

24ADL-0123
29 NOVEMBER 2024

Land Tenure, Protected Areas and Land Use

Submarine Construction Yard Environmental
Impact Statement

AUSTRALIAN NAVAL INFRASTRUCTURE



Land Tenure, Protected Areas and Land Use

29 November 2024

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Prepared for ANI

URPS Ref 24ADL-0123

We acknowledge the Kaurna People as the Traditional Custodians of the land on which we work and pay respect to their Elders past, present and emerging.

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1. Purpose of report

This report has been prepared concurrent to the Environment Impact Assessed Development Application for the nuclear-powered Submarine Construction Yard (SCY). The SCY development features a range of facilities and associated infrastructure.

This report responds to the Land Use and Site Conditions (LUSC1) assessment requirements. It considers:

- the existing land uses, land tenures and protected areas at, overlapping or adjoining the development site.
- details of site services and infrastructure including utility services, location of ground and roof plant and equipment.
- the high-level energy demand profile (including gas and electricity) for the construction and operational phases of the development. It notes current network capacity and the need for back-up power supplies for the facility.
- existing and potential native title rights, claims and interests which may be impacted by the development.
- the local impacts to adjoining land uses identified in the scoping application, privacy and enjoyment, conduct of regular or seasonal activities and describes any measures to mitigate these impacts.
- where relevant, the potential impacts of the development for Crown land (including the Port River) and Native Vegetation Heritage Agreements and any other relevant land tenures (including leases and licences).
- potential impacts of the development on areas protected under legislation or Special Legislative Schemes

The assessment is supplemented by the series of technical investigations provided within the appendices of the EIS.

A further desktop analysis has been undertaken where necessary to support the findings of these investigations and to develop an understanding of the key implications of the proposed land use change.

2. Proposed development

- *Provide details of the development (activities or structures) with the potential to impact on existing land uses, land tenures and protected areas that overlap, adjoin or are in the region of the development.*

The proposal seeks to enable the construction and operation of the SCY.

The Government Gazette Notice that declares the SCY as an Impact Assessed Development describes the scope of the development as follows:

Development for the purposes of establishing and operating a nuclear-powered Submarine Construction Yard at Osborne (being on the land and coastal waters specified in Table 1 and Figure 1), including:

- (a) development associated with the construction and operation of a submarine construction yard, including
 - (i) facilities associated with maritime construction works in respect of submarines for defence of the Commonwealth, including:
 - i. the processing of raw steel and other products to manufacture submarine components;
 - ii. general steel processing including cutting, forming, welding and nondestructive evaluation;
 - iii. general and specialist machining in support of fabrication and outfitting;
 - iv. outfitting of submarine sections and other structures with welded components such as submarine decks and fixed pipework;
 - v. outfitting units and other structures with electrical, mechanical and piping components;
 - vi. assembly, testing, commissioning and services installation in support of combat system integration;
 - vii. manufacture of pipe and electrical components;
 - viii. assembly, testing and commissioning of the nuclear propulsion system (but excluding the manufacture of the reactor power module);
 - ix. assembly, construction and commissioning of submarines;
 - x. on-site system testing, commissioning and set-to-work activities; and
 - xi. mechanical, hydraulic and electrical conveyance for the purpose of moving submarine components and submarine launch activities;
 - (ii) the storage or warehousing of chemicals or chemical products, including appropriate bunding/hardstand,

- (iii) facilities and works associated with abrasive blasting and surface coating of submarines;
 - (iv) wet basin, wharf and related support facilities including any associated works (including dredging for the purposes of construction and operation of vessel berths but excluding dredging for the purposes of deepening the Port River Channel);
 - (v) truck loading and unloading facilities, access and egress;
 - (vi) ancillary infrastructure, including guard houses, car parking, warehousing, office accommodation, health centre, data centre and general information and communication technology services, sleeping quarters, and general amenities including training facilities and other staff and visitor support facilities, security, and access;
 - (vii) temporary construction compound and laydown areas; and
 - (viii) temporary protected storage of waste, including low-level radioactive waste;
- (b) development associated with any change in the use of land and coastal waters associated with any development within the ambit of the preceding paragraphs;
- (c) development associated with the construction, installation or provision of any or all of the following infrastructure, facilities and services:
- (i) stormwater;
 - (ii) water supply;
 - (iii) power supply;
 - (iv) telecommunications; and
 - (v) waste water treatment or disposal

in each case, associated with any development within the ambit of the preceding paragraphs;

- (d) development (including development undertaken on land or coastal waters in the State, inclusive but not limited to the land and coastal waters specified in Table 1 and Figure 1) associated with any excavation or filling of land associated with any development within the ambit of the preceding paragraphs;
- (e) development (including development undertaken on land or coastal waters in the State, inclusive but not limited to the land and coastal waters specified in Table 1 and Figure 1) associated with the division of land associated with any development within the ambit of the preceding paragraphs; and
- (f) any related or ancillary development (including development undertaken on land or coastal waters in the State, inclusive but not limited to the land and coastal waters specified in Table 1 and Figure 1) associated with any development within the ambit of the preceding paragraphs;

but excluding:

- (i) the relocation of existing electricity transmission lines, substation and gas pipelines;

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- (ii) works and activities associated with existing port and harbour operations; and
- (iii) works associated with the construction and alteration of a road on Lot 103 DP82690, Lot 110 DP118046, Lot 777 DP87145, QP7 DP74306, Lot 208 DP 64682, Lot 801 DP76925 and Lot 601 DP121984.

3. Subject land

The development is proposed for the north-eastern side of the Lefevre Peninsula in Port Adelaide. It encompasses the following Certificate of Titles shown in Table 1 and Figure 1, as well as a portion of the Port River.

CT6191/179	CT6191/180	CT6191/181	CT6191/182	CT6268/862	CT6236/388
CT6262/182	CT6289/763	CT6088/174	CT6088/171	CT6088/170	CT6088/177
CT6282/172	CT6088/175	CT6282/178	CT5858/214	CT5855/133	CT5856/14
CT6088/188	CT6088/186	CT6088/185	CT6088/184	CT6088/183	CT6231/17
CT6231/5	CT6282/169	CT6088/193	CT6088/190	CT6088/189	CT 6191/178
CT6191/176	CT6060/497	CT6282/175			

Table 1 – SCY subject site



Figure 1 – SCY Subject Site

4. Existing land uses, tenures and protected areas

- Provide details of the existing land uses (including relevant Planning Code Overlays and Zones), land tenures and protected areas at, overlapping or adjoining the development site.

4.1 Land uses

There are four key areas of the subject site: area 1, 2 and 3 (land based), and the marine-based area.



Figure 2– Applicable Zones and Subzones

Area 1 currently comprises warehouses and cleared industrial land with some areas of piles and slab prepared for the Attack Class Submarines before the cancellation of this program, and laydown areas.

Area 2 includes PMB Defence (which will not be altered through the development), carparking and cleared industrial land.

Area 3 is currently used for dredge ponds.

The marine-based portion of the subject site is the Port River. The Port River supports a variety of uses including port imports, exports and tourism, recreational boating, swimming and fishing. It supports a range of marine flora and fauna and is part of the Adelaide Dolphin Sanctuary.

4.1.1 Planning and Design Code

The subject site is covered by five zones, two subzones and a number of overlays from the Planning and Design Code (the Code). The Code captures a range of technical matters and state interests that apply to and guide development.

These zones and subzones are spatially represented in the map below:



Figure 3 – Applicable Zones and Subzones

A description of each Zone, Subzone, Overlay and Technical and Numeric Variation (TNV) is detailed in the table below.

Table 2 – Planning and Design Code Overview

Policy Type	Description
Zones	<ul style="list-style-type: none"> • Strategic Employment <ul style="list-style-type: none"> – DO 1: A range of industrial, logistical, warehousing, storage, research and training land uses together with compatible business activities generating wealth and employment for the state. – DO 2: Employment-generating uses are arranged to: <ul style="list-style-type: none"> a) support the efficient movement of goods and materials on land in the vicinity of major transport infrastructure such as ports and intermodal freight facilities b) maintain access to waterfront areas for uses that benefit from direct water access including harbour facilities, port related industry and warehousing, ship building and related support industries c) create new and enhance existing business clusters d) support opportunities for the convenient co-location of rural related industries and allied businesses that may detract from scenic rural landscapes e) be compatible with its location and setting to manage adverse impacts on the amenity of land in adjacent zones. – DO 3 A pleasant visual amenity from adjacent arterial roads, adjoining zones and entrance ways to cities, towns and settlements. • Employment <ul style="list-style-type: none"> – DO 1: A diverse range of low-impact light industrial, commercial and business activities that complement the role of other zones accommodating significant industrial, shopping and business activities. – DO 2: Distinctive building, landscape and streetscape design to achieve high visual and environmental amenity particularly along arterial roads, zone boundaries and public open spaces. • Open Space <ul style="list-style-type: none"> – DO 1: Areas of natural and landscaped open space provide for biodiversity, tree canopy cover, urban cooling and visual relief to the built environment for the health and enjoyment of the community.

