

CONSULTATION INFORMATION PACK

Application for authorisations under the *Aboriginal Heritage Act 1988* (SA)

Eyre Peninsula Desalination Plant (Billy Lights Point)

- Applicant:** South Australian Water Corporation (SA Water)
- Application Type:** Sections 21 and 23 of the *Aboriginal Heritage Act 1988* (SA)
- Application Area:** An area of land comprising some 52.5 Ha at and near Billy Lights Point, south of Port Lincoln on the Eyre Peninsula – see Attachment 1.
- Proposed Activities:** Ground disturbing works and other supporting works within the Application Area to enable the construction of a desalination plant; marine intake pump station; subsurface tunnels for pipes; electricity transmission lines and water pipelines; and construction of associated infrastructure and upgrades to existing infrastructure.

Figure 1 – Part of the Application Area on Billy Lights Point facing northeast (image courtesy of Applicant)



Information in this document is based primarily on information provided by the Applicant.

LIST OF ACRONYMS AND ABBREVIATIONS

AAR	Attorney-General's Department - Aboriginal Affairs and Reconciliation
Acciona	Acciona Construction Australia Pty Ltd
Act	<i>Aboriginal Heritage Act 1988</i> (SA)
Applicant	South Australian Water Corporation, also referred to as 'SA Water'
Application Area	An area of land comprising some 52.5 Ha located at and near Billy Lights Point, south of Port Lincoln on the Eyre Peninsula
BACCI	Barngarla Aboriginal Consultative Committee Inc
BDAC	Barngarla Determination Aboriginal Corporation RNTBC
Committee	The State Aboriginal Heritage Committee
CHMP	Cultural Heritage Management Plan
Consolidated Heritage Assessment	A Consolidated Heritage Assessment prepared for the Project in 2024
DOSAA	The former Department of State Aboriginal Affairs (SA)
Desalination Plant	A proposed 5.3 gigalitre per year reverse osmosis desalination plant (and associated infrastructure) that may be expanded to 8 gigalitres per year – at Billy Lights Point, south of Port Lincoln
Determined site	A site that has been determined as an Aboriginal site within the meaning of the Act by the Minister under section 12 of the Act. Determined site records are added to the Register of Aboriginal Sites and Objects, a subset of the central archives of Aboriginal heritage maintained by AAR on behalf of the Minister. Determined sites are conclusively presumed to be Aboriginal in any legal proceedings. Determined sites appear on AAR's maps as a green dot or polygon
Drinking Water Pipeline	An approximately 7 km long water pipeline infrastructure corridor extending from the proposed desalination plant to a SA Water connection point at the northern boundary of the Kathai Conservation Park, southwest of Port Lincoln
Electricity Transmission Line	An electricity transmission line infrastructure corridor connecting the proposed desalination plant to the Port Lincoln Marina Substation and the Port Lincoln City Substation
EWSD	The former Engineering and Water Supply Department (SA)
Heritage	Aboriginal sites, objects and/or remains, as defined in the Act
Historic Jetty	A jetty historically used by BHP for loading/unloading processed sand, located south of the Application Area near the Desalination Plant. The jetty is connected to Billy Lights Point by a small spit of land and shown at Figure 3

Listed site	An Aboriginal site that has been entered onto AAR's central archives that has not been through a determination process under section 12 of the Act. Listed sites attract the same protection under the Act as determined sites. Listed sites appear on AAR's maps as a red point or polygon
Marine Pump Station	A marine intake pump station and associated infrastructure, which would be built on the northeast corner of the Port Lincoln Waste Water Treatment Plant, primarily within three decommissioned lagoons
Marine Pipes	Pipes extending east of the Marine Pump Station into the boundary of Proper and Boston Bays. The pipes would be used to draw in seawater, as well as discharge hypersaline water back in the sea. The pipes would be contained within an underground tunnel, before emerging onto the seabed
Minister	Minister for Aboriginal Affairs
NAC	Nauo Aboriginal Corporation RNTBC
PLAO	Port Lincoln Aboriginal Organisation
Project	The construction of the Desalination Plant and associated infrastructure at and near Billy Lights Point, south of Port Lincoln
Reported site	A site or object for which a report has been received by AAR, but that has not yet been formally accessioned onto the central archives. Reported sites do not have an eight-digit site number, and so are allocated a sequential 'ID' number
RNTBC	Registered Native Title Body Corporate
SAPN	SA Power Networks
WWTP	Port Lincoln Waste Water Treatment Plant

INTRODUCTION

The Minister for Aboriginal Affairs (Minister), who is responsible for the *Aboriginal Heritage Act 1988* (SA) (Act), has received an application for authorisations under sections 21 and 23 of the Act from SA Water (Applicant). The Applicant seeks to undertake ground-disturbing works associated with the construction and operation of a desalination plant at and near Billy Lights Point, south of Port Lincoln on the Eyre Peninsula (Project). The application area is shown in purple at Figure 2 and Attachment 1 (Application Area).

The Applicant has identified an urgent need to provide a new source of water to Eyre Peninsula residents and businesses, on the basis that currently available sources are not sustainable in the medium to long term. The Project would involve the construction of a seawater desalination plant that can provide 5.3 gigalitres of potable water each year, which may later be expanded to 8 gigalitres per year.

The Project would involve ground disturbing works within the Application Area including: largescale earthworks to enable the construction of key Project infrastructure including a desalination plant and marine intake pump station; tunnelling/drilling under the coastal margin; localised seabed excavation (dredging and drilling); the laying of pipes on the seafloor; trenching and excavations to allow the installation of above-ground electricity monopoles and sub-surface electricity transmission lines; installation of above-ground water pipelines; installation of fencing; excavations for new roads, upgrades to existing roads and kerbing; the removal and stripping of topsoil; the clearing of vegetation, including native vegetation; the creation of laydown and storage areas; stormwater management infrastructure, including drainage basins; and the construction of temporary storage compounds; and landscaping works.

The Application Area is entirely within the native title boundary of the Barngarla People, whose native title rights and interests are represented by the Barngarla Determination Aboriginal Corporation RNTBC (BDAC).

The Application Area intersects one Aboriginal site for which records are held on Aboriginal Affairs and Reconciliation's (AAR's) central archives. In addition, AAR is aware of other Aboriginal sites – including multiple fish traps, archaeological sites, an historic site, and a restricted anthropological site – within 300 m of the Application Area. One of these archaeological sites is located approximately 3 m from the Application Area.

Section 21 of the Act makes it an offence to excavate land for the purposes of uncovering Aboriginal sites, objects and remains (together, heritage) without the Minister's authorisation, while section 23 of the Act makes it an offence to damage, disturb or interfere with Aboriginal heritage without the Minister's authorisation.

As the Project would potentially involve direct impacts to at least one Aboriginal site, and extensive ground-disturbing works that may impact, or require excavation of, any discovered Aboriginal heritage, the Applicant has sought authorisations under sections 21 and 23 of the Act.

Prior to considering whether to grant an authorisation, section 13 of the Act requires the Minister to understand and consider the views of a range of interested Aboriginal parties. AAR conducts this consultation on the Minister's behalf, seeking the views of Traditional Owners, the

State Aboriginal Heritage Committee (Committee) and other Aboriginal parties that the Minister considers may have an interest in the matter.

PROJECT OVERVIEW

The Applicant

The Applicant is a water utility that is wholly owned by the state government of South Australia. It is responsible for operating over \$14 billion in assets and for providing water, sewerage and wastewater services to residents across South Australia.

Project Background

The Applicant advises that current water supply for the lower Eyre Peninsula region is provided through a mix of groundwater extracted within the Eyre Peninsula region and water piped in from the River Murray. The groundwater used for drinking is mostly drawn from the Uley South Basin – a groundwater aquifer located in the southwest of the Eyre Peninsula.

The Uley South Basin is considered to be an ‘at risk’ water resource due to reduced groundwater recharge and potential seawater infiltration into the basin. The Applicant says that long-term use of this groundwater resource is unsustainable from an ecosystem health and water quality perspective.

The Project seeks to provide long term, climate-independent water security for Eyre Peninsula, allowing for sustainable and proactive environmental water resource management and protection of the Uley South Groundwater Basin. In March 2023, following a three-year site selection process, the state government accepted SA Water’s recommendation for the construction of a reverse osmosis desalination plant, situated approximately 4 km southeast of the Port Lincoln city centre adjacent to Billy Lights Point in the Eyre Peninsula, South Australia.

The Applicant advises that the Project would initially see the construction of a 5.3 gigalitre per year desalination plant. However, as part of the Project, the desalination plant’s capacity may be expanded to 8 gigalitres per year to meet future water demand in the region. The 5.3 gigalitre desalination plant would be constructed over approximately 18 months, with a current Project finalisation timeframe of mid-2026.

Further information about the Project is available on the Applicant’s website, accessible via: agd.sa.gov.au/heritage-applications.

Billy Lights Point

The Applicant advises that its selection of Billy Lights Point for the construction of the Project included consideration of, among other things, the following:

- its proximity to existing electricity and water networks
- the available space would allow for future growth, meaning that the 5.3 gigalitre per year desalination plant can be increased to an 8 gigalitre per year capacity, if required
- Billy Lights Point is located on industrial-zoned land that is relatively sheltered and flat, which would assist with construction
- a large portion of the Project would be situated on or adjacent to previously disturbed industrial-zoned land, which is not close to residential areas

- Billy Lights Point has access to deep water which allows water pipes to be located away from sensitive aquaculture areas
- environmental considerations.

The Applicant advises that it has made efforts to minimise the Project's anticipated impacts on Billy Lights Point, with a preference for areas that have been previously disturbed through sand loading activities undertaken by BHP and wastewater treatment activities associated with the Port Lincoln Waste Water Treatment Plant (WWTP).

Anticipated benefits of the Project

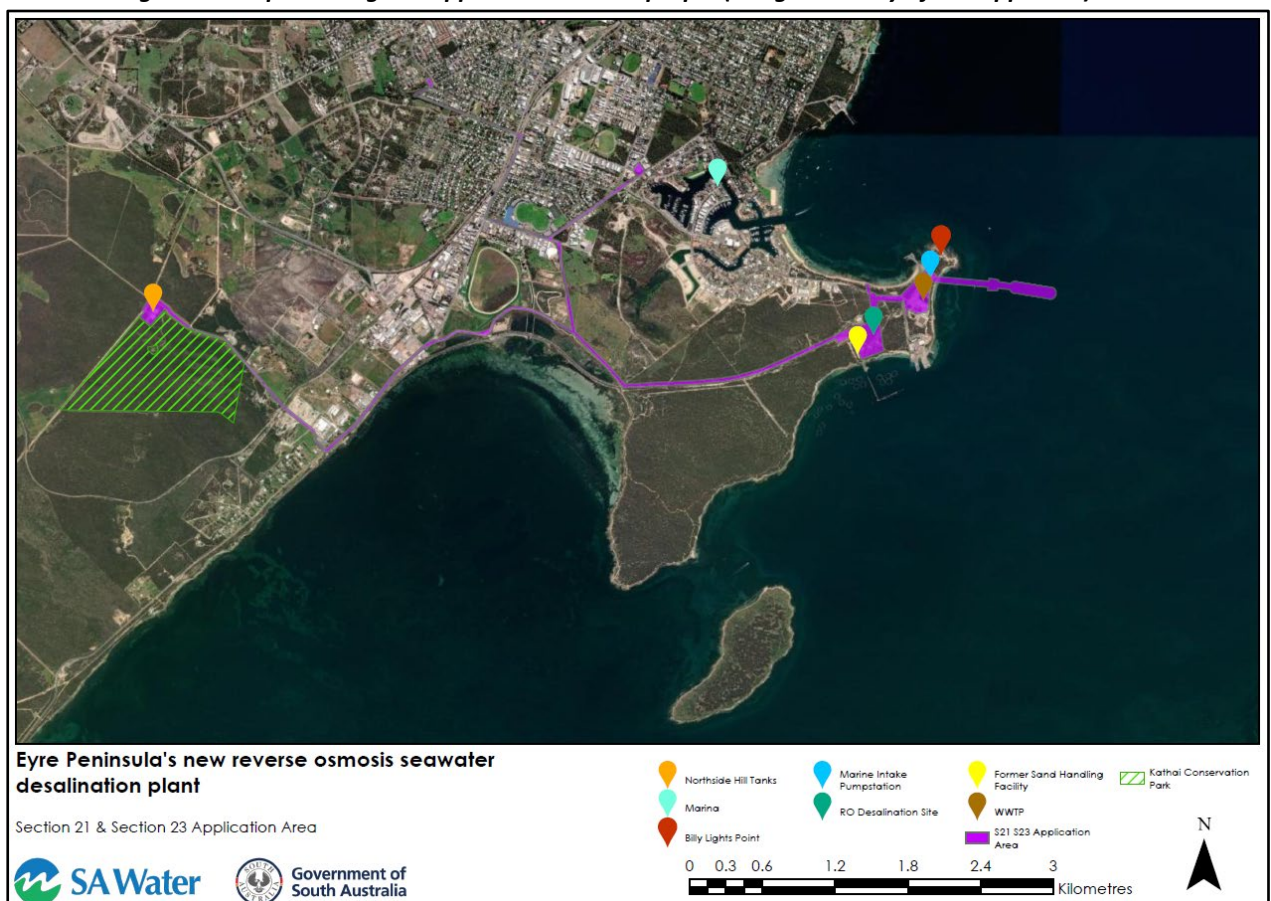
The Applicant advises that the Project would:

- produce up to 16 megalitres (16 million litres) of drinking water per day (based on a 5.3 gigalitre per year output), securing a long-term supply for residents of the Eyre Peninsula
- relieve pressure on the Uley Basin South allowing it to operate sustainably, and avoiding long term impacts to the groundwater aquifer
- create approximately 230 jobs during the Project's construction phase, with a focus on local industry participation.

