



National Capital Authority
Works Application
Overnight Glamping

Location:

Yarramundi Peninsula, Ngunnawal Country, Canberra

Table of Contents

1. Acknowledgement of Country	4
2. Introduction	5
2.1 Proposed Timeframe	6
3. The Project	7
3.1 Project Overview	7
3.2 The Site	8
3.3 Heritage	9
3.4 Cultural Significance.....	9
3.5 Landscape	10
3.6 Proposed Individual Sites	12
3.7 Car Parking	12
4. Traffic Management	14
5. Land Use for Lake Burley Griffin and Foreshore Precinct.....	16
5.1 National Capital Plan - Precinct Codes.....	16
6. Design Elements	18
6.1 Dome Structure	18
6.2 Visual	18
6.3 Deck Design	20
6.4 Footpaths	21
6.5 Power Supply	22
6.6 Water Supply.....	26
6.7 Sewerage Treatment	27
6.8 Heating / Cooling	28
6.9 External Utility Storage Enclosure.....	28
6.10 Interior Design elements	30
6.11 Internal Flooring	30
6.12 Security and Safety	31
7. Operations	32
7.1 Site Access	32
7.2 Servicing of Suites	33
7.3 Guest Check in / out	33
7.4 Onsite Signage	34
8. Economic Impact	35
9. Stakeholder Management	36
10. Construction Timeline	36
10.1 Site Establishment	36
11. Conclusion	38

12. Appendices

- 12.1 Site Map
- 12.2 Site Plan Detailed Drawings
- 12.3 Statement of Heritage Impact (SoHI)
- 12.4 Fire Hazard Assessment Report
- 12.5 Design Drawings
 - 12.5.1 Combined Drawings
 - 12.5.2 Power Plant Room Plans
 - 12.5.3 Sanitary and Water Drawings
 - 12.5.4 Artists' Impression Drawings
 - 12.5.5 Utility Enclosure Plans
- 12.6 Risk Assessment Plan
- 12.7 Waste Management Plan
- 12.8 Bushfire Management Plan
- 12.9 Operational Safety Management Plan
- 12.10 Operational Traffic Management Plan
- 12.11 Temporary Traffic Management Plan
 - 12.11.1 TCCS Authorisation
 - 12.11.2 ESA TTMP
 - 12.11.3 TTMP Drawings
- 12.12 Technical Data Information Sheets
 - 12.12.1 Keksia Evergreen Brochure
 - 12.12.2 Duetz Power Solutions Generator
 - 12.12.3 ELMOFO 48v Lithium Battery Data Sheet
 - 12.12.4 Reclaim Energy Hot Water System
 - 12.12.5 Mitsubishi A/C Brochure
 - 12.12.6 Tankworld Water Tank Specification Sheet
 - 12.12.7 Sani-Loo Sewerage Treatment System
 - 12.12.8 Glass Igloo Technical Data
 - 12.12.9 Ground Screws Australia Data sheet
 - 12.12.10 Sani-Loo Holding Tank
 - 12.12.11 Living Power Solar Access Survey Test Results
 - 12.12.12 Colourbond Colour chart
 - 12.12.13 Moma Solar Pop Up Module – data sheet
 - 12.12.14 Tecma Macerating Toilet
 - 12.12.15 Solar Pathway Lights
 - 12.12.16 Auto Swing Gate Solar
 - 12.12.17 Proposed Signage Specifications
- 12.13 Materials Finishes
- 12.14 ESA Tree Management Plan
- 12.15 Letters of Support/Correspondence
 - 12.15.1 ACT Chief Minister, Economic Development Directorate
 - 12.15.2 Australian Tourism Export Council
 - 12.15.3 Ngunnawal Elders
 - 12.15.4 Burrunju Aboriginal Art Gallery
 - 12.15.5 ACT Fire and Rescue
 - 12.15.6 ACT AFP Water Police
 - 12.15.7 ACT Environmental Protection Agency
 - 12.15.8 ACT State Emergency Services
- 12.16 18Fifty3 Capability Statement

Acknowledgement to Country

In the spirit of reconciliation Eco Suites Australia acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea, and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

1. Relevant Legislation, Codes, Regulations or References

- Australian Standards AS/NZS 2906:2001 – Fuel Containers, Portable, Plastic and Metal
- Environmental Guidelines for Petroleum Storage in the ACT
- AS 2208-2023 – Safety Glazing Materials in Buildings
- AS 1288-2021 Glass in Buildings
- Australian Standard AS 1657:2018 Fixed Platforms, Walkways, Stairways and Ladders - Design, Construction and Installation
- AS3000 Wiring Rules
- AS3001 Electrical Installations Transportable Structures
- AS4509 Stand Alone Power Systems
- AS4777 Inverter Energy Systems
- AS5033 Installation and Safety for PV Arrays
- AS5139 Battery Energy Storage Systems
- Environment Protection Act 1997
- Environment Protection Regulation 2005
- Work Health and Safety Act 2011 (WHS Act)
- Civil Law (Wrongs) Act 2002 s151 (Innkeepers Liability)
- Privacy Act 1988
- Australian Privacy Principles (AAP's)
- Liquor Regulation Act 2010 (ACT)
- Australian Standard (AS) 3959 (2018) Construction of buildings in bushfire-prone areas;
- ACT Bushfire Management Standards (2023);
- ACT Strategic Bushfire Management Plan 2019-2024;
- Planning for Bushfire Protection 2019 and 2022 Addendum,
- AS 4970-2009 Protection of trees on development sites.
- NCA Tree Management Policy, 2021
- Australian Standard AS 3542-1996 - Pleasure boats—toilet waste collection, holding and transfer systems

2. Introduction

Eco Suites Australia's mission is to provide immersive nature based, luxury tourism experiences at iconic locations in Australia & New Zealand. The ESA product will introduce a never seen before commercial eco-tourism product to the Australian marketplace with luxury Glass Geodesic Domes with minimal impact on the environment incorporating rich indigenous cultural experiences.

The National Capital deserves a luxury nature-based experience that showcases its natural beauty, its Ngunnawal heritage and culture; available for all Australians, local residents and visitors alike. The high-end tourism product will also have an immense appeal to International visitors and will provide a rich cultural and nature experience. ESA is engaging some of Australia's leading innovative suppliers to provide expert advice and design to reduce carbon footprint. The unique design of the 100% off grid glamping overnight experience will achieve net zero.

Eco Suites Australia (ESA) is proposing to operate overnight glamping on the shores of Lake Burley Griffin on Ngunnawal country as the launch location into the Australian market under the Eco Suites Canberra brand. The specific proposed location is at Yarramundi Peninsula (refer to Appendix 12.1 - Site Map). The location is ideal due to its seclusion and natural environment with minimal light pollution at night.

The proposed project meets with the objectives of the National Capital Plan, in particular the design, heritage, and environmental impact. Furthermore, the project addresses the applicable Precinct Code, 4.12 - Lake Burley Griffin and Foreshores Code. ESA has received the support from ACT Government through grant funding support for the Tourism Product Development grant. The Tourism Product Development Fund was designed to encourage co-investment in tourism-related infrastructure, products and experiences that can drive economic growth in the ACT and deliver improved visitor experiences, while also enhancing Canberra's reputation as a tourism destination.

2.10 Proposed Timeframe

ESA is proposing an initial period of 3 years (+1yr + 1yr) with 3 luxury off grid glass domes to provide an adequate period to review impact of operation and whilst being commercially viable. Following NCA and public sentiment on the operation following the first 12 months, ESA is keen to increase to up to six domes on the site. A separate Works Application would be sought.

The proposed works of the construction of 3 temporary structures with associated utilities include:

- 64 sqm (8m x 8m) architecturally designed elevated decks
- Luxury 6m Geodesic Glass domes
- Associated under deck utilities
- 380L waste storage (double banded) tank suspended under deck
- Outdoor lockable cabinet enclosure to house utilities
- CCTV surveillance for guest safety and security of assets.
- Installation of 1600mm ground screws
- Onsite centralized power solution - equipped with rooftop PV solar array, generator, battery storage, inverters and general storage.
- Direct access pathways to each suite
- Cut and fill 280m (approx.) long trench 600mm deep x 200mm wide to bury cabling and plumbing
- 2 x 10,000L above ground Water Tanks
- Install new farm gate swing automatic gate at entry
- Relocate the existing entry gate to close public vehicle access to old boat ramp

During the construction phase the site will require additional temporary structures. these will be positioned on the existing sealed access sections of the site:

- Temporary site office
- Small rooftop solar array
- Maximum 4 x 20-40ft storage containers
- Temporary fencing erected around each deck location
- Temporary fencing to close off access road after cycle path
- Environmental protection measures
- Soil containment barriers

3. The Project

3.1 Project Overview

Eco Suites Australia (ESA) will provide luxury nature-based glamping experiences through a sustainable product offering 100% off grid experiences underpinned by reducing carbon emissions. The geodesic glass domes are wind, rain, hail, snow proof well suited to the Canberra climate and will be fitted out similar to the standard of a traditional 5-star hotel room with king bed, reverse cycle A/C, ensuite with walk in shower, toilet facilities, Wi-Fi. The main dome frame is made of strengthened alloy aluminum and 115 glass panels with 3 x 5mm thick glazed glass. There are 3 remote controlled openable windows and a retractable roof providing a truly immersive stargazing experience. The opaque glass panels on the outside provide privacy and allow the domes to blend into the natural environment during daylight hours. At night the domes become transparent, however each dome is equipped with smart glass technology operated with remote control to provide desired privacy.

