<i>Carcharias taurus</i>	Grey Nurse Shark
No	No	<i>Carcharodon carcharias</i>	White Shark, Great White Shark
No	No	<i>Caretta caretta</i>	Loggerhead Turtle
Yes	Yes	<i>Charadrius bicinctus</i>	Double-banded Plover
Yes	Yes	<i>Charadrius leschenaultii</i>	Greater Sand Plover, Large Sand Plover
Yes	Yes	<i>Charadrius mongolus</i>	Lesser Sand Plover, Mongolian Plover

Direct impact	Indirect impact	Species	Common name
No	No	<i>Charadrius veredus</i>	Oriental Plover, Oriental Dotterel
No	No	<i>Chelonia mydas</i>	Green Turtle
No	No	<i>Dermochelys coriacea</i>	Leatherback Turtle, Leathery Turtle, Luth
No	No	<i>Diomedea antipodensis</i>	Antipodean Albatross
No	No	<i>Diomedea epomophora</i>	Southern Royal Albatross
No	No	<i>Diomedea exulans</i>	Wandering Albatross
No	No	<i>Eubalaena australis</i>	Southern Right Whale
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
No	No	<i>Gallinago megala</i>	Swinhoe's Snipe
No	No	<i>Gallinago stenura</i>	Pin-tailed Snipe
No	No	<i>Hirundapus caudacutus</i>	White-throated Needletail
No	No	<i>Lagenorhynchus obscurus</i>	Dusky Dolphin
No	No	<i>Lamna nasus</i>	Porbeagle, Mackerel Shark
No	No	<i>Limicola falcinellus</i>	Broad-billed Sandpiper
No	No	<i>Limosa lapponica</i>	Bar-tailed Godwit
Yes	Yes	<i>Limosa limosa</i>	Black-tailed Godwit
No	No	<i>Macronectes giganteus</i>	Southern Giant-Petrel, Southern Giant Petrel
No	No	<i>Macronectes halli</i>	Northern Giant Petrel
No	No	<i>Megaptera novaeangliae</i>	Humpback Whale
No	No	<i>Motacilla cinerea</i>	Grey Wagtail
No	No	<i>Motacilla flava</i>	Yellow Wagtail
Yes	Yes	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew
No	No	<i>Numenius minutus</i>	Little Curlew, Little Whimbrel
Yes	Yes	<i>Numenius phaeopus</i>	Whimbrel
Yes	Yes	<i>Phalaropus lobatus</i>	Red-necked Phalarope
No	No	<i>Phoebetria fusca</i>	Sooty Albatross

Direct impact	Indirect impact	Species	Common name
Yes	Yes	<i>Pluvialis fulva</i>	Pacific Golden Plover
Yes	Yes	<i>Pluvialis squatarola</i>	Grey Plover
No	No	<i>Sternula albifrons</i>	Little Tern
No	No	<i>Thalassarche carteri</i>	Indian Yellow-nosed Albatross
No	No	<i>Thalassarche cauta</i>	Shy Albatross
No	No	<i>Thalassarche impavida</i>	Campbell Albatross, Campbell Black-browed Albatross
No	No	<i>Thalassarche melanophris</i>	Black-browed Albatross
No	No	<i>Thalassarche steadi</i>	White-capped Albatross
Yes	Yes	<i>Thalasseus bergii</i>	Greater Crested Tern
Yes	Yes	<i>Tringa brevipes</i>	Grey-tailed Tattler
No	No	<i>Tringa glareola</i>	Wood Sandpiper
Yes	Yes	<i>Tringa nebularia</i>	Common Greenshank, Greenshank
Yes	Yes	<i>Tringa stagnatilis</i>	Marsh Sandpiper, Little Greenshank
Yes	Yes	<i>Tringa totanus</i>	Common Redshank, Redshank
Yes	Yes	<i>Xenus cinereus</i>	Terek Sandpiper

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

Yes

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

Context

Based on habitat types in the Project area, 13 migratory bird species listed below were assessed as either 'Possible' or 'Certain' to be impacted by the Project through a likelihood of impacts assessment (see Att 2 EPBC Self-assessment, Table 7, pp. 41-45). In addition to the 13 migratory bird species below, Section 4.1.5 of this form includes threatened species that are also listed migratory species. For clarity, threatened and migratory listed species have not been included in the below list, but are considered in this referral (see Section 4.1.4 of this referral form).