APPLICATION AREA

The Application Area, which comprises approximately 52.5 Ha, is shown in purple in Figure 2 and Attachment 1. Attachment 2 contains a series of maps that show the Application Area in detail. A much larger series of maps showing the Application Area in greater detail is available on AAR's website: agd.sa.gov.au/heritage-applications.

Figure 2 - Map showing the Application Area in purple (image courtesy of the Applicant)



The Applicant advises that the Application Area encompasses land that is held by various Crown entities including SA Water, the Minister for Infrastructure and Transport, and local government as well as private landowners, which the Applicant intends to acquire in the coming months.

In summary, the Application Area comprises the following key elements:

- the footprint for a proposed seawater desalination plant and associated infrastructure on Billy Lights Point, which would be located immediately east of existing sand loading infrastructure formerly used by BHP (covering approximately 8 Ha) (**Desalination Plant**, hereafter)
- the footprint for a marine intake pump station and associated infrastructure, which would be built on the northeast corner of the Port Lincoln WWTP, primarily within three decommissioned lagoons (**Marine Pump Station**, hereafter)
- a corridor that would be used for marine pipes extending east of the pump station into water that forms the boundary of Proper and Boston Bays. This would include underground pipes, installed using tunnelling/drilling techniques, under the coastal cliffs and intertidal reef area at Billy Lights Point. Once the pipes meet the seafloor, pipes would be laid on the seafloor (up to approximately 1,100 m from the shore) (**Marine Pipes**, hereafter)
- an approximately 7 km long water pipeline infrastructure corridor extending from the proposed desalination plant to a SA Water connection point at the northern boundary of the Kathai Conservation Park, southwest of Port Lincoln (**Drinking Water Pipeline**, hereafter)
- a 7.6 km electricity transmission line infrastructure corridor connecting the proposed desalination plant to the Port Lincoln Marina Substation and the Port Lincoln City Substation (**Electricity Transmission Line**, hereafter)
- connected areas of land that would be used for associated infrastructure, maintenance work and the installation of services etc.

Details about the various parts of the Application Area and Project details proposed within them, are discussed later in this document.

ABORIGINAL HERITAGE

AAR's central archives, which are a non-exhaustive record of Aboriginal heritage across the state, contains records for Aboriginal heritage within, and adjacent to, the Application Area.

The single known site that intersects the Application Area – site 6028-3037 ('Port Lincoln EWS One') – is described below. Aboriginal sites known to AAR that are located close to, but outside the Application Area, are summarised in Attachment 3.

Where appropriate, Aboriginal sites referenced below and in Attachment 3 are shown on the maps at Attachment 4.

Please note that geospatial records held on AAR's central archives vary in accuracy. Many site locations were recorded prior to modern GPS technology. The precise location, full geographic extent, or on-ground orientation of Aboriginal heritage sites may not be reflected accurately on the attached maps. For these reasons, the site locations and boundaries on the attached maps should be considered indicative only.

Aboriginal heritage within the Application Area

AAR's central archives lists one Aboriginal site that intersects the Application Area: this is archaeological site 6028-3037 ('Port Lincoln EWS One') – shown at Attachment 4.

Site 6028-3037 ('Port Lincoln EWS One')

Site 6028-3037 is an Aboriginal archaeological site recorded by archaeologist Vanessa Edmonds in 1990, who had been engaged by the Engineering and Water Supply Department (EWSD), now SA Water. The name allocated to the site by Edmonds – 'Port Lincoln EWS One' – reflects the context of its recording. Further information about how and why this site was recorded can be found in a summary of relevant Aboriginal heritage studies at Attachment 5.

Edmonds describes the site as a 'midden and artefact scatter' comprising three distinct areas. The three areas, which are separated from one another by up to 36 m, are described as:

- **Area 1:** measuring 1 x 1 m in area – containing five quartz artefacts
- **Area 2:** measuring 3 x 3 m in area - described as a *"very disturbed surface scatter of stone artefacts, burnt fragments of calcarenite [limestone], 1 piece of bird bone and 2 pieces of fish bone"*. Edmonds noted that the fragments of calcarenite are likely associated with hearths (cooking fires). The artefacts, made primarily from quartz and quartzite, were recorded at an average density of 8/m²
- **Area 3:** measuring 3 x 2 m in area - described as a small scatter of seven quartz and quartzite artefacts.

On the condition of the site, Edmonds notes that the three areas *"appear to have been disturbed by minor clearing and vehicle traffic"*. Area 2, according to Edmonds, had also been disturbed by wind and water erosion.

Edmonds' 1990 report also states that the Port Lincoln Aboriginal Organisation (PLAO) was consulted prior to, and following, her survey of the area. A PLAO representative also inspected the site with Edmonds. The 1990 Edmonds report states that a PLAO Sites Officer *"made a collection of artefacts from all recorded sites on the Reserve and these artefacts are now held at PLAO headquarters"*.

In providing recommendations in relation to site 6028-3037, Edmonds says that while the *"majority of exposed stone artefacts were collected from this site...many fragments of hearth stones still remain"*. Despite the site's degraded state, Edmonds recommended that the site be avoided.

In describing the importance of the three Aboriginal sites identified during her survey, Edmonds notes that *"PLAO have indicated this area is of special significance to them because of its proximity to the fishtraps at Billy Light's [sic] Point and the past extent of Aboriginal campsites in the area. They would like to see the integrity of this area of coastline kept as is"*.

AAR notes that, due to the limited capacity for pre-GPS technology to accurately plot the location of Aboriginal heritage sites, the exact location or orientation of this site is unknown. As such, the location of the site as shown on the maps at Attachment 4 should be considered indicative only. Nonetheless, based on records available to AAR, site 6028-3037 is located within the Application Area.

The Applicant advises that despite conducting visits to the location, it has been unable to identify any cultural material associated with site 6028-3037. The Applicant says that any remaining cultural materials, if present, are now beneath fill materials introduced to create access roads within the Port Lincoln WWTP.

HERITAGE ASSESSMENTS

AAR is aware of previous heritage surveys and studies that have been conducted over parts of the Application Area and/or adjacent areas since 1984. A summary of relevant historic reports is provided at Attachment 5. Information about a recent heritage assessment relating to the Project is provided below.

2024 Port Lincoln Desalination Plant (Billy Lights Point) – Consolidated Heritage Assessment. Unpublished report prepared for SA Water, Adelaide.

To better understand the risks posed by the Project to Aboriginal heritage, the Applicant has engaged a heritage consultancy firm to prepare a consolidated desktop heritage assessment for the Project (Consolidated Heritage Assessment). That document, dated March 2024, includes results from:

- an on-ground heritage inspection of parts of the Application Area
- a review of previous heritage reports relevant to the area and other background information
- a review of geotechnical data produced by FMG Engineering
- a search undertaken of AAR's central archives, which flagged the presence of Aboriginal sites on Billy Lights Point and surrounds.

On-ground heritage inspection

AAR notes that the heritage consultancy firm the Applicant engaged was not requested to carry out a comprehensive pedestrian heritage of the Application Area. Instead, the purpose of the inspection was to enable the heritage consultancy firm to refine its heritage management advice to the Applicant.

Archaeologists from the heritage consultancy firm undertook this on-ground heritage inspection over parts of the Project footprint near Billy Lights Point, namely the location of the Desalination Plant, as well as some of the Drinking Water Pipeline corridor. This inspection occurred in September 2021. No Traditional Owners were present during the inspection.

AAR also notes that between 2021 – when the inspection took place – and 2024, the footprint of the Project has undergone significant changes. Given this, and the scope of the September 2021 inspection, there are parts of the current Application Area that were not considered in the Consolidated Heritage Assessment. Parts of the Application Area that were not visited by the heritage consultancy firm's archaeologists include the Electricity Transmission Line, proposed infrastructure areas on Billy Light Point (including the WWTP), as well as a portion of the Drinking Water Pipeline near North Side Hill (also known as 'Northside Hill'), located on Blue Fin Road, Duck Ponds.

As a result of this heritage inspection, the Consolidated Heritage Assessment noted that:

- the Desalination Plant has been subject to significant historic development and disturbance associated with sand processing and associated activities
- in relation to the Drinking Water Pipeline corridor, the stratigraphy (sub-surface layers) in this corridor comprises limestone or calcrete deposits underneath a thin layer of organic debris and sand. The heritage consultancy firm suggests the area carries a low likelihood of intact archaeological features being present in this corridor
- in the coastal margins (that is, the coastal area immediately adjacent to the water), the shallow soils over limestone or calcrete layers, coupled with previous ground disturbance, means that the Project is unlikely to interfere with any intact archaeological features, despite these areas typically having high heritage sensitivity.

In addition to the above, the Consolidated Heritage Assessment says that Traditional Owners had provided the Applicant with information about other fish traps around 50 m east of a spit of land that connects a jetty historically used for loading/unloading sand (Historic Jetty, hereafter) to Billy Lights Point (Figure 3 shows the Historic Jetty). While no evidence of human-made fish traps was observed during the inspection, the archaeologists did observe natural rock formations in this area. The report acknowledges that the coastal areas east of the Historic Jetty and connected spit of land may hold cultural significance for Traditional Owners. The report specifically advised that consultation with the Barngarla should occur to establish a 'no-go zone' in this area.

Geotechnical data review

As part of its Consolidated Heritage Assessment, the heritage consultancy firm conducted a review of geotechnical data produced by FMG Engineering over the proposed Desalination Plant area. It found that this area contained 'relatively undisturbed stratigraphy' – that is, undisturbed soil layers. Areas close to the foreshore around the Historic Jetty were, in comparison, observed to contain metres of introduced fill material.

Recommendations

The heritage consultancy firm provided a range of recommendations in relation to the Project. These included:

- in previously disturbed soils within the Desalination Plant, the Drinking Water Pipeline and Electricity Transmission Line, there is a 'low' risk that Project works would encounter unknown Aboriginal archaeological sites and objects
- in historically undisturbed soils within the Drinking Water Pipeline and Electricity Transmission Line, there is a 'moderate' risk that Project works would encounter unknown Aboriginal archaeological sites and objects
- within the 'intertidal zone' close to the Desalination Plant, the risk posed to anthropological heritage is considered 'moderate to high'
- the risk of impacts to previously unrecorded anthropological sites by the current Project footprint was considered 'low'.
- the risk of impacts to previously unrecorded anthropological sites in undeveloped areas within the intertidal zone was identified as 'moderate to high'. This is due to the potential presence of culturally significant fish traps and/or significant rock formations in this area. AAR notes that this area is excluded from the current Application Area.

In addition to providing the above risk assessment, the Consolidated Heritage Assessment recommended that:

- where avoidance of known Aboriginal heritage – as well as any heritage found during Project works – is unavoidable, the Applicant should obtain authorisations under the Act
- a ‘no-go zone’ be established 50 m east of the Historic Jetty and associated spit of land, and that further consultation be carried out with the relevant Aboriginal community.

Heritage management options

In addition to providing recommendations, the heritage consultancy firm listed a series of heritage management options aimed at managing heritage risk during Project works. These included the implementation of a heritage discovery procedure and inductions for Project staff. For areas considered ‘moderate’ or ‘high’ heritage risk, the Consolidated Heritage Assessment recommended consultation with the relevant Aboriginal community.

PROPOSED MANAGEMENT OF HERITAGE

The Applicant advises that, despite efforts by the Applicant to engage with Traditional Owners to conduct a heritage survey of the Application Area, a comprehensive on-ground cultural heritage survey of the Application Area has not occurred. In the absence of a heritage survey of the Application Area, the Applicant says it has designed the Project in a way to avoid or minimise impacts to known Aboriginal heritage and ‘cultural values’, based on information available to the Applicant.

This is based primarily on information provided through AAR’s central archives, information available from previous heritage assessments of the area, recommendations from the Consolidated Heritage Assessment, and through prioritising the use of previously disturbed areas as much as possible. The Applicant advises that avoiding or minimising impacts to Aboriginal heritage is a key consideration in the positioning and design of the Project and the associated Application Area.

For example, the Applicant has decided to tunnel/drill beneath the coastal shelf to avoid any potential impacts to any “*cultural or heritage values present*” in this area.

The Applicant advises that it continues to welcome advice from Traditional Owners and relevant Aboriginal Communities, including BDAC, Nauo Aboriginal Corporation RNTBC (NAC) and other Aboriginal organisations, in relation to the management of Aboriginal heritage. The Applicant says that it hopes information received by AAR through its consultation process will help further inform the Applicant’s approach to heritage protection and management.

Management of Aboriginal heritage

The Applicant advises that it is committed to undertaking ‘fair and reasonable efforts’ to avoid damaging, disturbing, or interfering with Aboriginal heritage within the Application Area, where possible. Nonetheless, given the scale and nature of the Project, and the extent of known Aboriginal heritage in the area, impacts to heritage may still occur.

In that context, the Applicant has sought the authorisations to impact any heritage that cannot be avoided through consultation with Traditional Owners, and/or by applying design and

engineering solutions. This includes both known Aboriginal heritage (site 6028-3037) and any other Aboriginal heritage that may be encountered during Project works.

Management of Site 6028-3037 ('Port Lincoln EWS One')

The Applicant advises that all Project works will occur sub-surface in this area. That is, no Project works are anticipated on the surface of site 6028-3037. The Applicant says that, in its view, further evidence of this site is unlikely to remain in the area, given the collection of Aboriginal objects in 1990.

AAR's Aboriginal Heritage Discovery Protocols

If the authorisations are granted, the Applicant has committed to complying with AAR's Aboriginal Heritage Discovery Protocols and Heritage Impact Procedure during the Project.