Policy Type	Description
	<ul style="list-style-type: none"> • Coastal Waters and Offshore Islands Zone <ul style="list-style-type: none"> – DO 1: The conservation and 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. • Conservation <ul style="list-style-type: none"> – DO 1: The conservation and 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.
Sub Zones	<ul style="list-style-type: none"> • National Naval Shipbuilding Subzone <ul style="list-style-type: none"> – DO 1: Ship building and the long-term growth of defence related support industry uses generating wealth and employment for the state and nation. • Ports Subzone <ul style="list-style-type: none"> – DO 1: 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.
Overlays	<ul style="list-style-type: none"> • Adelaide Dolphin Sanctuary <ul style="list-style-type: none"> – Provides guidance about stormwater and pollution management to protect and restore dolphin habitat. • Coastal Areas <ul style="list-style-type: none"> – Seeks to ensure the conservation of the natural coastal environment, provide for natural coastal processes and recognise and respond to coastal hazards. • Defence Aviation Area <ul style="list-style-type: none"> – All structures over 90 meters – seeks to ensure building height does not pose a hazard to the operational and safety requirements of Defence Aviation Areas. • Gas and Liquid Petroleum Pipelines

Policy Type	Description
	<ul style="list-style-type: none"> – Seeks to manage the risk to public safety and the environment and secure the energy supply from the encroachment of development on gas and liquid petroleum pipelines and associated infrastructure. • Gas and Liquid Petroleum Pipelines (Facilities) <ul style="list-style-type: none"> – Seeks to manage the risk to public safety and the environment and secure the energy supply from the encroachment of development on gas and liquid petroleum pipeline facilities. • Hazards (Flooding) <ul style="list-style-type: none"> – Seeks to minimise flood hazard risk to people, property, infrastructure and the environment. • Hazards (Flooding – General) <ul style="list-style-type: none"> – Seeks to minimise impacts of general flood risk through appropriate siting and design of development. • Historic Shipwrecks – State <ul style="list-style-type: none"> – Aims to protect historic shipwrecks and historic relics from encroaching development. • Major Urban Transport Routes <ul style="list-style-type: none"> – Seeks to ensure safe and efficient vehicle movement and access along major urban transport routes. • Native Vegetation <ul style="list-style-type: none"> – Seeks to protect, retain and restore areas of native vegetation. • Prescribed Wells Areas <ul style="list-style-type: none"> – Seeks to ensure sustainable water use in prescribed wells areas. • Regulated and Significant Trees <ul style="list-style-type: none"> – Seeks to mitigate the loss of regulated trees through appropriate development and redevelopment. • Traffic Generating Development <ul style="list-style-type: none"> – Aims to ensure safe and efficient vehicle movement and access along urban transport routes and major urban transport routes.

Policy Type	Description
	<ul style="list-style-type: none"> • Water Resources <ul style="list-style-type: none"> – Seeks to protect the quality of surface waters in South Australia.
Technical and Numerical Variations	<ul style="list-style-type: none"> • Finished Ground and Floor Levels <ul style="list-style-type: none"> – Minimum finished ground level is 3.3m AHD. – Minimum finished floor level is 3.55m AHD.

- An assessment of the Zones, Sub Zones and Overlays follows.

Strategic Employment Zone

- The majority of the subject site is within the Strategic Employment Zone.
- This Zone seeks development that generates wealth and employment for the state. It calls for a range of employment generating land uses with compatible business activities. The relevant Zone provisions state:

DO 1 *A range of industrial, logistical, warehousing, storage, research and training land uses together with compatible business activities generating wealth and employment for the state.*

DO2 *Employment-generating uses are arranged to:*

- support the efficient movement of goods and materials on land in the vicinity of major transport infrastructure such as ports and intermodal freight facilities*
- maintain access to waterfront areas for uses that benefit from direct water access including harbour facilities, port related industry and warehousing, ship building and related support industries*
- create new and enhance existing business clusters*
- support opportunities for the convenient co-location of rural related industries and allied businesses that may detract from scenic rural landscapes*
- be compatible with its location and setting to manage adverse impacts on the amenity of land in adjacent zones.*

PO 1.1 *Development primarily for a range of higher-impacting land uses including general industry, warehouse, transport distribution and the like is supplemented by other compatible development so as not to unduly impede the use of land in other ownership in the zone for employment-generating land uses, particularly those parts of the zone unaffected by an interface with another zone that would be sensitive to impact-generating uses.*

- The SCY provides for ship building and port-related industry. The use is directly envisaged by the Zone and will provide ongoing employment generating uses on land without an immediate interface to sensitive land uses.
- The SCY satisfies the intent and purpose of the Strategic Employment Zone.

Employment Zone

- The Employment Zone borders the western edge of the SCY. It has limited application to the site. It will be developed for car parking associated with the SCY only.
- The Employment Zone seeks a diverse range of uses that accommodate low-impact and light industrial, shopping and business activities. It seeks for such uses to not produce emissions that would detrimentally affect the local amenity.
- The relevant Zone provisions seek:
 - DO 1** ***A diverse range of low-impact light industrial, commercial and business activities that complement the role of other zones accommodating significant industrial, shopping and business activities.***
 - **PO 1.1** ***A range of employment-generating light industrial, service trade, motor repair and other compatible businesses servicing the local community that do not produce emissions that would detrimentally affect local amenity.***
- These provisions are satisfied because:
 - Car parking associated with the SCY is located within this Zone.
 - The balance of land within the Zone has been set aside for the future training facility. This facility will be proposed via a separate development application. The provision of this facility will not prejudice the ability of the Zone to achieve its desired purpose. Notwithstanding, the future use is associated with and complements the role of the adjoining Strategic Employment Zone that envisages more intensive uses.
 - The Employment Zone provides a buffer for and transitions the Strategic Employment Zone to the General Neighbourhood Zone beyond. It ensures land within the Strategic Employment Zone is used for its optimal purpose and intensity.
 - The proposal ensures land within the Employment Zone is used in a manner that complements and supports ship building on the Lefevre Peninsula without determinately affecting the amenity of the local area.

Conservation Zone

Small parts of the Conservation Zone are included within Area 1, 2, and 3 as shown within Figure 3. The Desired Outcome for this zone is the conservation and 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.

The relevant provisions of this Zone state:

- **DO 1** ***The conservation and 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.***
- **PO 1.1** ***Small-scale, low-impact land uses that provide for the conservation and protection of the area, while allowing the public to experience these important environmental assets.***
- **PO 3.1** ***Development avoids important habitat, nesting or breeding areas or areas that are important for the movement/migration patterns of fauna.***

- **PO 3.2** ***Development avoids seagrass, mangroves and saltmarshes for their biodiversity value and carbon storage potential.***
- The development will result in some limited impacts to seagrass along the coastal edge at the north-eastern extent of the development area. This is because the edge will need to be hardened to accommodate the wharf and associated submarine infrastructure.
- These impacts have been assessed within the impact assessment report.
- This hardening is limited to the section of the Zone between the Strategic Employment Zone and the Rivers edge. It is necessary to provide functional delivery between the development and the Port River. The balance of the land within the Conservation Zone will be maintained within its current state. This will ensure the intent of the Zone is reasonably achieved.
- It is proposed that a slight boundary realignment be undertaken to ensure consistency between the relevant zone boundary and any development authorisation.

Open Space Zone

The Open Space Zone applies to the north of Area 1 (i.e., Falie Reserve) and the linear connections to the north and west of the Mutton Cove. Approval has been granted for a grade separated road over this land, connecting Pelican Point Road into the ONS and SCY. The improved infrastructure is to support the sustainment of the existing ONS as well as to facilitate future construction and operations for the SCY.

While the Reserve was previously identified as Community Land under the Local Government Act 1993, this status was revoked via the *AUKUS (Land Acquisition) Act 2024* which transferred this land to Renewal SA and subsequently ANI to be part of the SCY.

- Given the change in land classification, the Zone's intent is no longer suitable for the land. It is therefore proposed that the Open Space Zone located within the development be converted to Strategic Employment Zone.
- This will ensure consistency between the relevant Zone boundaries and any development approval granted by the Minister.

Coastal Waters and Offshore Islands Zone

The Coastal Waters and Offshore Islands Zone applies to Light Passage and the Port Adelaide River. Its application is limited to the proposed launch facility and the support craft berth.

The Zone seeks:

- ***DO 1*** ***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.***
- ***DO 2*** ***A limited number of small-scale, low-impact developments supporting conservation, navigation, science, recreation, tourism, aquaculture or carbon storage.***
- ***PO 1,1*** ***Small-scale, low-impact development for the purpose of conservation, navigation, science, recreation, tourism or aquaculture.***

- **PO 3.1** *Development is undertaken in a manner which minimises the potential for harm to the marine and coastal environment or to fisheries and aquaculture, including harm arising from actions that introduce a biosecurity risk.*
- **PO 3.2** *Development avoids pollution (including turbidity and sedimentation) ,shading and effects on water flows harming the marine environment both inside and outside of the zone.*
- **PO 3.3** *Development avoids important nesting or breeding areas and areas that are important for the movement/migration patterns of fauna.*
- **PO 3.4** *Development avoids delicate or environmentally sensitive coastal areas and key habitat areas within and adjacent offshore islands such as sand dunes, cliff tops, estuaries, wetlands, mangroves and samphire areas.*
- **PO 3.5** *Offshore development is sited to minimise potential impacts on, and to protect the integrity of, reserves under the National Parks and Wildlife Act 1972 and the Marine Parks Act 2007.*
- The proposed development complies with the above provisions because:
 - The development is situated within an existing and operative port. The continued use of the port is expressly desired by the Strategic Employment Zone and the National Naval Shipbuilding Subzone. Its application and intent needs to be considered in this context.
 - The proposed berth and launch facility supplements existing facilities to the south.
 - The development has a limited and acceptable impact on the marine and coastal environment. This is documented within the Environmental Impact Statement.