Each temporary structure will consist of the following elements:

- 6m Luxury Geodesic Glass dome
- 64 sqm (8m x 8m) architecturally designed elevated decks
- Innovative 1600mm screw in ground screw foundations
- Integrated off grid water treatment management system and black water holding tanks suspended above ground under deck
- Utility storage enclosure at the rear of deck
- Associated under deck utilities
- 380L waste storage (double bunded) tank suspended under deck
- CCTV surveillance for guest safety and security of assets.
- Direct access pathways to each suite
- Pathway solar lighting

Centralised equipment includes

- An off-grid power plant room with expandable roof top PV solar array
- 10,000L above ground potable water supply (Main supply)
- 10,000L above ground water tank dedicated to firefighting
- Install new farm gate swing automatic gate at entry
- Relocate the existing entry gate to close public vehicle access to old boat ramp
- 2 Temporary Solar Streetlights (entry and car park)

Eco Suites Australia is committed to delivering a sustainable and environmentally friendly overnight experience from construction phase through to its operations. ESA has sourced industry leading sustainable design elements including decking materials, power supply and in room amenities, in addition ESA will not be supplying single-use plastics in the suites. Based on the design and fit out of the domes, these temporary structures can be disassembled if required in 8-10 weeks leaving little to no footprint and minimal impact on the environment. ESA will offset approximately 4.6 tonnes of CO2 emissions annually from its operations equivalent to planting 213 trees per year.

ESA is determined to deliver a world class indigenous cultural element through a collaboration with the Ngannawal Traditional Custodians. Consultation meetings have been met with excitement and support for such development. All guests will be welcomed with a welcome to the country filmed on location by Ngannawal elders displayed on TV's and feature Indigenous artwork from local Indigenous artists. Additionally, it will incorporate a rich cultural offering for guests to create unique hands-on learning experiences. These indigenous workshops would include artefact, painting, bush food tours and guests will leave with an enhanced understanding and respect for the world's oldest living culture.

3.2 The Site

ESA is proposing to the NCA to permit overnight glamping on the western shores of Lake Burley Griffin at Yarramundi Peninsula (*Block 1339 Canberra Central*) - refer to image 1.1 below (also known as Acacia Inlet). The NCA recommended site currently provides vehicle access and infrastructure with a semi sealed roadway that would be utilised to allow entry / exit onto Lady Denman Drive via lockable access gate (refer to traffic management plan)



Image – 1.1 - ACTMAPI

An existing cycle path runs through the proposed site with risk mitigation already in place with increased safety signage for both vehicles and cyclists.

The existing entry /exit and semi sealed driveway including the existing turning circle would also be used by contractors to service the domes on a regular basis. ESA is forecasting low vehicle movements within the site with a maximum of 4-5 cars in the location at one time.

Specific locations of domes will be set back from the shoreline by minimum 3 metres to be outside the 1 in 100-year flood zone (see image 1.2 - ACTMAPI flood zone map). ACTSES has assessed the proposed development advising that the location is not at risk of riverine flooding. The risk of dam failure upstream has been identified as rare and medium risk which has been assessed ESA's Risk Management Plan. ESA has highlighted 3 preferred specific locations within the Yarramundi Peninsula location. As per the Heritage Impact Assessment by Eric Martin & Associates, final location of each dome has been done in consultation with Indigenous groups and relevant stakeholders. ESA has considered alternate locations on the shorelines of Lake Burley Griffin, including the southern end of Yarramundi Reach overlooking Scrivener Dam with views of Government House. This location was deemed inappropriate due to the openness and the heritage values of the Lindsay Prior Arboretum. There are also increased pedestrian users of this area including pets. All other non-developed locations around Lake Burley Griffin are deemed inappropriate due to similar reasons or too much light pollution which minimizes the uniqueness and stargazing appeal. NCA recommended the current site location to investigate further, recognising that no other location adjacent to Lake Burley Griffin is deemed suitable for such an operation. ESA has visited the proposed site many times preparing the proposed works application and notes the peninsula area has not been frequently visited by the users of the lake. There is minimal impact on the community, and it creates a purpose to visit the location that is currently under utilised. Not only will the location be opened to Canberra residents but all Australians looking to visit the National Capital. ESA does acknowledge that the cycle path and public toilet facilities are utilized by the community on a frequent basis and does not request any changes to this infrastructure. ESA will not request to limit public access to the shoreline of the existing location.

As referenced on the site map (refer to Appendix 12.1) Suite 1 and Suite 2 are co-located on grassland facing southeast and south. Suite 3 is isolated facing north towards Acacia Inlet and Black Mountain which after consultation with local Nggunawal elders is located on a Songlines which holds significance to the Nggunawal custodians and will form a key part of the education and storytelling. This signature suite position has been moved back from the shoreline respecting the recommendations of the flora and fauna assessment. The native birdlife will also allow ESA to provide visitors with educational bird watching experiences without interrupting the habitat. The decks have been specifically designed to minimise access to the shoreline with the installation of the balustrades minimising exposure from the lake shoreline. Each deck will be accessed by compacted blue metal aggregate pathways to each dome.

ESA has conducted soil testing as part of a separate works application (WA103296) to confirm the suitability of the proposed location and pull tests performed by Stop Digging Australia has determined the soil is conducive to support the foundations of the decks and meet the required load limits.



Image 1.2: ACTMAP.I – Flood Map

3.3 Proposed individual suite locations.



Site 1: 35°17'14"S 149°05'18"E



Site 2: 35°17'14"S 149°05'19"E



Site 3: 35 17'15"S 149 05'19"E

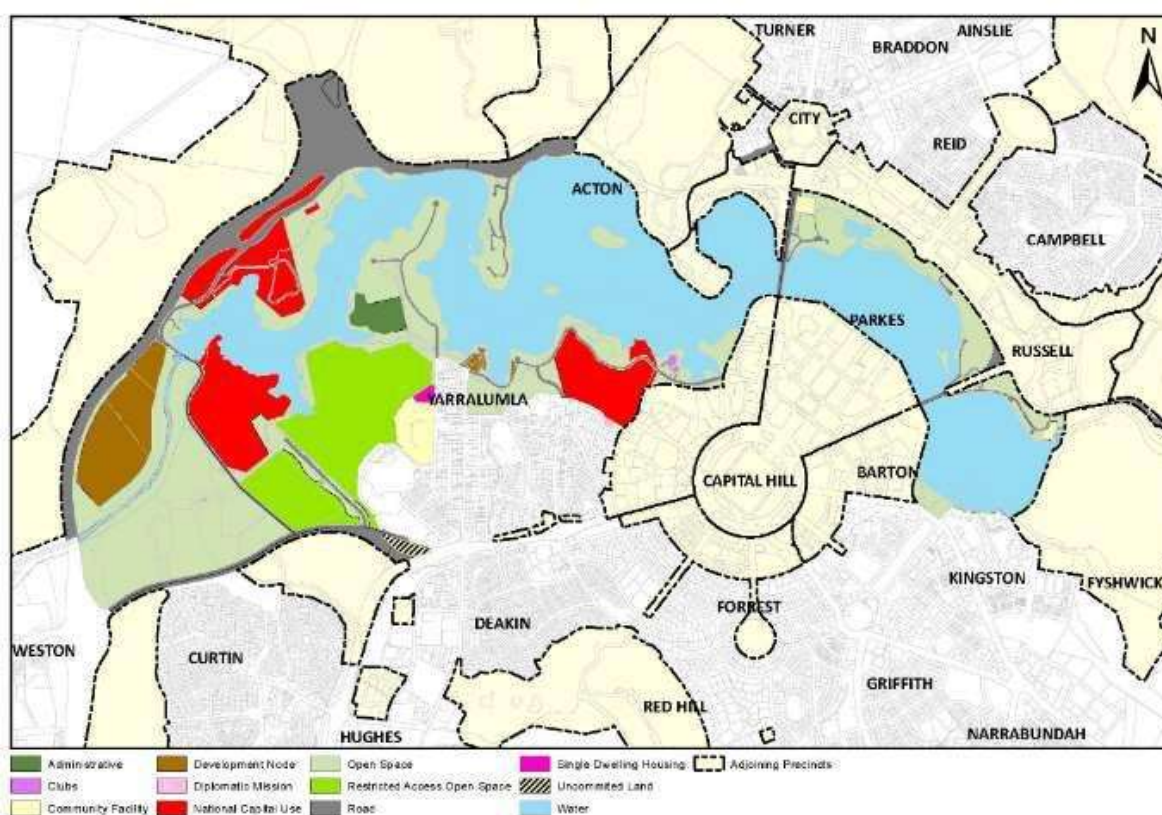
3.4 Heritage

A Statement of Heritage Impact (SoHI) has been prepared by Eric Martin and Associates (See Appendix 12.2). This report found that the overall proposal of the eco suites will have a minor impact on some official heritage values of aesthetics and peaceful setting. Consultation with DCCEEW has also been undertaken with recommendations considered in the proposal. ESA respects the important heritage that the proposed site holds as well as Lake Burley Griffin in shaping the National Capital.