AAR's Aboriginal Heritage Discovery Protocols outline the steps to be followed if Aboriginal heritage is discovered during the Project. AAR's Heritage Impact Procedure seeks to assist proponents with authorisations under the Act to prepare their own approach to excavating and removing discovered heritage where avoidance is not possible. AAR's Aboriginal Heritage Discovery Protocols make it a requirement that proponents holding an authorisation under the Act consider AAR's Heritage Impact Procedure before deciding how to relocate Aboriginal heritage that cannot be avoided.

The Applicant acknowledges that where there is any discrepancy between its own proposed heritage management procedures and AAR's Aboriginal Heritage Discovery Protocols and Heritage Impact Procedure, the latter would prevail.

Visit agd.sa.gov.au/heritage-applications for a copy of the AAR's Aboriginal Heritage Discovery Protocols and Heritage Impact Procedure. If you would like a hardcopy of these documents posted to you, please contact AAR.

Management of Aboriginal heritage discoveries

In seeking to appropriately manage Aboriginal heritage during Project works, the Applicant proposes to implement the following six measures:

1. arrange for Project management and construction management staff to attend a legislative awareness session prior to commencement of the Project. The Applicant has requested that AAR provide this session
2. if there is interest from BDAC, the Applicant will provide funding to create a *"tailored cultural awareness training package which will become part of the worksite induction package for all construction staff on this Project"*. BDAC representatives would be engaged by the Applicant to deliver this training package periodically throughout Project construction works. Information from this package would also be included in daily 'toolbox' meetings attended by construction staff
3. the Applicant would develop heritage discovery protocols that would be used for the duration of the Project, taking into account any conditions imposed by the Minister if he chooses to grant the authorisations sought, including AAR's Aboriginal Heritage Discovery Protocols and Heritage Impact Procedure. This would also form part of an induction package for all Project staff

4. if there is interest from BDAC, the Applicant would engage BDAC representatives to carry out Aboriginal cultural heritage monitoring of initial ground disturbing activities in previously undisturbed soils within the Application Area. That is, areas that have not been previously subject to significant ground disturbing works (i.e., land clearance, soil removal, trenching and ploughing etc.). These areas will be identified and defined by the Applicant as Project planning progresses
5. in the event Aboriginal heritage is identified, the Applicant would report the discovery to the Minister and then apply heritage discovery protocols referred to in Point 3 above, and:
 - where the heritage cannot be retained in-situ, relocate the heritage according to the proposed process detailed below (see 'relocation of heritage')
 - where the heritage can be retained in-situ and would not be affected by Project works, it would be avoided
6. following completion of the Project, the Applicant would seek to understand from Traditional Owners whether they wish to have any collected heritage relocated/reburied within the Application Area or returned directly to the Community. An archaeological report documenting any Aboriginal heritage found during Project works would be provided to AAR and relevant Traditional Owner groups following completion of the Project.

Relocation of discovered heritage

The Applicant advises that, in the event Aboriginal heritage is identified during Project works, it would request that its nominated professional archaeologist, in consultation with Traditional Owners, develop an appropriate method for the relocation of the heritage, consistent with the requirements of AAR's Aboriginal Heritage Discovery Protocols and Heritage Impact Procedure. The Applicant says that its method would be based on current heritage industry practices, and acknowledges that any heritage relocation would need to be conducted in compliance with the Act and any conditions that the Minister may choose to impose on an authorisation, if granted, under the Act.

Where excavation of heritage is required, the Applicant says that a qualified archaeologist will be engaged to coordinate and conduct the excavation. The Applicant also says that Traditional Owners would be welcome to be involved in any heritage salvage and reburial activities, in line with relevant guidelines.

The Applicant also says that:

- where Aboriginal heritage is encountered, it will be documented in a report that will be made available to AAR and interested Aboriginal parties following Project completion.
- any excavation method would be determined based on the extent and nature of the discovered Aboriginal heritage *"in a consultative manner that encompasses the wishes of the relevant Traditional Owners"*
- land will be made available within the Application Area to house a temporary secure storage facility for any discovered heritage, as well as for the reburial for any Aboriginal heritage that is relocated, if this is the wish of Traditional Owners. Any temporary secure storage facility would be accessible to Traditional Owners only

- it will not conduct any destructive testing on Aboriginal objects or remains as part of the Project.

Cultural Heritage Management Plan

The Applicant says that it recognises the benefits that a tailored Cultural Heritage Management Plan (CHMP) could bring to the Project. The Applicant advises that it is open and willing to develop a CHMP in consultation with BDAC, NAC and other Aboriginal organisations to further establish heritage management measures before, during and following the Project.

The Applicant also notes that it is *“committed to working closely with the Traditional Owners, in openness and transparency towards developing solutions to accommodate their wishes for their cultural heritage values where possible”*. It advises that it will seek to accommodate feedback received from Traditional Owners through AAR’s section 13 consultation process into its heritage management processes.

The Applicant advises that, where a CHMP cannot be developed in consultation with Traditional Owners, it will rely on any measures specified in the Minister’s authorisations (if granted) as well as guidance from AAR.

PROJECT DETAILS

Information about each part of the Application Area, and the key activities that are proposed within them, is provided below:

Project flexibility

The Applicant advises that Acciona Construction Australia Pty Ltd (Acciona) has been awarded the contract for the ‘Early Contractor Involvement’ phase of the Project. As such, it is likely to be responsible for developing detailed Project designs. The Applicant advises that the information provided below regarding proposed construction and earthwork methods is based on current designs that are considered preliminary at this stage. The exact scope of Project works, including the full extent and location of excavation activities, will be refined and may be subject to change as the Project design progresses. As it is possible that some of the Project elements or the nature of proposed works may be subject to change, the information provided below should be considered preliminary at this stage.

Nonetheless, the Applicant advises that the Application Area encompasses the entirety of all proposed Project works. As planning and design work continues, it is possible that the Project’s footprint and scope of works may be refined and modified. The Applicant advises that, where possible, it will seek to reduce the Application Area through this process.

Desalination Plant and associated infrastructure

The Desalination Plant would convert seawater into drinking water. The Desalination Plant is proposed on disused industrial land that was historically operated by BHP for sand handling and export operations. The yellow box in Figure 3 shows the proposed location of the Desalination Plant next to a disused BHP shed. The southern extent of the proposed Desalination Plant footprint abuts the Historic Jetty that the Applicant does not own or operate.

Figure 3 - View showing proposed Desalination Plant footprint (in yellow) adjacent to disused BHP infrastructure. The Historic Jetty is shown in the front right of frame (image courtesy of Applicant)



The Applicant advises that internal access tracks and historical structures exist in this area, as well as a disused rail line. Despite past disturbance, this location contains large areas of remnant and regenerating native vegetation. A detailed plan showing the location of the Desalination Plant and the Marine Pump Station (discussed below) is at Attachment 6.

Reverse osmosis desalination

The primary component of the Project is the construction of a reverse osmosis seawater desalination plant at Billy Lights Point.

Reverse osmosis desalination is a process where seawater is forced at high pressure through a semi-permeable membrane, removing salt from the water. The Applicant advises that the use of some chemicals is required during the pre-treatment phase (that is, pre-desalination) to limit/remove things like suspended solids, scale and microorganisms from the water. Chemicals are also required to clean filter membranes and to flush pipelines. The Applicant advises that the chemicals to be used for the cleaning process have all been subject to ecotoxicology testing.

Discharge of any chemicals into the environment requires approval from the Environment Protection Authority and that the operation of the Desalination Plant would need to comply with the conditions of a relevant chemical discharge licence. Once desalinated, the water would travel through the Drinking Water Pipeline to existing tanks on North Side Hill. A by-product of the desalination process is hypersaline seawater, which would be discharged into the boundary of Proper and Boston bays, via the Marine Pump Station and outfall pipe.

Suitability of location

The Applicant advises that marine hydrodynamic modelling, and other marine studies, have been undertaken to assess the suitability of Billy Lights Point for the Project. These assessments

have confirmed the suitability of the proposed Desalination Plant location, and that it would have minimal impacts on the local marine system.

Potential for future upgrades to Desalination Plant

Despite that a 5.3 gigalitre desalination plant is currently proposed, all pipelines and marine infrastructure proposed would be ‘future proofed’. That is, they would be designed and constructed to support an 8 gigalitre per year plant in the future. The Applicant has adopted this approach as it considers the Project’s marine infrastructure elements to pose the most potential impacts to the environment. Ensuring that the Project can accommodate production of 8 gigalitres per year in the future will limit construction to a single phase, therefore minimising marine disturbance as much as practicable. The Applicant says that expanding the Desalination Plant’s capacity to 8 gigalitres per year would potentially involve the extension of existing structures, and the installation of an additional tank. These works would be confined to the Project’s overall footprint, contained entirely within Application Area.

The Applicant advises that while the Desalination Plant area contains sufficient space to accommodate a larger plant in the future, any future expansion of the plant’s capacity (from 5.3 gigalitres per year to 8 gigalitres per year) would require further approvals.

The Applicant advises that it has adopted an engineering design for the Desalination Plant that would create “*minimal impact on the marine and coastal environments*”, and “*avoid known areas of cultural heritage significance*” based on central archives information and previous heritage assessments and investigations in the area.

Proposed works and Project elements

Construction of the Desalination Plant and associated infrastructure at and near Billy Lights Point would involve significant ground disturbing works, including through the trenching and excavation for foundations, wastewater management systems and new access roads; installation of electrical infrastructure; upgrades to existing access roads; excavations and trenching for the installation of services; and laydown and storage areas. These works will be undertaken to achieve the construction/installation of:

- a desalination plant, including the main plant building, tanks, chemical dosing facilities and electrical switch rooms
- a desalinated water tank and pump station
- buried pipework (on land) between the Desalination Plant and the Marine Pump Station
- a road connecting the Desalination Plant to St Andrews Drive
- internal roads to facilitate access, operation and maintenance of the Desalination Plant
- parking areas
- electricity infrastructure for distributing power within the Desalination Plant
- site office facilities and amenities
- a stormwater management system to collect, treat, detain and remove stormwater from the area
- high voltage electrical overhead powerlines to provide power to the Desalination Plant, and other services
- perimeter fencing and higher security fencing for the Desalination Plant

- raw seawater intake and marine outfall pipelines, approximately 860 m total length, between Marine Pump Station and the Desalination Plant. This may be installed above or below ground
- a sewer main from the desalination plant to the WWTP.

The Applicant also advises that vegetation and topsoil clearing is proposed as part of the Project, including at the Desalination Plant and surrounds. Excavation works associated with the construction of the Desalination Plant and associated infrastructure are not expected to exceed depths of 3.5 m.

Operations

The Applicant advises that, once the Desalination Plant is operational, it is expected a minimum of two operators will be on-site during business hours, with intermittent presence by maintenance staff as required.

Decommissioning

The Applicant says that below-ground assets have been designed for a life of 100 years, while above-ground infrastructure is anticipated to have a life of between 20 to 50 years. In terms of the Desalination Plant itself, the Applicant advises that it is set to have a 50-year minimum asset life, with components to be replaced/upgraded over time as required. At the end of the facility's life, the Applicant (or then facility owner) would consider whether to upgrade the facility, to extend its life, or decommission and demolish it.

**Figure 4 - Artist's impression of finalised Desalination Plant – view facing south from St Andrews Drive
(image courtesy of the Applicant)**



Marine Pump Station, Marine Pipes and associated infrastructure

Approximately 600 m northeast of the proposed Desalination Plant, the Applicant proposes to construct the Marine Pump Station and Marine Pipes. The Marine Pump Station and Marine Pipes would draw in seawater that would be processed at the Desalination Plant. Hypersaline water (a by-product of desalination process) would also be discharged back into the sea.

The Marine Pump Station would be situated in an area containing wastewater lagoons (treatment ponds) that were previously used for the WWTP up until 2019. The Applicant advises that the entire WWTP, which is currently enclosed with fencing and has no substantial vegetation, contains current and decommissioned treatment ponds, as well as infrastructure and operations buildings associated with the WWTP.

The Applicant would construct the Marine Pipes within a corridor extending in an eastern direction for up to 1,100 m from the coast. These would comprise two seawater intake pipes and one outfall pipe. The two seawater intake pipes would draw in seawater, while the purpose of the outfall pipe would be to discharge hypersaline water back into the sea at a greater distance than the intake pipes.

Attachment 7 depicts the indicative alignment of the Marine Pipes. Figure 5 is an indicative photograph showing the marine environment in the vicinity of the proposed Marine Pipe alignment.

Figure 5 - Indicative photograph of marine environment in proximity to proposed marine pipes, facing southwest (image courtesy of Applicant)



Proposed works and Project elements

Construction of the Marine Pump Station, Marine Pipes and connected and associated infrastructure at and near Billy Lights Point would involve significant ground disturbing works, including through the trenching and excavation for foundations; sub-surface tunnelling/drilling; trenching for the installation of services; wastewater management systems; construction of new access roads and upgrades to existing roads; installation of electrical infrastructure; and laydown and storage areas and crib huts.

The Applicant advises that Marine Pipes would be constructed by tunnelling/drilling from decommissioned lagoons within the WWTP, under the existing shoreline and into the marine environment. The Applicant advises that the tunnelling/drilling would be carried out using tunnel boring, directional drilling or other techniques. Once the tunnel has been fully excavated, the area where the tunnelling/drilling commenced will be converted into the Marine Pump Station.

