

## ASSESSMENT REPORT

### Taronga Institute of Science and Learning, Taronga Zoo Section 4.55(1A) Modification Application SSD 7311 MOD 1

#### 1. INTRODUCTION

This report is an assessment of a section 4.55(1A) application to modify State significant development approval (SSD 7056) granted for the construction of an education and research facility known as the Taronga Institute of Science and Learning Facility (the facility). The application has been lodged by the Taronga Conservation Society Australia (TCSA) (the Applicant) pursuant to section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and seeks to permit the installation of 234 new solar panels and 12 hot water panels on the roof of the facility.



Figure 1: Site Location (source: Nearmap)

## 2. SUBJECT SITE

Taronga Zoo (the zoo) comprises approximately 28 hectares of land situated to the west of Bradley's Head Road at Bradley's Head (**Figure 1**). Located in the Mosman local government area (LGA), Bradley's head peninsula extends to the south, fronting Sydney Harbour. The site is accessed primarily by Whiting Beach Road to the north, Bradley's Head Road to the West and Athol Wharf Road to the south. To the west, the site borders Little Sirius Point and Sirius Cove. The site is legally described as Lot 22 in DP 843294. The closest residential properties are located 140 m to the north east on Whiting Beach Road.

The modification application relates only to the facility located in the central northern area of the zoo. The facility is a partly two-storey, partly three-storey building used for education and research.

Mosman Local Environmental Plan 2012 (MLEP 2012) identifies elements within the zoo as being of local heritage significance. The facility is not in proximity to any of these items.

## 3. APPROVAL HISTORY

On 29 July 2016, the Executive Director, Key Sites and Industry Assessments, granted consent to SSD 7311 to permit the demolition of existing structures, construction of a new research and education facility, alterations and additions to the lecture theatre and associated landscaping works.

## 4. PROPOSED MODIFICATION

The Applicant submitted a modification application on 12 April 2018 seeking approval, under section 4.55(1A) of the EP&A Act, to install 224 solar panels and 12 solar hot water panels on the roof of the facility (**Figure 2**). To permit the change, the Applicant seeks to modify Condition A2 of the development consent to include a photovoltaic layout drawing (D-GE-10904P5-102) identifying the panels. Once installed, the solar panels will be connected to existing infrastructure to provide the facility with a source of renewable energy.