3.5 Cultural Significance

The SoHI did highlight potential sites of cultural significance, ESA has consulted with the traditional custodians through the Nggunawal Elders Council to ensure no impact on the significance of the area. The support received from the Nggunawal Elders representative has been positive and will see future collaborations to increase the awareness of the oldest living culture in the world. Furthermore, ESA will mitigate risk by developing and implementing an Unexpected Finds Protocol for the unlikely event that artifacts be disturbed during the construction and operational phases to provide guidance and consult relevant stakeholders. ESA has the support of the traditional custodians of the land with the Nggunawal people supporting the proposal as we have a mutual respect for the education and storytelling of the cultural heritage. ESA has engaged with the Nggunawal Elders representatives to gain their understanding and support to elevate the Nggunawal Culture as part of the unique accommodation experience.

4. Land Use for Lake Burley Griffin and Foreshore Precinct



5.1 National Capital Plan - Precinct Codes

The National Capital Plan details key precinct codes providing guidance on land use. Applicable

Precinct Code is 4.12 - *Lake Burley Griffin and Foreshores Code*

Section 4.12.5 - Detailed Conditions of planning, design and development outlines certain conditions for land use and any potential development. Below table is in reference / response to key development criteria compliance.

Conditions	
Major lakeside buildings, special national capital attractions and other tourist developments The placement, form and colour of buildings on any land used for these developments will be subject to detailed site planning standards to ensure that the development is in harmony with the Lake landscape and does no harm to the environment of the Lake.	Complies – Heritage Impact Statement suggests the proposal will only have a minor impact on the aesthetic values as a new addition to the area and visible from Yarramundi Reach, Weston Park, Lady Denman Drive and Parkes Way
Restrict parking so that it does not prevent the enjoyment of any area or downgrade the appearance of the lakeshore	Existing car parking infrastructure is protected by existing bushland limiting visibility of vehicles and not impacting the

	appearance of the lake. A dedicated parking area for vehicles is suggested. Noting only a very small number of vehicles will be present based on small operation
Yarramundi Reach's natural shoreline and key wetland waterbird and aquatic mammal breeding habitat in Warrina, Yarramundi and Acacia Inlets will be conserved and protected.	Complies – Proposed development will not impact natural shoreline and wetlands with restricted access from decks.
Buildings in the Lake flood zone will be subject to the following controls: Commercial Areas: Walkways, service areas, basements are to be above the 100 year flood level.	Complies – temporary elevated domes will be set back at least 3m from shorelines and elevated above ground level (above the 100-year flood levels). Also note advice received is that there is no threat of riverine flooding at the location.
Development Nodes Land use for the Lake Burley Griffin and Foreshores Precinct should be in accordance with Figure 114 and as detailed below. The range of uses permitted in Lake Burley Griffin and Foreshores will be the following: Aquatic Recreation Facility Club (related to lake use only) Community Facility Landscape Buffer National Capital Use Outdoor Education Establishment Park Pathway Corridor Public Utility Reserve Restaurant Restricted Access Open Space Road Single Dwelling Housing (Block 6 Section 4 Yarralumla only) Scientific Research Establishment Tourist Facility (not including a service station)	Complies – NCA definition Tourist Facility The use of land for the purpose of providing entertainment, recreation, cultural or similar facilities for use mainly by the general touring or holidaying public. This may include a restaurant, café, bar, service station, tourist accommodation (including motel) and the retail sale of crafts, souvenirs, antiques and the like.
Development Nodes Buildings and structures will be subject to design controls to ensure that they are of high quality complementary to the Lake Burley Griffin western foreshores landscape and are generally unobtrusive when viewed from the Tuggeranong Parkway.	Complies – the Geodesic domes are designed to high quality and will blend into the natural environment and will not be intrusive. The Eco Suites will not be visible from the Tuggeranong Parkway

3.6 Landscape

The temporary dome structures will be positioned above the natural grasslands. The underdeck utilities will be suspended above the ground securely attached to the deck structure to reduce any impact to the vegetation. There is a requirement to clear a small area of topsoil behind each deck (approx. 12sqm) to position the utility cabinet on a flat surface with a reinforced cement slab. The specific location of this soil removal is at the rear or side of the decks and no protected species of grass will be removed. Soil will also be repurposed on the site avoiding any removal.

ESA has purposely identified sites that will not require removal of any established trees and will need to remove some native regenerative plants, as per ESA Tree Management Plan (Appendix 12.14). As part of our environmental commitment, ESA will plant a new native tree for each native tree removed in an area mutually agreed upon with NCA. Refer to images 1.3 – 1.7 for specific plant removal. On average a total of up to twenty plants and saplings per dome site will need be transplanted or removed with Dome location 3 having the most density of saplings. ESA notes the significant amounts of uncontrolled weeds within the site particularly along the shoreline and within the site that would require NCA removal and ongoing management. Access to each dome will require a pathway to be cleared and compacted decomposed granite installed (see Site Map 1.4) for location of pathways. Advice within the SoHI indicates this will have low impact to the heritage values due to no protected species of grass identified as per the flora and Fauna assessment. A Tree Management Plan has also been undertaken to provide qualified advice on the development (Appendix 12.13).



Image 1.3- Suite location 1



Image 1.4- Suite location 2



Images 1.5, 1.6, 1.7- Suite location 3: Plants to be removed.

3.7 Proposed car parking

Car parking will use an existing suitable parking area (approx. 75 sqm area) within the site approx. 20m away from the toilet block (refer to image 1.8,1.9,2.0) Allocated parking will be provided with one car per suite. Each sign will be small in scale, non-reflective and will not be permanently fixed. A proposed portable Solar light will be installed as a safety measure providing adequate lighting without impacting the natural characteristics. The proposed lighting would be a single street light fixture attached to a aluminum pole anchored with a fillable base. Pathway solar lights will be used along the pathways installed low to the ground. Proposed car park solar lights are shown in section 6.4 – refer to image 4.9.



Images 1.8 - example parking sign Image 1.9 - proposed guest parking Image 2.0 - proposed guest parking

5. Traffic Management

Vehicle access is required from Lady Denman drive using the existing entry point (refer to image 2.1 and 2.2 below). There will be no significant increase in traffic levels because of the domes and therefore no additional congestion or safety concerns. ESA directional signage is requested on existing surrounding roadways as per proposal. ESA recognises that additional signage may be required from ACT Transport Canberra and City Services Directorate (TCCS). There is existing traffic directional signage within the site in relation to the public bike path. ESA recommends additional warning signage for cyclists using the cycle path in proximity to vehicles crossing. ESA will request to signpost a speed limit of 10km/h within the access driveway indicating a shared zone environment.

Parking will be restricted to the existing designated semi-sealed surface area. (refer to image 1.6). The contractors that require regular access during construction and operations to the site will limit their access to the existing turning circle of the access road.

ESA has received approval from Roads ACT for the construction phase as per the supporting Temporary Traffic Management Plan (TMP), Temporary Guiding Schemes (TGS) which have been prepared by Pacific Site Specific Pty Ltd. (see Appendix 12.11). Albeit an extension request will be sought based on final WA approval and timeline. A separate TMP has been prepared for the operations of the ongoing business during consultation with TCCS (See Appendix 12.10).



Image 2.1: Aerial photo of existing entry to site



Image 2.2: photo of existing entry to site

Once operational, the site will be serviced by ESA vehicles and third parties to service the domes on a daily and weekly basis.