The Applicant advises that the tunnel for the Marine Pipes will extend underground for some 500 m, before surfacing again into the seabed. The Applicant advises that excavations and dredging will be required at the location where the tunnel emerges from the seabed. From the point where the Marine Pipes exit the tunnel, they will be laid on the seabed and anchored into place. The Applicant advises that excavations across an area of seabed (approximately 0.8 ha) would be required to transition the pipelines from the tunnel to the seafloor, and to retrieve the tunnel boring machine (if used).

By undertaking this tunnelling/drilling work, the Applicant advises it will avoid impacts to the coastline, nearby Aboriginal heritage and the associated low-lying coastal shelf and seagrass bed.

Once completed, the tunnel would accommodate three marine pipelines: two intake pipelines and one outfall pipeline. All three pipes will be approximately 900 mm in diameter, made of a high-density Polyethylene plastic commonly called HDPE. The two intake pipelines will be used to draw seawater from the boundary of Boston and Proper Bay, at a total distance of approximately 600 m and 670 m from the shore. The outfall pipeline will discharge hypersaline water (brine) at a distance of approximately 1,100 m from the shore. The Applicant says that an 'outfall diffuser' would be attached to the end of the outfall pipe, allowing for mixing of the saline water into the surrounding seawater.

Of the proposed earthworks associated with the Marine Pump Station and Marine Pipes, the Applicant says:

- the depth of earthworks associated with the Marine Pump Station and associated coastal and marine infrastructure would not be expected to exceed 12.9 m in depth (while a reduction in this depth is possible, it will be dependant on geological conditions)
- the total diameter of the Marine Pipes tunnel would not exceed 3 m metres
- additional infrastructure connecting the Marine Pump Station to the Desalination Plant, including the 'sewer rising main' and water intake and outfall pipelines, will require earthworks not exceeding 3.5 m in depth.

The Applicant advises that its marine infrastructure design, proposed footprint and construction techniques have been informed by factors including seabed topography, marine habitat, hydrodynamic modelling and other information. The Applicant says that this will ensure its proposed marine infrastructure avoids significant habitats (including seagrass beds and reefs) and minimises the extent and duration of impacts during construction.

Drinking Water Pipeline

The Applicant advises that drinking water produced by the Desalination Plant would be transferred to the SA Water network via an approximately 7 km long, 600 mm diameter underground pipeline to the existing SA Water tanks at North Side Hill. From there, drinking water would be distributed to customers via the existing SA Water network infrastructure.

The Drinking Water Pipeline would follow a previously disturbed disused rail corridor (containing remnant and regenerating native mallee species) from the former BHP sand handling facility to Greyhound Road. From there, it would follow existing road alignments before connecting to the existing water storage tanks at North Side Hill, at the northwest corner of the Kathai Conservation Park.

The Applicant advises that this corridor follows a combination of sealed and unsealed roads and easements. Adjacent to Kathai Conservation Park, the Applicant says the alignment passes through an area containing native vegetation.

Figure 6 shows the proposed Drinking Water Pipeline corridor.

Proposed works and Project elements

Construction and installation of the Drinking Water Pipeline would involve an open trench typically measuring 1 m wide and up to 2 m deep depending on geological conditions, situated primarily in road verges approximately 0.5 m from the edge of the existing roads. One exception to this method is where the pipeline is required to cross the historic rail line dissecting Blue Fin Road, in which case 'trenchless construction' would be required. This would involve 'micro-tunnelling' under the rail line, to a maximum depth of 3.5 m.

The Applicant advises that the water pipeline itself would measure around 600 mm in diameter.

The Applicant advises that Drinking Water Pipeline works would also include 'scour/discharge chambers/pits', which are variable size (depending on location) up to 1.5 m in diameter with a maximum depth of 2.5 m. These would allow the pipeline to drain during commissioning and operation. The locations of these pits are yet to be confirmed but will be located immediately adjacent the pipeline.

Figure 6 - Image showing the proposed Drinking Water Pipeline route (courtesy of the Applicant)



The Applicant advises that the precise orientation of the pipeline within its 'North Side Hill' tanks compound is yet to be finalised, and notes that it is open to feedback from Traditional Owners on how it can best be orientated to avoid any impacts to the nearby site 6028-7347.

The Applicant notes that the depth of earthworks associated with the Drinking Water Pipeline works would not exceed 3.5 m in depth, with excavations less than 2 m deep being likely in most areas.

Electricity Transmission Line

The Applicant advises that the Desalination Plant would be connected to the South Australian energy grid via a 11 kilovolt overhead transmission line, to be constructed by SA Power Networks (SAPN) in an easement extending west and north of the Desalination Plant. The Electricity Transmission Line has two key elements:

1. a single 3.8 km alignment from the Desalination Plant to Windsor Avenue in Port Lincoln, which would be supported by the construction of new electricity poles
2. two alignments (measuring approximately 3.8 km in total combined length) from Windsor Avenue, connecting to existing SAPN substations on Sleaford Terrace and Wingard Terrace, Port Lincoln.

See Figure 7 for a depiction of the Electricity Transmission Line corridor.

Part of the Application Area between the Desalination Plant and Windsor Avenue would be used to accommodate both the Electricity Transmission Line corridor and the Drinking Water Pipeline corridor. This can be seen by comparing Figure 6, Figure 7, Attachment 1 and Attachment 2. As with the Drinking Water Pipeline, a 3.8 km portion of the Electricity Transmission Line would follow a previously disturbed disused rail corridor (containing remnant and regenerating native mallee species) from the former BHP sand handling facility to Greyhound Road. Once reaching Greyhound Road (after approximately 2 km), it would follow the existing road alignment before diverting north to terminate at Windsor Avenue.

Figure 7 - Image showing the extent of the Electricity Transmission Line (image courtesy of Applicant)



The Applicant says that up to 32 overhead monopoles (electricity poles), no greater than 13 m above the ground, would be constructed along the 3.8 km alignment from the Desalination Plant to Windsor Avenue. The two alignments, from Windsor Avenue to existing SAPN substations in Port Lincoln would likely utilise and rely on existing power poles, although the Applicant notes that this design has yet to be finalised.

The Applicant says that SAPN has advised that the footings for the monopoles would require excavations of approximately 1.5 m in diameter and 2 m in depth. It is likely there will be one monopole every 100 m. The Applicant notes that the depth of earthworks associated with the electricity transmission line works would not exceed 3 m in depth.

Associated works and infrastructure

In addition, the Applicant has also sought authorisation for connected areas of land that would be used to enable the Project. This includes areas connecting key Project elements to one another (for example, the area between the Desalination Plant and the Marine Pump Station), as well as areas that may be used for the installation of supporting infrastructure, laydown and storage areas, construction compounds etc.

Stormwater discharge alignment

The Applicant seeks to filter and then discharge stormwater from the Desalination Plant into the sea. This filtering would involve the use of a 'gross pollutant trap', a 'sediment and soil interceptor' and a stormwater detention basis with a 'biofiltration zone'. The Applicant says this would involve:

- excavating a trench measuring approximately 170 m long, 0.75 m wide and 0.65 m deep
- install a concrete pipe in the trench, before backfilling it

- at the 'sea end' of the concrete pipe, the installation of a precast concrete structure to 'dissipate the flow' of the stormwater into the ocean.

Other works associated with stormwater management include:

- a network of entry pits and reinforced concrete pipes to capture stormwater runoff from the water-resistant surfaces including concrete slabs, concrete pavement, asphalt pavement and hardstands
- a detention basin to detain stormwater flows. This would be located at the lowest point of the Desalination Plant (north-eastern corner). The basin would include an overflow weir to ensure a safe flow path away from the Desalination Plant in the event of blockages.

Key elements of the stormwater management infrastructure, and how this relates to the Desalination Plant, are depicted on the plan at Attachment 8.

Spoil management

The Applicant says that stockpiles of materials (spoil) generated from earthworks will be managed largely on-site at the desalination Plant in existing cleared areas and within the decommissioned lagoons at the Port Lincoln WWTP. Spoil may also be temporarily placed along St Andrews Drive in disturbed areas that do not contain native vegetation.

Where these locations cannot accommodate further spoil, excess stockpile material would be stored either within or outside of the Application Area. Eventually, and where necessary, spoil would be removed from the Application Area and disposed of to a suitably licensed waste transfer station.

Current geotechnical investigations

The Applicant advises that it recently undertook a program of geotechnical investigations (borehole drilling) to inform final Project design. These geotechnical investigations, which were undertaken on land and offshore, included:

- up to 37 boreholes on land and eight offshore in the marine environment, measuring a maximum of 20 cm in width, to a depth of approximately 20 m
- sixteen test pits measuring 2 x 3 m, and up to 4 m in depth.

OTHER INFORMATION ABOUT THE PROJECT

Approvals required under other legislation

The Applicant advises that, in addition to authorisations under the Act, the Project will require approvals under the following pieces of legislation:

- *Planning, Development and Infrastructure Act 2016* (SA): The Project has been submitted for Development Approval under the Section 131 (Crown Development) pathway of the *Planning, Development and Infrastructure Act 2016* (SA). The Project will be assessed against the relevant policies under the Planning and Design Code, established under this legislation. A decision is expected soon. See the PlanSA website for further details, accessible via: agd.sa.gov.au/heritage-applications

- *Local Government Act 1999* (SA): It is envisaged that upgrades to local roads will be required to facilitate safe vehicle access to the area during Project construction. To support this, the Applicant is required to obtain a license from City of Port Lincoln Council to make an alteration to a public road pursuant to Sections 221(2)(b) and 221(6)(b) of the *Local Government Act 1999* (SA)
- *Native Vegetation Act 1999* (SA): The Application Area is located within an area of South Australia subject to the provisions of the *Native Vegetation Act 1991* (SA). Under this legislation, any clearance to native vegetation must be approved by the Native Vegetation Council (or delegate). As the Project would involve the clearing of some native vegetation, approval is required under this legislation
- The Applicant also advises that the Project will also be self-referred for an assessment under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*. While no impacts on 'Matters of National Environmental Significance' were identified in the Applicant's self-assessment, the Applicant says that a self-referral will be lodged for confirmation out of an abundance of caution.

Other assessments carried out for the Project

As part of the Project's Development Assessment application, extensive terrestrial and marine studies have been undertaken including:

- flora and fauna surveys (native vegetation, bird surveys and orchid surveys)
- traffic and access
- noise assessment (land and sea)
- air quality and odour assessment
- soil, drainage and erosion assessment
- hydrodynamic modelling
- marine habitat assessment (including fish surveys)
- water quality (physical, biological and chemical assessment)
- sediment characterisation
- contamination and geological assessments.

SCOPE OF AUTHORISATIONS SOUGHT

The Applicant has requested that the authorisations, if granted, extend to itself and:

- Acciona
- SAPN
- the Minister for Climate, Environment and Water
- the Minister for Infrastructure and Transport
- other Ministers, agencies and instrumentalities of the Crown
- other state government department, agency and local government
- all employees, agents, advisors, contractors and subcontractors of the above,

where reasonably undertaking works in connection with the Project. If the authorisations sought are granted, the authorised activities would be permitted only to the extent reasonably necessary to develop, construct and maintain the Project.

ABORIGINAL ENGAGEMENT

The Applicant advises that it has sought to consult with relevant Aboriginal organisations regarding the Project since 2021. It remains open to arranging a cultural heritage survey with Traditional Owners of the Application Area, and would welcome further consultation with Traditional Owners and relevant Aboriginal organisations about the Project.

In addition, it anticipates that feedback received through AAR's section 13 consultation process can be considered for incorporation into the Project.

SECTION 13 CONSULTATION

Prior to considering whether to grant any authorisation under the Act, section 13 requires the Minister to take all reasonable steps to consult with the Committee, Traditional Owners, and any other Aboriginal persons or organisations that in the opinion of the Minister have a particular interest in the matter.

An Aboriginal Community consultation meeting will be held for Traditional Owners and any other interested Aboriginal people and organisations at **6:00 pm on Monday 16 December 2024 at The Port Lincoln Hotel** located at **1 Lincoln Highway, Port Lincoln, SA 5606**.

A light supper will be provided. Please RSVP for catering.

For more information, to RSVP to attend the community meeting or to lodge a verbal submission, please call (08) 8429 9419 or email AAR.CIR@sa.gov.au.

Invitation for submissions from interested Aboriginal parties

Verbal and written submissions are now invited from all interested Aboriginal parties about the Project. Consultees may make a submission to AAR in person, by phone, letter, or email. Anyone in receipt of this consultation information pack is encouraged to share it with other Aboriginal parties who may have an interest in the Project.

This document is available online at agd.sa.gov.au/heritage-applications.

Important information about AAR's consultation materials

Any revisions to AAR's consultation materials will be made available on AAR's website and YourSAy. Traditional Owners and interested Aboriginal parties are encouraged to check AAR's website regularly for any changes to the consultation materials. AAR will email and/or post updated consultation materials to Traditional Owners and interested Aboriginal parties who contact AAR and provide their email and/or postal address. Hardcopies may also be collected from AAR's office.

CONSULTATION HAS BEEN EXTENDED AND NOW CLOSING ON MONDAY 3 FEBRUARY 2025.

The Committee will consider all submissions received by the due date.

Aboriginal people with an interest in this matter are encouraged to contact AAR to learn more about the Project and to lodge a submission.

All consultation feedback, RSVPs, submissions and/or requests for further information should be addressed to:

Mr Peter Kapiris
Acting Principal Project Officer (Heritage), AAR
Mail: GPO Box 464, ADELAIDE SA 5001
Email: AAR.CIR@sa.gov.au
Telephone: (08) 8429 9419

When making a submission, consultees should consider and respond to at least the following questions:

1. **Should the authorisations sought by the Applicant be granted? Why or why not?**
2. **If the authorisations are granted, what conditions (if any) should be imposed on them?**
3. **Will the Project provide you with any direct or indirect benefits (e.g. cultural, financial or personal)?**
4. **Are there any other matters the Minister should consider when deciding this application?**

Consultees may request AAR to keep any cultural information in their submission confidential. Where possible AAR will accommodate that request, however, procedural fairness considerations may require that the Applicant be provided with a right of response to information that is relevant (or at least so much of the information as is relevant).