- Common Sandpiper (*Actitis hypoleucos*) (EPBC Act: Migratory [wetlands], Listed Marine)
- Pectoral Sandpiper (*Calidris melanotos*) (EPBC Act: Migratory [wetlands], Listed Marine - overfly)
- Ruff (*Calidris pugnax*) (EPBC Act: Migratory [wetlands], Listed Marine - overfly)
- Red-necked Stint (*Calidris ruficollis*) (EPBC Act: Migratory [wetlands], Listed Marine - overfly)
- Long-toed Stint (*Calidris subminuta*) (EPBC Act: Migratory [wetlands], Listed Marine - overfly)
- Double-banded Plover (*Charadrius bicinctus*) (EPBC Act: Migratory [wetlands], Listed Marine - overfly)
- Whimbrel (*Numenius phaeopus*) (EPBC Act: Migratory [wetlands], Listed Marine)
- Red-necked Phalarope (*Phalaropus lobatus*) (EPBC Act: Migratory [wetlands], Listed Marine)
- Pacific Golden Plover (*Pluvialis fulva*) (EPBC Act: Migratory [wetlands], Listed Marine)
- Greater Crested Tern (*Thalasseus bergii*) (EPBC Act: Migratory [wetlands], Listed Marine)
- Grey-tailed Tattler (*Tringa brevipes*) (EPBC Act: Migratory [wetlands], Listed Marine)
- Marsh Sandpiper (*Tringa stagnatilis*) (EPBC Act: Migratory [wetlands], Listed Marine - overfly)
- Common Redshank (*Tringa totanus*) (EPBC Act: Migratory [wetlands], Listed Marine - overfly)

Potential impacts

Direct

- Reduction of up to 12.77 ha of low, moderate, and high-quality foraging, roosting, or sheltering habitat
- Direct mortality or injury of individuals due to vehicle strike
- Disturbance or disruption to foraging or roosting behaviour due to noise generation, light generation, and/or vibration

Indirect

- Habitat degradation caused by erosion and sedimentation, altered hydrological regime, or introduction or spread of weeds
- Habitat degradation as a result of an incident during construction or operation that results in a loss of containment

Nature, scale, and extent of potential impacts

The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation.

Following identification of all the potential impacts of the Project, an assessment of the severity of the impacts was completed following the guidance in DCCEEW (2013b). The assessment concluded that the severity of potential impacts is expected to be minor, short term, localised and of low intensity. See Att 1 EHIA Report, Section 7.2, p. 65 for details.

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

*

No

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

Overview

Significant impact assessments (SIAs) against the criteria in *Matters of National Environmental Significance: Significant Impact Guidelines 1.1* (DCCEEW 2013a) are documented in Att 2 EPBC Self-assessment, Table 19, pp. 103-106 for listed migratory species.

The SIAs for migratory species also utilised EPBC Act Policy Statement 3.21 - *Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species* (DCCEEW 2017).

The SIAs concluded that the Project is unlikely to have a significant impact on listed migratory species. The following sections provides a summary of the assessment results.

Listed migratory species

The Project area is on the southern fringes of the 43,673 ha area of the Gulf St Vincent. This area is listed as internationally or nationally significant habitat area for some of the migratory species assessed.

The proposed Project is anticipated to directly impact up to 12.77 ha (conservative estimate) of suitable habitat for migratory bird species. As this clearance is on the southern margin of the Gulf St Vincent habitat area (Weller et al. 2020), the clearance is not expected to fragment the populations of any species.

There is remaining state-protected suitable habitat near the Project area, including Mutton Cove, Torrens Island, and Bird Island. The area of impact is already in or adjacent to highly disturbed areas and is contained within a wider landscape that is dominated by industrial land uses.

