

# Outdoor Event Guide



## Information for Staging Outdoor Events at Sydney Opera House

Issue date: 1 December 2021

Issued by: Event Operations and Planning

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## Revisions

Version	Date of Issue	Issued by	Issued for
2021.12	01/12/2021	Event Operations and Planning	Public

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## 1 Introduction

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*Welcome to Sydney Opera House.*

Sydney Opera House is a major performing arts venue staging over 2,500 events a year across seven major venues. Guided tours, functions, bars, restaurants, and shops also operate on a daily basis. One of Australia's premier tourist destinations and a treasured local landmark, we welcome around 10.9 million visitors annually.

A State, National and World Heritage listed *masterpiece of human creative genius*, Sydney Opera House is unlike any other performing arts centre in the world. State and Commonwealth laws are in place to protect its unique position as part of the Sydney city skyline, its surroundings and heritage values. These requirements affect how we plan and stage events.

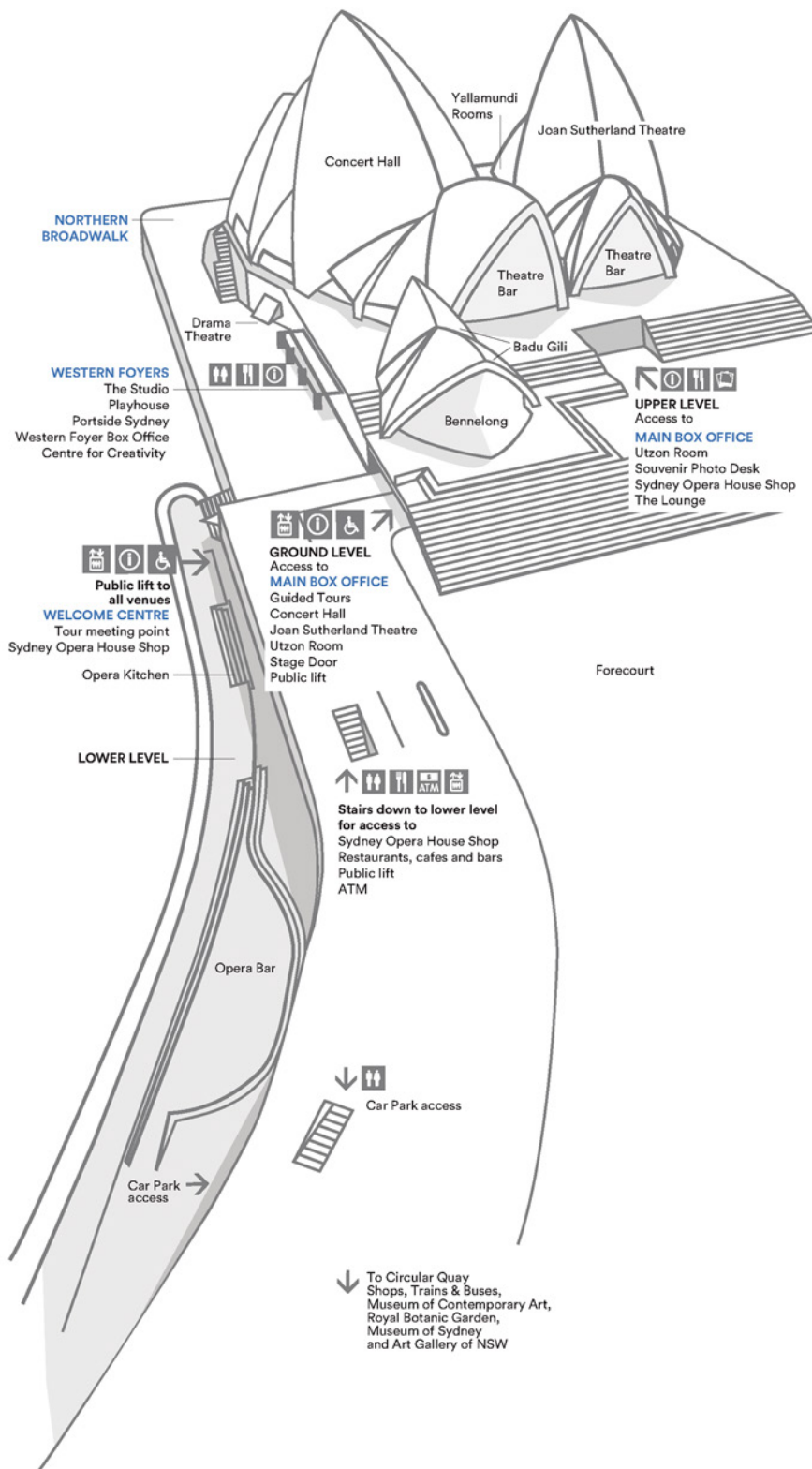
The staging of outdoor events is subject to a complex structure of planning and heritage instruments, approvals, and policies, including:

- Sydney Opera House Trust Act 1961;
- State Environmental Planning Policy (State Significant Precincts) 2005 (SEPP);
- Development consent for staging of temporary events and performances on the Forecourt and Western Broadwalk;
- Site-specific heritage exemptions under the Heritage Act 1977;
- A range of internal policies, including the Conservation Management Plan, this Outdoor Events Guide and Heritage Guidelines for Outdoor Events; and
- The Opera House's Design Advisory Panel and Conservation Council also regularly provide advice in relation to the staging of events.

Every event must be managed carefully so that it is integrated with our other activities and those in the immediate precinct to ensure the safety and security of people and protect the site from anything that might damage the building or heritage values.



## 1.1 Site Map





## 1.2 List of Acronyms

The acronyms listed below are used in this Outdoor Event Guide.

<b>ABCB</b>	Australian Building Codes Board
<b>AM</b>	Account Manager
<b>AS</b>	Standards Australia
<b>BCA</b>	Building Code of Australia
<b>BOP</b>	Building Operations
<b>BOH</b>	Back of House
<b>BOM</b>	Bureau of Meteorology
<b>CCB</b>	Crowd Control Barrier
<b>CCR</b>	Central Control Room
<b>CMP</b>	Conservation Management Plan
<b>DA</b>	Development Application
<b>DAP</b>	Design Advisory Panel
<b>EBMS</b>	Event Booking and Management System
<b>EPA</b>	Environmental Protection Authority
<b>EPRG</b>	Emergency Planning and Response Group
<b>EAP</b>	Environmental Action Plan
<b>EWIS</b>	Emergency Warning Intercommunication System
<b>F&amp;B</b>	Food and Beverage
<b>FOH</b>	Front of House
<b>OB</b>	Outside Broadcast
<b>PA</b>	Public Announcement
<b>NCC</b>	National Construction Code
<b>PCBU</b>	Persons Conducting a Business or Undertaking
<b>PLI</b>	Public Liability Insurance
<b>PM</b>	Production Manager
<b>PPE</b>	Personal Protective Equipment
<b>RA</b>	Risk Assessment
<b>RBG</b>	Royal Botanic Garden
<b>RSA</b>	Responsible Service of Alcohol
<b>SEPP</b>	State Environmental Planning Policy
<b>SFX</b>	Special Effects
<b>SOH</b>	Sydney Opera House
<b>SWMS</b>	Safe Work Method Statement
<b>SWP</b>	Safe Work Procedure
<b>TfNSW</b>	Transport for New South Wales
<b>Trust</b>	Sydney Opera House Trust
<b>UPP</b>	User Pay Police
<b>VMS</b>	Variable Message Signage
<b>WHS</b>	Workplace Health and Safety
<b>WIP</b>	Warden Intercom Phone