National Naval Shipbuilding Subzone

- The National Naval Shipbuilding Sub Zone complements the Strategic Employment Zone. It applies to the southeastern portion of the site.
- The Subzone seeks:
 - **DO 1** *Ship building and the long-term growth of defence related support industry uses generating wealth and employment for the state and nation.*
 - **PO 1.1** *Development of naval shipbuilding and defence related support industry uses.*
 - **PO 1.2** *Development on land with direct water frontage comprises those functions of ship building and repair involving the movement of waterborne vessels from the water to the land and vice versa.*
 - **PO 1.3** *Shared use of facilities and structures to minimise the need for development to extend into or over the Port Adelaide River.*
 - **PO 1.4** *Development extending into or over the Port Adelaide River does not obstruct or interfere with shipping and navigation channels.*
 - **PO 1.5** *Development maintains public access to land in the Open Space Zone located to the north of the subzone, unless an alternative public access route is provided.*
- The SCY achieves the intent of the Subzone because:

- It will deliver increased ship building capabilities. This increase will support the long-term growth of the desired defence industry contributing to increased employment.
- The land development is supplemented by existing and additional waterfront development. This development will enable the movement of waterborne vessels between land and water.
- Waterfront development is limited to the periphery of the Port Adelaide River and Light Passage. Development does not extend beyond nor obstruct the ongoing use of the Port Adelaide River.
- This subzone only forms a portion of the subject site. It is proposed that the subzone be extended to encapsulate all the land being developed within this proposal. Section 76(2)(d) of the *Planning, Development and Infrastructure Act 2016* enables this for impacted assessed development. This will ensure consistency between the subzone boundaries and the shipyard.

Ports Subzone

- The Ports Subzone applies to the northern portion of the site. It shares an interface with and borders Lights Passage.

The Subzone supports the ongoing development of port related activities that contribute to the handling of export and import commodities. This intent is underpinned by relevant provisions of the Subzone. They seek:

- **DO 1** *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*
- **PO 1.1** *Development primarily for a range of port related activities.*
- **PO 1.2** *Waterfront land developed for activities dependent on a direct frontage to the water, including port functions involving waterborne vessels and/or the movement of products or items from the water to the land (or vice versa).*
- The SCY will satisfy the Port Subzone because:
 - Naval related industry contributes to and complements the import and export of commodities.
 - The SCY will be a key employment base for the state. Its development will contribute to the state's economic significance.
 - Naval defence infrastructure involving the launching of constructed vessels represents a port related function. The facility cannot operate outside of a port environment.

Overlays

An assessment of the Overlays relevant to the subject site follows:

Overlay	Comment
Adelaide Dolphin Sanctuary	Impacts associated with the Overlay have been considered within the Impact Assessment report. The development will implement strategies to minimise impacts on dolphin habitat, movements and pollution controls.

Overlay	Comment
Coastal Areas	<p>Some coastal areas will require alteration to accommodate the development. These impacts are considered within the Impact Assessment Report.</p> <p>Given the Strategic Employment Zone and National Navy Shipbuilding Subzones interface with the coast, these impacts are acceptable in the site's context. They are essential to enabling an operative port.</p> <p>Coastal flooding impacts are considered with mitigation measures identified within the impact assessment report.</p>
Defence Aviation Area	<p>The Overlay seeks to manage building impacts to maintain operational and safety requirements of Defence Aviation Areas.</p> <p>The proposed building heights (including associated plant) will not exceed the designated 90 metre height.</p>
Gas and Liquid Petroleum Pipelines	<p>Relevant infrastructure will be relocated. The removal and reinstallation will be undertaken by the relevant service utility operator.</p>
Gas and Liquid Petroleum Pipelines (Facilities)	<p>Relevant infrastructure will be relocated. The removal and reinstallation will be undertaken by the relevant service utility operator.</p>
Hazards (Flooding)	<p>The Overlay has limited application to the land. The development has considered the necessary flood risks and has prepared a strategy for mitigation accordingly.</p> <p>The impacts and mitigation measures are outlined in the impact assessment report.</p>
Hazards (Flooding – General)	<p>The Overlay has limited application to the land. The development has considered the necessary flood risks and has prepared a strategy for mitigation accordingly.</p> <p>The impacts and mitigation measures are outlined in the impact assessment report.</p>
Historic Shipwrecks – State	<p>The Overlay applies to portions of the Lefevre Peninsula. The development is predominately contained to the land and coastal edge. Some dredging within the Port River is proposed.</p> <p>Historic shipwrecks have been considered within the impact assessment report. This includes a heritage assessment undertaken by DASH Architects.</p> <p>The DASH Architect report also considers historic shipwrecks located within Mutton Cove beyond the spatial application of this overlay.</p> <p>The development is not anticipated to unreasonably impact historic shipwrecks or relics.</p>
Major Urban Transport Routes	<p>Victoria Road which borders the land is a Major Urban Transport Route and a State Maintained Road. The proposal will result in increased ship building capacity and staff numbers. This in turn will result in increased vehicle volumes.</p>

Overlay	Comment
	<p>The increase in vehicle volumes will be managed through the construction of the new Grade Separated Road. The road is proposed within a sperate development application (24012501).</p> <p>The Grade Separated Road will integrate with car parking and access arrangements contained within the proposed development to ensure:</p> <ul style="list-style-type: none"> • Safe vehicle access and egress • Acceptable impacts to traffic flow of State Maintained Roads. • Sufficient on-site queuing. • No buildings encroach or restrict access to State Maintained Roads. <p>Traffic impacts are further considered within the impact assessment report.</p>
Native Vegetation	<p>Native vegetation clearance applies only to the marine based portion on the subject site, and has been considered within the impact assessment report.</p>
Prescribed Wells Areas	<p>The SCY will not be reliant on water licensed under the Landscape South Australia Act 2019. The Overlay is not impacted by the proposed uses.</p>
Regulated and Significant Trees	<p>No Regulated or Significant Trees are located on the land. The Overlay is not impacted by the proposed uses.</p>
Traffic Generating Development	<p>Similar to the Major Urban Transport Routes Overlay, this Overlay seeks for the safe and efficient operation of State Maintained Roads.</p> <p>The construction of the new Grade Separated Road via a sperate development application (24012501) will ensure this outcome is achieved. Traffic has been further considered within the impact assessment report.</p>
Water Resources	<p>The overlay seeks to protect surface water from adverse water quality impacts and maintain the function and natural flow paths of watercourses.</p> <p>The SCY will provide for the collection and management of stormwater through the implementation of contemporary engineering practices. This will ensure:</p> <ul style="list-style-type: none"> • Post development stormwater flows are appropriately managed and restricted. • Water quality and discharge measures are implemented to manage impacts on aquatic ecosystems are reduced. • Soil erosion is minimised. • Interference with existing flow paths are minimised and where required, appropriately substituted.

4.2 Land tenure

As of 30 June 2024, ANI holds all land for the SCY. This has been facilitated through two mechanisms: a land exchange agreement between the Australian and South Australia Governments, or the *AUKUS (Land Acquisition) Bill 2024*.

On 10 November 2023, the Australian Government and the South Australian Government signed a land exchange agreement to secure the majority of the Osborne site for the SCY. In exchange for the SCY land, the State Government received defence-owned land at Keswick and Smithfield. State Government will utilise the exchanged land to support future urban renewal projects in metropolitan Adelaide, and parts of Cultana Training Area, to facilitate the State’s future renewable energy initiative.

Falie Reserve has been acquired through the *AUKUS (Land Acquisition) Bill 2024*.

4.3 Adjoining land uses, tenure and protected areas

The following table identifies the land use, tenure and protected areas of the land overlapping or adjoining the subject site.

Adjoining land use	Location in relation to subject site	Use	Tenure
Protected areas			
Torrens Island Conservation Park	Adjoining marine-based portion of subject site	<p>Torrens Island Conservation Park supports mangroves, samphire and coastal dunes, which provide important habitat for a range of native fauna species. There is no public vehicle access to this park. The public can access some parts of the park via small watercraft. There are no jetties or mooring facilities for boats.</p> <p>The conservation park covers about three quarters of the island, with the remaining land including the state-heritage listed Torrens Island Quarantine Station and two power stations.</p>	Crown land
Adelaide Dolphin Sanctuary	In the marine-based portion of subject site	The Adelaide Dolphin Sanctuary is home to around 30 resident bottlenose dolphins, with another 400 transient dolphins that visit at various times of the year. These wild	Crown land

Adjoining land use	Location in relation to subject site	Use	Tenure
		<p>dolphins come here to feed, play, socialise and nurse their calves.</p> <p>The Sanctuary encompasses mangroves, seagrass, salt-marsh, tidal flats and tidal creeks.</p> <p>The Port Adelaide Passenger Terminal and Flinders Adelaide Container terminals front the Sanctuary, used for commercial and tourism port purposes. Two power stations are included.</p> <p>Recreational activities include dolphin and bird watching, kayaking, paddle boarding, and fishing. Several marinas are included in the Sanctuary.</p> <p>There are a number of Aboriginal and European cultural and historical places of interest in the Sanctuary, including the state heritage listed Torrens Island Quarantine Station.</p>	
Barker Inlet St Kilda Aquatic Reserve	Adjoining marine-based portion of subject site.	<p>The Barker Inlet – St Kilda Aquatic Reserve protects important fish nursery habitat and breeding grounds.</p> <p>Only certain low impact activities are allowed within the reserve including boating, fishing by rod and line or handline, and taking bloodworms using a hand net.</p>	Crown land
Other open spaces			
Mutton Cove	Adjoining land-based portion of subject site.	Mutton Cove protects the last remaining biodiverse area of salt marsh and grey mangrove (<i>Avicenna marina</i>) woodland on the Lefevre Peninsula.	Crown land