Nature, scale, and extent of potential impacts

The SIAs considered the nature, scale, and duration of impacts as follows:

- The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation.
- These impacts are expected to be minor and manageable through standard environmental management measures.
- The scale of the impact is localised, with works confined to a linear corridor within an already modified landscape.
- The duration of the construction phase is approximately 18-24 months, after which the area will be rehabilitated in accordance with relevant environmental requirements.

An assessment of the severity of the impacts was completed following the guidance in DCCEEW (2013b). The assessment concluded that the severity of potential impacts is expected to be minor, short term, localised and of low intensity. See Att 1 EHIA Report, Section 7.2, p. 65 for details.

Overall, the action is not expected to result in significant or long-term environmental impacts to migratory species.

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

No

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

*

The proposed action is not considered a controlled action in relation to listed migratory species for the following reasons:

- SIAs have been undertaken in accordance with *Matters of National Environmental Significance: Significant Impact Guidelines 1.1* (DCCEE 2013a) (see Att 2 EPBC Self-assessment, Table 19, pp. 103-106) and determined that the proposed action is unlikely to have a significant impact on any listed migratory species.
- The proposed action will result in the clearing of up to 12.77 ha of vegetation (conservative estimate) within a heavily disturbed industrial landscape with low, moderate, and high-quality habitat for migratory species.
- Higher quality habitat occurs nearby and will remain unaffected, allowing for the continued movement and foraging of migratory species within the broader landscape.
- The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation
- Potential impacts are localised, minor in scale, and temporary, with construction activities to occur over an approximate period of 18-24 months.
- Standard mitigation measures, including pre-clearing fauna surveys and management of potential impacts (e.g. noise generation, light generation, and/or vibration), will be implemented to further reduce the likelihood of impacts.

On this basis, the proposed action is not expected to have a significant impact on listed migratory and should not be considered a controlled action.

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

Overview

Details of the minimum management and mitigation measures are included in Att 1 EHIA Report, Table 26, p. 67. These measures align with accepted practices for construction in South Australia. The Contractor will be required to prepare the Construction Environmental Management Plan in accordance with the South Australian Environment Protection Authority (EPA) Industry guideline (EPA 2024b).

Management and mitigation measures for listed migratory species

Standard construction environmental management, including preparation of a Project specific fauna management plan. Preliminary mitigation measures for threatened fauna species include:

- Begin clearance at the farthest point from contiguous habitat to allow fauna to relocate toward undisturbed habitats
- The Project will be designed to minimise clearance of vegetation to a minimum
- Avoid or minimise impacts in VAs with high ecological value (i.e., VA2a Subtropical and Temperate Coastal Shrubland TEC and VA7 Grey Mangrove Woodland)
- Minimise impacts to any potential remaining VA2b vegetation in Falie Reserve
- Minimise disturbance to VA1 and VA2c
- Utilise long-reach cranes to avoid encroaching into Mutton Cove Conservation Reserve when decommissioning overhead electricity transmission line towers
- Where practicable, crane access areas for decommissioning the overhead electricity transmission line towers will be established on disturbed areas (e.g., access tracks, roads, cleared areas, etc.)
- Project boundaries and 'no go' zones with significant vegetation or habitats will be fenced off
- Where practicable, revegetate disturbed areas with local provenance native species where remnant vegetation has been cleared
- Avoid stormwater, wastewater, nutrient, or pathogen export outside of the Project area
- Implementation of mitigation measures listed under the erosion and sediment control, surface water, weeds and pathogen, and leaks or spills of chemicals sections of Att 1 EHIA Report, Table 27, p. 69
- An ecologist will conduct a pre-clearance survey of the ROW, Subtropical and Temperate Coastal Saltmarsh TEC, mixed native plantings and any other areas of disturbance
- Where practicable, minimise the intensity of light used for of the Project
- Shorebirds are sensitive to short-wavelength (blue/violet) and ultraviolet lights, so where practicable long-wavelength (red) lights should be used
- Where the design allows, use suitable commercial lighting to minimise impacts to shorebirds (DCCEEW 2023):
 - Light types suitable for use near migratory shorebird habitat include low-pressure sodium vapour, high-pressure sodium vapour, filtered light emitting diode (LED), filtered metal halide, and filtered white LED
 - Light types not suitable for use near migratory shorebird habitat include white LED, metal halide, white fluorescent, halogen, and mercury vapour
- Where practicable, undertake loud construction activities outside of migratory bird season (October to March) in areas of sensitive coastal habitats such as VA1, VA2a, and VA7 within or adjacent to the Project area
- All employees and contractors will be made aware of the fauna within the Project area as part the site induction (particularly the sensitivities within Mutton Cove Conservation Reserve, Torrens Island, and adjacent to the Port River), and their obligations in ensuring disturbance is kept within the Project area