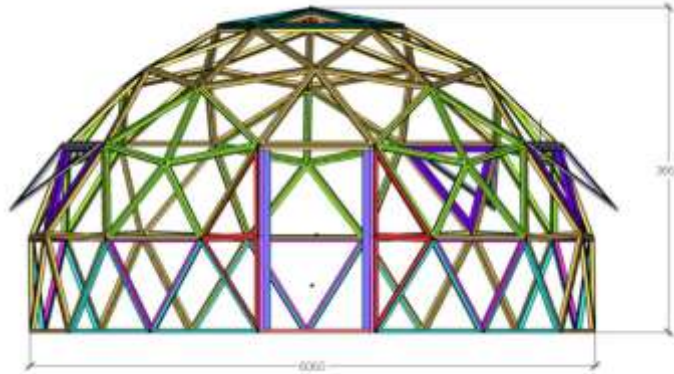
As part of the mitigation of the reduced speed limit for vehicles, ESA will install speed humps to reinforce the low-speed environment. The speed humps will be installed across the access road at 2 different points within the site. (refer to Appendix 12.1. - site map)

As part of the works, ESA will request permission to relocate the existing gate to the shoreline to close public vehicle access to the existing boat ramp and still allowing authorized vehicle access if required.

6. Design Elements

6.1 Dome Structure

The dome structure is a powder coated alloy aluminum frame 6.06m in diameter with secure entry door, 3 opening windows and retractable roof. The structure total weight of frame and glass panels is approximately 4000kg and is fastened to the deck base using structural grade fasteners. The domes have a wind resistance grade of 10 or up to 100km per hour hurricane force winds. The dome frame measures 3.66m high at the peak. (See Appendix 12.12.8 Glass igloo Technical Data Sheet)



6.2 Visual

Whilst being a bold design, the dome structure will complement the natural environment blending in with the reflection of the water surface during sunlight hours. As per the manufacturer glass performance data supplied (table 1.1 and table 1.2) the glass panels are low E glass resulting in the reduction of solar heat penetrating through but maximizing the natural light to filter through thus reducing the external reflectivity. Each glass panel is rated "Grade A" and will be manufactured to Australian standards (AS2208-2023). During the daytime a navy-blue UV film layer provides opaqueness to the glass panels from external view whilst inside a transparent view to outside surroundings. The low level of lighting inside the domes will reduce any glow and will have a slight warm appearance at night. The R-Value of the glass domes standalone is 3.43, additional insulation measures will improve energy efficiency. Internal light sources will be limited to two bedside lamps, one floor lamp, and ensuite lighting. The glass panels on the ensuite side of the structure will have permanent opaque privacy glass installed. The bottom section of the glass around the base of the dome will also have permanent opaque privacy glass panels approx. 1m high around the base perimeter windows, permanent opaqueness around the ensuite section will be as high as 2m.

Glass Performance Data Sheet

Thickness	Glass Type	Color	Visible Trans(%)	Direct Penetration (%)	Shading Coefficient	U-value W/m²k(%)
8mm	8mm tempered glass	Blue	25.99	6.29	0.62	5.83

Glass Performance Data Sheet

Thickness	Glass Type	Color	Visible Trans(%)	Direct Penetration (%)Out Door	Direct Penetration (%)In Door	Shading Coefficient	U-value W/m²k	
19mm	5mm+5mm+5A+6low-E tempered glass	Clear	24	24.64	24.18	0.46	2.636 (summer daytime)	2.921 (winter nighttime)

Table 1.1 / 1.2 - supplied by Tentxperts



Image 2.3 - Display Suite - Tentsxperts



Image 2.4 - Suite Interior- Tentsxperts



Image 2.5 - Evening Suite Interior - Tentsxperts



Image 2.6 - Evening Suite View - Tentsxperts

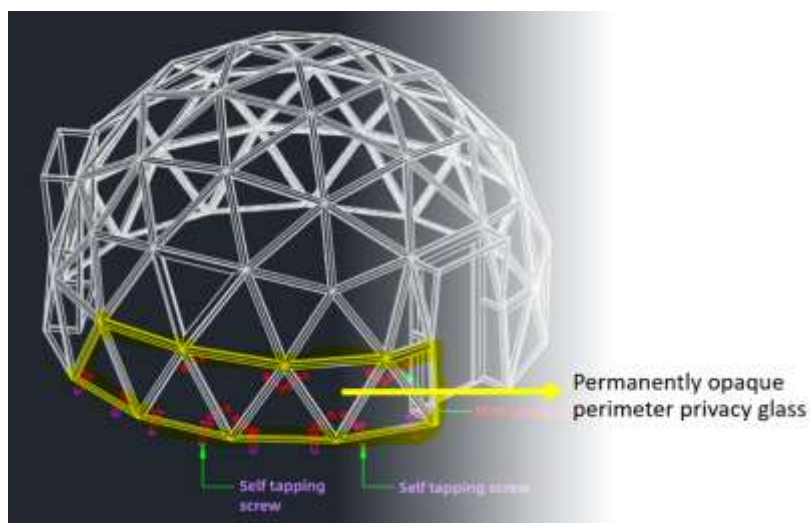


Image 2.7 - Structure - Tentsxperts

6.3 Deck Design

ESA proposes installing three architecturally designed deck measuring 8m x 8m (64 sqm) featuring a 1m high powder coated steel balustrade around the perimeter of the deck restricting external access, enclosed facade down each side of the deck and 3 – 4 wooden access steps.

Structural Engineers have provided the final design to accommodate the required load factors of 4000kg per deck. ESA has purposely avoided constructing our decks using the traditional foundation method of cemented post stirrups but utilising European designed screw-in ground screws. A total of 25 support screws 75mm x 1600mm per deck. The ground screws will penetrate the ground surface 600mm deep with 75mm diameter (Appendix 12.12.9 Ground Screws Australia Data Sheet). The deck base will be a metal sub frame using 110mm profile joints and bearers. The decks will be elevated 700mm above ground surface to allow for underdeck off grid water storage systems, associated plumbing, utilities and provide secure access for regular sewerage extraction via a lockable access door built into the side façade.

The decking board that will be used is one of the most environmentally friendly and innovative sustainable product on the market and local ACT business. Evergreen is a high-quality composite decking made from 90% recycled materials, the core is made from high quality oak wood fibre and is 24mm creating additional strength. It is UV stable & fade resistant, scratch resistant, highly stain resistant, non-porous, easy to clean and has an option for BAL29 fire rating. We have selected the Pialligo Evergreen colour paying homage to Walter Burley Griffin's grove of majestic Redwood trees. The primary chocolate colour of this decking has a deep reddish undertone. Each deck will be the same in colour and wood-like appearance blending in with the surrounding natural environment. (Refer to Keksia Evergreen Brochure - Appendix 12.12.1)

The balustrade around the perimeter of the deck will provide safety and security measures to minimize access off the designated footpaths limiting access to the grasslands and shoreline. Elegant in design with powder coated, stainless steel wire barriers and a top rail consisting of the decking board.

Access steps will be custom built to provide access to the raised deck platform. The frame of the steps is built of hardwood timber meeting the AS1657.2018 and finished colour of Pialligo matching the decks.



Image 2.8 – Pialligo Deck colour



Image 2.9 – Keksia Pialligo Deck



Image 3.0 – Artist Impression



Image 3.1 – Sample Balustrade materials

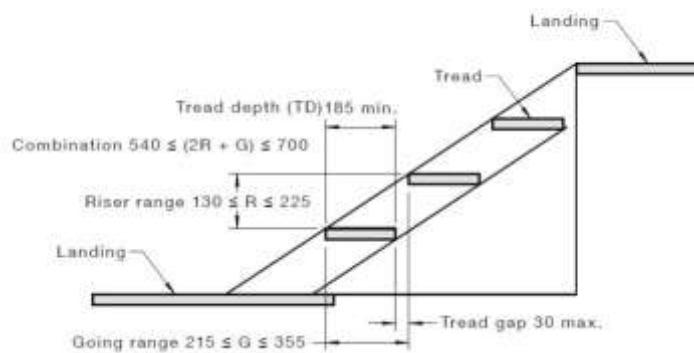


Image 3.2 – AS1657-2018 standards



Image 3.3 – sample access steps

6.4 Access Footpaths

ESA proposes installing footpaths to each suite on the most direct route possible linking the access road to the suites. The length of footpaths will range from 10m to 25m starting from the 3 access points from edge of the semi sealed section in between existing timber balustrades. Footpaths will access the rear or side of the decks to minimize the guests' access from the lake shorelines. Any existing wooden bollards that need to be removed for the trench will be replaced to similar conditions. The footpaths leading from access road to each suite will consist of compacted decomposed granite. The footpaths will follow the lines of the underground conduit cabling restoring the impact of the minor civil works. Low ambient Garden solar lights will line the footpaths on a single side positioned every approx. 3m to provide sufficient lighting at night, minimizing light pollution. The existing 24hr access gates will not be obstructed by proposed footpaths.