## 2 Venue Overview and Specifications

### 2.1 Sydney Opera House Site

There are three main spaces used for outdoor events: the Forecourt, the Western Broadwalk, and the Northern Broadwalk.

Considerations must be given to specific constraints of the site including:

- Exposure to all weather conditions, including temperature, wind, and storms.
- Particular heritage significance associated with the granite, bronze and concrete surfaces
- Restrictions on the load bearing capacity and environmental restrictions for noise and surface runoff.
- Outdoor amenities are limited and the Hirer must establish additional amenities for outdoor events.

#### The Forecourt

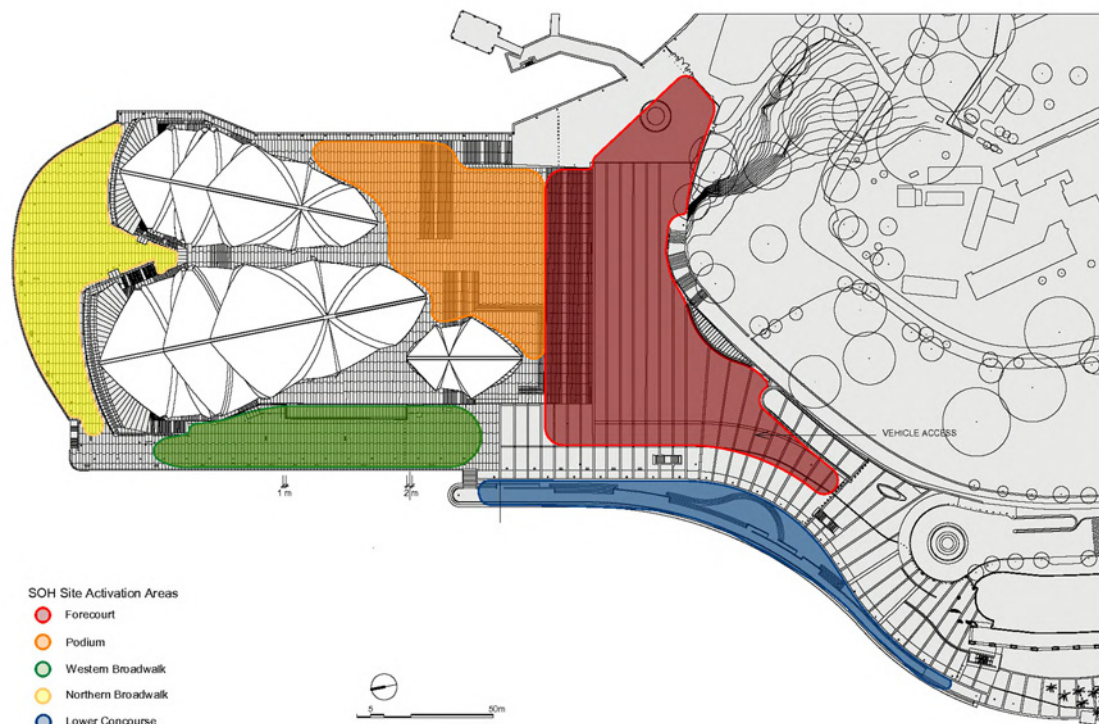
Our largest performance venue. An amphitheatre, set on the Monumental Steps between the white architectural shells and the city skyline, is used to stage outdoor performances ranging from sporting events to rock concerts for audiences of up to 6,000 patrons.

#### Northern Broadwalk

Used to stage smaller outdoor events and in conjunction with other areas for events such as New Year's Eve that occupy the whole site.

#### Western Broadwalk

With expansive views of Circular Quay, the Western Broadwalk is a primary means of pedestrian and vehicle access to the Northern Broadwalk and northern end of the site as well as the amenities of the Colonnade and Western Foyers.





This guide provides information to support the planning and delivery of memorable outdoor events of any scale.

## 2.2 Site Control

The Sydney Opera House Trust maintains ultimate control over the Sydney Opera House and its precinct at all times. The site is governed under Sydney Opera House Trust By-law, which is available **on our website**. Certain conduct is prohibited under the By-law and penalties apply. Authorised officers have enforcement powers under the By-law.



## 2.3 Venue Capacity

The audience capacity for your specific event will be determined by Sydney Opera House on receipt of the Event Site Layout Plan. The final approved capacity, up to the maximum for the site, will be based on a calculation of the available space after infrastructure and supporting equipment are installed, an assessment of the audience demographic, the amount of other activity planned for the site on the event day, and any other considerations necessary to ensure safe access and egress.

### 2.3.1 Forecourt

The following maximum capacities are applicable for Forecourt events, according to your event classification:

<b>Forecourt Maximum Capacities</b>	
<b>DA Events – Performing Arts</b>	6000
<b>DA Events – Corporate Functions</b>	2000
<b>SEPP Primary Function Events</b>	5000
<b>SEPP Community Events</b>	5000



### 2.3.2 Other Outdoor Spaces

For other outdoor spaces, maximum capacity is to be determined based on the space hired.

## 2.4 Hours of Operation

Like most outdoor venues around the city, outdoor events at Sydney Opera House are subject to certain operational restrictions under NSW Planning law. The following hours of operation are set as part of our approval to stage outdoor events from the NSW Department of Planning, Industry and Environment, and the finishing times are not negotiable.

<b>Outdoor Events – Hours of Operation</b>		
<b>DA Events</b>	7 days a week	08:00 hrs – midnight [amplified sound 10:00 – 23:00]
<b>SEPP Primary Function Events</b>	Sunday – Thursday	08:00 hrs – 23:00 hrs [amplified sound 10:00 – 22:30]
	Friday – Saturday	08:00 hrs – midnight [amplified sound 10:00 – 23:30]
	New Year's Eve	08:00 hrs – 02:00 hrs
<b>SEPP Community Events</b>	Sunday – Thursday	08:00 hrs – 23:00 hrs [amplified sound 08:00 – 22:30]
	Friday – Saturday	08:00 hrs – midnight [amplified sound 08:00 – 23:30]

In some instances, an earlier start may be approved through Event Operations, however noise restrictions are non-negotiable.