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

No offsets have been identified as being required.

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 the relocation of utilities. It does not involve 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 nearest Commonwealth marine area is the 'Exclusive Economic Zone and Territorial Sea', which is located approximately 100 km south of the Project area. The Project would not have a direct or indirect impact on the 'Exclusive Economic Zone and Territorial Sea'. As the Project would not directly or indirectly impact the 'Exclusive Economic Zone and Territorial Sea', there would be no significant impact upon 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 Great Barrier Reef Marine Park is located 1,700 km northeast of the Project area in QLD. The Project area is not located within the Great Barrier Reef Marine Park, and the Project would not have a direct or indirect impact on the Great Barrier Reef Marine Park. As the Project would not directly or indirectly impact the Great Barrier Reef Marine Park, no significant impact is anticipated.

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 the relocation of utilities.

The Project does not involve a coal seam gas development or large coal mining development. There would be no direct or indirect impact as a result of the Project that is related to this MNES.

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	Commonwealth Land - Australian National Railways Commission

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. *

Context

The proposed action involves the installation of gas pipelines beneath the Australian National Railways Commission railway, which is Commonwealth land. Up to two trenchless crossings beneath the railway are required for installation of gas pipelines.

Potential impacts

Direct

- Ground disturbance within Commonwealth land from pipeline installation activities (e.g., entry/exit pits for trenchless drilling)
- Temporary access requirements for laydown and staging areas
- Interruption to existing land use

Indirect

- Soil compaction or erosion
- Contamination from spills or leaks
- Noise, dust, and vibration

MNES and whole of the environment considerations

The rail corridor is an existing disturbed area that contains track ballast (rocks), sleepers, and rail tracks. Freight trains frequently pass through the corridor to and from the container terminal and logistics facilities to the north of the Project area.

The rail corridor does not contain habitat for listed threatened species or ecological communities, or listed migratory species and no other matter of national environmental significance (MNES) are relevant to the rail corridor. The Project would be unlikely to have a direct or indirect impact on an MNES within the rail corridor.

In terms of whole of the environment matters, direct and indirect impacts mainly relate to ground disturbance as discussed above (e.g., landscape and soils) (see Att 1 EHIA Report, Section 10.1, p. 94 for details). Additionally, other SIAs were completed that considered whole of environment matters (see Att 1 EHIA Report, Section 10.0, pp. 93- 120 for details).

Nature, scale, and extent of potential impacts

The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation.

Following identification of all the potential impacts of the Project, an assessment of the severity of the impacts was completed following the guidance in DCCEEW (2013b). The assessment concluded that the severity of potential impacts is expected to be minor, short term, localised and of low intensity. See Att 1 EHIA Report, Section 7.2, p. 65 for details.

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. *

Overview

SIAs against the criteria in *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies: Significant Impact Guidelines 1.2* (DCCEEW 2013b) are documented in Att 1 EHIA Report, Section 10.0, pp. 93-120.

The SIAs concluded that the Project is unlikely to have a significant impact on the environment on Commonwealth land. The following sections provide a summary of the assessment results.

