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9 February 2021

Our Ref: HW xxxx/xxxx

Mr Dominic Crinnion
Team Leader, Water and Intermodal Assessments
Social & Infrastructure Assessments
NSW Department of Planning, Industry and Environment

Dear Dominic,

**Belmont Drought Response Desalination Plant (SSI-8896)
DPIE Request for Additional Information - 03022021**

We refer to the DPIE request for additional information dated 3 February 2021 in relation to the Belmont Drought Response Desalination Plant planning application. Hunter Water's response to the request for additional information is provided below:

1. The depth of the on-shore sea water pump station (20 metres or 25 metres)

A maximum depth of up to 25 metres for the construction of the sea water pump station wet well has been allowed for in the design and the environmental assessments. The environmental assessments considered this depth so that there is flexibility during construction. If pipe-jacking / micro-tunnelling is selected as the preferred construction method for the direct ocean intake, a deeper wet well would be required to allow a tunnel boring machine to be lowered into the wet well.

2. Detail of where excavated materials will be stored, including those associated with any excavations of the sea bed

The spoil management principles for the Project are to beneficially re-use excavated material on site as far as practical. Spoil management plans are to be developed during detailed design. An area of 150m x 30m has been identified at the southern end of the site. This area is shown in **Figure 1**.

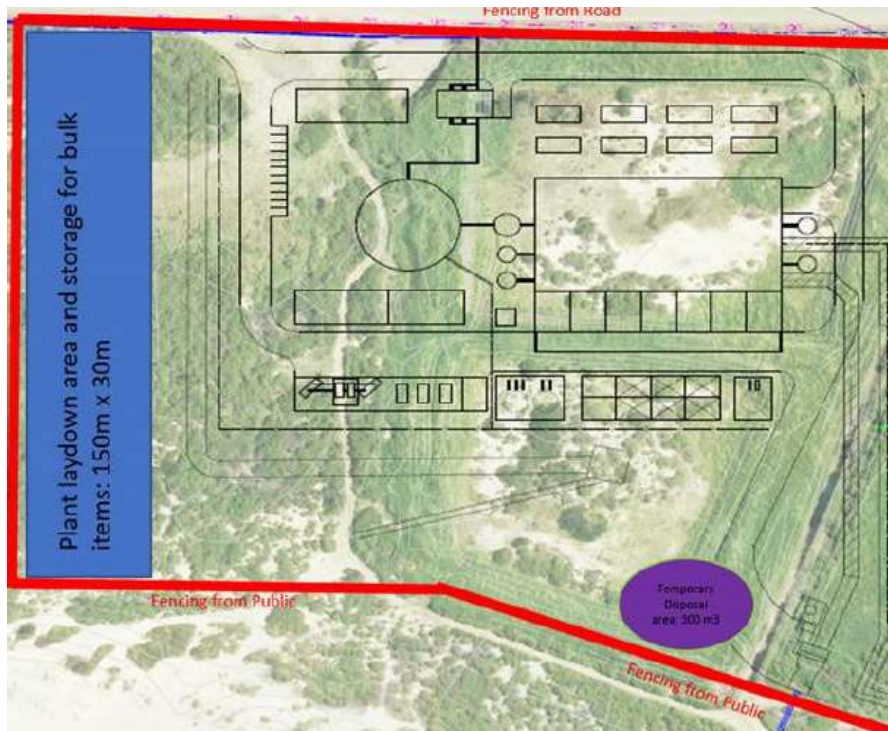


Figure 1 Laydown and storage area

This area of 4,500 m² would be used to temporarily store excess spoil and bulk items during construction. Where beneficial re-use on site is not practical, excess spoil would be disposed off-site in accordance with waste management legislation.

3. Confirmation of the number of buildings that are proposed on site

A Concept Design General Arrangement has been prepared to show the layout of the Project elements on the site, and the general arrangement of site infrastructure. The site layout would be further refined during design development. The final arrangement of buildings and site infrastructure would depend on the final technology that is selected, but would include the following:

A. Buildings:

- Administration building
- Seawater filtration building
- Reverse Osmosis (RO) building
- Electrical building/structure (kiosks, switch rooms and transformer)
- Chemical storage structures
- De-watering building (includes centrifuge & bins, solids handling, polymer storage and dosing)
- Lime dosing and CO₂ dosing structure

B. Pumps and ancillary structures

- Seawater intake, screening and pumping structure
- Backwash pumps
- Brine water pump structure
- Lamella thickener structure

- Potable water pump station
- Supernatant tank and pump structure

4. Size and number of storage tanks to be stored on the site and if any hazardous materials not already considered would be stored

A Concept Design General Arrangement has been prepared to show the layout of the Project elements on the site, and the general arrangement of site infrastructure. The site layout would be further refined during design development. The final arrangement of tanks would depend on the final technology that is selected, but would include the following tanks:

- Treated water storage tank (1 x 14ML)
- Raw seawater tank (1 x 14ML)
- Permeate tank (1)
- UF backwash tanks (4)
- Supernatant tank (1)
- Centrifuge tank (1)

The sizes of permeate, UF backwash, supernatant and centrifuge tanks would be determined as the design is developed. These tanks would be significantly smaller than the treated water and raw seawater tanks that are each 14 ML in size.

There is no change to the planned materials, including any potentially hazardous materials, to those described and assessed in the EIS and the AR.

5. Details of how the offshore sea water pump station will be marked/identified once operational

The infrastructure to be installed in the ocean comprises an inlet structure and pipes. No pump station will be located off-shore. The seawater pump station is to be located on shore, to the east of the proposed water treatment process plant.

The Australian Hydrographic Office (AHO) publishes and updates approximately 500 official paper charts and Electronic Navigational Charts (ENC). Published Australian paper charts are updated via fortnightly Australian Notices to Mariners (NtM) Editions. The AHO also publishes eNotices to Mariners. eNotices is a free subscription service that updates electronic nautical charts and enables the latest navigational safety critical notifications to be available regularly. Navigation charts are updated with the locations of navigation hazards, or newly constructed infrastructure such as intake structures and sub-surface pipes.

Hunter Water has consulted with the AHO and would follow AHO requirements, as follows. A minimum of one month prior to construction Hunter Water would lodge notices with the AHO stating the construction location, methods, duration and other relevant information to describe changes or hazards to navigation. The AHO would issue a temporary notice to mariners warning of the construction activity, separation zones and other relevant navigational information.

At the end of construction Hunter Water would lodge "As Constructed" drawings with the AHO as soon as possible. These drawings would confirm the location of all proposed infrastructure that was described in the pre-construction notices. The plans would show all infrastructure to a <1m GPS accuracy. AHO would then issue updates to the navigation charts in the next fortnightly publication.

6. The proposed start date of the dune restoration program at Nine Mile Beach

Hunter Water commenced the dune restoration program in July 2020. Works were completed on site over a two month period, with completion achieved in September 2020.

We trust this meets DPIE's requirement. If you have any queries, please contact me on the details provided below.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'Chris Gilmore', is centered below the text 'Yours Sincerely'.

Chris Gilmore
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Hunter Water Corporation

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