## 3 Event Planning

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### 3.1 Booking Process

If you wish to present an event at Sydney Opera House, you must first make a booking through our Venue Hire department and you will need to enter into a Venue Hire Agreement.

Venue & Event Sales	
Phone	+61 2 9250 7393
E-mail	venuehire@sydneyoperahouse.com
Internet	<a href="http://sydneyoperahouse.com">sydneyoperahouse.com</a>

### 3.2 Venue Hire Agreement

The Venue Hire Agreement between the Hirer and The Sydney Opera House Trust will specify venue access times, hiring conditions and any agreed special conditions. The Venue Hire department will provide you with a Venue Hire Agreement when your booking is confirmed. The agreement must be signed, and any required pre-payment or deposit paid, before event tickets can be released for sale or distribution.

All outdoor events are categorised under the appropriate NSW planning law and different conditions apply depending on the nature of the event.

At the time of booking, we will advise you whether the planning requirements for your event fall under:

- Planning consent DA 445–10–2003 as modified (DA). A full copy of the DA can be found in **Appendices**; or
- The State Environmental Planning Policy (SEPP) – Primary Function or Community

Conditions are different under the two classifications.

### 3.3 Hiring Conditions

The Venue Hire Agreement will cover:

- Use of space;
- Inclusions and exclusions;
- Indemnities and insurance;
- Recording and broadcast;
- Merchandising;
- Use of hazardous goods;
- Box Office, cancellations and fees and charges; and
- Workplace

The outdoor venue hire fee does not include:

- Stage and site power;
- Access to indoor areas including dressing rooms, or rehearsal spaces;





- Technical services and equipment;
- Staff labour;
- Site infrastructure, such as toilets and fencing;
- Waste management services;
- Catering services;
- Any other goods or services not specifically included in the Venue Hire Agreement;
- Noise monitoring costs;
- Granite and building fabric protection; and
- Box office charges.

Your production needs can be provided either in-house or hired from third parties on your behalf. Our Account Manager or Production Manager will coordinate the event requirements and provide cost estimates. While some services, such as ticketing, security, cleaning, and catering must be supplied in-house, others such as temporary staging, lighting and sound may be brought in through your own providers, subject to our approval and all applicable regulations.

### **3.4 Event Approval Process**

All proposed events will be assessed as to its suitability for a Sydney Opera House outdoor venue. We will work with you to assess suitability and resolve any concerns, but ultimately the decision to accept a booking is at the sole discretion of Sydney Opera House.

### **3.5 Access to Indoor Areas**

All indoor dressing rooms are assigned to our indoor theatres and there is normally no access to dressing rooms within Sydney Opera House if an external space is hired. If internal dressing rooms are needed, a request can be made to your Account Manager. Every endeavour will be made to accommodate the request, if possible, subject to availability.

The Sydney Opera House Green Room, accessed via Stage Door, is available for artists and crew to purchase meals and rest. The Green Room is a back of house space, not accessible to members of the public or media.

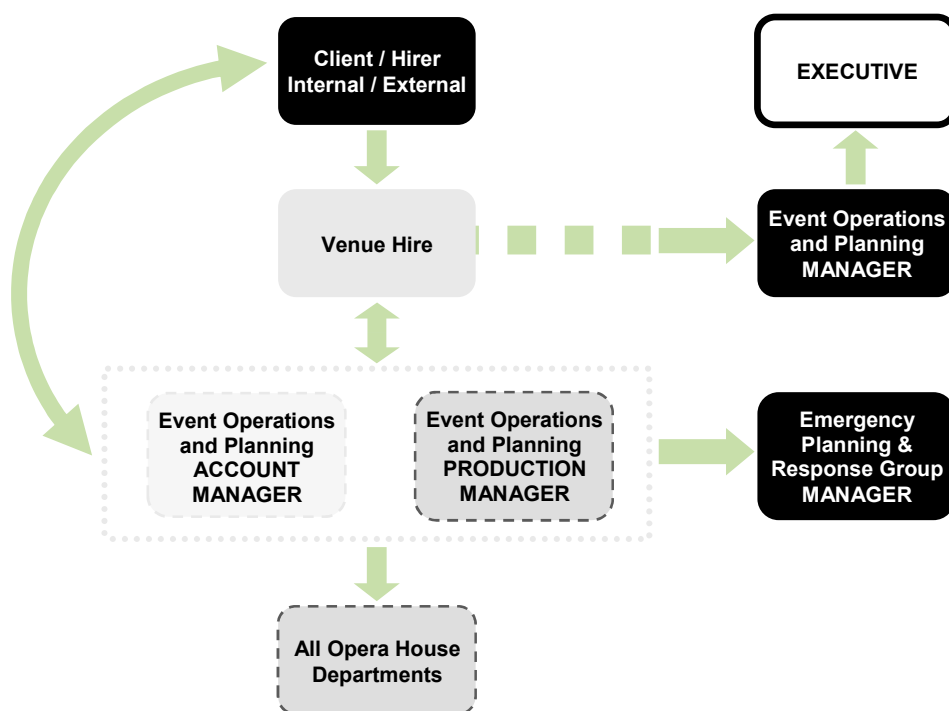
### **3.6 Event Management Process**

The diagram below shows the management hierarchy for events at Sydney Opera House, as well as decision making during an event.

- After your booking is confirmed, an Account Manager and Production Manager from our Event Operations department will be assigned to your event to usher you through all aspects of event planning and delivery; and



- All decisions and requests during an event are to be directed through your Account Manager or Production Manager. The only exception to this is during an emergency situation, when the Chief Warden becomes the ultimate decision maker and the Security, Crowd and Risk Management Plans take effect.



See also: **7 Emergency Management & Security** below

### 3.7 Event Documents

Our outdoor performance spaces are created from open public space, and as such every event is unique in the details of site configuration and event management plans. We will therefore require you to provide a set of plans and event manual created for your specific event. The Account Manager and Production Manager will work with you to develop these plans and manual.