Environment on Commonwealth land summary

The gas pipelines will be installed beneath the Australian National Railways Commission railway using trenchless construction methods, which significantly reduces surface disturbance and environmental risk. All works will be undertaken in accordance with relevant Australian Standards to ensure protection of the rail infrastructure and surrounding environment.

No MNES are present on or directly adjacent to the affected section of Commonwealth land (see Att 1 EHIA Report, Section 5.0, pp. 30-32). No permanent changes to land use, infrastructure function, or environmental values are anticipated.

Nature, scale, and extent of potential impacts

While minor, short-term construction impacts such as ground disturbance, noise, vibration, and dust may occur, these are:

- Localised to a small section of the rail corridor within an already modified landscape
- Temporary, limited to the construction phase
- Well understood and manageable through standard construction and environmental management measures (see Att 1 EHIA Report, Table 27, p. 69)

An assessment of the severity of the impacts was completed following the guidance in DCCEEW (2013b). The assessment concluded that the severity of potential impacts is expected to be minor, short term, localised and of low intensity. See Att 1 EHIA Report, Section 7.2, p. 65 for details.

For these reasons, the proposed action is not expected to have a significant impact on the environment of Commonwealth land.

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. *

The proposed action is not considered a controlled action under the EPBC Act in relation to Commonwealth land, as it is not likely to have a significant impact on the environment of that land. This conclusion is based on the following:

- SIAs have been undertaken in accordance with *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies: Significant Impact Guidelines 1.2* (DCCEEW 2013b) (see Att 1 EHIA Report, Section 10.0, pp. 93-120) and determined that the proposed action is unlikely to have a significant impact on the environment of Commonwealth land.
- Potential environmental impacts—including minor, localised ground disturbance, noise, and vibration—will be temporary and limited to the construction phase.
- The action involves the installation of gas pipelines beneath the Australian National Railways Commission railway, which is Commonwealth land. The works will be conducted using trenchless construction methods and will comply with relevant Australian Standards to minimise ground disturbance and avoid impacts to rail infrastructure.
- While minor, short-term construction impacts such as ground disturbance, noise, vibration, and dust may occur, these are:
 - Localised to a small section of the rail corridor within an already modified landscape
 - Temporary, limited to the construction phase
 - Well understood and manageable through standard construction and environmental management measures (see Att 1 EHIA Report, Table 27, p. 69)
- There are no MNES present on the affected Commonwealth land, and no permanent impacts to the railway corridor are expected.
- The action will be managed under a CEMP, which includes mitigation measures to address dust, erosion, spill prevention, and vibration (see Att 1 EHIA Report, Table 27, p. 69).

Based on the nature (minor), scale (localised), and duration (temporary) of the potential impacts—and the implementation of standard mitigation measures—the action is not expected to result in a significant impact on the environment of Commonwealth land, and therefore should not be considered a controlled action.

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. *

Details of the minimum management and mitigation measures are included in Att 1 EHIA Report, Table 27, p. 69. These measures align with accepted practices for construction in South Australia. The Contractor will be required to prepare CEMPs in accordance with the South Australian Environment Protection Authority (EPA) Industry guideline (EPA 2024b).

Standard construction environmental management and mitigation measures, include the preparation of Project specific:

- Soil erosion drainage management plan
- Surface water and groundwater management plans
- Contamination management plan
- Acid sulfate soils management plan
- Spill prevention and response management

See Att 1 EHIA Report, Table 27, p. 69 for detailed management and mitigation measures to be implemented.

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

No offsets have been identified as being required.

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 is located in South Australia and does not impact 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. *

Overview

A self-assessment to decide whether the Project is likely to, or would have, a significant impact has been undertaken in accordance with the *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies: Significant impact guidelines 1.2 (Commonwealth of Australia 2013b)*. Detailed significant impact assessments (SIAs) for whole of environment matters are provided in Att 1 EHIA Report, Section 10.0, pp. 93-120.

Existing conditions for whole of the environment values are provided in Att 1 EHIA Report, Section 5.2, pp. 33-54.