Adjoining land use	Location in relation to subject site	Use	Tenure
		<p>A pathway extends around the perimeter of the reserve which is used for walking and birdwatching.</p> <p>There are two protected shipwrecks within the park.</p>	
Falie Reserve	Adjoining land-based portion of subject site.	Falie Reserve is used for informal recreation, stormwater management and planting of local endemic species (including plantings by the community). It is excluded from the scope of the EIS, and assessed through a separate Development Application for the Grade Separated Link Road.	ANI
Biodiversity Park	Adjoining land-based portion of subject site.	Biodiversity Park is primarily for the conservation and enhancement of biodiversity, including fauna and flora species and sustained habitats, with walking and cycling along defined path networks.	Renewal SA
Kardi Yarta	Adjoining land-based portion of subject site.	Kardi Yarta is a park which includes walking and cycling paths, picnic tables, a BBQ, a playground including nature play, an amphitheatre suitable for community events, seats, grassed and landscaped areas, car parking and stormwater management areas.	Renewal SA
Port River	In the marine-based portion of subject site.	The Port River is a diverse estuary that includes deep shipping channels, large areas of fringing mangroves, extensive tidal flats and seagrass beds which provide habitat for a range of fauna. The river has been used as a shipping channel since 1836 and is the location of South Australia's largest commercial and tourism port. The	Crown land

Adjoining land use	Location in relation to subject site	Use	Tenure
		<p>river has been dredged a number of times to support this purpose. The river has a history of poor water quality as the catchment for stormwater and industrial pollution. The banks of the river are extensively developed for industrial uses.</p> <p>Recreational uses of the river include boating and scenic cruises.</p>	
Commercial			
Existing ANI site	Overlapping land-based portion of subject site.	<p>The Osborne Naval Shipyard is the most advanced and modern shipbuilding hub in Australia. It currently supports:</p> <ul style="list-style-type: none"> Air Warfare Destroyers (AWD) Collins Class Submarines Offshore Patrol Vessels Hunter Class Frigates 	ANI
PMD Defence	Within land-based portion of subject site (will not be directly impacted by the development)	PMB is a manufacturer of submarine battery systems.	Private
Pelican Point Power Station	Adjoining land-based portion of subject site.	Pelican Point Power Station uses two gas turbines and a steam turbine to produce up to 497 MW of electricity using gas fuel piped into the site.	Private

Adjoining land use	Location in relation to subject site	Use	Tenure
Viterra Outer Harbor	Adjoining land-based portion of subject site.	Viterra Outer Harbor is a bulk grain export port terminal used to load grain onto ships for export.	Private
Ampol Pelican Point Fuel Terminal	Adjoining land-based portion of subject site.	This liquid fuel storage terminal is accessible by pipeline and sea, and primarily stores petroleum products.	Private
Residential			
Residential properties	Adjoining land-based portion of subject site (separated by a road).	The residential suburb of North Haven adjoins the subject site, separated by Victoria Road. The suburb of Osborne is also close by. The area includes a mix of low-medium density with predominantly one and two storey dwellings. Parts of these residential areas are well established.	Private
Infrastructure			
Roads	Adjoining land-based portion of subject site.	Roads provide access in to and around the Lefevre Peninsula. Pelican Point Road connects with Victoria Road to provide access into the industrial area.	Council Department for Infrastructure and Transport
Grain terminal rail	Through land-based portion of subject site.	The Dry Creek – Port Adelaide railway line is an 8km east-west freight railway line running through Adelaide’s north-western suburbs. It links Port Adelaide, Pelican Point and the main interstate rail routes which link Adelaide with Melbourne, Perth, Darwin and Sydney.	Private (track ownership) Minister for Infrastructure (land ownership)

Adjoining land use	Location in relation to subject site	Use	Tenure
Pelican Point/Outer Harbour line	Through land-based portion of subject site.	The Outer Harbor line is a suburban passenger line in Adelaide. The line runs from Adelaide Station to Port Adelaide and Outer Harbor. The line is operated by Adelaide Metro.	Australian Rail Track Corporation Ltd.
SEA Gas Port Campbell to Adelaide (PCA) Pipeline.	Through land-based portion of subject site.	The Port Campbell to Adelaide (PCA) gas mainline connects Port Campbell in south west Victoria to Pelican Point in South Australia. Note this pipeline will be relocated around the subject site to accommodate the SCY development.	SEA Gas
Epic Energy's Pelican Point Lateral pipeline, off the Moomba to Adelaide Pipeline System	Through land-based portion of subject site.	The Pelican Point Lateral pipeline off the Moomba to Adelaide Pipeline System (MAPS) deliver gas to the LeFevre Peninsula from Moomba, in the Cooper Basin. Note this pipeline will be relocated around the subject site to accommodate the SCY development.	Epic Energy
Osborne Substation	Adjoining land-based portion of subject site.	The Osborne Substation is natural gas powered with one gas turbine and one steam turbine that together generate 180 MW of electricity. In addition to the electricity generated, Osborne produces 410 tonnes/hour of steam.	Private
Snapper Point Power Station	Adjoining land-based portion of subject site.	Nexif Energy is developing a 154 MW gas turbine peaking power plant project located near Snapper Point at Outer Harbour.	Private
Electricity power lines	Through land-based portion of subject site.	Electranet Pelican Point 275-volt overhead electricity transmission lines traverse the site. Note these power lines will be	Private

Adjoining land use	Location in relation to subject site	Use	Tenure
		relocated around the subject site to accommodate the SCY development.	

Many of these land uses in the locality are identified in the below map.

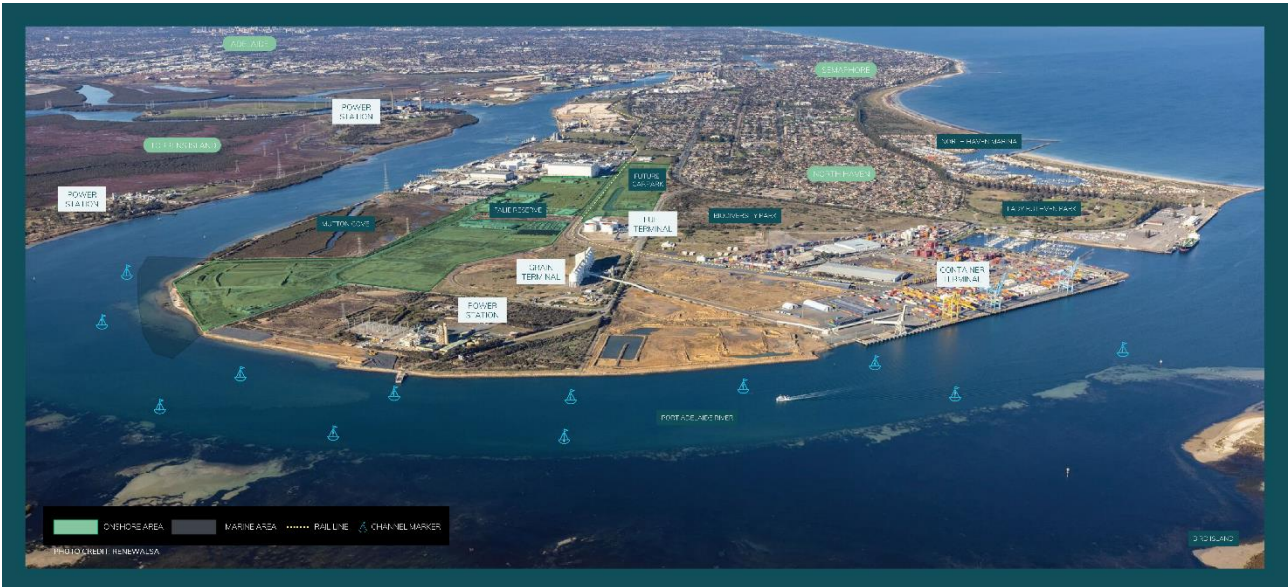


Figure 4 - Key land uses in the locality

4.3.1 Other protected areas in the locality

It is important to note that while not adjoining the project site, the Adelaide International Bird Sanctuary (Winaityinaityi Pangkara) National Park is present in the general locality (over 1km away at its nearest point). The Bird Sanctuary encompasses over 60km of coastline north of Adelaide, adjacent to Gulf St Vincent. The Bird Sanctuary sits right at the southern end of the East Asian-Australasian Flyway (EAAF) and is one of the key feeding and roosting sites for migratory birds who use the flyway each year. The Bird Sanctuary helps protect resident and migratory shorebirds as well productive mangroves, marine and coastal assets, river systems and many significant terrestrial species and ecological communities.

5. Site services and infrastructure

- Provide details of site services and infrastructure including utility services (water, gas, electricity, sewerage disposal, wastewater, drainage, trenches or conduits); location of ground and roof plant and equipment (electricity transformers; air conditioning; solar panels etc).

At this stage, the design of the SCY is not far enough progressed to have exact site services and infrastructure details confirmed. However, investigations and collaboration with relevant service providers is currently underway. The SCY will be able to be serviced by the necessary site services and utilities. Exact details will be confirmed prior to construction.