Depending on the type and scale of your event, the plans and documentation we need may include:

- **Venue Hire Agreement:** a draft agreement will be issued to you by Sydney Opera House, to be finalised and signed prior to ticket release;
- **Proof of Insurance:** the list of insurances required will be included in the Venue Hire Agreement;
- **Event Site Layout Plans:** for bump in/out phase, event phase and egress plan;
- **Production Schedules:** including bump in, vehicle deliveries, event, and bump out;
- **Risk Management Plans:** covering all event risks and including risk assessments and SWMS, environmental risks, food and beverage risks relevant to your event;
- **Signage Plan:** showing location and design of directional and event signage;



- **Traffic Management Plan:** including pedestrian and vehicle traffic, extending to include impacts on Macquarie St. for large events;
- **Emergency Medical Plan:** includes the location and type of First Aid services to be employed on the event
- **Technical and Dressing Room Requirements:** including staging, lighting, sound, audio visual, power and communication equipment requirements;
- **Wind Management and Inclement Weather Plans:** including wind load, design and construction certification for temporary structures, event alteration or cancellation plans in case of inclement weather;
- **Sustainable Event Management Plan:** including details of waste management of all waste on site
- **Food and Beverage and Retail Plans:** including FOH and BOH catering, programs, and merchandise; and
- **Other:** as required to ensure the effective management of your event.

Sydney Opera House will work with you to write the following plans, as required:

- **Security, Crowd and Risk Management Plans:** security positions, access procedures (e.g., bag searches), and emergency evacuation plans – this will be developed by Opera House Security in conjunction with the Hirer;
- **Noise Management Sub-Plan:** to be prepared by a suitably qualified expert detailing the methods and controls to ensure compliance with any applicable noise limits. The Sub-Plan must be consistent with the Sydney Opera House Noise Management Plan, which will be provided if applicable.
- **Event Management Plan:** detailing all information of your event, including demographic, patron egress and ingress, other Opera House site activity

Further information on these plans is provided throughout this guide. Refer also to the **Checklists** in **Appendices**.

## 3.8 Heritage Management

### 3.8.1 Key Considerations

Sydney Opera House is a State, National and World Heritage site and, as such, is subject to a range of State Federal planning and heritage instruments.

We are committed to ensuring the heritage values are protected and event planning must consider any impacts or risks to these values. Sydney Opera House may require heritage advice to be obtained at the Hirer's cost where any significant impacts or risks are identified.

The key reference documents that guide heritage management are:

- **Sydney Opera House Conservation Management Plan (4th edition) (CMP4);**
- **Utzon's Design Principles;** and
- Sydney Opera House Heritage Guidelines for Outdoor Events & Activities (see **Appendices**).

These documents provide the visionary and policy framework for our management decisions relating to preserving and protecting Sydney Opera House. At minimum, in assessing the level of risk related to your event, consideration should be given to:



- Avoid obscuring significant heritage features such as the roof shells, glass walls, concrete columns, views of the Podium and Sydney Harbour vistas;
- Confining structures to the event infrastructure zones defined in the ***Heritage Guidelines***;
- Prohibition of white marquees on site;
- Keeping large structures that may impact on views and vistas to the Sydney Opera House are to a minimum;
- Maintaining a sense of openness and reducing clutter as far as is practicable. Avoid the use of plants and greenery – the Sydney Opera House should appear as a manmade structure clear of plants;
- Minimising the duration and frequency of events, including bump in and bump out times;
- Minimising the times in which the public will be excluded from the enjoyment of the Broadwalk, Forecourt and Podium steps;
- Minimising wear, tear and possible damage from work crews, event infrastructure, vehicles, patron movement, food and beverage service;
- Minimising the fixtures and connection features left in situ when not in performance mode; and
- Striving for the highest quality available in design and materials.

For other key activities that may impact heritage values see:

**Section 4.13 Signage**

**Section 4.5 Food and Beverage Services**

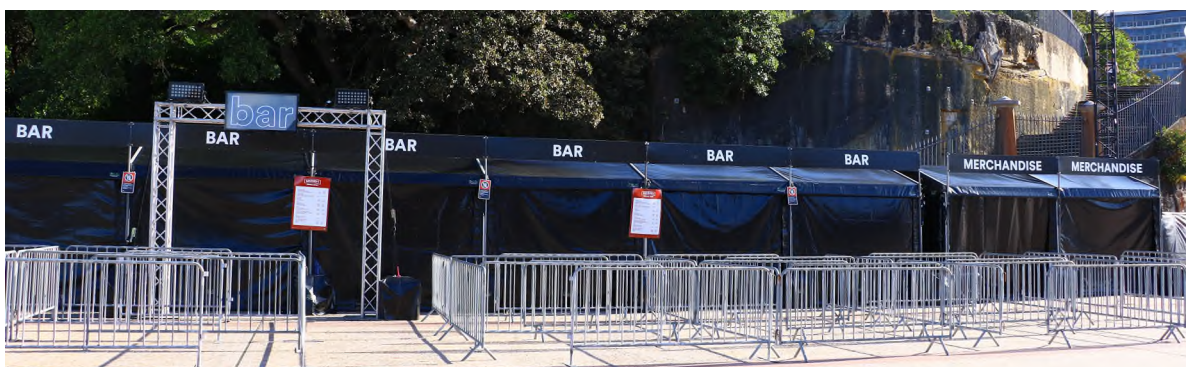
**Section 5 Infrastructure Planning & Management**

**Section 6 Environmental Management**

### 3.8.2 Visual Impact

Careful consideration needs to be given to the visual impact of temporary structures and related event infrastructure. These considerations are based on planning regulations, ***CMP4*** and ***Utzon's Design Principles***:

- Avoid the use of white structures that visually compete with the prominence of the Sydney Opera House shells;
- Marquees to be black with gable roof and stages to be grey or black sheeting (see image below);





- When large scale music events require a sea container wall to be deployed for sound isolation, it is to be painted Dulux Tea House Grey and scrimmed in same colour (see image below);



- The deployment of the sea container wall is to be determined by SOH when developing the event *Noise Management Sub-plan*;
- No white structures will be approved on site;
- Temporary installations should minimise impact on views, setting and fabric, and communicate their purpose clearly to visitors to ensure a positive visitor experience;
- The palette of natural colours and materials chosen by the original architect Jørn Utzon for the exterior must be retained and respected and not confused in any way where possible;
- All back of house areas must be covered with black, grey, or beige coloured scrim fencing, or painted in Dulux “Coconut Husk” colour or approved equivalent, at an approved height and appearance for that event and area;
- Fencing may be covered with event signage, however, all artwork must be approved by Sydney Opera House in advance;
- Approved Heritage colours to be incorporated in event marketing signage;
- Presentation of the site must be maintained at the highest quality at all times;
- Any outdoor event should entail minimal infrastructure necessary to safely stage and support it, and when it is over, all traces of it should be removed as quickly as possible, leaving the space without damage;
- Public announcement (PA) wings and scaffolding towers should be covered where possible in a permeable fabric (such as shade cloth) to provide a homogenous look to the event;
- Supporting and rigging materials should be masked to meet visual standards;
- Event signage must be in line with **4.13 Signage**;
- Temporary facilities must be located out of the view of the public where possible; and





- Sydney Opera House will determine the suitability of event plans at the time of booking, and Event Operations will continue to work with you through the event planning phase to ensure the event aligns with our heritage management requirements.