Based on the existing conditions and SIA results, it is not likely that the Project would result in a significant impact to whole of the environment matters.

Nature, scale, and extent of potential impacts

The nature of the potential impacts is primarily associated with temporary construction activities, including vegetation clearing, earthworks, and infrastructure installation.

Following identification of all the potential impacts of the Project, an assessment of the severity of the impacts was completed following the guidance in DCCEEW (2013b). The assessment concluded that the severity of potential impacts is expected to be minor, short term, localised and of low intensity. See Att 1 EHIA Report, Section 7.2, p. 65 for details.

Whole of the environment – potential impacts

Landscapes and soils

Only direct impacts have been identified for landscapes and soils and include:

- Erosion from excavations
- Landscape changes from bulk earthworks
- Compaction of soils
- Bulk earthworks have potential to disturb acid sulfate soils
- Potential spills from construction machinery

Coastal landscapes

As parts of the Project area occur along the Port River, there is potential for direct impacts to coastal landscapes:

Direct

- Clearance and/or disturbance of saltmarsh and mangrove vegetation
- Habitat degradation caused by erosion and sedimentation, altered hydrological regime, or introduction or spread of weeds
- Habitat degradation as a result of an incident during construction or operation that results in a loss of containment

Ocean forms, ocean processes, and ocean life

There are no direct impacts to ocean forms or ocean processes as the Project area occurs within the terrestrial environment and below the Port River. However, the Port River is a marine environment due to tidal reach. As such, there is potential for direct and indirect impacts to ocean life:

Direct

- Marine habitat degradation caused by an incident during construction that results in a loss of containment

Indirect

- Disturbance or disruption of fauna behaviour due to noise generation and/or vibration

Water resources

Direct and indirect impacts have been identified for water resources and include:

Direct

- Changes in runoff from increased hard surfaces
- Changes to water flows following earthworks
- Leaks or spills (including a release of drilling mud, hydrotest water, etc.) to water resulting in contamination
- Reduction in groundwater quality as a result of acid generation of spoil material

Indirect

- Temporary decrease in water quality from dust generated in construction
- Mobilisation of sediment due to ground disturbance

Pollutants, chemicals and toxic substances

Direct and indirect impacts have been identified for pollutants, chemicals, and toxic substances and include:

Direct

- Contamination of soil or water where an incident occurs (including HDD induced hydraulic fracture and hydrotest water release)
- Mobilisation of contaminants or hazardous waste impacting soil or water
- Oxidisation of acid sulfate soils from bulk earthworks
- Harm to human health
- Nuisance to local businesses (e.g., odour, visual impacts, traffic disruptions)
- Exposure of acid sulfate soil

Indirect

- Destruction of habitat due to pollution from a spill
- Injury or mortality to fauna due to a spill

Plants

Direct and indirect impacts have been identified for plants and include:

Direct

- Clearance and/or disturbance of approximately 2.56 ha of vegetation within the Subtropical and Temperate Coastal Saltmarsh TEC
- Clearance and/or disturbance of up to 0.28 ha of vegetation in Bead Glasswort suitable habitat areas
- Clearance and/or disturbance of remnant vegetation

Indirect

- Habitat degradation caused by erosion and sedimentation, altered hydrological regime, or introduction or spread of weeds
- Habitat degradation as a result of an incident during construction or operation that results in a loss of containment

Animals

Direct and indirect impacts have been identified for animals and include:

Direct

- Removal and disturbance of fauna habitat
- Direct mortality and/or injury of the species due to vehicle strike and/or equipment movement
- Disturbance or disruption to foraging or roosting behaviour due to noise generation, light generation, and/or vibration

Indirect

- Habitat degradation caused by erosion and sedimentation, altered hydrological regime, or introduction or spread of weeds
- Habitat degradation as a result of an incident during construction or operation that results in a loss of containment

People and Communities

Only potential direct impacts have been identified for people and communities and include:

Direct

- Disturbance due to increased noise, dust, and vibration generated during construction
- Disturbance due to mobilisation of odour or gross pollutants during construction
- Increased traffic impacts to local residents
- Loss or damage to property or infrastructure and potentially residences from accidental fire

Heritage (Aboriginal and historic)

There are no known Aboriginal or historic heritage sites recorded within the Project area. However, there remains potential for direct and indirect impacts:

Direct

- Disturbance of unidentified Indigenous heritage values

Indirect

- Interaction with intangible Indigenous values

The Lefevre Peninsula has intangible heritage values for the Kurna People. However, it is not likely the Project would result in an indirect impact on Aboriginal heritage, as the landscape has previously been disturbed, and development of the Project is consistent with existing surrounding uses.

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. *

The consequences of not proceeding

As discussed in Att 1 EHIA Report, Section 1.2, p. 1, this Project is one aspect of a staged development required to enable building Australia's first conventionally-armed nuclear-powered submarines by the early 2040s. Specifically, utilities need to be relocated to allow vacant land on the Lefevre Peninsula to be functional for industrial purposes (including for its planned use as a SCY).

The Australian Submarine Agency undertook a comprehensive analysis of potential locations to inform a government decision on a suitable site for the SCY. The vacant land that the utilities are being relocated from was selected as the preferred site for the SCY (GHD 2024a).

The SCY is critical to Australia's long-term Defence strategy. Not developing a modern future submarine capability could impact upon national security.

If the SCY were not developed for the purposes of construction of Australia's conventionally-armed nuclear-powered submarines, it is most likely that it would be utilised for another industrial development related to ship building or Department of Defence.

Feasible alternatives

No feasible alternatives have been identified for the Project.

Epic Energy and ANI have completed several pipeline route studies of options that avoided works within Mutton Cove Conservation Reserve. However, these options were assessed as having unacceptable risks relating to environment, heritage, construction, technical feasibility, and other aspects. Specifically, the alternate gas pipeline routes would result in a high level of disturbance within Torrens Island Conservation Park and surrounding areas.

Preferred options that were considered feasible are described in Att 1 EHIA Report, Section 2.6, p. 14.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	02/05/2025		High

1.2.5 Information about the staged development

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Link	Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/sites/default/files/do..			High
#3.	Link	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/sites/default/files/do..			High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Link	Australian Naval Infrastructure https://www.ani.com.au/osborne- naval-shipyard/			High
#2.	Link	Reconciliation Action Plan https://www.ani.com.au/rap/			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				

Environmental Policy.pdf
ANI Environmental Policy

01/10/2023 No

High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Link	Coastal Landscapes of South Australia https://www.jstor.org/stable/10.20851/j.ctt1sq5w..			High
#3.	Link	Geoscience Australia Portal https://portal.ga.gov.au/			High
#4.	Link	Lefevre Peninsula Stormwater Management Plan https://www.cityofpae.sa.gov.au/__data/assets/pd..			High
#5.	Link	Northern Lefevre Open Space https://renewalsa.sa.gov.au/projects/northern-le..			High
#6.	Link	St Vincent Gulf https://cdn.environment.sa.gov.au/landscape/docs..			High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High

3.1.3 Natural features, important or unique values that applies to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Link	Directory of Important Wetlands in Australia https://www.dcceew.gov.au/water/wetlands/austral..			High
#3.	Link				

Torrens Island Conservation Park
<https://www.parks.sa.gov.au/parks/torrens-island..>

