

Submarine Construction Yard Strategic Impact Assessment Report

Contents

Overview	3
Structure of PAE Submission	5
Noise and Vibration	6
Mobilisation of sediment, contaminants and gross pollutants	6
Changes to soil chemistry	7
Dust generation and Odour	7
Mortality of injury of native animals.....	7
Clearing of vegetation	8
Light generation.....	8
Changes to landscape and visual amenity.....	9
Interaction with a heritage place or heritage values.....	9
Increased demand for resources and facilities.....	10
Hydrological changes.....	10
Radiation	11

SUBMISSION

Strategic Impact Assessment Report



Overview

PAE recognises the scale and the significance of the proposed Osborne Submarine Construction Yard (SCY) development and its role in delivering on the initiatives of the AUKUS agreement.

At its Ordinary Council Meeting on 12 November 2024, Council adopted a Decision Making Framework for AUKUS to guide its strategic and operational input into the AUKUS development. This Framework, which aligns with the City Vision 2024-34 goals and objectives, has been used to inform Council's submission on the Strategic Impact Assessment Report (SIAR). Specifically, the submission seeks to minimise negative environmental and community outcomes and advocate for environmental and community (including economic development) benefits from those aspects of the development that are captured within the SIAR.

One of Council's overarching concerns with regards to the SIAR is that the report fails to encompass the impacts that AUKUS will have on existing residents and their ability to remain living on the peninsula as a consequence of the Osborne SCY development.

Not only are the existing community at risk of being displaced from the peninsula if the future development results in land and property cost increases, but additionally, if key impacts of the development are not adequately addressed and mitigated, such as traffic volumes, noise and air quality, the quality of the life and the environment will be negatively impacted. It is important to ensure that development of the Osborne SCY does not compound any existing socio-economic disadvantages on the peninsula. The matters are further detailed in Council's submission on the separate Environmental Impact Statement, a copy of which is attached for consideration in the Strategic Impact Assessment.

Despite the long development timeframes for the Osborne SCY, the existing community are experiencing the impacts of the development now, e.g. from increased traffic volumes and the effect of significant construction works, which are only going to increase. The agencies of AUKUS need to consider their social licence as a matter of priority and not wait until the negative outcomes of the development on the community and the environment have already occurred.

The SIAR states that as the development of design and planning for the SCY is still in its early stages, the scope of some activities related to the development are still under consideration. This includes uncertainties that relate to the design, construction and operation of the Strategic Assessment Plan (SAP), such as the timing / duration of activities, the frequency of activities and the scale and extent of activities.

Whilst Council acknowledges this position, there is some concern that, as a result of this limitation, assessment of the potential impacts of undertaking the Actions and Classes of Actions, may not be entirely accurate. The importance of ongoing auditing, monitoring and reporting of outcomes being delivered during the construction and operation of the Osborne

SUBMISSION

Strategic Impact Assessment Report



SCY is therefore fundamental to the protection of matters of national environmental significance (MNES) and the environment.

The descriptions of the Actions and Classes of Actions described in the SIAR provide a reasonable level of detail despite the early stages of design development. It is anticipated that if the SAP is granted approval by the Minister, the approval of Actions described in the SAP will be subject to the preparation and implementation of the mitigation measures identified in the SIAR that will reduce the potential impacts of the development on Protected Matters.

In an unmitigated state, the SIAR assessed that there was potential for a significant impact from the proposed development of the Osborne SCY upon aspects of the environment, specifically:

- Landscapes and soils
- Coastal landscapes and processes
- Ocean forms and ocean life
- Pollutants, chemicals and toxic substances
- People and communities

With the application of mitigation measures set out in the SIAR to avoid or reduce potential impacts, the ASA has concluded that the impacts of the SAP are likely to be acceptable.

The 'SMART' mitigation measures described in Table 8-1 assumes that the mitigation measures identified will be sufficient to deliver the risk ratings set out in the Environmental Risk Assessment (Table K-1). However, that is currently unknown and reinforces the importance of monitoring future compliance throughout the construction and operation of the Osborne SCY to ensure that identified mitigation measures are implemented as proposed and will result in the reductions in risk predicted.