### 3.8.3 Forecourt Colour Palette



The above colour palette is still awaiting final approval from the Design Advisory Panel (DAP). How, and in what proportion these colours are used, are to be developed jointly with the DAP and SOH Conservation Council.

### 3.8.4 Exterior Furniture

The design and quality of exterior furniture and signage should be appropriate for the Sydney Opera House site. They must comply with the **CMP4** and **Utzon's Design Principles**:

- Materials and finishes of exterior furniture with high reflectivity must be avoided;
- Materials and finishes of exterior furniture with harsh tonal and colour contrasts with the natural palette of materials on the Forecourt, Lower Concourse, Under the Steps, Broadwalk and Podium must be avoided;
- White should not be used except for lettering on signage, as it competes with the visual prominence of the tiled shells, which must remain the key attraction to the site;

## 3.9 Event Insurance

You are responsible for adequately insuring the event. In addition to Public Liability Insurance and Workers' Compensation cover, other insurances might be required including key employee or headline artist insurance, equipment insurance, wet weather insurance and event cancellation insurance. We encourage you to consult with a professional insurance broker to advise and quote for the appropriate cover.

### 3.9.1 Public Liability Insurance

We require you to hold, and provide proof of currency of, a minimum of AU\$20,000,000 per claim in Public Liability Insurance. Other insurances, including Workers' Compensation insurance, will also be required. The minimum insurance requirements for your event will be set out in the Venue Hire Agreement.



### 3.10 Cancellation Policy

If a decision is made to cancel the event, then the allocation of costs (and / or compensation for loss) will depend upon the circumstances that prompted the decision to cancel, and the amount of advance notice given. The Venue Hire Agreement covers the financial and contractual outcomes if the Hirer decides to cancel the event, or if Sydney Opera House is obliged to cancel the event. The Venue Hire Agreement also covers what will happen if something outside the control of either party prevents the event from proceeding.



### 3.11 Event Lifecycle and Timeline

#### 3.11.1 Lifecycle





### 3.11.2 Timeline

Event Lifecycle	Description	Documents for Hirers to submit to SOH	Documents SOH will supply to Hirer / SOH Crew
<b>Pre-Event Approvals and Contract</b>	Venue booking confirmed. Venue Hire Agreement signed. SOH AM and PM allocated		
<b>Pre-Production</b>	All activities in the planning process that enable an event to be delivered in a safe and efficient manner		
	Following intro to AM and PM	Box Office Build Form Online marketing collateral	Approve for on sale Review and approve seating plans and venue layout
	6 weeks prior to event	Technical rider Event timings and overview Set designs and technical plans	
	7–14 days following '6 weeks' information received from Hirer		Estimate of costs
	4 weeks prior to event	Approved SOH schedule Approved estimate of costs Hospitality rider Merchandise information Branding / Signage Draft risk assessment	
	Following '4 weeks' information received from Hirer		Updated estimate
	2 weeks prior to event	Final technical plans Schedules Dressing room requirements Draft personnel access list Final risk assessment including SWMS Structure Design Certificates	Food and beverage FOH and security requirements
	10 days prior to event (Final day to amend SOH crew calls without incurring charges)	FOH notes Final dressing room allocations Final merchandise agreements Final hospitality rider quote	Technical crew confirmations
	7 days prior to event	Final personnel access list Key onsite contacts Vehicle details that require Loading Dock access	Final event requirements to all SOH internal departments Final accreditation SOH to Building Operations Final estimate
	1–2 days prior to event	Final comp ticketing list to Box Office team and AM	Conduct final staff briefings Provide vehicle access codes for the Loading Dock Venue specific induction requirements (if applicable)
<b>Bump-in</b>	First day of contracted time, commences from the first vehicle/team member onsite.	Hirer to sign acknowledgment of induction	Venue specific induction delivered prior to start of work (if applicable)
<b>Event</b>	All aspects from when patrons arrive until the last patron departs the building.		
<b>Bump-out</b>	Breakdown of facilities, stage and BOH areas.		
<b>Post Event Debrief and Invoice</b>	A Post Event Debrief may be held with all relevant stakeholders to evaluate the success of the event and ways to improve in the future. SOH AM to send post event Presenter Survey. Final invoice issued to Hirer.		Final invoice  SOH AM to send post event presenter survey





## 4 Operational Guidelines

### 4.1 Noise Control

Sydney Opera House has ultimate control over noise levels on the site. As part of our approval to stage outdoor events, the NSW Department of Planning, Industry and Environment has set a number of conditions which include the following limits for hours during which amplified sound may be produced.

Due to the varied nature of events and changing site conditions, Sydney Opera House reserves the right to further restrict the times for events.

Maximum permitted hours for amplified music under planning regulations		
<b>DA Events</b>	7 days a week	10:00 hrs – 23:00 hrs (or 22:00 hrs in some cases)
<b>SEPP Primary Function Events</b>	Sunday – Thursday	10:00 hrs – 22:30 hrs
	Friday – Saturday	10:00 hrs – 23:30 hrs
<b>SEPP Community Events</b>	Sunday – Thursday	8:00 hrs – 22:30 hrs
	Friday – Saturday	8:00 hrs – 23:30 hrs

Further restrictions may apply, and all activities are at the discretion of Sydney Opera House and the General Manager, Event Operations & Planning.

Any performance finish time after 22:30 hrs needs prior approval from the General Manager, Event Operations & Planning.

### 4.2 Acoustic Monitoring

Our approval to stage outdoor events from the NSW Department of Planning, Industry and Environment requires that acoustic monitoring must be undertaken by a suitably qualified technician for all events with amplified sound. Sydney Opera House will organise this with a third-party provider and pass on costs to the Hirer.

#### 4.2.1 DA Events

If your event is being presented under the DA, Sydney Opera House will provide you with a copy of the Sydney Opera House Noise Management Plan. Using this plan, we will work with you to develop your event specific Noise Management Sub-Plan which must be signed-off by a suitably qualified and experienced expert confirming the event set up has the ability to comply with all applicable noise limits.

As the expert is an external consultant, there will be a charge for the hirer for this service.

For all events and functions with amplified music, noise levels must be continuously monitored in real time, by an accredited consultant, throughout the entire event or function.

These plans specify the noise monitoring locations and various permissible noise levels for different types of event configurations.