High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Document	Att 2 EPBC Self-assessment.pdf Ecology assessment	09/04/2025	No	High
#3.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..			High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Document	Att 2 EPBC Self-assessment.pdf Ecology assessment	08/04/2025		High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Link	Directory of Important Wetlands in Australia https://www.dcceew.gov.au/water/wetlands/austral..			High
#3.	Link	Lefevre Peninsula Stormwater Management Plan https://www.cityofpae.sa.gov.au/__data/assets/pd..			High
#4.	Link	WaterConnect Groundwater Data https://www.waterconnect.sa.gov.au/Systems/GD/Pa..			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 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Document	Att 2 EPBC Self-assessment.pdf Ecology assessment	08/04/2025		High
#3.	Link	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/environment/epbc/publi..			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 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Document	Att 2 EPBC Self-assessment.pdf Ecology assessment	08/04/2025		High
#3.	Link	Conservation Advice for Subtropical and Temperate Coastal Saltmarsh https://www.environment.gov.au/biodiversity/thre..			High
#4.	Link	Conservation Advice for Tecticornia flabelliformis (bead glasswort) https://www.environment.gov.au/biodiversity/thre..			High
#5.	Link	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 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 2 EPBC Self-assessment.pdf Ecology assessment	08/04/2025		High
#2.	Link				

Significant Impact Guidelines 1.1 -
Matters of National Environmental
Significance

High

<https://www.dcceew.gov.au/environment/epbc/publi..>

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 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Link	Construction Environmental Management Plan https://www.epa.sa.gov.au/files/12330_guide_cemp..			High
#3.	Link	National Light Pollution Guidelines for Wildlife https://www.dcceew.gov.au/sites/default/files/do..			High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Document	Att 2 EPBC Self-assessment.pdf Ecology assessment	08/04/2025		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	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/environment/epbc/publi..			High

4.1.5.6 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Document				

Att 2 EPBC Self-assessment.pdf Ecology assessment	08/04/2025	High
#3. Link	EPBC Act Policy Statement 3.21 https://www.dcceew.gov.au/environment/epbc/publi..	High
#4. Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..	High
#5. Link	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/environment/epbc/publi..	High

4.1.5.9 (Migratory Species) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 2 EPBC Self-assessment.pdf Ecology assessment	08/04/2025		High
#2.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publi..			High

4.1.5.10 (Migratory Species) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Link	Construction Environmental Management Plan https://www.epa.sa.gov.au/files/12330_guide_cemp..			High
#3.	Link	National Light Pollution Guidelines for Wildlife https://www.dcceew.gov.au/sites/default/files/do..			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

#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025	High
#2.	Link	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/environment/epbc/publi..		High

4.1.10.6 (Commonwealth Land) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity Confidence
#1.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025	High
#2.	Link	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/environment/epbc/publi..		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.	Document	Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025	High
#2.	Link	Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 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 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025	High
#2.	Link	Construction Environmental Management Plan https://www.epa.sa.gov.au/files/12330_guide_cemp..		High

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

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Type	Name	Date	Sensitivity	Confidence
#1.	Document Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		High
#2.	Link Significant Impact Guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999 https://www.dcceew.gov.au/environment/epbc/publi..			High

4.3.8 Why alternatives for your proposed action were not possible

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att 1 EHIA Report.pdf Environment and heritage impact assessment	01/05/2025		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	Liam Seed
Representative's job title	Principal Environmental Scientist
Phone	0483149499
Email	liam.seed@aecom.com
Address	Level 18, 91 King William Street, Adelaide SA 5000

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, **Liam Seed 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	45051762639
Organisation name	AUSTRALIAN NAVAL INFRASTRUCTURE PTY LTD
Organisation address	5017 SA
Representative's name	John Mortimer

Representative's job title Director Major Projects
Phone 0419868880
Email john.mortimer@ani.com.au
Address 61 Veitch Road, Osborne, SA 5017

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, **John Mortimer of AUSTRALIAN NAVAL INFRASTRUCTURE PTY LTD**, 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, **John Mortimer of AUSTRALIAN NAVAL INFRASTRUCTURE PTY LTD**, the Person proposing the action, consent to the designation of **Arna Ward of Australian Submarine Agency** 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. *

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.

ABN/ACN 67250046148
Organisation name Australian Submarine Agency
Organisation address 2609 ACT
Representative's name Arna Ward
Representative's job title a/Director Infrastructure
Phone (08)81150072

Email asa.osborne.enquiries@defence.gov.au

Address 25 Catalina Drive, Majura Park 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. *

- I, **Arna Ward of Australian Submarine Agency**, 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. *