In relation to the Environmental Risk Assessment, the residual risk assessment conducted by ASA in consideration of the mitigation measures identified that a risk rating of 'high' remained for:

- Increased demand for resources and facilities
- Clearing of vegetation.

All other unmitigated risks that were rated high, were assessed by ASA to be medium or low with mitigation measures in place.

However, within Table K-1 are a number of 'unmitigated risk ratings' that could be challenged as having a higher risk rating than what is given. For example, noise generation from the construction would likely have a higher risk rating than 'unlikely' for EPBC listed migratory shorebirds which are known to be very sensitive to noise and will vacate feeding and roosting location from noise disturbance. As the development site footprint and adjacent areas

SUBMISSION

Strategic Impact Assessment Report



(particularly Bird Island, Mutton Cove and Torrens Island) contains both feeding and roosting habitat and these birds were found to be present in surveys, it would suggest some of the risk rating could be higher, allowing for more consideration of specialised mitigation measures.

Similarly, as there are limited details of the mitigation measures at this stage, Council has limited confidence that the subsequent risk assessments accurately assess the residual mitigated risk rating i.e. how can ASA state that the risk level will be low for a particular impact when the mitigation measures have not yet been detailed?

Recommendation 1

That ASA work in partnership/collaboration with Council and other stakeholders on best practice mitigation measures that go beyond standard practice for developments due to the significance of the flora and fauna and conservation areas/sanctuaries. Council also recommends ensuring that ecological expertise is sought regarding best practice mitigation measures for marine flora (particularly seagrass and saltmarsh), marine fauna and migratory shorebirds.

Aside from reinforcing the importance of the auditing, monitoring and future compliance reporting throughout the duration of the development, Council strongly encourages that the principles of ecologically sustainable development are integrated into the design, construction and operation of the SCY.

Whilst not directly related to the assessment, Council is also keen to receive further clarity on the following:

- Timeframes for the scheduling of the development i.e. what is happening when and where for community awareness purposes.
- Confirmation of what the various 'approvals', 'licences' and 'permits' are, as referenced throughout the SIAR.

Structure of PAE Submission

As ASA is aware, Council has also submitted comments on the Environmental Impact Statement (EIS) as part of the State Development Approval process under the PDI Act. To ensure coverage of all issues within the approvals process, Council has provided ASA with a copy of the submission on the EIS to enable ASA to cross reference to the detail provided on key issues of importance in the development of the Osborne SCY and its impacts on the wider Lefevre Peninsula.

For ease of reference and convenience, the structure of Council's comments below follow the structure and order of the Impact Factors outlined in the SIAR.

Noise and Vibration

Council requests further detail be provided for consultation when the following are prepared: Construction Noise and Vibration Framework, Construction Noise and Vibration Management Plan, a Night Works Management Plan (as needed), so that we can understand the full extent of vibration and noise impacts, the mitigation measures and communication pathways for community and Council.

Where practicable, vibration conducting work is to be conducted during standard construction hours, including any dredging works in the Port River.

Recommendation 2

That further detail and consultation on the Stakeholder and Community Engagement Plan for construction activities is provided, together with assurance that this will include all community impacts from the development and pathways for communication should amenity or public health be impacted.

Recommendation 3

That further detail be provided for consultation when the Dredge Management Plan is prepared to further understand the noise, environmental and public health and amenity concerns.

Mobilisation of sediment, contaminants and gross pollutants

With reference to Table 8-1 “SMART Mitigation Measures”, the Column 1: “Impact Factors” relating to stormwater quality, i.e:

- Mobilisation of sediment
- Mobilisation of contaminants
- Mobilisation of gross pollutants
- Hydrological changes

are typically proposed to be addressed in the form of a “*Soil Erosion Drainage Management Plan*”, prepared in accordance with document “*Stormwater pollution prevention: code of practice for local, state and federal government (EPA SA 1998)*”. It is also stated that the above requirement will only apply/be implement (i.e. Column 7: “timebound”) “*during construction*” and “*during operation*”.

The SIAR needs to be updated to include the necessary, industry recognised stormwater quality reduction targets that need to be met, to prevent stormwater runoff quality impacts to the Port River. Those being a reduction of: 90% gross pollutants, 80% suspended solids, 60% phosphorus, and 45% nitrogen. These should be listed as a “measurable” in the table and apply “*during design*” under all relevant “impact factors” relating to stormwater runoff.