#### 4.2.2 SEPP Events

The following requirements apply to events that are covered by the SEPP.



Noise monitoring is required at the following locations:

- At Beulah Street Wharf (off Waruda Street), Kirribilli;
- Cremorne Wharf (off Milson Road), Cremorne Point;
- At a point within 1 metre of the residential boundary nearest to Sydney Opera House at the Bennelong Apartments, East Circular Quay; and
- Dawes Point Park (off Lower Fort Street) Millers Point.

The noise levels measured at the monitoring locations specified above must not exceed the following limits:

- Sunday – Thursday:
  - $L_{Amax}$  65dB(A) and  $L_{Cmax}$  85dB(C).
- Friday – Saturday:
  - $L_{Amax}$  70dB(A) and  $L_{Cmax}$  90dB(C).

#### 4.2.3 Community SEPP Events

If the event involves amplified music that is merely ancillary to the main purpose of the event, the noise levels must not exceed certain background noise levels at the above locations. Sydney Opera House Event Operations can advise details of this at time of booking and the level at which your event will need to comply.

### 4.3 Duration of Occupancy

Sydney Opera House is limited in the number of days outdoor events can be held per year. The NSW Department of Planning, Industry and Environment and the NSW Heritage Office have imposed these limitations to ensure that the frequency of outdoor events can be sustained within the local neighbourhood, and to protect the heritage values of the site, which includes the need to maintain open and uncluttered views and vistas to Sydney Opera House.

It is important that we keep the site as clear of visual distractions as possible and that our site presentation is of a high standard. Production schedules must be kept as short as possible, minimising the time that temporary infrastructure occupies external spaces.

In doing this, we are also able to minimise production costs and maximise the number and variety of event bookings we can accommodate.

Special approval will be needed for any booking longer than 7 days.

### 4.4 Ticketing

The Sydney Opera House venues are hired as ticketed venues.

The Sydney Opera House remains the master Box Office for all events held onsite. Minority allocations may be agreed for other ticketing agencies. Box Office fees apply.

If additional Box Office infrastructure is required for large outdoor events, you will need to discuss an appropriate location for this function with Event Operations. Any infrastructure must consider planning regulations and heritage guidelines (see **3.8 Heritage Management**) and will be at the expense of the Hirer.



## 4.5 Food and Beverage Services

### 4.5.1 General Considerations

Sydney Opera House is a fully catered venue and reserves all rights relating to the supply, sale and service of food and beverage on site. If Hirers wish to provide or supply food and / or beverages while on the premises (this includes for performers), Sydney Opera House F&B Operations will supply Hirers with a list of authorised caterers.

Once you have selected your authorised caterer from our list, we ask that you fulfil all of the following:

- Ensure that any documentation or other information requested is produced in a timely fashion;
- All facilities associated with food catering must be in accordance with the Food Standard Code and the NSW Food Authority Guidelines for Food Businesses at Temporary Events;
- All forms of food functions or events must be notified to NSW Health either manually or online at [www.foodauthority.nsw.gov.au](http://www.foodauthority.nsw.gov.au). Food businesses may be exempt from this requirement if they meet the criteria listed by the NSW Department for Primary Industries, Food Authority;
- If required, all temporary food stalls or temporary food vendors associated with Sydney Opera House events must have a current approval from the City of Sydney in accordance with the requirements of the *Local Government Act 1993 (NSW)*. Approval number (Temporary Food Permit numbers) for all food operators must be submitted to the City of Sydney at least 14 days prior to the event;
- The setup and operation of any temporary food stall or vendor and associated equipment must comply with relevant sections of the City of Sydney fact sheet – “Requirements for the Operation of a Temporary Food Stall” and Australia New Zealand Food Standards Code –Standard 3.2.2, Food Safety Practices and General Requirements (Australia only);
- Note: The “Requirements for the Operation of a Temporary Food Stall, City of Sydney” and the “Temporary Food Stalls Event Register” and “Details of Temporary Food Stall” forms can be obtained from the City of Sydney website <http://www.cityofsydney.nsw.gov.au>;
- Ensure that you and your supplier meet and address any stipulations and issues raised by Sydney Opera House; and
- Any arrangement will be subject to the agreed terms of supply, sale and service for food and beverage, either as part of the Venue Hire Agreement, or as a separate agreement with Sydney Opera House.

In consultation with your authorised caterers, at minimum, you must provide detail on the items listed below:

- A full list of proposed food and beverage options for sign off – please submit menu plans so we can help identify any substances that are known to cause potential staining on granite surfaces;
- Details of structure from which food and beverages will be vended (e.g., truck, cart, van, stall or other similar structure);
- Food Safety Plan including copy of Food Safety Supervisor certificate of relevant staff member;
- Responsible Service of Alcohol certificates for all working staff, see **4.5.5 Alcohol**;



- Indicative menu;
- Equipment and appliances to be used in providing the F&B services;
- Grey water disposal;
- Cooking oil disposal;
- Waste disposal;
- Building Protection Plan: general consideration must be given to protection of granite surfaces and the prevention of soiling due to spillage of oily foods;
- Cooking methods; and
- Power requirements, which must be installed by licensed electrician, see **8.7.4 Electrical Safety**

Sydney Opera House reserves the right to enter into a separate agreement with the proposed F&B operator in relation to the supply, sale and service of food and beverages.

#### **4.5.2 Catered Functions**

Sydney Opera House F&B Operations will supply Hirers with a list of authorised caterers who have approval to supply F&B for catered functions.