Otherwise, all submissions will be forwarded to the Applicant in full for comment. Once the consultation period has closed, consultee submissions and the Applicant's comments about them will be forwarded to the Committee, and the Committee's advice will then be sought.

AAR will collate all submissions, the Applicant's responses to them, the Committee's advice, and its own recommendations to the Minister to assist them to make a final decision about the application.

AAR is available to answer questions or provide further information about the application at any time **prior to the new consultation closing date of Monday 3 February 2025.**

Thank you for taking the time to consider this document. If you are an interested Aboriginal party, AAR encourages you to make a submission about this application.

AAR is available to assist people to record submissions if they have any difficulty in doing so.

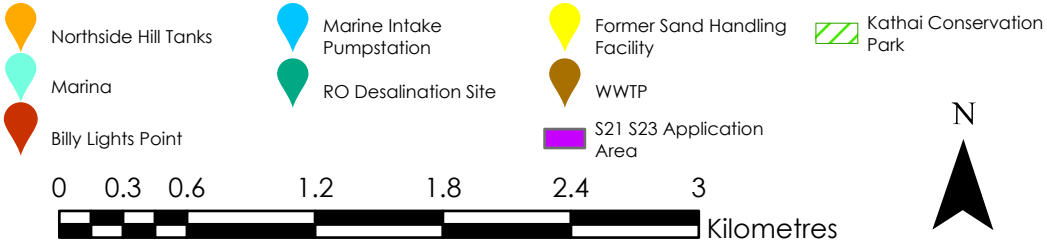
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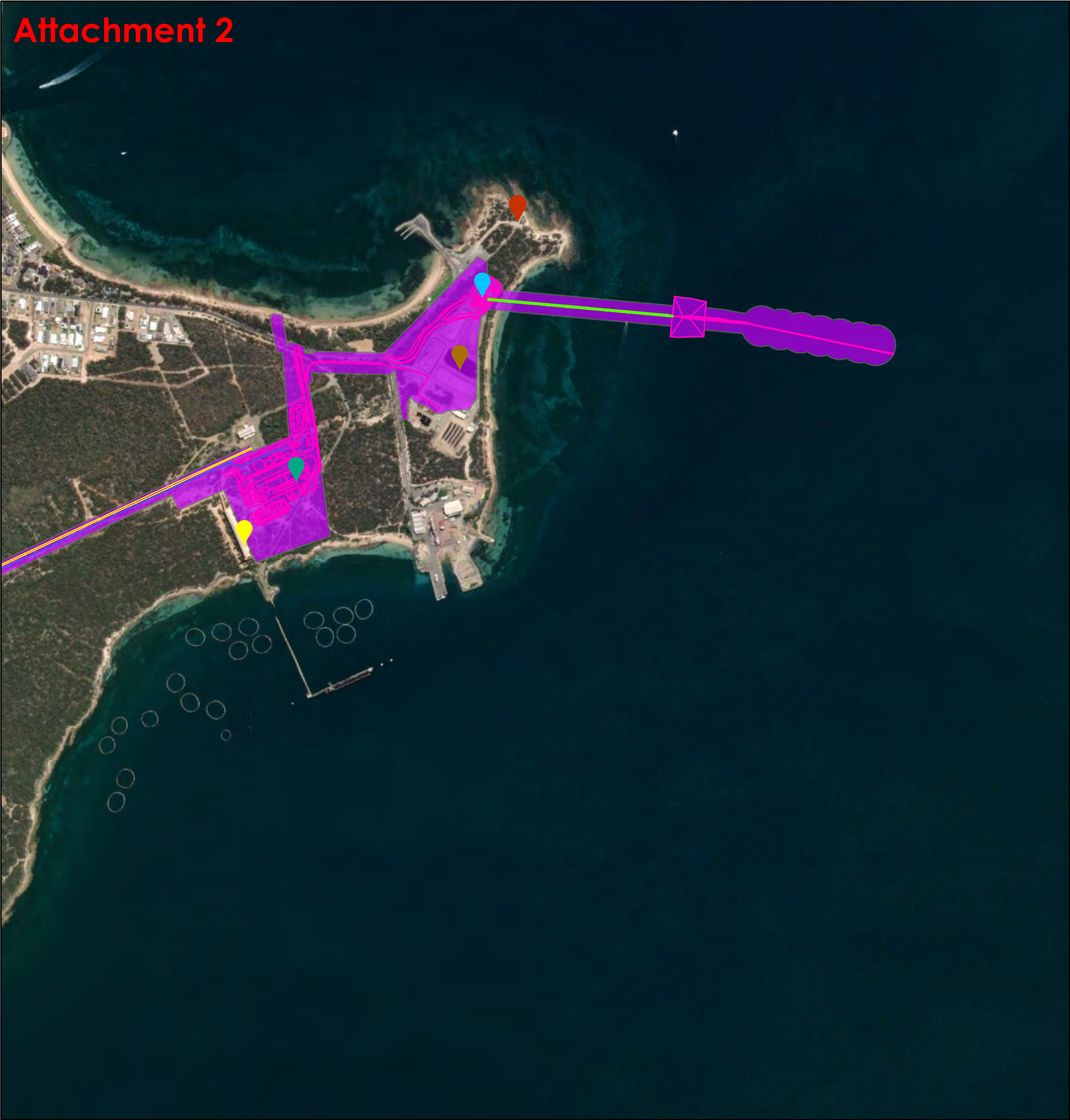
- Attachment 1: Overview map of Application Area
- Attachment 2: Map series of Application Area in detail
- Attachment 3: Information about Aboriginal heritage adjacent to the Application Area
- Attachment 4: Maps showing Aboriginal heritage in relation to the Application Area
- Attachment 5: Summary of relevant Aboriginal heritage studies
- Attachment 6: Indicative Desalination Plant and Marine Pump Station Plan (courtesy of Applicant)
- Attachment 7: Indicative Marine Pipes alignment plan (courtesy of Applicant)
- Attachment 8: Indicative Desalination Plant and stormwater infrastructure plan (courtesy of Applicant)



Eyre Peninsula's new reverse osmosis seawater desalination plant

Section 21 & Section 23 Application Area

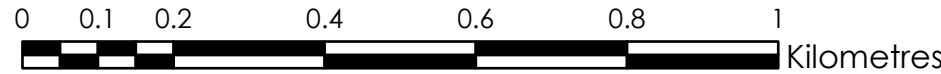


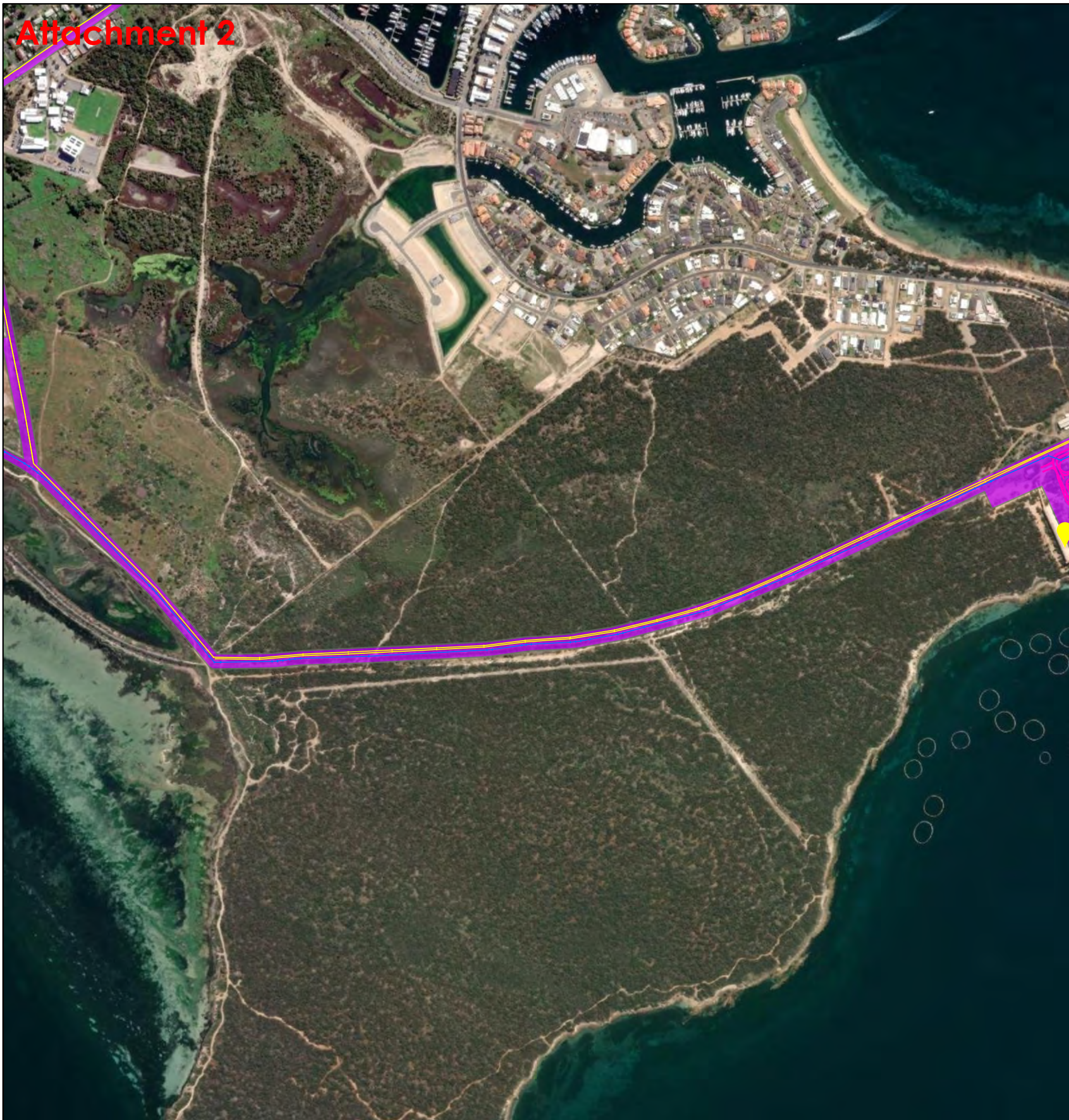


Eyre Peninsula's new reverse osmosis seawater desalination plant

Section 21 & Section 23 Application Area

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| Billy Lights Point | Marina | Proposed Desalinated Water Transfer Pipeline |
| Former Sand Handling Facility | Marine Intake Pumpstation | Sub-surface marine works |
| Northside Hill Tanks | Proposed RO Plant, Marine Pumpstation, Marine Pipelines | Kathai Conservation Park |
| WWTP | Proposed SAPN Development | S21 S23 Application Area |
| RO Desalination Site | | |



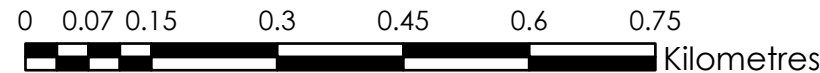


Eyre Peninsula's new reverse osmosis seawater desalination plant

Section 21 & Section 23 Application Area



- Billy Lights Point
- Former Sand Handling Facility
- Northside Hill Tanks
- WWTP
- RO Desalination Site
- Marina
- Marine Intake Pumpstation
- Proposed RO Plant, Marine Pumpstation, Marine Pipelines
- Proposed SAPN Development
- Proposed Desalinated Water Transfer Pipeline
- Sub-surface marine works
- Kathai Conservation Park
- S21 S23 Application Area





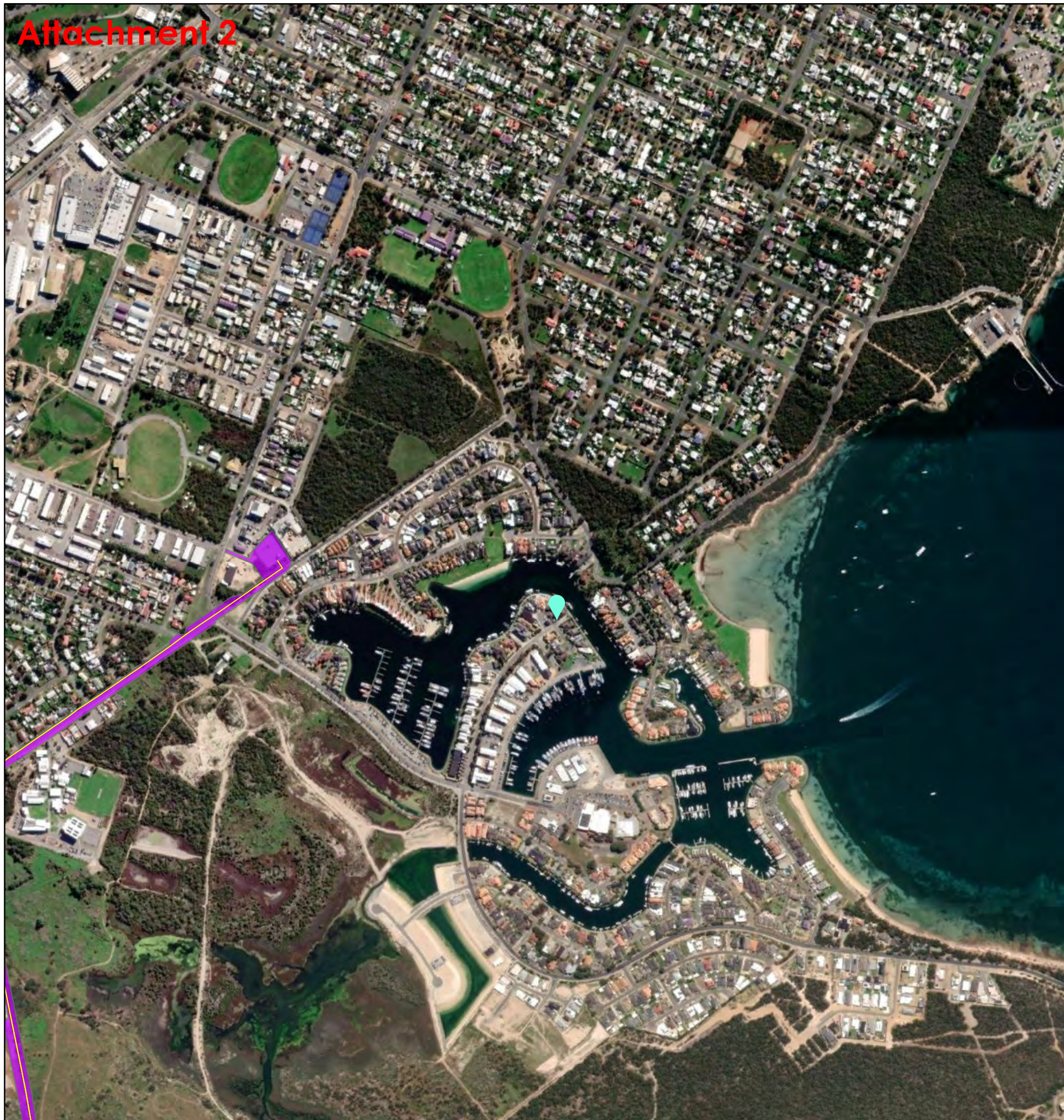
Eyre Peninsula's new reverse osmosis seawater desalination plant