The applicable services and associated service providers include:

- Electricity – SA Power Networks (SAPN)
- Telecommunications – NBN / Telstra / Vocus / SabreNet / Optus
- Natural Gas - APA
- Water – SA Water
- Wastewater / sewer – SA Water
- Stormwater / drainage

A summary of the existing site infrastructure and the anticipated works that will be required to connect the SCY facilities are provided in the following sections. The image below shows the project areas for reference.



Figure 5 - Project Areas

5.1 Electricity

Existing site infrastructure

Existing electrical infrastructure near the site includes:

- 275kV transmission from ElectraNet via Pelican Point Power Station feeding the LeFevre Substation (66kV / 11kV)
- ElectraNet and SAPN 66kV feeders from LeFevre Substation reticulate through Falie Reserve then south.
- SAPN 11kV feeders from LeFevre Substation supply ANI South, ANI Area 1, PMB, and four feeds reticulate through Area 1 to outer harbour.
- SAPN 11kV feed from another substation to the south reticulates along Pelican Point Rd.

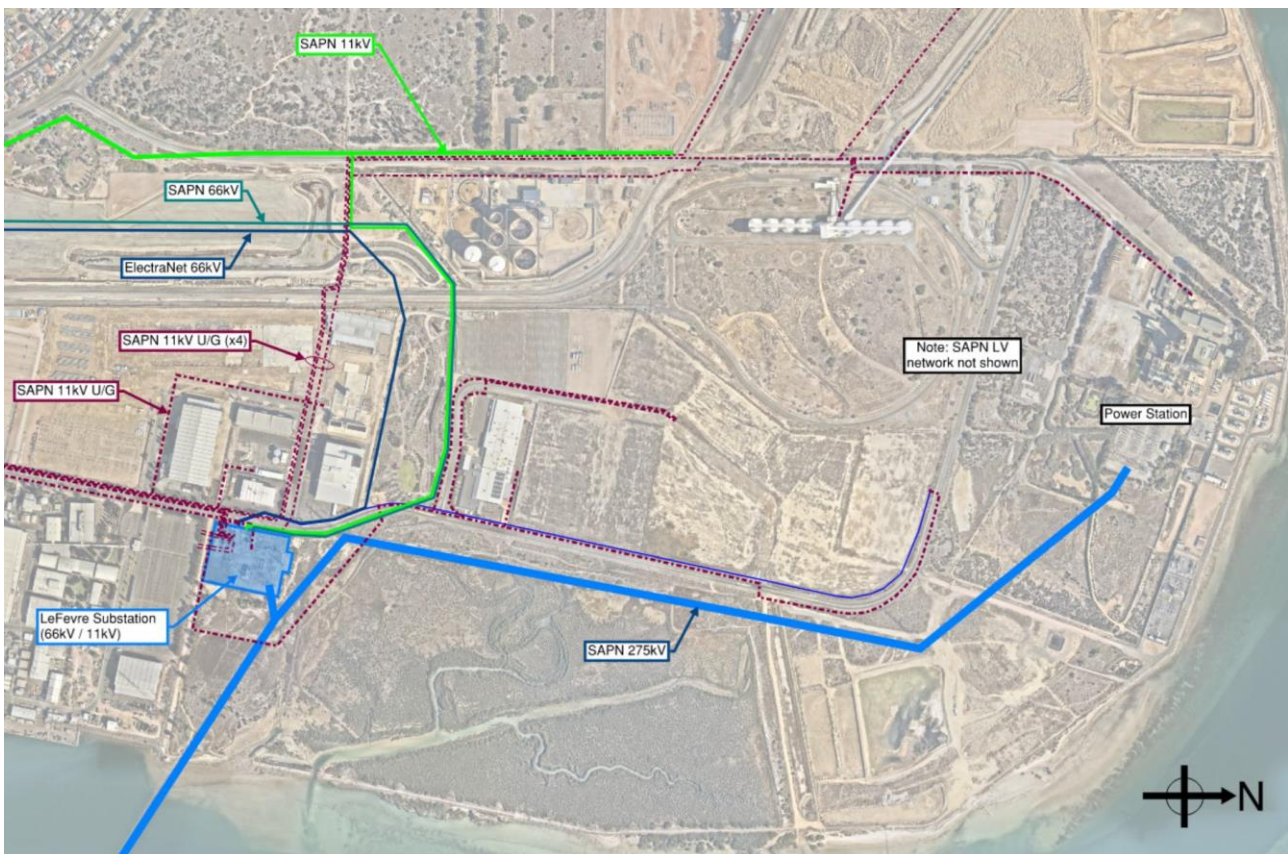


Figure 6 Electricity infrastructure

Anticipated works

It is anticipated that the SCY will connect to existing electrical infrastructure as follows:

- Area 1 – Retain two existing 11kV feeders and install additional 11kV feeders from Le Fevre Substation to all facilities in Area 1.

- Area 2/3 – Investigating options for supply. Existing 11kV feeders are from Le Fevre Substation available, however it is anticipated that 66kV feeders will be needed to meet the power demands. It is anticipated that two feeds via diverse paths from alternate SAPN substations will be provided for redundancy to critical facilities. Options are currently under investigation. Options for connection to ElectraNet are also under investigation.

5.2 Telecommunications

Existing site infrastructure

Existing telecommunications infrastructure near the site includes:

- Telstra and NBN Co. networks inground cabling along Pelican Point Rd and Mersey Rd N, and within Archie Badenoch Cct.
- SabreNet network inground and above ground cabling along Mersey Rd N, limited to south area into Naval Shipbuilding College and ASC.
- Vocus network inground cabling to Mersey Rd N near south corner of area 1 (connecting into ASC), and a few local pits near N115 and PMB.
- Optus network within Mersey Rd N near south corner of area 1 (connecting to ASC).
- Note: all of the networks above are predominantly reticulated within Telstra cable ducts and pits, with some localised dedicated SabreNet, Vocus, and Optus infrastructure.



Figure 7 - Telecommunications infrastructure

Anticipated works

It is anticipated that the SCY will connect to existing NBN optical fibre network and SabreNet high-speed network. Additional connection to Telstra or Optus network may be desirable for redundancy via diverse paths.

NBN and Telstra networks are available along Pelican Point Rd for connection to the STA facility, and northern connection into Area 2 and 3, while NBN, Telstra, SabreNet, Vocus, and Optus networks are available for southern connection into Area 1.

Connections into both Area 1 and Area 2/3 will likely be desirable so it is anticipated that the northern and southern connection paths will be utilised. Existing connections to PMB, CSPIF / N117, and ASC will need to be retained.

It is envisaged that some of the NBN and Telstra infrastructure within the subject site will be removed, rediverted, or ownership transferred to ANI in order to reduce third-party access into the subject site.

5.3 Natural Gas

Existing site infrastructure

Existing natural gas infrastructure near the site includes:

- APA high-pressure (350kPa) gas main reticulates from the south, inground along Pelican Point Rd, through Falie Reserve, Archie Badenoch Cct, and short section of Mersey Rd N. There are provisions for connection/extension into Area 1 and Area 2.
- APA high-pressure (350kPa) gas main reticulates from the south, inground along Mersey Rd N up to a gas meter near the ANI fence line. The gas pipeline continues in private (ANI owned) pipe near Area 1. Details to be confirmed.
- High-pressure gas pipelines owned by SEAGas and Epic Energy reticulate through/adjacent the site to the Pelican Point power station.



Figure 8 – Epic Energy and SEA Gas high-pressure gas pipelines

Anticipated works

Natural gas requirements for the SCY are yet to be confirmed, however it is envisaged that a new connection will be provided from Pelican Point Rd into the Skills and Training Academy facility, and connections near Mersey Rd N into Areas 1, and 2/3 as needed.

It is not anticipated that the Project will connect to the major pipelines owned by SEAGas and Epic Energy, however major works to relocate these pipelines are planned as early works to enable the SCY development.



Figure 9 - APA Natural Gas infrastructure

5.4 Water

Existing site infrastructure

Existing water infrastructure near the site includes:

- Water mains reticulates inground in a loop around Victoria Rd, Pelican Point Rd, and Mersey Rd N, as well as through Falie Reserve, and branches in Archie Badenoch Cct and Annie Watts Cct.



Figure 10 - Water infrastructure

Anticipated works

It is envisaged that new connections will be established near the project boundary for Area 1, 2 and 3. Initial concept development is considering multiple connections to provide redundancy to the project site, with water storage and pumps to provide reliable peak flow capacity and pressure.

It is envisaged that some of the SA Water infrastructure within the subject site will be removed, redirected, or ownership transferred to ANI in order to reduce third-party access into the subject site.

5.5 Wastewater / sewer

Existing site infrastructure

Existing wastewater (sewer) infrastructure near the site includes:

- Low pressure sewer system through Area 2 and 3.
- Falie Reserve pump station with rising main reticulates west and then south. This was installed relatively recently to accommodate planned development in the area now superseded by the SCY project.

- Other existing pump stations near N107 and N170 direct sewer south along Mersey Rd N via combination of rising mains and gravity sewer.



Figure 11 - Wastewater infrastructure

Anticipated works

It is envisaged that the majority of wastewater from Area 1, 2 and 3 will be directed to the Falie Reserve Pump station with rising main reticulating west then south, and a portion of Area 1 will be directed to existing pump stations near south of the project area.

Further assessment is required to refine wastewater requirements and network capacity.

It is envisaged that some of the SA Water infrastructure within the subject site will be removed, rediverted, or ownership transferred to ANI in order to reduce third-party access into the subject site.