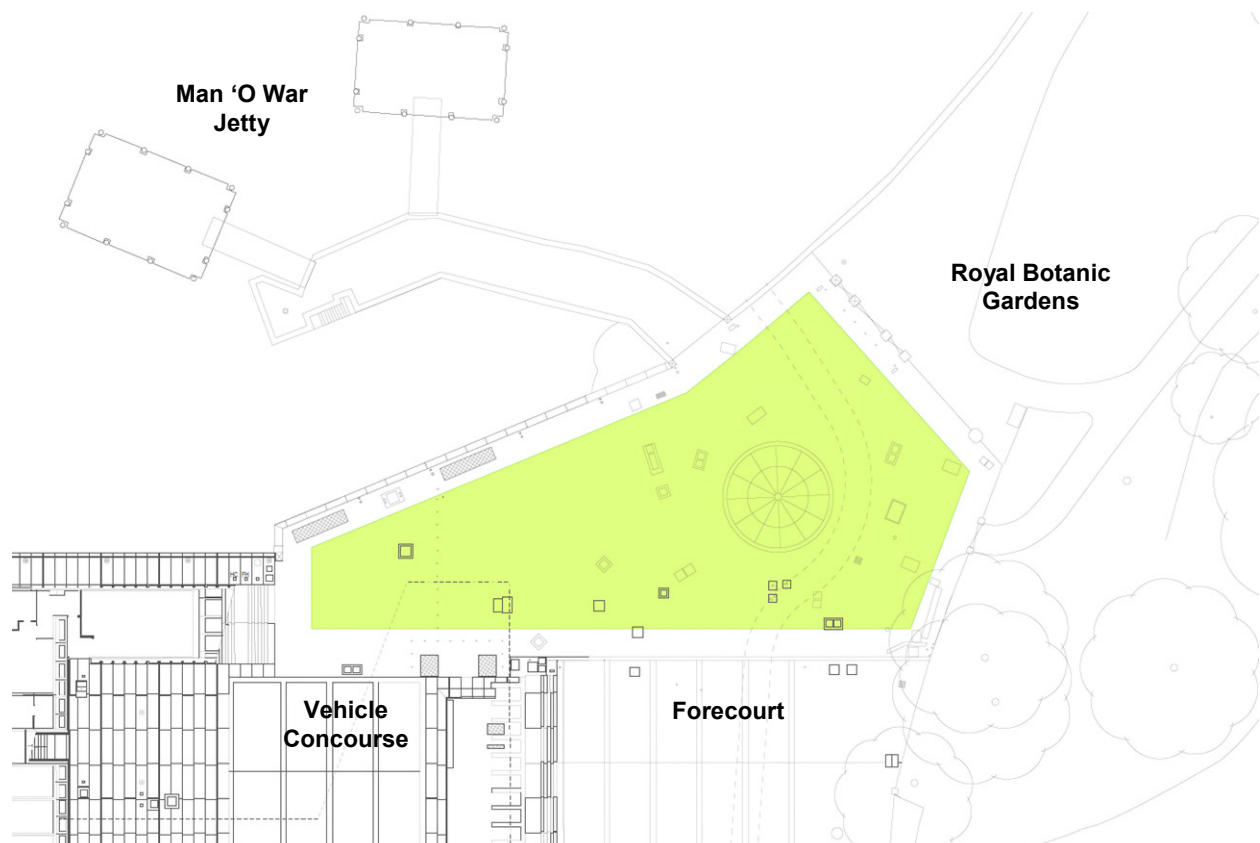
#### **4.5.3 Operational Conditions for Outdoor Events**

F&B requirements for outdoor events will be set out in the relevant agreement with the F&B Provider and will include the following:

- F&B Provider is responsible to ensure there is no damage to any Opera House building fabric;
- F&B Provider must ensure that any food options provided will not stain or damage any Opera House surface;
- F&B Provider should provide:
  - their own cooking appliances;
  - their own gas;
  - their own fire extinguishers;
  - details of food preparation area and method of assembly; and
  - packaging options of how the food will be served – where possible, sustainable packaging and serving methods should be used;
- Cooking with oil, and food with a high oil or fat content is not desirable due to the risk of staining granite surfaces. Cooking can only take place on the bitumen surfaces outlined in **4.5.4 Opera House Valid Cooking Areas**. See also, **4.5.5 Food and Beverages on Sydney Opera House Surfaces**;
- Glass is prohibited for all large-scale commercial events – beverages sold in glass bottles must be decanted into plastic cups before being served to patrons;
- Free drinking water must be made available to patrons, preferably un-bottled;
- Food trucks will require drip trays, must drive onto floor protection, and will only be permitted at the discretion of Event Operations; and
- A risk assessment must be provided by all food and beverage suppliers.



#### 4.5.4 Opera House Valid Cooking Areas



#### 4.5.5 Food and Beverages on Sydney Opera House Surfaces

Any proposed protection method must be specific for that event and installed at the Hirer's or F&B Provider's cost.

The following is the minimum standard for bar and food preparation areas on the granite surfaces:

- Protection film or builders' plastic must be laid directly onto Sydney Opera House surfaces. No adhesive materials should be used on any Opera House surface. The use of duct tape or electrical tape is not permitted unless approved by Building Operations;
- Outdoor flooring must be installed over the protection film or builders' plastic. Products similar to Pro-Floor® EF, a portable, lightweight outdoor flooring composed of engineering grade material for high impact, flexibility and resilience, is recommended; and
- Matting must be laid on top of the outdoor flooring. Hydrasorb High Traffic Entrance Mat or similar product capable of absorbing liquid and spills, is recommended.

The protection described above should be checked daily. If anything leaks through, or if an outline appears around the edges of the protected area, the protection should be replaced at the Hirer's or F&B Provider's cost.

Building fabric protection of all surfaces must be included in the Food and Beverage Risk Assessment, including the proposed methodology and materials.

#### 4.5.6 Alcohol

Consumption of alcohol within the Sydney Opera House precinct is prohibited unless it has been supplied by an authorised seller or provider.



The supply of alcohol and the provision of alcohol for consumption within the Sydney Opera House precinct is prohibited unless the supplier or provider:

- has written permission from the Sydney Opera House Trust;
- holds a current liquor licence;
- complies with all requirements of the Sydney Opera House Trust set out in the approval; and
- complies with the requirements of the Sydney Opera House Liquor Management Code.

Alcohol and glass brought onto the site without written permission may be confiscated.

The Sydney Opera House Trust does not hold a liquor licence but, as the custodian of the precinct, has sole discretion to give permission for alcohol to be supplied at the precinct. Once permission has been granted, individual licensees remain responsible and liable under their own liquor licence, including in relation to the responsible service of alcohol.

The food and beverage operators who operate from premises within the precinct each hold their own liquor licence regulating the supply of liquor by them within their respective licensed areas. Those licensed areas are specifically defined by their liquor licence.

If their licence provides for a catering service extension, those operators may also, from time to time, supply liquor for outdoor functions and events in other parts of the precinct by pre-arrangement with the Sydney Opera House Trust.

The whole of the Sydney Opera House precinct is within the Sydney CBD Entertainment Precinct declared under the *Liquor Act 2007 (NSW)*. As a result, all supplies of liquor anywhere on the site are subject to additional requirements and limitations as a further government initiative to curb intoxication and its consequences.

The Sydney Opera House Trust has adopted a Liquor Management Code (**the Code**) which aims to prevent alcohol-related violence and alcohol-associated anti-social behaviour within the precinct.

All venue Hirers, event organisers and anyone authorised to sell alcohol within the precinct must comply with the Code, which will be provided.

## 4.6 Cleaning and Waste Management

Sydney Opera House Building Operations will provide cleaning and waste services for your event through our cleaning contractor. An estimate of charges will be provided on receipt of all event details.