Section 21 & Section 23 Application Area



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| RO Desalination Site | | |

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Eyre Peninsula's new reverse osmosis seawater desalination plant

Section 21 & Section 23 Application Area



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|  Former Sand Handling Facility |  Marine Intake Pumpstation |  Sub-surface marine works |
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|  RO Desalination Site | | |

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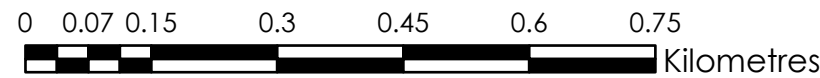


Eyre Peninsula's new reverse osmosis seawater desalination plant

Section 21 & Section 23 Application Area



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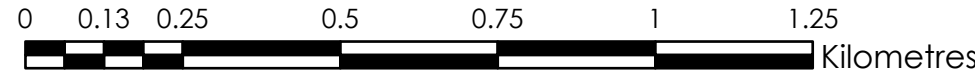


Eyre Peninsula's new reverse osmosis seawater desalination plant

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| RO Desalination Site | | |



Attachment 3

ATTACHMENT 3 – KNOWN ABORIGINAL HERITAGE ADJACENT TO THE APPLICATION AREA

The area immediately surrounding the Application Area is known to contain multiple Aboriginal sites. Outside the Application Area, but within 300 m of it, AAR holds records for eight Aboriginal sites. These include multiple Aboriginal fish traps, archaeological sites, an historic site and a restricted anthropological site. One of these sites, site 6028-3039, is located approximately 3 m outside of the Application Area, some 50 m south of site 6028-3037.

Information about nearby Aboriginal sites

See Table 1 for a summary of sites listed on the central archives that are outside, but within 300 m of, the Application Area. The sites listed below will not be avoided by Project works.

Table 1 – Aboriginal heritage sites within 300 m of the Application Area

Site number	Site name	Type/description	Status
6026-3039	Port Lincoln EWS Two	Archaeological site	Determined
6028-3040	Port Lincoln EWS Three	Archaeological site	Determined
6028-3619	Billy Lights Point 1	Stone arrangement (fish trap)	Determined
6028-3620	Billy Lights Point 2	Stone arrangement (fish trap)	Determined
6028-3621	Billy Lights Point 3	Stone arrangement (fish trap)	Determined
6028-3622	Billy Lights Point 4	Stone arrangement (fish trap)	Determined
6028- 7347	[restricted]	Restricted anthropological site	Listed
6028-8186	Mallee Park Aboriginal Reserve	Historic site	Listed

AAR is aware of additional Aboriginal sites further away from the Application Area. For example, AAR is aware of an additional 16 Aboriginal sites located between 300 m and 2 km of the Application Area – all of which are fish traps.

Site 6028-3039 ('Port Lincoln EWS Two')

Recorded by archaeologist Vanessa Edmonds in 1990, site 6028-3039 is described as an 'artefact scatter' located in a cleared vehicle track. The site is located 50 m south of site 6028-3037, approximately 24 m from the coastline. The site is described as comprising one quartzite core and one quartz flaked piece separated by approximately 4 m. Edmonds states that both artefacts were collected.

Attachment 3

AAR notes that, due to the limited capacity for pre-GPS technology to accurately plot the location of Aboriginal heritage sites, the exact location or orientation of this site is unknown. Nonetheless, based on records available to AAR, site 6028-3039 is located approximately 3 m outside of the Application Area.

Site 6028-3040 ('Port Lincoln EWS Three')

Recorded by archaeologist Vanessa Edmonds in 1990, site 6028-3040 is described as a 'midden and artefact scatter' covering an area measuring 1 x 2 m. More specifically, Edmonds describes the site as a *"small, low density scatter of cockle and periwinkle...along with a small scatter of stone artefacts"*. The site contained seven stone artefacts. These comprised mainly quartz and quartzite artefacts, with one yellow chert flake also being recorded. Shell fragment density was observed as being five fragments per m². In describing the condition of the site, Edmonds notes that the area was regularly used by the public for camping, with 'modern hearths' having been observed by Edmonds in the area.

Edmonds states that while all visible artefacts were collected from the area, *"some scattered shell fragments remain"*. Although Edmonds considered it unlikely that *"further archaeological sites remain in the area subsurface"*, due to erosion in the area, Edmonds recommended that the area be avoided.

About Aboriginal fish traps

Aboriginal fish traps are a type of archaeological site, commonly found in coastal and riverine contexts. Fish traps are well known to exist along the coastline of the Lower Eyre Peninsula.

Fish traps primarily comprise the remains of stone structures that are used to trap fish that enter shallow areas at times of low tide. Fish traps are constructed by hand and typically comprise arranged rocks and stones. Branches and wooden stakes are also used in some cases. Often, these elements are constructed in a way that adds to pre-existing natural landform features such as rocky coastal platforms, channels, outcrops and boulders to form the trap. As the tide recedes, fish that entered during low tide become trapped and can be more easily caught.

Please note that the four Billy Lights Point fish traps described below (6028-3619; 6028-3620; 6028-3621 and 6028-3622) are contained within a single area hatched in yellow at Attachment 4. These four fish traps are outside the Application Area and will be avoided by the Project. According to information available to AAR, the four Billy Lights Point fish traps are located between 74 m and 158 m away from the Application Area.

Traditional Owners who seek more information about the location, nature and extent of the fish traps in this area are encouraged to contact AAR.

Site 6028-3619 ('Billy Lights Point 1')

A site card for this site was recorded by archaeologist Sarah Martin and historian Gil Robertson in February 1987. The site is described as a stone walled semi-circle on a sheltered, rocky beach located between the headland and a sandy beach. The wall consists of thousands of small rocks tightly packed together, forming a fish trap 13 m in diameter and 20 cm in height. Although partly covered by mud and algae, the wall is described as complete and *"easily discernible"*.

Attachment 3

Site 6028-3619 was the subject of an historic authorisation to impact Aboriginal heritage, granted by the former Minister for Aboriginal Affairs on 21 July 1998. The authorisation was issued to the City of Port Lincoln in relation to proposed development works in the area. AAR understands that the works related to the development of a hard-stand area to support the maintenance of tuna ring farms that were planned for Porter Bay. It is not clear to AAR whether these proposed works ever took place and, if they did, the extent to which they may have impacted this site.

Site 6028-3620 ('Billy Lights Point 2')

A site card for this site was recorded by archaeologist Sarah Martin and historian Gil Robertson in February 1987. The site is described as a series of stone walled enclosures on an inter-tidal rock platform. Most of the walls are formed from large boulders. A natural rocky outcrop and large in-situ boulders have, according to Martin, been utilised in the trap layout, with the built walls integrated with these natural features to form two enclosures with entries.

The total length of the site, which is orientated roughly north-south, measures approximately 94 m. The trap faces out into Porter Bay. The condition of the site is described as poor, with most walls partially destroyed by wave action, making them difficult to discern.

Site 6028-3620 was the subject of an historic authorisation to impact Aboriginal heritage, granted by the former Minister for Aboriginal Affairs on 21 July 1998. The authorisation was issued to the City of Port Lincoln in relation to proposed development works in the area. AAR understands that the works related to the development of a hard-stand area to support the maintenance of tuna ring farms that were planned for Porter Bay. It is not clear to AAR whether these proposed works ever took place and, if they did, the extent to which they may have impacted this site.

Site 6028-3621 ('Billy Lights Point 3')

A site card for this site was recorded by archaeologist Sarah Martin and historian Gil Robertson in February 1987. The site is described as two low stone walls forming a barrier across a natural channel in an inter-tidal rock platform. The walls are described as 'very scattered', likely indicating impacts through wave action. The walls are partly covered by sand and algae. Martin observed what may have been other walls scattered on either side of the site. While no dimensions are provided in the site card, Martin's photographs indicate a site of potentially 20 m in length. Martin says the site can be clearly seen from a nearby lookout.

Site 6028-3622 ('Billy Light's Point 4')

A site card for this site was recorded by archaeologist Sarah Martin and historian Gil Robertson in February 1987. The site is described as an enclosure formed by two stone barriers "*across shallow channels*" with a rock outcrop in the middle. The longer wall is 11 m and a maximum of 30 cm high, formed from large, water-rounded boulders (carefully packed together in some places but partly scattered in others). Martin believes this wall would have originally been higher. The shorter wall is formed by two large in-situ rocks with the intervening spaces packed with boulders. Tidal action is thought to have scattered some wall rocks in places, but the outline

Attachment 3

of the trap is described as “*well defined*”. Martin says the site can be clearly seen from a nearby lookout.

Site 6028-8186 (‘Mallee Park Aboriginal Reserve’)

The Mallee Park Aboriginal Reserve, located in Port Lincoln, is an Aboriginal site of significance to Aboriginal history. Traditional Owners who wish to know more about this site may contact AAR to request further information.

Site 6028-7347 (Restricted Anthropology/Tradition Site – name and location not disclosed)

Site 6028-7347 is an Aboriginal site of significance to Aboriginal anthropology and tradition. According to information held on AAR’s central archives, there are strict cultural restrictions around the disclosure of information about this site. The site is located near to the western end of the Drinking Water Pipeline corridor.

Given the sensitivity of this site, it is not depicted on the maps at Attachment 4. While the site is near to the Application Area, its recorded boundary does not overlap with it.

Traditional Owners who wish to know more may contact AAR to request further information.

Potential for additional heritage adjacent to the Application Area

AAR notes that the central archives are not an exhaustive record of Aboriginal heritage in South Australia. It is possible and potentially likely that the Application Areas contain unrecorded Aboriginal heritage. Some of the reports summarised in Attachment 5 refer to additional Aboriginal heritage sites that may exist in the general area; however, to AAR’s knowledge, these do not intersect the Application Area.

Attachment 4



PORT LINCOLN

AAR Heritage Sites

■ Determined

▨ Listed

Fish Traps

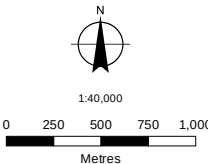
Area Containing Billy Lights Point Fish Traps (Sites 6028-3619, 6028-3620, 6028-3621, 6028-3622)

Application Area

■ s21 s23 Application Area

National Parks & Reserves

■ Kathai Conservation Park



Produced by: Aboriginal Affairs and Reconciliation (AAR)
Data sources: Aboriginal heritage - AAR
Topographic / cadastral - Location SA
Aerial imagery - DEW
Projection | Datum: Lambert Conformal Conic | GDA2020
Job No: 2024180-003c
Compiled: 12/11/2024
Information derived from AAR's central archives is confidential under section 10 of the Aboriginal Heritage Act 1998 (SA).
AAR's central archives are not a comprehensive record of all Aboriginal heritage and other sources of heritage information may exist. The positional accuracy of this data is variable and dependent on the accuracy of information provided to AAR at the time of recording. The full geographic extent of Aboriginal heritage sites may not be depicted and sites may be larger than they appear on the map.
This map has been produced using information supplied by third parties. Whilst all reasonable care has been taken in the preparation of this information, AAR is not able to warrant its accuracy and accepts no responsibility for the loss, injury or any other liability incurred by any person that arises as a result of the use of this information by any person or organisation.
This map is not to be reproduced or distributed without prior approval from AAR.