5.6 Stormwater / drainage

Existing site infrastructure

Existing stormwater (drainage) infrastructure near the site includes:

- Stormwater detention basins near Area 1 carpark, Falie Reserve, and north of Mutton Cove Conservation Reserve.
- Stormwater pipework within Mersey Rd N, Archie Badenoch Cct, and Annie Watts Cct.
- There are two points of stormwater discharge into the river as shown below.



Figure 12 - Stormwater infrastructure

Anticipated works

It is envisaged that the existing stormwater detention basins, pipework and discharge paths will be retained with no change to the overall stormwater management strategy. New stormwater pipework will be established within the project areas as needed, connecting into the existing network.

Further assessment is required to determine stormwater requirements and network capacity, and refine the stormwater management plan with consideration of adjacent sites (Viterria and Ampol).

It is envisaged that some of the existing stormwater infrastructure within the subject site will have ownership transferred to ANI in order to reduce third-party access into the subject site.

6. Energy demand profile

- Provide high-level energy demand profile (including gas and electricity) for the construction and operational phases of the development, noting current network capacity to meet expected future demand, including consideration of the need for back-up power supplies for the facility.

Electricity

Given the initial stage of design development at the time of writing this EIS, an initial Estimated Maximum Demand (EMD) calculation has been undertaken to satisfy this requirement.

Areas with similarities to the former Attack Class program (and where information is available) have been used as a basis to establish demand to apply to the infrastructure layout. Where areas or buildings do not have similarities to the former Attack Class program, infrastructure and equipment loads have been estimated from similar facilities (existing infrastructure at ONS). However, some infrastructure and areas are very unique, and assumed demands have been used based on an understanding of the function and engineering judgement. The Estimated Maximum Demand will be refined in detailed design as more information becomes available.

- Area 1 has an initial EMD of 25.5 Mega Volt Amps (MVA), inclusive of the separate proposed carpark to the west of the rail alignment. The total EMD of the Osborne North Precinct, inclusive of the existing facilities and ASC North is 29 MVA. This load component is proposed to be supplied from existing local substation infrastructure.
- Area 2 has an initial EMD of 23.8 MVA, which is predominantly based on the estimated areas of the new facilities with the pro rata kVA/m² rates from the Attack Class layouts and information. The large office areas have been estimated based on typical AS/NZS 3000 W/m² figures, with slight uplifts applied for the higher security areas associated with these facilities (similar to that typical for Defence office buildings/areas).
- Area 3 has a preliminary EMD of 21.9 MVA. A portion of this load is anticipated to require a higher level of redundancy in supply relative to Areas 1 and 2. Some of the unique facilities within this area have little design basis information available, and therefore assumed demands have been used in the initial estimate based on high level building function information and engineering judgement.

The site total initial EMD is therefore 71.2 MVA. The maximum demand figures above are inclusive of the spare capacity requirements (i.e. are the Ultimate Design Load or ULD for the purposes of infrastructure sizing).

Based on the infrastructure available surrounding the development, it is proposed to utilise the existing local substation to supply Area 1 and provide two 66 kV incoming supplies that will service Areas 2 and 3. The sites for the two 66 KV providing incoming electricity supplies serving Areas 2 and 3 will be confirmed during detailed design.

Gas

Based on the initial design it is currently anticipated that the natural gas demand for the development will not exceed the capacity of the recent new supply provided to immediate proximity of the development area. Gas demand and gas supply will be confirmed during detailed design.

7. Native title

- Describe existing or potential native title rights, claims and interests which may be impacted by the development (including with the use of maps) the following native title considerations:
 - land or waters where native title has been determined to exist by the Federal Court
 - land or waters that are covered by a native title determination application.
 - land or waters that are covered by a registered Indigenous Land Use Agreement.

Native title is the recognition that Aboriginal and Torres Strait Islander peoples have rights and interests to land and waters according to their traditional law and customs as set out in Australian Law. Native Title is governed by the *Native Title Act 1993*.

The subject site is within the Kurna People's Native Title Claim Area (Tribunal file no. SAD6001/2000) shown in the figure below. On 18 March 2018 the Kurna people were recognised as native title holders for lands around Adelaide. The Commonwealth Native Title tribunal register indicates that there is an Indigenous Land Use Agreement (ILUA) between the Kurna people and the State of South Australia for the broader Kurna native title claim area.

Native title only exists for certain parcels within the lands around Adelaide. Native title has been determined by the Federal Court to not exist within the subject site itself. Therefore, the requirements of the ILUA, including notification and future act processes do not apply to this project.

Nonetheless, ANI recognise the general cultural significance of the peninsula and surrounding waters to Kurna and Ramindjeri peoples and commit to working with Aboriginal and Torres Strait Islander peoples to minimise impacts and maximise opportunities.



Cadastral data sourced from
Department of Planning, Transport & Infrastructure SA
7 November 2017

DISCLAIMER

This map has been produced from data or documents of varying accuracy and sources. The State of South Australia expressly disclaims all and any liability to any person, in respect of anything done or omitted to be done by any person in reliance, whether in part or entirely, upon the whole or any part of the information provided on this map.

Kaurna Peoples Determination Area
External boundary of
Determination Area
Mapsheet 1 of 20



1:50 000 1:60 2017064_011_Determination_Area_Boundary (164932016)

8. Impacts on existing or adjoining land uses

- *Provide an assessment of local impacts to adjoining land uses identified in the scoping application (e.g. property access (fencing, gates), privacy and enjoyment, conduct of regular or seasonal activities (e.g. grape vintage, sowing, harvesting, mustering, spraying, lambing) and describe any measures to mitigate these impacts*
- *Describe in general terms the potential impacts of the development on existing or adjoining land use. [Note that many impacts and mitigation measures will be addressed under Assessment Requirements for other environmental attributes and should be cross-referenced accordingly in the EIS].*

Impacts on existing or adjoining land uses are covered comprehensively in various sections of the report including:

- Amenity and environmental quality
- Air quality
- Noise/vibration
- Transport and traffic
- Visual amenity
- Biological environment
- Biosecurity
- Marine flora and fauna
- Terrestrial flora and fauna
- Hazards and risks
- Fire
- Flooding
- Site and groundwater contamination
- Dangerous substances
- Nuclear propulsion systems and radiation exposure from accident
- Physical environment
- Coastal and marine
- Soils, landform and geology
- Surface water and groundwater

- Design
- Urban design and placemaking
- Social and community
- Aboriginal cultural heritage
- Community wellbeing/social impact assessment
- Heritage places and areas
- Further detail about each of these impacts can be accessed in the relevant sections and appendices.

9. Impacts on Crown land and Native Vegetation Heritage Agreements

- Describe (where relevant) potential impacts of the development for Crown land (including the Port River) and Native Vegetation Heritage Agreements or any other relevant land tenures (including leases and licences).

9.1 Crown land

None of the land-based portion of the subject site is Crown Land.

The Port River which is contained in the marine-based portion of the subject site is Crown Land. Adjoining land uses including Mutton Cove and Torrens Island Conservation Park are also Crown Land.

There will be direct impacts on the Port River through dredging works.

There will be no direct impacts to Mutton Cove or Torrens Island Conservation Park.

9.2 Native vegetation heritage agreements

There are no Native Vegetation Heritage Agreements on the subject site.

9.3 Significant Environmental Benefit Area (2009/3097)

One Significant Environmental Benefit (SEB 2009_3097) area overlays the southern end of the land-based portion of the subject site – refer Figure 13 Significant Environment Benefit Area 2009_3097 below (Succession Ecology 2024).

ANI sought advice from the Native Vegetation Council about the status of this SEB and implications for the project. The Native Vegetation Council responded 29 August 2024. An excerpt of their response is as follows:

“Over time, the [Native Vegetation] Act has changed in terms of the areas that it applies in metropolitan Adelaide. After a recent review, it was found that the Act does not apply to the land which was approved in 2009 as a Significant Environmental Benefit area (2009/3097). Thus, the site that has been established on your land is not enforceable under the Act. The Native Vegetation Branch is taking action to remove the SEB note from the Administrative Interest section on your Certificate of Title.”



Figure 13 Significant Environment Benefit Area 2009_3097

10. Legislative protection

- Describe (where relevant) potential impacts of the development on areas protected under legislation or Special Legislative Schemes.
- Describe the existing policy and legislative considerations underpinning the Adelaide Dolphin Sanctuary which apply to the development.

10.1 Adelaide Dolphin Sanctuary Act 2005

10.1.1 Background and Special Legislative Scheme

Special Legislative Schemes are laws that have a direct link to the planning system and are of significant environmental importance to the state. They are defined under the *Planning, Development and Infrastructure Act 2016*. The *Adelaide Dolphin Sanctuary Act 2005* is one such scheme.

The *Adelaide Dolphin Sanctuary Act 2005* establishes a sanctuary to protect the dolphin population of the Port Adelaide River estuary and Barker Inlet and to protect the habitat on which they rely.

The Adelaide Dolphin Sanctuary (ADS) is located in an area that is economically, socially, culturally and historically important. It contains infrastructure, industries, the State's major port, significant redevelopment and European and Aboriginal heritage. It is also an important area for a range of water related recreational activities. It is one of the most intensively used marine environments in the State and one of the few places in the world where bottlenose dolphins live in such close proximity to a major city.

The Act provides a mechanism to manage and regulate the cumulative effect of the combination of uses to ensure efficient and appropriate planning and the ecological sustainability of the area. Development undertaken within or adjacent the sanctuary needs to be cognisant of and consistent with the objectives of the Act and its Management Plan.

Objective:

The Adelaide Dolphin Sanctuary is protected from the adverse impacts of development.