Appendix 12.2 includes site map of each location for the footpaths and detailed drawings.



Image 3.4: compacted decomposed granite

Elegantly designed solar pathway lights (refer to image 3.5) will be positioned every 5m along single side of the footpaths. The height of the lights is adjustable, and we will select the low height option to ensure emitting light is low to ground as per recommendation in the flora and fauna advice. This light automatically turns on at dusk and features a built-in motion sensor that brightens the light when motion is detected, switching itself back to a dim light after 22 seconds. A dim light is displayed continuously from dusk until dawn. When motion is detected, the light brightens for 22 seconds before returning to a dim light. The LED light contains a warm white This light features a built-in 1500mAh Lithium battery to extended use. The lights operate for up to 120hours in dim light mode or 12hours in bright mode. The lights are 100% waterproof and weather-resistant light is made of rustproof ABS material to prevent it from deterioration. (See Appendix 12.12.15). Each suite will be signposted at the entry to footpaths with elegant powder coated aluminum (1.2mm thick) IP65-rated solar lightbox attached low to the ground using existing bollards. These solar-powered LED lightbox will provide wayfinding with dusk-to-dawn functionality. (See Appendix 12.12.17)



Image 3.5: solar pathway lights



Image 3.6: solar lightbox

6.5 Power Supply

ESA has partnered with Solar Power Australia to design an innovative power solution harnessing renewable energy. Solar Power Australia specializes in all aspects of Photovoltaic and Wind Energy Projects. The design includes a centralized power plant room that will be positioned onsite in a temporary movable structure with fifteen Photovoltaic panels positioned on top of the power plant room operated by remote control to provide power output of approximately 27kWh per day. The location of this is northwest facing approx. 200m away from the furthest suite location. Gas struts will be utilised to increase stability and reduce flex/twist in the frame. A maximum tilt of 15 degrees will be used to ensure the appropriate height of the lowest panels within the array. The Plant room is a custom built 40ft shipping container built to Australian standards used by many off grid applications and will be positioned on ground screws to provide a level surface low to the ground. The plant room will be well ventilated with inbuilt vents on the doors and a small chimney on one side in the generator section. ESA initially engaged Living Power Australia to undertake Solar Access Survey testing (see Appendix 12.12.11) around the site location to maximize the annual exposure. The results demonstrated the most suitable position providing estimated 91% average annual solar exposure in the proposed location.

The position of the plant room in location so that it is not visible from Lake Burley Griffin or the vantage view points highlighted in the SoHI. The preferred position of the plant room is towards the open space in an isolated position with remote controlled solar panel array in a northwest facing position. The array will consist of 20 x 500w High efficiency Sunpower Monocrystalline Solar modules. The panels would be fully extended during daylight hours to maximize solar generation and fold back on top of the plant room overnight. The lowest panel height will be a minimum of 2.3m above ground level. The solar and battery solution has been designed to reduce the usage of the backup generator; the system has been designed to provide adequate power for up to 5 suites in operation simultaneously as well as 3-4 days back up power in the case on inclement weather. This results in minimal reliance on generator usage, particularly with only 3 suites. (refer to image 3.4). The shipping container will match the colour of the utility sheds using the Monument colorbond finish, minimise the impact to the natural values and aesthetics of the parkland setting.

The power plant room will contain the solar array, battery storage system, solar inverter, battery inverter, distribution board, circuit breakers, isolators and associated cabling in accordance with Australian Standards. The power being transferred to each dome via 50mm conduit buried 600mm underground and will be concealed under the decks. A second conduit (50mm diameter) will contain cat 6 ethernet cabling providing wired Internet solution to the suites. Site Map 1.2 displays the location of the 600mm deep single line backfilled trench required meeting AS/NZS 4026:2008 and site survey DWG No 22284-A002 provides detailed location. The total length of the conduit is 200m from the plant room in a southeast direction. There is a need to disrupt the grass area to minimize encroachment of Tree Protection Zones and will be restored after installation. TPZ's will be maintained as much as possible in accordance with AS 4970-2009 *Protection of trees on development sites*. Based on the site survey plans we anticipate only 3 locations of TPZ encroachment of approximately 33.2%. (See Appendix 12.2 – DWG No 22284-A002). ESA preference will be to utilize the latest technology using a non-invasive method such as Hydro Vacuum excavation, however traditional methods maybe required once task is started dependent on the density of sub ground level. The site-specific location of the trench has been identified avoiding existing tree canopy droplines and reducing the impact to trunk and root systems. Images 4.1, 4.2 display the line of sight of location of proposed cabling conduit installation from rear of plant room. Noting a dead tree on left also shown on Site Plan Drawings.

An eco-friendly generator will be installed inside the power plant to act as power supply back up in case of battery failure or depleted battery storage and has an auto-start function. The proposed battery capacity is adequate to power up to 5 domes resulting in the reduced reliance on the generator to top up power and allows for up to 3 days of low UV production caused by inclement weather at full occupancy (five domes). The Duetz 30KVA auto start generator (Appendix 12.12.2) is housed in a separate section of the plant room and is well ventilated with inbuilt vents and an exhaust chimney. Based on the system design, capacity and on advice provided by Solar Power Australia, ESA anticipates this to be in use for an absolute maximum of 1 hour per day only on days of peak occupancy providing guarantee of power to the occupied suites. The generator is expected to only be in use overnight during peak usage following the drain of battery stored power (i.e. full occupancy and every appliance used simultaneously), this will result in a humming noise. The engine runs at 1500rpm resulting in the noise level of the generator of approx. 60db and mitigated by the soundproof acoustic enclosure and its storage inside the plant room meeting the requirements of the *Environmental Protection Regulations 2005*. The diesel fuel tank features a bunded storage tank with a 90L capacity, designed meeting Australian Standards. No other fuel will be stored onsite mitigating any potential environmental harm and is compliant with EPA's environmental guidelines for petroleum storage in the ACT. A safe refueling process will be implemented including a spill kit station onsite. The current design of the system, including the 40ft shipping container, provides sufficient power guarantee of supply, with less reliability on generator usage and allows for future expansion if required to reduce reliance on generator.

Real time monitoring of power supply and battery status will be remotely accessed by ESA and Solar Power Australia via a web application. This will also allow information to be made available to guests during their stay supporting education on energy conservation.

The power storage will be powered by a 48V 21.3kWh Advanced Lithium Battery System. ELMOFO Industrial Lithium Battery Packs utilise the ELMOFO 50NMC Powercells. These are CALB's A-Grade NMC Lithium-Ion cells. The ELMOFO Lithium Battery Packs (Appendix 12.12.3) are housed in a high-quality powder coated steel enclosure with a gas-strut assisted door and capable of more than 2000 cycles to 80% Depth of Discharge, which is around 7 times the cycle life of a typical deep cycle lead acid battery when cycled to the same Depth of Discharge (DOD). A Victron Multiplus 15kVa Inverter is part of the power solution and features a remote monitoring system. A battery management system will be used to monitor performance, including protection of potential failures or outages. The BMS feature temperature sensors and cut off protections are in place to avoid overcharge and over discharge.