Attachment 4



PORT LINCOLN

AAR Heritage Sites

■ Determined

Fish Traps

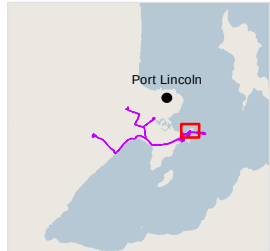
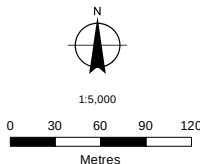
Area Containing Billy
Lights Point Fish
Traps (Sites 6028-
3619, 6028-3620,
6028-3621, 6028-
3622)

Application Area

■ s21 s23 Application
Area

National Parks &
Reserves

■ Kathai Conservation
Park



Produced by: Aboriginal Affairs and Reconciliation (AAR)
Data sources: Aboriginal heritage - AAR
Topographic / cadastral - Location SA
Aerial imagery - DEW
Projection | Datum: Lambert Conformal Conic | GDA2020
Job No: 2024180-004b
Compiled: 22/07/2024

Information derived from AAR's central archives is confidential under section 10 of the Aboriginal Heritage Act 1998 (SA). AAR's central archives are not a comprehensive record of all Aboriginal heritage and other sources of heritage information may exist. The positional accuracy of this data is variable and dependent on the accuracy of information provided to AAR at the time of recording. The full geographic extent of Aboriginal heritage sites may not be depicted and sites may be larger than they appear on the map. This map has been produced using information supplied by third parties. Whilst all reasonable care has been taken in the preparation of this information, AAR is not able to warrant its accuracy and accepts no responsibility for the loss, injury or any other liability incurred by any person that arises as a result of the use of this information by any person or organisation. This map is not to be reproduced or distributed without prior approval from AAR.

Attachment 4



PORT LINCOLN

AAR Heritage Sites

▣ Listed

Application Area

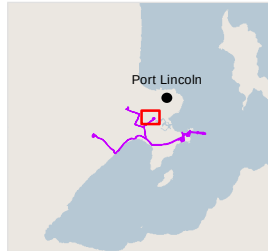
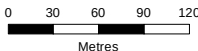
▣ s21 s23 Application Area

National Parks & Reserves

▣ Kathai Conservation Park



1:5,000



Produced by: Aboriginal Affairs and Reconciliation (AAR)
Data sources: Aboriginal heritage - AAR
Topographic / cadastral - Location SA
Aerial imagery - DEW
Projection | Datum: Lambert Conformal Conic | GDA2020
Job No: 2024180-005c
Compiled: 12/11/2024

Information derived from AAR's central archives is confidential under section 10 of the Aboriginal Heritage Act 1998 (SA). AAR's central archives are not a comprehensive record of all Aboriginal heritage and other sources of heritage information may exist. The positional accuracy of this data is variable and dependent on the accuracy of information provided to AAR at the time of recording. The full geographic extent of Aboriginal heritage sites may not be depicted and sites may be larger than they appear on the map. This map has been produced using information supplied by third parties. Whilst all reasonable care has been taken in the preparation of this information, AAR is not able to warrant its accuracy and accepts no responsibility for the loss, injury or any other liability incurred by any person that arises as a result of the use of this information by any person or organisation. This map is not to be reproduced or distributed without prior approval from AAR.

Attachment 5

ATTACHMENT 5 – SUMMARY OF RELEVANT ABORIGINAL HERITAGE STUDIES

Below is a broad overview of relevant heritage surveys, inspections and assessments that have been conducted over parts of the Application Area, or in nearby areas.

Ross, B 1983 Environmental Impact Report - Heritage Survey: Porter Bay. Unpublished report prepared for Department of Tourism.

In 1983, archaeologist Betty Ross was engaged by the then Department of Tourism to carry out a baseline Aboriginal heritage survey of a portion of the proposed marina at the intersection of Salt Creek and Porter Bay. The marina is generally situated in between the Application Area and the centre of Port Lincoln.

Ross' report notes that while *"campsites, shell middens and graves may have been evident prior to...major landscape alterations"* in the area, no archaeological material was identified during her survey. While no Aboriginal heritage was observed, the report references two Aboriginal fish traps that had been reported to Ross by local historian, Gil Robertson. Both were said to be located along Salt Creek.

In summarising the potential impacts of the proposed marina development, Ross advised that *"[s]ub-surface sites, Aboriginal graves, may be exposed in coastal dune remnants during land reclamation"*.

Martin, S 1984 Report on the Survey of Fish Traps at Salt Creek (Porter Bay, Port Lincoln). Unpublished report for Department of Environment and Planning.

In 1984, archaeologist Sarah Martin was commissioned by the then Department of Environment and Planning to undertake a heritage survey of the proposed Porter Bay marina. This work sought to expand on the work undertaken by Ross in her 1983 heritage survey to support an Environmental Impact Report (above).

The archaeological survey of the proposed development took place over three days. Twelve likely Aboriginal fish traps were recorded by Martin during the fieldwork. These sites were located outside of the Application Area.

As part of her report, Martin recommended a more detailed archaeological survey of fish traps and related sites along the Eyre Peninsula coastline.

Martin, S 1986 An Archaeological Study of Fish Traps in the Porter Bay Area, Eyre Peninsula, S.A. Unpublished report for SA Department of Marine and Harbours.

In 1986, archaeologist Sarah Martin was engaged to undertake a heritage survey, desktop research and oral history recording focusing on Aboriginal fish traps in the Port Lincoln area. This work was undertaken in connection with the proposed Porter Bay marina development. AAR understands that Martin was engaged by the then Department of Marine and Harbours to carry out this work.

Martin's report provides a detailed overview of Aboriginal fish traps within their archaeological, cultural and environmental context, both in the Porter Bay area and more generally. A further 14 fish traps were located and recorded in the Salt Creek area as part of Martin's 1986 survey. These 14 fish traps, with the 12 identified in Martin 1984, brought the number of fish traps in the Salt Creek area and surrounds to 26. Martin's 1986 report emphasises the importance of the Salt Creek/Porter Bay fish trap complex, describing the complex as having scientific and education significance, as well as contemporary cultural significance to the Aboriginal Community.

Attachment 5

AAR understands that the four Billy Lights Point fish traps (sites 6028-3619; 6028-3620; 6028-3621 and 6028-3622) were first recorded as part of this survey. Martin provided the following recommendations for the management of the Billy Lights Point fish traps:

1. that a 'Protected Area' be declared, which encompasses the four Billy Lights Point fish traps
2. that an existing fence at the Billy Lights Point lookout be maintained and that access to the rock platforms should not be upgraded
3. boating facilities at the nearby boat ramp should not be upgraded. People should instead be encouraged to use the nearby marina facilities
4. there should be no upgrading of access to the rocky shore near Billy Lights Point 1 and 2
5. the Department of Marine and Harbours and the City of Port Lincoln should be made aware of the proposed 'Protected Area' *"and the need to plan developments with protection of the fish traps in mind"*
6. the fish traps should be *"utilised, under the guidance of the Port Lincoln Aboriginal Organisation, as a cultural and educational resource"*.

Martin, S 1988 Eyre Peninsula and West Coast – Aboriginal Fish Trap Survey. Unpublished report for Department of Environment and Planning.

In 1988, archaeologist Sarah Martin and others were commissioned by the then South Australian Department of Environment and Planning to undertake an Aboriginal fish trap survey of the Eyre Peninsula and West Coast. The aim was to provide a regional overview of the distribution of coastal and estuarine fish traps on the Eyre Peninsula and West Coast (roughly from Port Augusta to Ceduna). This included desktop research, oral history recording and field surveys.

The fieldwork component of this work was undertaken between May 1986 and February 1987. The work specific to Billy Lights Point was conducted by Martin and others in February 1987.

The overall survey documented 57 fish traps, with the Lower Eyre Peninsula described as having the highest concentration of fish traps compared to the other regions surveyed.

In giving recommendations for the protection of the Billy Lights point fish traps, Martin listed six measures that aligned with her 1986 recommendations for Billy Lights Point (see above).

Edmonds, V 1990 An Archaeological Survey of a Proposed Sewerage Treatment Site near Port Lincoln, South Australia. Unpublished report for Engineering and Water Supply Department.

In February 1990, archaeologist Vanessa Edmonds was engaged by the Engineering and Water Supply Department (EWSD), a predecessor agency of SA Water, to conduct an archaeological survey of a proposed sewerage treatment plant at Billy Lights Point. The survey area, referred to by Edmonds as the 'Sewerage Reserve', comprised part of the Application Area.

The archaeological survey occurred on 14 and 15 February 1990. The Edmonds report advises that ground surface visibility was poor during the survey, with between 80% to 100% of the Sewerage Reserve being covered by vegetation. This dense vegetation, combined with a thin layer of eroded sediments with also affected visibility, meant that only areas that had been exposed through clearing activities or natural erosion could be inspected during the survey. As such, Edmonds estimates that around 30% of the Sewerage Reserve was inspected during the surface. These areas included a boundary fence line, vehicle tracks and a storage area.

Attachment 5

In total, three Aboriginal sites were identified by the Edmonds survey. These are:

- 'Site 1' - now site 6028-3037 (Port Lincoln EWS One)
- 'Site 2' – now site 6028-3039 (Port Lincoln EWS Two)
- 'Site 3' – now site 6028-3040 (Port Lincoln EWS Three)

See the Consultation Information Pack for information about site 6028-3037. See Attachment 3 for information about sites 6028-3039 and 6028-3040.

Edmonds notes that the Port Lincoln Aboriginal Organisation (PLAO) was consulted prior to and following the survey. This involved Edmonds taking PLAO's nominated Sites Officer to inspect the three recorded Aboriginal sites.

Edmonds' consultation with historian Gil Robertson indicated that additional stone artefacts would have been present in the general area, but that these had been removed historically either by 'amateur collectors' or through erosion.

Importantly, the Edmonds report states that a PLAO representative *"made a collection of artefacts from all recorded sites on the Reserve and these artefacts are now held at PLAO headquarters"*.

In providing recommendations to EWSD, Edmonds said:

1. In relation to 'Site 1' (6028-3037), the majority of stone artefacts were collected from this site, but that many fragments of hearth stones still remained. Despite the site's degraded state, Edmonds recommended that EWSD avoid the site
2. In relation to 'Site 2' (6028-3039), both of the artefacts have been removed
3. In relation to 'Site 3' (6028-3040), all visible artefacts were removed from the area; however, shell fragments remain. Although it is unlikely that subsurface archaeological sites remain in the area, EWSD should avoid earthworks in this area
4. PLAO notes that the area is of significance, given its proximity to the fish traps on Billy Lights Point and given the *"past extent of Aboriginal campsites in the area"*
5. PLAO also recommends that its nominated representative be afforded the opportunity to make periodic visits to the Sewerage Reserve during construction works to assess whether further archaeological materials are being uncovered
6. Should any 'cultural material' be identified by EWSD, works should cease and the Aboriginal Heritage Branch and PLAO should be notified.

Walshe, K 1996 Archaeological assessment of registered Aboriginal sites at Billy Lights Point, Port Lincoln: A Stage 2 report to City of Port Lincoln Council and for circulation to representatives of Port Lincoln Aboriginal Organisation, Barngarla Aboriginal Consultative Committee Inc. and Department of State Aboriginal Affairs. Unpublished report for the City of Port Lincoln.

In 1996, archaeologist Keryn Walshe was engaged by the City of Port Lincoln to conduct an archaeological assessment of, and to subsequently report on, two Aboriginal fish traps located at Billy Light Point: site 6028-3619 ('Billy Lights Point 1') and site 6028-3620 ('Billy Lights Point 2').

This work was undertaken in the context of the proposed development of a hard-stand area to support the maintenance of tuna ring farms off Billy Lights Point in Porter Bay. AAR understands that this development was proposed east of the present-day boat ramp.

The report says that in 1996, at least two on-site inspections were conducted of site 6028-3619 ('Billy Lights Point 1') and site 6028-3620 ('Billy Lights Point 2'). These inspections variously

Attachment 5

involved Dr Walshe, representatives of Barngarla Aboriginal Consultative Committee Inc (BACCI), PLAO, the City of Port Lincoln and the then Department of State Aboriginal Affairs (DOSAA).

In her 1996 report, Dr Walshe also provides the outcomes of oral history recordings about fish traps in the area. AAR understands that the four informants interviewed by Dr Walshe were not Aboriginal people. The report uses these testimonies, along with an assessment of the physical attributes of the fish traps and the preferred environments of local fish species, to suggest that site 6028-3619 ('Billy Lights Point 1') and site 6028-3620 ('Billy Lights Point 2') may not be Aboriginal in origin.

In addition, the report states that site 6028-3619 ('Billy Lights Point 1') and site 6028-3620 ('Billy Lights Point 2') had been subject to significant disturbance associated with previous developments between 1970 and 1990.

Nonetheless, AAR notes that Dr Walshe's report serves to highlight the importance that BACCI and PLAO representatives placed on the Billy Lights Point fish traps.

Walshe, K 1997 Aboriginal Heritage Survey of Sections 110 and 111, BHP Land, Port Lincoln, South Australia. Unpublished report for BHP and JLW Advisory.

In 1997, archaeologists Keryn Walshe and Vivienne Wood were engaged by BHP and JLW Advisory to conduct a cultural heritage survey of an area between Billy Lights Point and Murray Point to the southwest. The purpose of this survey was to identify any Aboriginal sites within the survey area and to make recommendations for their long-term management.

The land, comprising some 146.6 Ha, was held by BHP. The study area was described as 'virgin coastal mallee scrub' fronting onto Proper Bay. AAR understands that the overall intended survey area intersected parts of the Application Area; however, the exact area that was covered by the survey is not known to AAR. The survey was conducted on 31 August 1997 by archaeologists Dr Keryn Walshe and Vivienne Wood, along with three Aboriginal representatives.

The report notes that 'off-track vegetation' was dense, resulting in less than 1% ground surface visibility. AAR understands that, due to this low ground surface visibility, the survey was constrained to exposed tracks associated with the former BHP sand handling facility. In total, the authors estimated that some 30% of the total study area was subject to visual inspection.

No new archaeological sites were identified during the survey. The authors attribute this to the dense vegetation covering the survey area. The report states that on *"the basis of existing information it is expected that some archaeological material exists or existed in the study area but is either under cover of vegetation or has been disturbed"*.