State Planning Policies:

18.1 Development in or adjacent to the Adelaide Dolphin Sanctuary will not adversely impact on the dolphin population and their habitat.

18.2 Development that results in significant discharge into the waters, requires the removal of vegetation or alters the water flow regime of the sanctuary should be avoided.

18.3 Good stormwater management should ensure the ongoing and long term protection of the Adelaide Dolphin Sanctuary through appropriate water sensitive urban design.

10.1.2 Potential impact on the Adelaide Dolphin Sanctuary

Refer to the ecology section of the EIS for details about potential impact to the Adelaide Dolphins Sanctuary.

10.1.1 Adelaide Dolphin Sanctuary Draft Management Plan 2024

The Adelaide Dolphin Sanctuary Management Plan is being developed to set directions for the management of the Adelaide Dolphin Sanctuary. The plan aims to focus on priority themes for the Sanctuary and set achievable strategies for its management.

The Management Plan is a requirement of the *Adelaide Dolphin Sanctuary Act 2005*. Consultation is being undertaken to inform a final Management Plan which will be submitted for adoption by the Minister for Climate, Environment and Water.

10.2 Other legislative protection

Other South Australian and Commonwealth Government legislation and other standards relate to land use and tenure in and around the subject site are identified and described in the legislative section of the EIS.

Appendix A – Consistency of the development with the State Planning Policies

State Planning Policy (SPP)	Project Alignment with SPPs
<p>SPP 1 – Integrated Planning</p> <p>To apply the principles of integrated planning to shape cities and regions in a way that enhances our liveability, economic prosperity and sustainable future.</p>	
<p>1.1 An adequate supply of land (well serviced by infrastructure) is available that can accommodate housing and employment growth over the relevant forecast period.</p>	<p>The development seeks to develop a large area of highly underutilised land almost entirely zoned Strategic Employment or Employment. The development site’s location next to the existing Osborne Naval Shipyard (ONS) provides the opportunity to deliver defence infrastructure within a consolidated and managed precinct. The development site has been identified for future defence sector growth in the State’s strategic planning work.</p> <p>investigations and collaboration with relevant infrastructure service providers is currently underway. The SCY will be able to be serviced by the necessary site services and utilities including electricity, gas, telecommunications, water, wastewater and stormwater.</p> <p>The site has access to deep water which is essential for the function of the development.</p> <p>Options will be progressed in partnership with a number of government agencies and organisations to deliver traffic, housing and other infrastructure and services to support the development and other future planned growth of the Lefevre Peninsula.</p>
<p>1.2 Provide an orderly sequence of land development that enables the cost-effective and timely delivery of infrastructure investment.</p>	<p>The development is seeking to expand the existing ONS and other industry on the Lefevre Peninsula. Expanding existing defence services on the adjacent vacant land allows for a cost effective and timely delivery of additional infrastructure.</p>
<p>1.3 Plan growth in areas of the state that is connected to and</p>	<p>The Lefevre Peninsula is of significant local and state economic importance as an industrial and trade hub. The</p>

State Planning Policy (SPP)	Project Alignment with SPPs
<p>integrated with, existing and proposed public transport routes, infrastructure, services and employment lands.</p>	<p>development’s strategic location is connected to major road networks including for freight, passenger and freight rail, the Flinders Ports Holdings Adelaide Container Terminal and deep-water infrastructure which is essential for future operations. The development has been well planned and aligns with state and national objectives. The development integrates well with the surrounding industry including manufacturing, services, retail, transport and logistics. Local healthcare, emergency response services, utility, education, childcare, recreational facilities and other community support services provide for the area.</p>
<p>1.4 Protect areas of rural, landscape character, environmental importance, mining or food production significance from the expansion of urban areas, towns and settlements.</p>	<p>The development will expand existing defence land uses. There are areas of environmental value in the locality, such as the Adelaide Dolphin Sanctuary and habitat for protected birds. Significant ecological investigations have been undertaken into the impact of the development on the environmental, and these are considered to be not significant. Mitigation measures will be put in place to minimise any impacts such as noise and dredging.</p> <p>The impact of the development on landscape character is considered to be negligible to minor given the existing industrial character of the development site and surrounding area.</p> <p>There are no rural, mining or food protection lands impacted by the development.</p>
<p>1.6 Plan for strategic infrastructure that helps to shape the pattern of settlement in a way that enhances quality of life and supports long-term sustainability.</p>	<p>The development of additional defence infrastructure is strategically important to the state and nation. Development will be consistent with the existing form and pattern of development on the Lefevre peninsula. The development will support long term economic and employment opportunities in the locality and for the state.</p>
<p>SPP 2 – Design Quality</p> <p>To elevate the design quality of South Australia’s built environment and public realm.</p>	

State Planning Policy (SPP)	Project Alignment with SPPs
<p>2.1 Promote best practice in the design of buildings, places and the public realm by applying the principles of good design .</p>	<p>Buildings will be designed to serve their intended future use. The public realm will be developed to be complimentary to the built form and support the movement of people through the development site.</p>
<p>2.9 Respect the characteristics and identities of different neighbourhoods, suburbs and precincts by ensuring development considers existing and desired future context of a place.</p>	<p>The north-eastern tip of the Lefevre Peninsula is characterised by industrial development and a large defence precinct. The development is seeking to continue to expand the existing defence precinct and ensure that it can service the future capability requirements of Australia. Built form will be consistent with the established characteristics in the locality. The land is envisaged and zoned for industrial use.</p>
<p>2.11 Manage the interface between modern built form of different scales with more traditional dwelling forms, including through the management of streetscape character, access to natural light, visual and acoustic privacy, massing and proportions.</p>	<p>The size and scale of the proposed development will be substantial. This is in line with much of the surrounding land uses which are industrial and of substantial scale.</p> <p>Measures will be put in place to assist with the mitigation of visual, light and acoustic impacts introduced through the interface of the development with the residential suburbs of Osborne and North Haven.</p>
<p>SPP 4 – Biodiversity</p> <p>To maintain and improve our state's biodiversity and its life supporting functions.</p>	
<p>4.1 Minimise impacts of development on areas with recognised natural character and values, such as native vegetation and critical habitat so that critical life-supporting functions to our state can be maintained.</p>	<p>The proposed development will occur adjacent to areas of identified natural character. Impacts across land and water-based activities have been considered in detail. As far as possible the development will reduce the impacts on the natural environment and ensure that ongoing mitigation measures are put in place to protect the areas and species of identified value.</p>
<p>4.5 Where impacts to biodiversity cannot be avoided, these impacts</p>	<p>As detailed above, the development seeks to reduce impacts on biodiversity. Some removal of sparse native seagrass will be required as part of the dredging works.</p>

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<p>should be minimised and where possible, offset.</p>	<p>This will be supported by the relevant reports, approvals and offsets.</p> <p>Mitigation measures have been developed and will continue to be refined in consultation with ecologists to minimise unavoidable impacts to biodiversity.</p>
<p>4.8 Development in, or affecting, marine environments is ecologically sustainable.</p>	<p>The development is occurring within and adjacent to the Port River. Development will seek to minimise impacts on the marine environment and will implement mitigation measures as necessary to achieve this.</p>
<p>SPP 5 – Climate Change</p> <p>Provide for development that is climate ready so that our economy, communities and environment will be resilient to climate change impacts.</p>	
<p>5.2 The good design of public places to increase climate change resilience and future livability.</p>	<p>There are no public places associated with the development site itself. Climate change resilience including protection against flooding and sea level rise as well as opportunities to reduce greenhouse gas emissions have been integrated into the design and operation of the development.</p>
<p>5.3 Facilitate climate-smart buildings to reduce our demand for water and energy.</p>	<p>The future development will include climate-smart features to reduce the demand for energy and water and to follow the waste hierarchy. These features will be incorporated into the design.</p>
<p>5.5 Avoid development in hazard-prone areas or, where unavoidable, ensure risks to people and property are mitigated to an acceptable or tolerable level through cost-effective measures.</p>	<p>Future development will be constructed to protect against hazards including flooding and sea level rise.</p> <p>At a very minimum, surface and building levels across the development site will be set above the 1% AEP design flood envelope, with an appropriate allowance for increased rainfall, sea level rise, land subsidence or uplift, and coastal erosion. To achieve this, finished surface levels will be set above a minimum level of 3.30m AHD and building floor levels set above a minimum level of 3.55m AHD.</p>

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<p>5.9 Encourage development that does not increase our vulnerability to or exacerbate the impacts of climate change and which makes the fullest possible contribution to mitigation.</p>	<p>Flood and sea level rise risk will be managed as per above.</p> <p>A Greenhouse Gas Emissions Reduction Strategy will be prepared for the development to guide mitigation efforts.</p>
<p>SPP – Cultural Heritage</p> <p>To protect and conserve heritage places and areas for the benefit of our present and future generations.</p>	
<p>72 Recognise and protect Indigenous cultural heritage sites and areas of significance.</p>	<p>There are no known Aboriginal heritage sites within the development site. The development site has been assessed as having a low risk of works impacting unknown Aboriginal heritage sites. Risk of encountering unknown Aboriginal heritage sites can be managed through routine measures.</p>
<p>7.3 Recognise and protect places and areas of acknowledged heritage value for future generations.</p>	<p>There are no state heritage places, state heritage areas, local heritage places and historic areas affected by the development.</p> <p>There are historic shipwrecks in the locality that could be affected by construction activities. Mitigation measures for construction activities in close proximity to extant historic shipwrecks will be put in place to manage these potential impacts.</p>
<p>SPP 9 – Employment Lands</p> <p>To provide sufficient land supply for employment generating uses that supports economic growth and productivity.</p>	
<p>9.1 Support the expansion and clustering of key economic growth areas including health; education; tourism; energy and resources; primary industry; defence; and knowledge and creative industries.</p>	<p>The development will see a clustering of services for defence in a strategically identified locality. This will support economic growth and ensure the development of a knowledge and industry hub that has the capability and capacity to deliver on its strategic goals.</p>