SUBMISSION

Strategic Impact Assessment Report



It should be noted that the *“Stormwater pollution prevention: code of practice for local, state and federal government (EPA SA 1998)”* makes no reference to the above-mentioned stormwater quality reduction targets, in which case it is considered important that these be included as an additional measurable.

Stormwater pollution reduction is of particular importance as the development site is adjacent to sensitive waterways that are protected. The Port River Estuary system is listed as a wetland of national importance (Barker Inlet and St Kilda Wetland) with additional protection measures required under the *Adelaide Dolphin Sanctuary Act, 2005*. Strong consideration needs to be made to the additional measures (pollution reduction targets listed above) that are needed to ensure stormwater pollutants are not entering the protected waterways.

Recommendation 4

That further detail be provided for consultation when the Soil Erosion and Drainage Management Plan is prepared to understand the control for surface runoff, dust generation, erosion and sediment control so as to prevent pollution of stormwater and impacts to amenity and public health.

Changes to soil chemistry

If the site contains Acid Sulfate Soils (ASS), disturbance may lead to acidification of surrounding environments which can cause the corrosion of infrastructure, poor water quality, and ecological harm.

Dust generation and Odour

Council requests further detail be provided for consultation when the Soil Erosion and Drainage Management Plan is prepared so that we can understand the control for surface runoff, dust generation, erosion and sediment control so as to prevent pollution of stormwater and impacts to amenity and public health.

Recommendation 5

That further detail be provided for consultation when the Air Quality Management Plan is prepared to understand odour sources, concentrations, mitigation and reporting methodology.

Mortality of injury of native animals

Council is reassured to see that a specific measure of a survey requirement is included in respect of this impact factor i.e. *“Prior to the removal of vegetation / other activities identified to have the potential to impact fauna, the area to be affected should be checked for*

SUBMISSION

Strategic Impact Assessment Report



fauna species by a suitably qualified person” and that “Under the supervision of a suitably qualified specialist, relocate any native fauna to a similar habitat if that species’ habitat will be destroyed” has also been included. Council would like to be informed of any survey results and relocation of fauna.

Council also supports the measure *“Implement work practices which allow avian and marine fauna that are sensitive to noise, to depart without the risk of harm”* as this requires expert advice on the detail of the work practices that will be put in place.

Clearing of vegetation

Beyond the Biosecurity Plan, which will cover significant national weed management, there is also a need for improved native vegetation planting and management within the Strategic Assessment Area. The report states that *“Vegetation across the Strategic Assessment Area has typically regenerated or reseeded within previously disturbed areas.”* However, these areas have typically regenerated with weeds. This is an opportunity to improve the vegetation on site by developing appropriate native landscaping plans and maintenance regimes.

The impacts from dredging the Port River as well as the construction of Area 3 will have significant impact on the seagrass cover within the Port River. The removal of seagrass should be included as clearing of vegetation and, as with terrestrial vegetation clearance, should aim to ‘offset’ or provide an improved biodiversity outcome elsewhere on the site. Consideration should also be given to supporting local volunteer groups and NGOs who work tirelessly on monitoring and restoration projects to improve the ecological health of the Port River Estuary.

Recommendation 6

That Council is consulted in the preparation of the input into the proposed Biosecurity Management Plan, which is to be included in the Construction Environmental Management Plan.

Light generation

Artificial lighting can have significant impacts on wildlife, community amenity, and sky visibility, particularly in environmentally sensitive areas, Council can provide further advice on these areas. Council requests details on how lighting will be designed to mitigate these impacts while maintaining compliance with relevant standards.

Of particular concern is the potential disruption to nocturnal wildlife in the coastal and marine areas as artificial lighting can affect the behavior of birds, insects, and other fauna, altering natural migration patterns and ecological interactions. If possible, Council prefers warm-colored (preferably <3000K) and low-intensity fixtures, as well as directional and

SUBMISSION

Strategic Impact Assessment Report



shielded lighting to prevent unnecessary glare and light spill into natural habitats while maintaining light level to comply with Australian Standards.