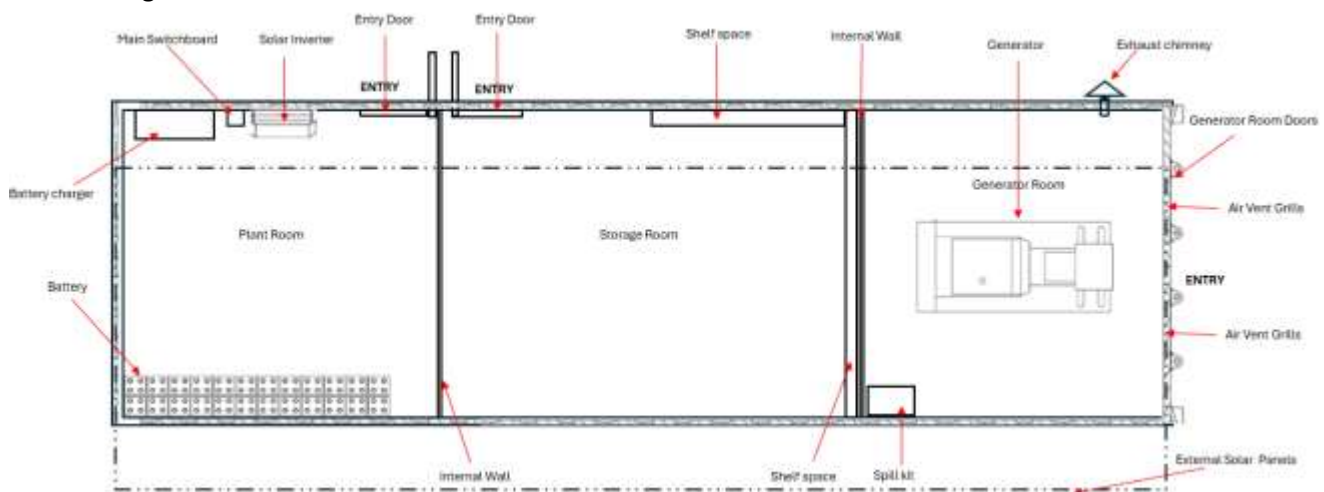


Image 3.7 Floorplan Power Plant Room



Image 3.8 ELMOFO Lithium Battery Packs

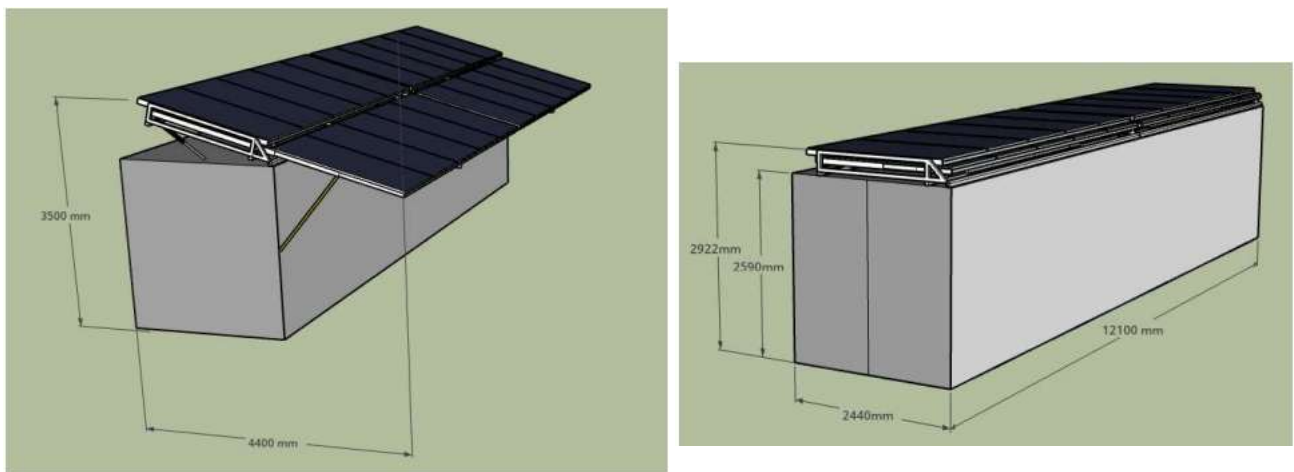


Image 3.9 – Power Plant Room with rooftop solar array open and closed



Image 4.0 – Artist Image Power Plant Room.



Images 4.1,4.2 – Proposed line of sight for underground services from Plant Room

6.6 Water Supply

During the initial design phase, ESA has consulted sustainability and off grid specialists Off Grid Plumbing to provide advice on best practice water management. A central 10,000L water tank will provide water supply to the domes via a buried underground plumbing (See Appendix 12.5.3). The tank will be positioned at the rear of the existing toilet block installed on the level grassed surface (see image 4.2). The colour of the tank will be the Colorbond® Monument and will not have impact on the heritage characteristics of the parkland setting. The excavation of a trench 600mm deep is required as per appendix 12.2 from water tank along middle of exiting access road to join main trench line with other buried utilities. All excavation will be backfilled and made good to existing condition. The tank is manufactured using food grade UV20 Polyethylene and includes one outlet and overflow (See Appendix 12.12.6). Potable water will be delivered to the site as needed by an Icon water approved provider. ESA expects this to be monthly based on occupancy and water efficiency measures within the domes. The water truck will connect a hose pipe to tank from the truck parked in the parking area.

Each dome will capture the untreated black water in a 380L marine grade holding tank. The heavy-duty tank is manufactured with 16mm thick walls (Appendix 12.12.10). The black water will be processed via the Sani-Loo sewerage treatment system (Appendix 12.12.7) before storage which includes treatment daily with marine grade biodegradable waste neutralizer. These tanks are suspended above ground under the deck structure with secured side access and not accessible to the public. ESA will engage a certified contractor to extract the waste of black water regularly each week based on occupancy levels. The contractor will connect hose pipes to waste tanks to the truck parked on access road adjacent to entry point to each footpath.

Hot water will be provided by an individual 160L Reclaim Energy heat pump system consisting of the heat pump unit and water tank stored in the secure utility enclosure at the rear of each deck. The energy efficient heat pump unit will be anchored to the cement slab next to the utility storage enclosure alongside the A/C unit (See Appendix 12.12.4).

A separate 10,000L water tank is proposed to be installed to meet *ACT Bushfire Management Standards (2023)*, defined as a primitive camping development in a designated bushfire prone zone. The proposed location is adjacent to the existing public toilet block providing a flat central access point and distance between Domes and power plant is achieved. The water tank will be dedicated for firefighting purposes in the event of an emergency. A 65mm Storz connection coupling kit including ball valve for firefighting connection.

The colour of the tank will be the Colorbond® Monument (See Appendix 12.12.12) and will not have impact on the heritage characteristics of the parkland setting. Overflow pipes will direct the water into the existing sump (See appendix 12.2 – Site Plan Drawing 2284-A002/A).



Image 4.3 – 1000L Water



Image 4.4 – Proposed location of 2 water tanks

6.7 Sewerage Treatment

Each suite will be equipped with a Sani-Loo® sewerage treatment system and a macerating toilet. This marine grade solution is used in marine environments meeting government regulations, designed, and manufactured in Australia. (Appendix 12.12.7 and 12.12.14)

The sanitation system connects to an electric macerating toilet. The macerated toilet waste enters the treatment tank. A chemical is added to the treatment tank that sanitises the waste to 99% then transferred to a holding tank. The holding tank is pumped out on a regular basis.

The 380L holding tank is fabricated from high polyethylene roto molded as one piece with weld plates and luds with internal baffles. The walls of the heavy-duty holding tanks are 16mm thick. These tanks will be suspended under the deck with direct access for discharge / pump out. The holding tank will have a sensor gauge installed to provide accurate readings of capacity.

A Level control switch will be installed where it will automatically shut down the toilet when the holding tank is full, preventing sewage from being pumped out the vent. A sensor will also advise the capacity levels of the holding tanks.



Image 4.5 - Sani-Loo® sewage treatment system

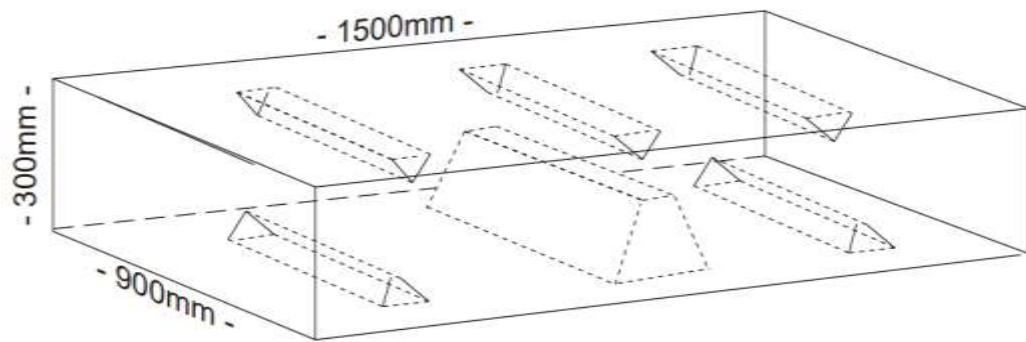


Image 4.4 - 380L Marine grade holding Tank

6.8 Heating / Cooling

The natural design of the geodesic domes is self-insulation, maximizing airflow and regulating thermal temperature control. Each dome has 3 remote controlled openable windows allowing fresh air and a retractable roof. Additionally, each dome will be equipped with a 2.5 kwh Mitsubishi Avanti Plus wall mounted reverse cycle a/c unit to provide adequate control in the Canberra climate with an EER 5.48 cooling and 4 star heating (Appendix 12.12.5). The external A/C unit will be positioned at the rear of the deck store adjacent to external storage enclosure fastened to the cement slab on ground level. A galvanized steel AC unit cover (Monument) will be installed. cabinet on ground level resulting in no view from Lake Burley Griffin. The noise level from the external unit will be 19 decibels as per manufacturer specifications which is equivalent to rustling leaves.