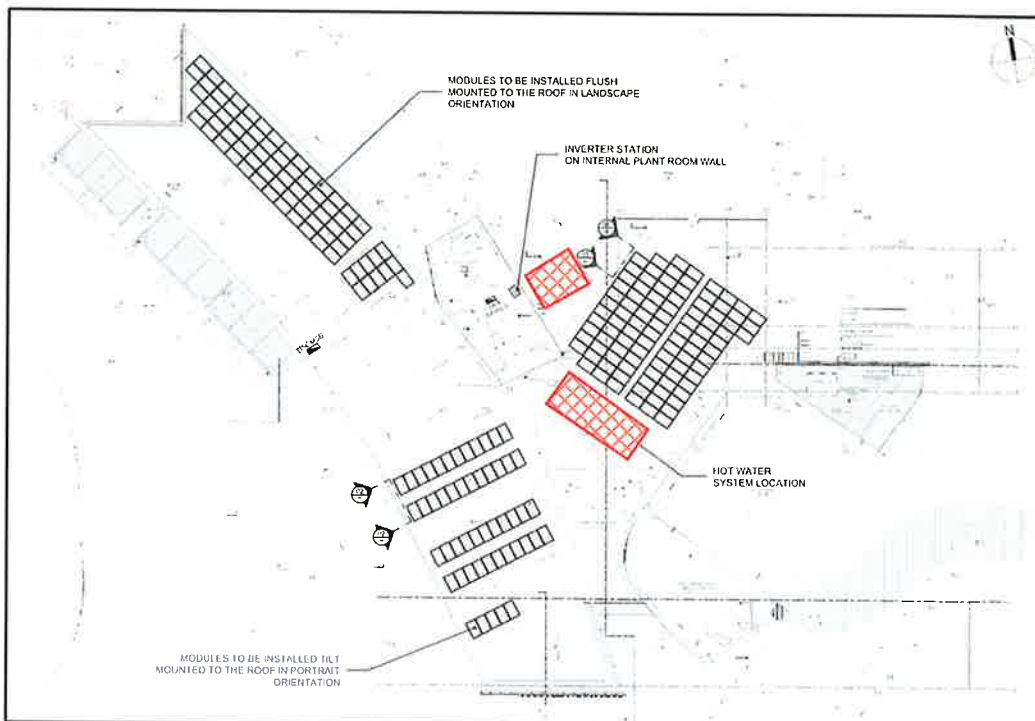


Figure 2: The proposed solar panels and already installed hot water panels (source: Applicant's EIS)

The Applicant has advised that the 12 hot water panels have already been installed (shown by red hatching in **Figure 2**). The Applicant therefore seeks to regularise these works as part of the proposed modification. Separate compliance action was undertaken concurrently to the modification application in respect to these works. The investigation resulted in a warning letter that was issued to the Applicant on 10 July 2018. No further action will be taken.

## 5. STATUTORY CONSIDERATION

### 5.1 Modification of approval

Section 4.55(1A) of the EP&A Act requires the consent authority to be satisfied that the following matters in **Table 1** are addressed in respect if all applications that seek modification approvals.

**Table 1: Section 4.55(1A) Modification involving minimal environmental impact**

Section 4.55(1A)	Department's consideration
(a) that the proposed modification is of minimal environmental impact, and	<b>Section 7</b> of this report provides an assessment of the impacts associated with the proposal. The Department is satisfied that the proposed modifications will have minimal environmental impact.
(b) that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and	The proposed modification seeks approval for minor changes and does not result in any additional adverse impacts on the surrounding area. On this basis, the proposal would result in development that is substantially the same as the originally approved development.
(c) the application has been notified in accordance with the regulations, and	<b>Section 6</b> of this report demonstrates that the application followed the consultation requirements as outlined in the <i>Environmental Planning and Assessment Regulation 2000</i> .
(d) any submission made concerning the proposed modification has been considered.	The Department received one submission on the proposal. The issues raised in the submission have been considered in <b>Section 7</b> of this report.

### 5.2 Environmental Planning Instruments

The following Environmental Planning Instruments (EPIs) apply to the site:

- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy No.55 – Remediation of Land
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Mosman Local Environmental Plan 2012.

The Department has considered the proposed modification against the relevant EPIs and is satisfied the proposal continues to be consistent with the requirements of the EPIs.

### 5.3 Consent Authority

The Director, Key Sites Assessments may determine the application under delegation as:

- the relevant local council has not made an objection
- a political disclosure statement has not been made
- there are no public submissions in the nature of objections.



## 6. CONSULTATION

Section 4.55(1A) modifications are not required to be notified under the *Environmental Planning and Assessment Regulation 2000*. However, the modification application was made publicly available on the Department's website and was referred to Mosman Council (Council).

Council did not object to the modification application but recommended the solar panels be located to reduce the visibility from the harbour and surrounding headlands. The Applicant noted this concern in the Response to Submissions (RtS) and confirmed the majority of the panels would be sited on the north-eastern facing roof areas where they are invisible from the harbour due to the sloped roof.

No public submissions were received.

## 7. ASSESSMENT

The Department considers the key issue associated with the proposed modification to be the potential visual impact arising from the design and installation of the solar panels at the facility.

### 7.1 Visual impact

The modification application seeks approval to install 224 new solar panels and approve the ongoing use of 12 solar hot water panels already installed at the facility (Figure 3).

Council recommended the panels be located to minimise their visibility from the harbour and surrounding headlands. To reduce their visibility, 51 panels will be tilted at 30 degrees and the remaining 173 panels will be installed to be parallel or 'flush' with the roof line angle of the facility. The tilted panels will be set between 40 cm and 50 cm above the roof line to maximise the capture of sunlight. No additional infrastructure will be required to operate the panels as they will be connected to existing services at the zoo.