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<p>9.2 Enable opportunities for employment and encourage development of underutilised lands connected to, and integrated with, housing, infrastructure, transport and essential services.</p>	<p>The development site is currently underutilised. It is well connected to road, rail and water transport and neighbours existing defence industry services. The development will enable significant employment growth in a well-connected area.</p>
<p>9.3 Support state-significant operations and industries and protect them from encroachment by incompatible and/ or more sensitive land uses.</p>	<p>This development is of state, national and international importance. Ensuring that South Australia has the capability and capacity to deliver the SSN-AUKUS submarines is critical. With defence services already established on the Peninsula, the development is a logical expansion of existing land uses. Further to this, the strategic location alongside the port is critical to its operation.</p>
<p>9.4 Adaptable policies that allow commercial and industrial-focused employment lands to support local economies and evolve in response to changing business and community needs.</p>	<p>The development has been proposed to respond to the identified need for additional defence capability and capacity in Australia. The development will support the local economy in a significant way.</p>
<p>9.6 Protect prime industrial land for employment use where it provides connectivity to freight networks; enables a critical mass or cluster of activity; has the potential for expansion; is connected to skilled labour; is well serviced; and is not constrained by abutting land uses.</p>	<p>The development site is prime industrial land, and proposed to be used for this purpose in a way that delivers significant employment benefits for the state.</p>
<p>9.12 Plan for employment and industrial precincts in strategic locations that improve economic productivity; are protected from encroachment; connect to efficient supply chains; and are located to</p>	<p>The development will occur in a strategically identified area. Development will see supply chain efficiencies and the enhancement of an industrial precinct for defence purposes. The opportunity to expand the existing defence land uses is strategically important for the state and nation.</p>

State Planning Policy (SPP)	Project Alignment with SPPs
provide transport access and connectivity.	
<p>SPP 11 – Strategic Transport Infrastructure</p> <p>To integrate land use policies with existing and future transport infrastructure, services and functions to preserve and enhance safe, efficient and reliable connectivity for people and business.</p>	
<p>11.2 Development that maximises the use of current and planned investment in transport infrastructure, corridors, nodes and services.</p>	<p>Strategic planning documents have identified the importance of the Lefevre Peninsula for future defence infrastructure and are supporting this through associated planning policy and investment including in transport infrastructure.</p>
<p>SPP 13 – Coastal Environments</p> <p>To protect and enhance the coastal and marine environment and ensure that development is not at risk from coastal hazards.</p>	
<p>13.1 Protect and enhance the natural coastal environment and its resilience to a changing climate, including environmentally important features, such as mangroves; wetlands; estuaries; marine-protected areas; sand dunes; cliff tops; beaches; native vegetation; living creatures; and other important habitats.</p>	<p>The future development is acutely aware of the surrounding environment and its importance. Majority of the development is land based, however the marine infrastructure will interface with the coastal environment. Mitigation strategies will be put in place to mitigate and manage impacts.</p>
<p>13.3 Balance social and economic development outcomes in coastal areas with the protection of the environment.</p>	<p>The development will see significant economic impacts for the region and state. To accommodate the defence development there will be associated development to provide additional housing and social services for the growing community. This growth more broadly will be cognisant of the natural environment and enhancing it to maintain liveability.</p>

State Planning Policy (SPP)	Project Alignment with SPPs
<p>13.4 Locate development and infrastructure in areas that are not subject to coastal hazards unless the development requires a coastal location and appropriate hazard mitigation strategies are in place, taking into account projected sea-level rise and coastal retreat.</p>	<p>The proposed development requires a coastal location for the launching of submarines. The development site has been identified because of the deep-water access and the established defence infrastructure in place. Further to this, there is adequate space for expansion. The development will be designed to mitigate potential flooding and sea level rise hazards.</p>
<p>13.5 Facilitate sustainable development that requires a coastal site, including eco-tourism, aquaculture, marinas and ports, in areas adjoining the foreshore where environmental impacts can be avoided or mitigated.</p>	<p>The development is seeking to develop defence related infrastructure to capitalise on the existing coastal location and established infrastructure. Access to deep water is critical for the operation of the SCY. The marine area directly impacted by the development comprises a sandy intertidal area and sparse seagrass, and avoids the high-quality seagrass, mangroves and samphire supported by other parts of the locality. Mitigation measures will be put in place to reduce impacts on the natural environment.</p>
<p>13.6 Maintain or enhance the scenic amenity of important natural coastal landscapes, views and vistas.</p>	<p>The existing amenity of the Lefevre Peninsula is heavily industrial. The existing coastal environment functions as a working port. The port has been expanded and evolved over time to meet the changing needs of the shipping industry. The development will continue evolve the Lefevre Peninsula and the strategic role it plays for the state.</p>
<p>SPP 15 – Natural Hazards</p> <p>To build the resilience of communities, development and infrastructure from the adverse impacts of natural hazards.</p>	
<p>15.5 Protect key coastal areas and critical infrastructure at risk from sea-level rise, coastal erosion and storm surges.</p>	<p>The development will be constructed to protect against sea-level rise, coastal erosion and storm surges.</p> <p>At a very minimum, surface and building levels across the development site will be set above the 1% AEP design flood envelope, with an appropriate allowance for increased rainfall, sea level rise, land subsidence or uplift, and coastal erosion. To achieve this, finished surface levels</p>

State Planning Policy (SPP)	Project Alignment with SPPs
	will be set above a minimum level of 3.30 mAHD and building floor levels set above a minimum level of 3.55 mAHD.
<p>SPP 16 – Emissions and Hazardous Activities</p> <p>To protect communities and the environment from risks associated with emissions, hazardous activities and site contamination, whilst industrial development remains viable.</p>	
<p>16.1 Protect communities and the environment from risks associated with industrial emissions and hazards (including radiation) while ensuring that industrial and infrastructure development remains strong through:</p> <ul style="list-style-type: none"> a) supporting a compatible land use mix through appropriate zoning controls b) appropriate separation distances between industrial sites that are incompatible with sensitive land uses c) controlling or minimising emissions at the source, or where emissions or impacts are unavoidable, at the receiver. 	<p>Air quality can be well controlled within acceptable limits for the environment and community through the adoption of standard construction and operation mitigation measures.</p> <p>All dangerous substances associated with the development will be used, stored, treated and disposed of in accordance with strict legislative requirements and guidelines to ensure utmost safety for workers, the community and the environment.</p> <p>The nuclear-powered propulsion system will be designed and built overseas to international safety standards and transported from the host nation to Osborne, South Australia, where they will be integrated into the submarine hull at the SCY. The submarine and its systems will be tested, commissioned and then deployed to sea and are not currently anticipated to return to Osborne, South Australia for regular routine maintenance works.</p> <p>Up to low level waste, similar to hospital type waste, are anticipated to be generated throughout the later stages of the build process. This will be collected, sorted and categorised prior to being taken off-site for long-term disposal (once a suitable facility becomes available). The site design does not cater for the storage of any medium or high-level waste.</p> <p>Australia will work with the UK and the US to implement the highest standards of nuclear safety and security. All requirements under the <i>Australian Radiation Protection and Nuclear Safety Act 1998</i>, <i>Nuclear Non-Proliferation (Safeguards) Act 1997</i> and <i>Nuclear Non-Proliferation</i></p>

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	<i>(Safeguards) Act 1997</i> will be followed and highly regulated.
<p>SPP 18 – Special Legislative Scheme Adelaide Dolphin Sanctuary Act 2005</p> <p>The Adelaide Dolphin Sanctuary is protected from the adverse impacts of development.</p>	
<p>18.1 Development in or adjacent to the Adelaide Dolphin Sanctuary will not adversely impact on the dolphin population and their habitat.</p>	<p>The future development will occur within and adjacent to the Adelaide Dolphin Sanctuary (ADS). Impacts to the ADS and the dolphins it supports have been assessed and are not considered to be significant. Mitigation strategies will be put in place as needed to ensure the protection of the ADS.</p>
<p>18.2 Development that results in significant discharge into the waters, requires the removal of vegetation or alters the water flow regime of the sanctuary should be avoided.</p>	<p>A Stormwater Management Plan will manage the flow of water from the development site into the Port River.</p> <p>The development will require some removal of sparse seagrass as part of the dredging campaign. This is in line with previous dredging undertaken in the Port River for the existing ONS as well as by Flinders Ports Holdings for the construction and maintenance of the port.</p> <p>The construction of the coastal and marine infrastructure and the hardening of the coastal edge will cause changes in channel morphology and hydrodynamics (e.g. flow of water, deposition of sediment) in the Port River. The spatial area of this impact is still uncertain; given the final design has not been landed, this modelling is yet to be undertaken.</p>
<p>18.3 Good stormwater management should ensure the ongoing and long-term protection of the Adelaide Dolphin Sanctuary through appropriate water sensitive urban design.</p>	<p>Stormwater will be closely managed through a construction and operational Stormwater Management Plan to deliver best-practise stormwater management and protect the ADS.</p>

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