Image 4.5- Reverse Cycle A/C unit and cover

6.9 External Utility Storage Enclosure

A slimline lockable storage enclosure will be installed on ground level made of a steel structure enclosed with Colorbond walls, trim and roof. The footprint of the enclosure is 3000mm W, 1530mm D, 2080mm H with a roof pitch of 5 degrees. The highest height of the roof peak will be 2080mm. The access door will be located behind the rear wall with sliding doors. The maximum height is 2.2m lower than the height of the dome structure and deck height. The cladding materials will be Colorbond sheets (Appendix 12.12.12 - colour chart) The colour of the walls, roof, access door and trim will be Monument providing minimal impact on the aesthetics of the natural setting. The enclosure will have adequate ventilation on either end for safe storage. As a safety feature, anti-climb spikes will be attached to the roof of the enclosure to detract from persons and/ or wildlife accessing the rooftop.

The cabinet will be used to store and maintain secure access to utilities including hot water tank, sani-loo treatment system. The utility storage enclosures will be positioned at the rear sides of the domes against the perimeter of the decks as shown in drawings.

An approx. 12sqm section of grass and topsoil will be required to be cleared (reused onsite) to lay a 100mm thick reinforced cement slab floor to securely anchor the structure base. The slab will measure 3500mm x 1800mm and will be the foundation for the utility shed and external A/C condenser unit and cover. An isolator point will be installed on the external wall of the shed for both A/C and heat pump units. As per the flora and fauna advice, there is no natural temperate grasslands and is dominated by exotic species and pest plants therefore the impact of this grass and topsoil removal will be minimal. The soil will be repurposed around the area to allow regeneration of the area.

As a security measure to mitigate persons from climbing onto the roof of the storage enclosure from the raised deck, the roofline boarder will have Anti climb spikes installed. These European designed and manufactured safety measures use galvanized steel.

A ventilation fan and ventilation grills will be installed on the roof and along top of the enclosure which will be the same color as the roof. Designed to blend in with the natural environment and will be limited to only certain viewpoints on the lake. Although the enclosures will not be visual from the material to maintain a visually appealing appearance and provide the required ventilation required for safe storage. The storage utility will have a wind rating to a N2 standard being anchored to the cement base securely and reinforced internally with plywood panels providing additional strength.



Image 4.6 – Utility Storage Enclosure rendered image and specifications

6.10 Interior Design Elements

The internal design elements will feature a luxury look and feel similar to 5 star hotel room. The internal space is approx. 30 sqm in size consisting of bedroom and private ensuite facilities.

Flooring will feature SPC Hybrid floorboard throughout the Dome. The main bedroom will be spaciouly furnished with a king bed, a coffee table for chairs for 2 guests, a minibar fridge, wall mounted air conditioning, mounted TV and telescope. The feature will be the wall paneling on the internal wall providing a modern and stylish look as well as acoustic benefits reducing any echo or noise from the domes with recessed shelving both sides of the bed as well as bedside tables and designer lamps.

A 200mm wide internal wall will provide separation of bedroom and ensuite with a length of 4.86m and meet the internal roofline of the dome shape. The internal doorway will have 850mm clearance meeting NCC requirements. Internal Wall will have superior insulation with R-5.0 rated Insulation batts enhancing energy efficiency inside. The internal wall will act as the entry access point for underdeck utilities (power, water, plumbing, HVAC, electrical cabling). Refer to Appendix 12.3.5 for sanitary and water plans.

The ensuite will have a sleek modern look with tiled walls with semi separated shower area and toilet with a hand wash basin. The ensuite wall and shower will be waterproof and tiled meeting the National Construction Code (NCC). The shower will consist of frameless tempered glass shower screens, recess shelf and led strip lighting and shower base. All tapware will feature water saving measures and Watermark certified meeting a minimum 4-star water rating.

6.11 Internal Flooring

SPC hybrid flooring will be installed internally within the domes. It consists of a robust core layer made from a blend of natural limestone powder, polyvinyl chloride, and stabilisers. This unique composition gives SPC flooring its impressive durability and water resistance. Each piece of flooring consists of 4 mm + 1 mm EVA underlay padding. The Grigio colour has been selected.



Image 4.7 – SPC hybrid flooring

6.12 Security and Safety

ESA will provide guests with 24hr on call management via the in-room concierge system and contact mobile number. ESA will request permission to install and operate approx. 6-8 CCTV of the area to provide additional security for guests during their stay and the assets that will be monitored by ESA management. The cameras will operate on a dedicated Wifi network and powered by solar. The proposed CCTV units will require mounting infrastructure on dedicated poles if existing infrastructure is not adequate. All poles will be erected using the ground screws similar to the rest of the project. The CCTV will have a similar visual look to other CCTV devices in use around the lake by the NCA/ACT Government. The recordings will be stored for a maximum of 7 days and subject to the *The Privacy Act 1988* (Privacy Act) requirements including signage requirements notifying guests and public of the CCTV in operation. ESA does not see the camera having a noticeable impact on the heritage and environmental values of the location due to the secluded bushland environment Yarramundi Reach provides. Each dome will have a camera anchored to the top of the storage structure facing the entry to the deck. Additional cameras will be erected to the power plant container as well as the gate entry and turning circle area.

In addition to the CCTV security, ESA will request to permit regular overnight security patrols overnight utilizing a licensed security company increasing presence at the location after hours. Safety of guests is paramount, and measures outlined in ESA's Risk Management Plan will mitigate risks associated with its operation at Yarramundi Peninsula.

ESA has undertaken stakeholder engagement with ACT Emergency Service Agencies in relation to our proposed operations. All emergency services will continue to have access to the area using a master pin on the access gate.

Safety lighting will be installed using temporary street lighting individually operated on solar, lights will be installed at the entry/exit gate, and one positioned in the car park area noting the base will be a heritage green colour in line with brand colours. The base weighs 37kgs empty, 637kgs when full of water and has a swivel pole allowing easy setup/pack down. The adjustable support pole itself is aluminum and steel with HDG finish measuring a total height of 5.07m high. Motion sensed led light operating a maximum 4000 lumens. First 4 hrs operate 100% brightness, then up to 11hrs at 80% brightness when motion is detected or 20% when no detection. See Image 4.9 and appendix 12.12.13 for further product information.



Image 4.8 - sample ESA CCTV camera



Image 4.9 – Solar Security Light Design

7. Operations

Eco Suites Australia has developed a robust Operational Safety Management Plan which incorporates risk management plan, waste management plan, bushfire fire management plan to ensure safe operations. These plans will be kept onsite and maintained on a regular basis. All staff will undergo the required safety training in relation to the operating systems and safe storage requirements.

7.1 Site Access

Access to the area will be via the existing gate location off Lady Denman Drive. ESA proposes to invest in the additional security of a solar swing gate and keypad solution providing secure access to existing gate (see Appendix 12.12.16). The proposed solution will allow a Master pin to be created suitable for ESA staff, contractors and emergency services. An access control mounting bollard will need to be installed on the entry side of gate (as shown in Image 5.0). The keypad will also have the capability to create unique access pins suitable for single use guest access during each stay and mitigate unauthorized access. This solution will allow a master pin to be provided to the emergency services agencies to maintain 24/7 access. To exit, a wireless vehicle detection system will be installed to open the gate. An in-ground sensor (see image 5.1) will activate the gate via a transmitter when a vehicle passes over, this will be installed 20m from gate. ESA requests approval to relocate the existing gate and install at the boat ramp to restrict public vehicle access. This would allow authorized access to continue.



Image 5.0 – Access control bollard and design

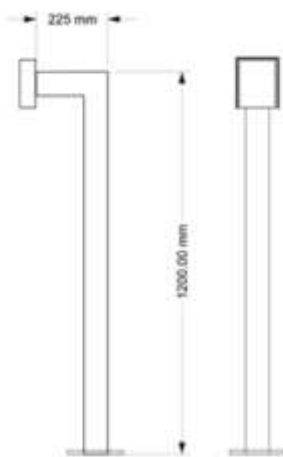


Image 5.1 – In ground wireless loop detector



Image 5.2 – Entry Gate pin pad

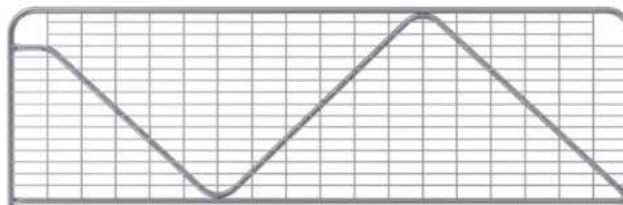


Image 5.3 – Proposed entry swing gate

7.2 Servicing the Suites

ESA management and staff will be onsite during business hours servicing the domes between 10am – 6pm. implementing enhanced cleaning covid safe protocols preparing for guest arrivals. Check in time will be 3pm and check out time 11am daily.