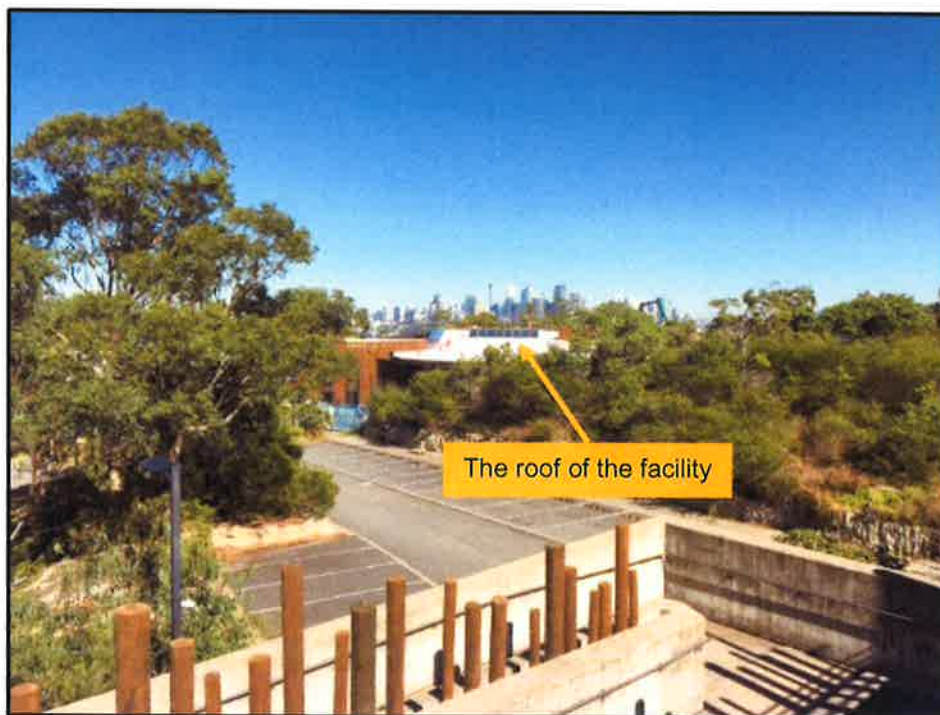


Figure 3: Looking south-west towards the facility from Taronga Zoo car park  
(Source: Department's Photograph)

The Department notes the solar panels have a low profile that results in minimal visual impact and minimal additional building height, and the panels to the south-eastern lower portion of the site would be tilted rendering the panels invisible from surrounding residential properties. The panels would also not interrupt significant views to, or from, Sydney Harbour or any item of heritage significance as they are surrounded by significant tree foliage that conceals and obscures the panels when viewed from surrounding residential properties and the harbour (**Figure 3**). All panels would be laminated to reduce the reflectivity to 6.2% reducing the potential for glare and are in keeping with the modern architecture of the facility.

The Department concludes that the proposed solar panels would not have an adverse visual impact on the zoo, surrounding public domain or adjoining residential properties.

## 8. CONCLUSION

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act. The Department notes that the proposed modification would improve the sustainability of the zoo by securing a renewable energy source without having an adverse impact upon the visual amenity or heritage value of the zoo. Consequently, the Department concludes the proposed modification should be approved, subject to conditions.

## 9. RECOMMENDATION

It is recommended that the Director, Key Sites Assessments, as delegate of the Minister for Planning:

- **consider** the recommendations of this report;
- **determine** that the application SSD 7311 MOD 1 falls within the scope of section 4.55(1A) of the EP&A Act;
- **modify the consent** (SSD 7311); and
- **sign** the attached modification of development consent (**Appendix A**).

Prepared by: Tim Green  
Key Sites Assessments

Recommended by:

Cameron Sargent  
**Team Leader**  
**Key Sites Assessments**

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## Decision

The recommendation is Approved by:

Ben Lusher  
**Director**  
**Key Sites and Industry Assessments**  
as delegate of the Minister for Planning