The use of motion sensors, dimming controls, and timers are generally supported by Council. Council also supports the International Dark-Sky Association (IDA) and aligns with best-practice environmental lighting standards. This includes compliance with Australian Standard AS 4282:2019 – Control of Obtrusive Effects of Outdoor Lighting and any Wildlife-Friendly Lighting Guidelines applicable to the area.

Recommendation 7

That further clarification is provided on any future and proposed lighting designs and how the development will minimise light pollution while ensuring safety and functionality.

Changes to landscape and visual amenity

While the general ‘industrial’ character of this area of the peninsula is acknowledged, it also includes a mix of characters with viewsapes beyond just industry that include natural open spaces and green corridors (Mutton Cove, Falie Reserve, Biodiversity Park, Lady Ruthven Park and North Haven Golf Cours). These types of character and viewsapes should not be discounted but given more consideration in the planning and design of the buildings, roads and other infrastructure.

Recommendation 8

That consideration is given to how the visual amenity, especially landscaping, could be enhanced and greatly improved for the key user groups through this development and not simply more of the same.

Interaction with a heritage place or heritage values

It is recommended that a detailed Cultural Heritage Management Plan (CHMP) is prepared by appropriate experts to provide a management framework for mitigating the potential impacts of the development on any unknown Aboriginal heritage sites, objects and remains for the life of the project. This should include a clear methodology for:

- engaging with the local Kurna community through the PAE Aboriginal Advisory Panel (The PAE - Yitpi Yartapuultiku Project showcased a good working example).
- heritage supervision requirements (monitoring and inspection of earthworks – the PAE Yitpi Yartapuultiku Project implemented local Kurna Members in Cultural Monitoring on site, during excavation in partnership with Australian Heritage Services, encouraging local involvement).
- cultural awareness training, communication protocols and reporting procedures.
- managing unexpected discoveries.

SUBMISSION

Strategic Impact Assessment Report



The CHMP should be designed to reduce the overall heritage impacts for the development and include consistent processes that can be applied to all locations with surface level and below ground construction impacts for the duration of works.

Recommendation 9

That a detailed Cultural Heritage Management Plan (CHMP) is prepared by appropriate experts to provide a management framework for mitigating the potential impacts of the development on any unknown Aboriginal heritage sites, objects and remains for the life of the project.

Increased demand for resources and facilities

Council requests to be consulted on the proposed Traffic Management Plan so we can better understand the impact on air quality and how this will be minimised, due to existing community concerns.

Council also requests further information which outlines how the community will be consulted on the Traffic Management Plan.

Hydrological changes

Council seeks further clarification on how the proposed development will impact local hydrology, groundwater movement, and stormwater systems.

A key concern is the increased impervious surface area, which may alter natural infiltration rates and result in higher stormwater runoff volumes. Without appropriate management, this could lead to localised flooding, increased pressure on Council's stormwater infrastructure, and reduced groundwater recharge.

Council requests details on how stormwater will be managed on-site, including the incorporation of Water Sensitive Urban Design (WSUD) principles, detention basins, and other mitigation measures.

Recommendation 10

Given the complex hydrological conditions of the area, that the Lefevre Peninsula Stormwater Management Plan be used as a key reference for understanding local topography, groundwater interactions, and flood risk assessments. This plan contains valuable data that should inform further investigations and ensure that hydrological impacts are appropriately considered in the development process.

Radiation

The SIAR states that 'Low level' radioactive waste to be managed and temporarily stored at the facility would include solid, liquid and mixed waste, some of which will contain low level radioactive and other hazardous materials such as industrial chemicals. The potential for a cumulative hazard incident due to a high consequence safety failure at one of the surrounding Major Hazard Facilities to the SCY, or sites storing dangerous substances in quantities slightly less than required for MHF classification, needs to be carefully considered and may have an impact on the layout of the SCY sites and the location of activities occurring within those sites.

On 12 November 2024 Council resolved as follows:

- to oppose the storage or disposal of radioactive waste in the AUKUS facilities at Osborne Naval Shipyard; and
- that any applications for licencing for the management, storage or disposal of radioactive waste at the AUKUS operations at the Osborne Naval Shipyard should be subject to comprehensive community engagement.

Recommendation 11

That the storage of any radioactive/nuclear waste at the site is prohibited and any applications for nuclear licensing is subject to comprehensive community engagement.