Between each guest checkout the wastewater will be extracted by an EPA licensed contractor to dispose of sewage in accordance with government regulation. This will be completed 2-3 times per week. The GVM of the service vehicle has been advised as 17,500 GVM with a minimum turning circle of 18m. The existing circle of the access road meets this requirement.

Potable water delivery will be required to be provided at times and will be delivered by a third-party contractor.

All contractors will service the suites with heavy vehicles remaining on the access road using retractable hose along the pathways to each deck.

The existing turning circle within the access road has mix of road base which will be suitable, and ESA does not see this being negatively impacted from this usage. The minimum turning circle required for the contractors has been recommended as 18m, which is suitable for the existing access road.



Image 5.4 – waste removal contractor vehicle

7.3 Guest Check in / Out

Pre-arrival communication will be sent to guests to prepare for their overnight stay including single use access pin to access the site for their stay. Communications will include security and safety elements such as the onsite procedures and protocols and including the daily weather and fire rating from ACT Emergency Services Agency as risk mitigation. A one-time unique access pin code will be provided to give access to each of the secure suites.

Check-in time will be limited to 3pm to 6pm where ESA staff will meet and greet guests providing them with an induction to the site.

In room concierge systems (connected to a ESA's wifi network) will provide guest access to 24hr on call management for all issues and mobile contact number provided.

Check out process will be contactless. Check out time is 11am.

7.4 Onsite Signage

Minimal signage will be required on location and will be temporary in installation. ESA will require permission to signpost moderate directional, safety and conditions of entry signage at the entry from Lady Denman Drive attached to the existing fence, internally along the sealed access road, allocated car parking area and pedestrian access to each suite. All signage will be developed in accordance with ESA brand standards printed various sized aluminum. ESA will request approval for traffic management signage to be signposted including 2 speed hump warning signs per direction within the site and 2 speed limit signage as per image 5.5 below. Appendix 12.12.17 contains full signage requirements and specifications.



Image 5.5 – sample signage

8. Economic impact

Eco Suites Canberra aligns to Tourism Australia's Thrive 2030 strategy and more relevant ACT Government's T2030 strategy which aims to increase the visitor economy to \$4B in 2030.

The mission-lead strategy strengthened ESA's ambition to launch a new brand in ACT delivering luxury nature based eco-friendly experiences whilst achieving multiple priorities outlined in the strategy. ESA's product will appeal to a global audience and provides the national capital with the opportunity to create a signature nature experience which is focused on strong collaboration of the local Indigenous cultural heritage. Our unique collaboration with the traditional custodians of Ngannawal Country is understood to be first of its kind locally and will deliver authentic indigenous storytelling experiences to all Australians and International visitors seeking a rich cultural holiday.

Eco Suites Australia will attract high net worth individuals traveling from across Australia and internationally looking for unique experiences. Attracting the high yield traveler to ACT will increase spend positively impacting the ACT Economy through direct and indirect expenditure.

Based on the Tourism Research Australia International & National Visitor Surveys for the year ending December 2024 - The Visitor Expenditure was worth \$3.6B with \$3.6B in domestic and International overnight expenditure.

Eco Suites Australia is forecasting a conservative first trading 12-month period operating 50% occupancy. This forecast is well below the strong visitation levels ACT tourism market is currently experiencing and the trend seen by other glamping operators in the region. This increase in visitation will target a new or small segment of overnight visitors currently traveling to ACT. ESA will contribute over \$4M visitor spend over the 5-year period.



8.1K visitors



4K Nights



\$4.4M Spend

The National Capital will also benefit from Eco Suites Australia launching in Canberra, enhancing the appeal of the destination offering world class unique experiences and acknowledging the first nations ancestral connection to this land and waterways. The overnight cultural experience will complement the existing national Institutions that feature Australia's history of our Indigenous heritage through stories, artifacts, art amongst other significant collections and align with the proposed Ngurra: The National Aboriginal and Torres Strait Islander Cultural Precinct. Visitors will have the opportunity to visit the National Indigenous Knowledge and Cultural Centre followed by an authentic overnight experience in Ngannawal country just 10 mins away.

9. Stakeholder Management

ESA has held several meetings with key stakeholders throughout the past 4 years including the National Capital Authority to discuss the project and gain input and feedback. It has been met with positive support from many stakeholders with letters of support received (Please see Appendix 12.11). We welcome any discussions with any other interested stakeholders. Eco Suites Australia has support from Ngunnawal Elders being the traditional custodians of the land as well as the nearby Burrunju Art Gallery.

ESA is proposing a unique product development opportunity through close collaboration with the local indigenous community and providing future employment opportunities by authentic experiences.

The Statement of Heritage Impact has been provided to the Department of Climate Change, Environment and Water (DCCEW) for their information. The proposal has been met with positive responses from ACT Government agencies with letters of support or correspondence provided.

ESA has consulted with the following ACT Government agencies to discuss the proposed operations:

- ACT Emergency Management Agency
- ACT Fire & Rescue Risk and Planning
- ACT SES
- Transport Canberra City Services (TCCS)
- Environmental Protection Authority (EPA)
- ACT Policing / ACT Water Police

10. Construction Timeline

ESA is ready to engage preferred contractors and suppliers upon the outcome of this Works Application and negotiations of license agreement. The construction phase is scheduled to be 16 weeks in total, followed by 8 weeks of fit out and product testing. Eco Suites Australia proposes a Q1/2 2026 operational launch.

10.1 Site Establishment

During the construction phase a temporary site office equipped with rooftop solar panels, 4 x 20 - 40ft containers will be required onsite as well as temporary fencing securing the site as well as around each deck location (refer site map 1.3 of Appendix 12.1)

The construction timeline is scheduled to take approximately 16 weeks to complete. Delivery of the shipping containers and some equipment will require tray back truck access for drop off/ pick up. Based on site inspection of the access road and surrounds, the clearance is suitable. Forklifts maybe in operation during the delivery phase.

A small temporary site office is required for the duration of construction; the work site will utilise the existing public toilet amenities. A small solar array with 4 panels will be required to be mounted on top for power and the office will be air conditioned. A plug and play power solution will be installed for the temporary site office. All required worksite safety signage will be displayed to create a safe work site including site induction materials.



Image 5.6 Example temporary site office



Image 5.7 Example temporary site office

ESA will request the access road just after the cycle path be closed off with temporary fencing for the duration of the construction as per Site Map 1.3. Temporary fencing will extend to the shoreline and include the plant room.

Some pruning of trees will be required to meet the minimum height requirements as per the ACT Bushfire Management Standards. ESA has identified 2 trees towards the front of the site entry with all other tree canopies deemed acceptable. This will also allow for delivery of equipment to the site during the construction phase.



Image 5.8, 5.9 Proposed tree canopy pruning

Sediment control measures will be implemented to avoid disturbed soil from entering the lake. Temporary silt fences / barriers will be installed along the shoreline in front of each suite location. The site falls into the lake with a 1-degree downslope and has slight upslopes to the west. Environmental protection measures will also be in place to minimize disturbance of natural water birdlife habitat as recommended in the Flora and Fauna advice and in response to DCCEEW recommendation #4. Construction will not be permitted in the vicinity of rounded hammocks.

Project Manager will be responsible to implement the ACT Roads approved Temporary Traffic Management Plan (TTMP) and Temporary Traffic Guidance Scheme (TTGS) throughout the construction phase as well as providing additional monitoring of the public cycle path during the delivery and pick up to ensure safety of the community.

Due to the small scale of the project, the work site will have a low number of workers onsite anticipating a maximum of 10 personnel at any given time. Parking within the construction site will use the existing access road.

10.2 Construction Contractors

Based on the construction and environmental experience, Eco Suites Australia has engaged a local and indigenous owned company 18fifty3 to lead the project construction. See Appendix 12.16 – for detailed capability information.

11. Conclusion:

Eco Suites Australia is requesting the support of the National Capital Authority to deliver a world class sustainable overnight experience on the shores of Lake Burley Griffin. By supporting this unique development will demonstrate commitment to a sustainable future whilst respecting the environmental and cultural significance of the heritage listed location. The proposed works are consistent with the objective of the National Capital Plan Precinct, it preserves and enhances the character of the Lake environment. The proposed overnight glamping sufficiently meets the EPBC Act in terms of any potential impact on the environment including the site's natural and indigenous heritage values. As per the SOHI prepared by Eric Martin and Associates, this proposal will have a minor impact on some official heritage values of aesthetics and peaceful setting (but no impact on indigenous or natural values).

Eco Suites Australia's development application envisions a harmonious blend of cutting-edge design, renewable energy, and responsible resource management. This forward-thinking project sets the stage for a sustainable and eco-conscious approach to sustainable hospitality not seen before, contributing positively to both the environment and the local First Nations community.

Eco Suites Australia welcomes the opportunity to discuss this works application in detail to ensure we confidently address any concerns during the review process.