While no archaeological sites were identified, the Aboriginal survey participants flagged the presence of three anthropological/tradition sites on the coastal edge, south of the former BHP sand handling facility. While the precise location and extent of these three sites is not known to AAR, it is unlikely that they intersect the Application Area. Due to confidentiality considerations, no further information is provided about these sites in this document. Traditional Owners who wish to know more may contact AAR to request further information.

Recommendations from the survey and consultation included:

- the anthropological/tradition sites should not be disturbed, and information about them should remain confidential
- relevant coastal management plans should include provisions for the long-term protection and management of the sites.

Attachment 6



OVERALL SITE PLAN
SCALE 1:2000

ISSUED FOR DEVELOPMENT APPLICATION

NOT FOR CONSTRUCTION
PRELIMINARY DRAWING FOR INFORMATION ONLY

PROJECT DRAWING NUMBER
EPDP-600-SMC-GEN-DRG-0004

SCALE 1:2000



REV	DATE	DRN	REVISION PANEL DETAILS	APPROVED	CURRENT REV AUTHORISED
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UR1	12.04.2024		UNDER REVISION		
CURRENT REVISION CONTRACTOR:					

DESIGNED	AUTHORISED
DRAWN	SIGNATURE
REVIEWED	
CONTRACTOR	

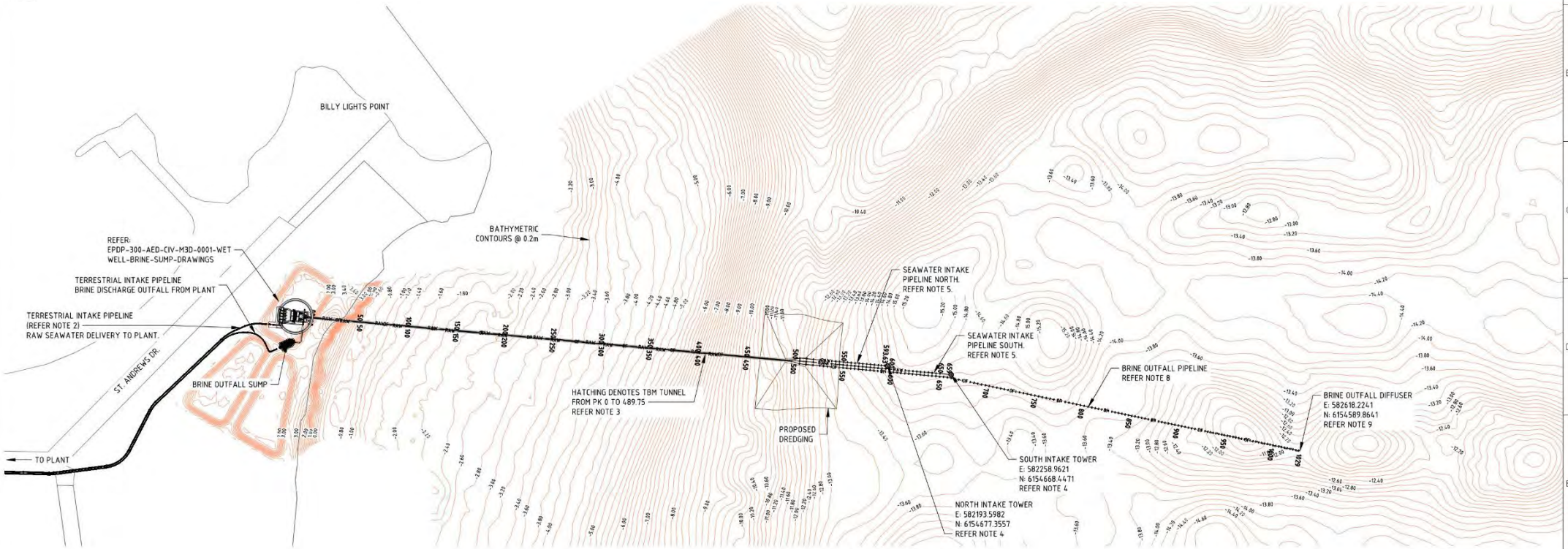
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SIGNATURE



EYRE PENINSULA DESALINATION PLANT
EX BHP - BILLY LIGHTS POINT
DESALINATION PLANT
OVERALL SITE PLAN
SITE LOCATION

A1	MAXIMO ID: P041915	UR2
TOTAL SHEETS	DISCIPLINE: GENERAL	REVISION
SUPERSEDES		
DRAWING NUMBER	P041915-06-00001	01
YEAR	NUMBER	SHEET

Attachment 7



MARINE INFRASTRUCTURE - LAYOUT PLAN

SCALE 1:2000

NOTES

- BATHYMETRY AND GEOPHYSICAL SURVEY SUPPLIED BY MES AND RELATIVE TO AHD. REFERENCE: "SAdesa23_GDA2020-53_AHD_2m_MA.vvz". GEOPHYSICAL INTERPRETATION ON DRAWING IS ONLY SHOWN FOR INDICATIVE PURPOSES, TO BE CONFIRMED BY THE CONTRACTOR.
- TERRESTRIAL INTAKE PIPELINE BETWEEN SEAWATER INTAKE PUMP STATION AND DESALINATION PLANT TO BE DN1000 HDPE SDR21 PE100.
- FINAL EXTENT OF SHORE ZONE CROSSING TUNNEL TO BE DEFINED FROM NEW GEOTECHNICAL SURVEY DATA.
- INTAKE TOWER STRUCTURES (2 NO.), ONE ON OFFSHORE END OF EACH SEAWATER INTAKE PIPELINE. REFER EPDP-200-AED-CIV-M3D-0001-INTAKE-TOWERS DRAWINGS
- SEAWATER MARINE INTAKE PIPELINES (2 NO.) TO BE DN900 SDR21 HDPE PE100.
- ALL PIPELINES SHALL BE ACCOMMODATED- WITHIN THE TUNNEL THROUGH THE SHORE ZONE CROSSING. REFER SHEET EPDP-300-AED-CIV-SKT-2001.
- FINAL ARRANGEMENT OF MARINE PIPELINE SYSTEMS IS BASED ON PIPELINES HYDRAULICS.
- BRINE OUTFALL PIPELINE (1 NO.) TO BE DN900 SDR21 HDPE PE100.
- OUTFALL DIFFUSER (1 NO.) ON OFFSHORE END OF BRINE DISCHARGE PIPELINE, REFER SHEET EPDP-500-AED-CIV-SKT-1002.
- ALL DESIGN ASPECTS TO BE CONFIRMED DURING FUTURE STAGES OF DESIGN.
- FOR VERTICAL LEVEL DATA REFER PIPELINE LONGITUDINAL SECTION DRAWINGS:
MARINE INTAKE PIPELINE SYSTEM - PLAN & LONG SECTION (2 DRAWINGS)
MARINE OUTFALL PIPELINE SYSTEM - PLAN & LONG SECTION (2 DRAWINGS)
- THE GEOGRAPHIC COORDINATE SYSTEM IS GDA2020 UTM ZONE 53S
- THE ALTIMETRIC SYSTEM IS REFERENCED TO THE AUSTRALIAN HEIGHT DATUM (AHD)
- THESE DRAWINGS WILL HAVE TO BE REVIEWED IN ACCORDANCE WITH THE RESULTS OF THE ONGOING MARINE GEOTECHNICAL INVESTIGATION

NOT FOR CONSTRUCTION.
PRELIMINARY DRAWING FOR
INFORMATION ONLY

ISSUED FOR DEVELOPMENT APPLICATION

EPDP-200-AED-CIV-DRG-1001

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1:2,000m (A1) - 1:4,000m (A3)

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UR2	15/05/24	PRL	AS INDICATED			THG	
UR1	12/04/24	PRL	AS INDICATED			THG	
CURRENT REVISION CONTRACTOR:							

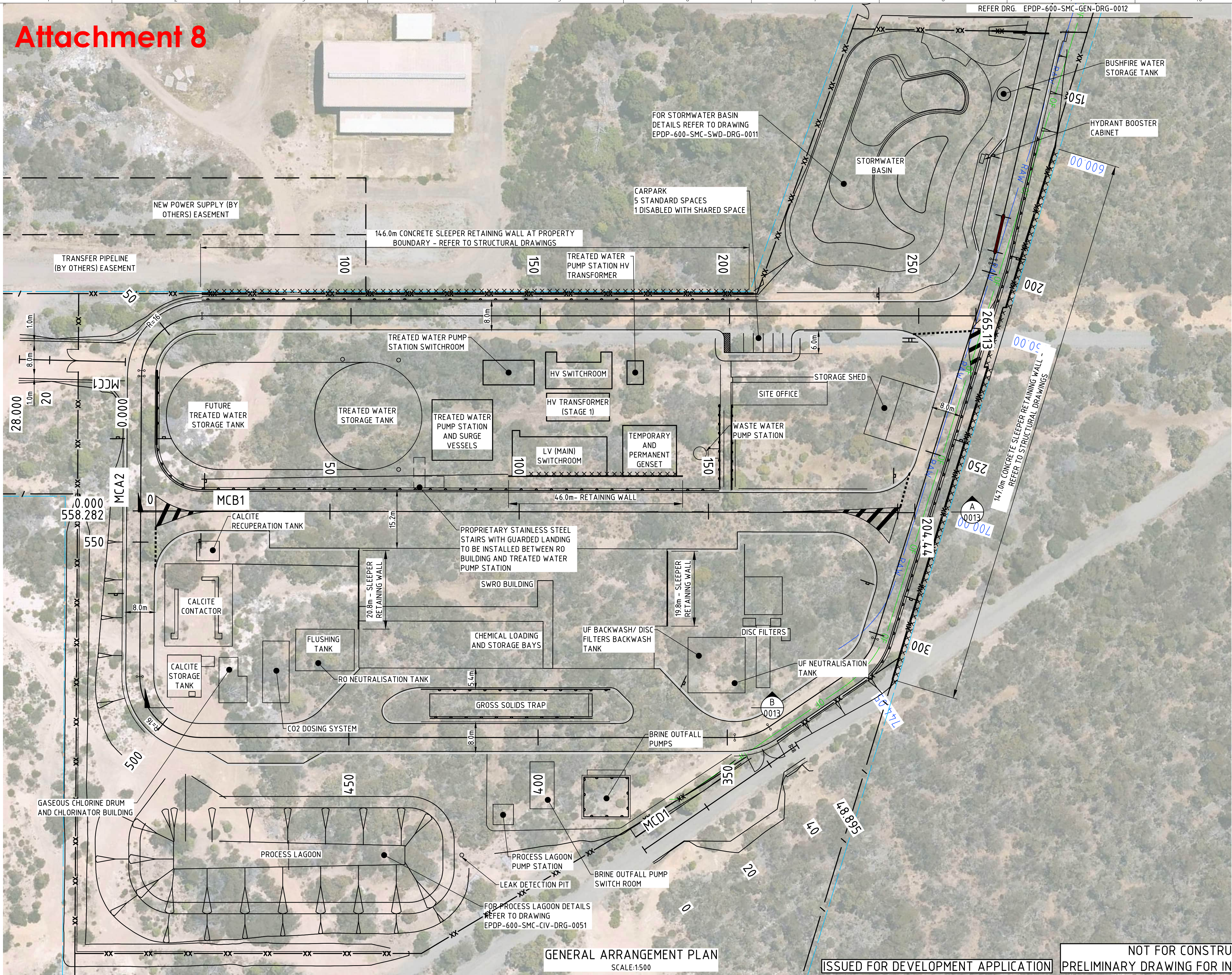
DESIGN PANEL	
DESIGNED	AUTHORISED SIGNATURE
DRAWN	
REVIEWED	
CONTRACTOR	



EYRE PENINSULA DESALINATION PLANT
MARINE INTAKE PUMP STATION AND PIPELINES
MARINE
MARINE INFRASTRUCTURE
LAYOUT PLAN

A1		MAXIMO ID:	UR3
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TOTAL SHEETS		DISCIPLINE:	
SUPERSEDES		DRAWING NUMBER	
YEAR		NUMBER	SHEET

Attachment 8



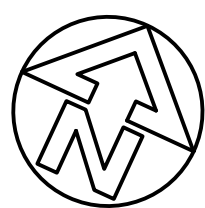
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- PROPERTY BOUNDARY
 - EASEMENT CORRIDOR (SERVICES)
 - STOCK FENCE
 - HIGH SECURITY MESH FENCE
 - GUARD RAIL
 - HOLDING RAIL
 - CONCRETE RETAINING WALL
 - MARINE OUTFALL PIPE
 - RAW SEAWATER INTAKE PIPE

GENERAL ARRANGEMENT PLAN
SCALE:1:500

ISSUED FOR DEVELOPMENT APPLICATION

NOT FOR CONSTRUCTION
PRELIMINARY DRAWING FOR INFORMATION ONLY

SCALE 1:500



REV	DATE	DRN	DETAILS	APR'D	CURRENT REV AUTHORISED
UR2	10.05.2024	KWS	UNDER REVISION		
UR1	12.04.2024		UNDER REVISION		
CURRENT REVISION CONTRACTOR:					SIGNATURE

DESIGNED	AUTHORISED
DRAWN	SIGNATURE
REVIEWED	
CONTRACTOR:	



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EYRE PENINSULA DESALINATION PLANT
EX BHP - BILLY LIGHTS POINT
DESALINATION PLANT
GENERAL ARRANGEMENT PLAN
PLANT

PROJECT DRAWING NUMBER		EPDP-600-SMC-GEN-DRG-0011
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SHT SIZE	PROJECT No: A0012-0025	REVISION
TOTAL SHEETS:	DISCIPLINE: GENERAL	
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