We strongly encourage sustainable event practices. See **6 Environmental Management** for more details

## 4.7 Event Services

### 4.7.1 Toilets & Water

The site has limited connection points to sewage & potable water points. The position of these can be found in the services plans in **4.24 Diagrams**.

Sewerage points do not connect directly to “town” sewage pipes, rather they connect to the buildings treatment plant which is located in the sub-basement via small diameter pipes.



**Due to the limitation of the plumbing, it is not possible to use standard event toilet blocks or to evacuate holding tanks via the system.**

General Admission facilities must therefore utilise a vacuum macerator type of pre-treatment (this is akin to the systems used on aircraft) installed by a licenced plumber familiar with the systems. The reduction in water usage is environmentally friendly & meets WaterWise standards. Note it is available for accessible units and smaller BOH facilities.

**In areas where vacuum type facilities cannot be used, “porta-loo” or “Duo” trailer facilities can be used, however their usage needs to be carefully monitored and they will need pump-outs before cartage from site.**

Space is limited on the FCT allowing for approximately 60 pans + 3 accessible for a ratio of 1:100 for a 6000-capacity event.

The NBW can accommodate up to 42 pans + 1 accessible for a ratio of 1:62 for a 2600 capacity event.

#### **4.7.2 Electrical**

The FCT has a comprehensive electrical supply with outlets situated both above ground and in underground pits. The latter are interconnected by conduits with pull-throughs allowing for multicores and data to pass underground which largely eliminates the use of cable tray. When cable tray is used it must be of the accessible ramp type in public areas.

The rest of the site has limited points. The position & specification of these can be found in the services plans in **4.24 Diagrams**.

Electrical safety & compliance is detailed in **8.7.4 Electrical Safety**

## **4.8 Royal Botanic Garden**

As part of the event Site Layout Plan for all major ticketed Forecourt events, fencing is required in the Tarpeian precinct near the Tarpeian Way gates, to prevent the public from accessing the event area along the Royal Botanic Garden fence line overlooking Sydney Opera House Forecourt.

Unobstructed access must also be maintained between the entrances to the Royal Botanic Garden on the eastern side of Sydney Opera House Forecourt and the Tarpeian Way.

The Tarpeian Way is managed by the Royal Botanic Garden. Any application to close an entrance must be lodged directly with the Royal Botanic Garden Trust at least 4 weeks prior to the event. It incurs both administration and security fees, which are payable to the Royal Botanic Garden.

## **4.9 Accessibility**

The Sydney Opera House is committed to providing for the needs of all patrons. When planning an event, it is both our social responsibility and a legal requirement to consider the access needs of people with disabilities.

The Forecourt is on ground level. Wheelchair access is available via the internal lift to view the Forecourt from the Box Office Podium. Courtesy wheelchairs are available from Front of House staff to assist patrons.

Seating plans for your event must accommodate wheelchair positions in all price reserves. Accessible paths of travel need to be maintained to amenities, F&B, and





merchandise outlets. Sightlines to the stage need to be considered for patrons using a wheelchair, as well as those seated in adjacent seating areas.

People unable to walk long distances can normally be dropped off at the roundabout at the bottom of Macquarie Street. There is also a complimentary shuttle bus which operates between Circular Quay and Sydney Opera House. The bus schedule is linked to performances times.

Accessible parking spaces are available in Wilson's Sydney Opera House Car Park, a public car park adjacent to the site. Full details are available on our website at [sydneyoperahouse.com](http://sydneyoperahouse.com).

If you wish to provide audio description, Auslan interpretation or live captioning access services for the event, or you have any special access requirements for performers, please contact our Accessibility Manager, through your Account Manager.

#### 4.10 Public Access

At all times, a level access way must be maintained for the general public from one side of the Forecourt to the other. Public access must also be maintained to the Lower Concourse via the southern escalators, southern stairs, and ramp.

Public access must be maintained at all times around Sydney Opera House along the Western, Northern and Eastern Broadwalks to the Royal Botanic Garden.

Unobstructed access between the bottom of Tarpeian Steps and Royal Botanic Garden Opera House gate along the Forecourt must be provided to the public, except during events.

#### 4.11 Traffic Management

Macquarie Street provides the only vehicle access point to the Sydney Opera House site.

A Traffic Management Plan is required for any events which involve Macquarie Street.

**TfNSW Transport Management Centre** can assist in the development of this plan.

The following impacts need to be considered and arrangements put in place to ensure the rest of the site can continue to operate throughout the event period:

- Does the event site encroach on the Sydney Opera House roadway?
- Do the impacts change between bump in and event phases?
- Is there a need for restricted access to the site? Will certified traffic controllers be needed?
- Are there any special needs to manage pedestrians?
- Are there VIP or other special access requirements?
- Is there a need for additional traffic management signage, including variable message signage (VMS) in Macquarie Street?
- If vehicles are to be allowed on the Sydney Opera House roadway during a night time event, will headlights impact the event?
- Are there any other planned events, roadworks, or road / transport network capacity reductions, occurring outside the Sydney Opera House site, that may impact on event operations?





## 4.12 Pedestrian Access Management

When planning an outdoor event, organisers must ensure their planning recognises that the outdoor areas of the Sydney Opera House are public open spaces, and that comfortable and safe access for members of the general public, including those not attending the event, must be maintained.

Pedestrian management must be addressed in the *Production Risk Assessment* (see **8.3.2 Writing a Production Risk Assessment**) and should tie in with your crowd management plan and vice versa. The following need to be considered and documented in the *Production Risk Assessment*:

- The strategies for managing audience access and egress at the event site, as well as taking into consideration non-attendee pedestrians who may be affected by it;
- All travel paths included in the event footprint are to be easily identifiable and are to be free of any trip hazards. Adequate lighting is to be provided during night events;
- The travel paths are to be wide enough to accommodate the expected populations and overcrowding must be avoided along these travel paths;
- Separation strategies of pedestrians and vehicle traffic during each phase of the event or production. Any vehicle movements within the event pedestrian zone during the event should be kept to a minimum, the speed limited to walking pace and be escorted by event staff;
- Clearly signed separation of event audience and non-attendee pedestrians at ingress points;
- Emergency evacuation plans must also include the impacts of non-attendee pedestrians that may be present on egress exits and pathways;
- Lighting on the Monumental Steps cannot be adjusted for Technical rehearsals or Performances without the express permission of SOH.

## 4.13 Signage

Event signage must receive approval from Sydney Opera House Event Operations prior to being produced and must comply with the following:

- Fit with the style and quality of the site, without adversely affecting the heritage significance of Sydney Opera House;
- Event signage to be black with white lettering, except the following categories which must comply with AS 1319–1994 Safety Signs For The Occupational Environment;
  - Safety & Emergency such as Exits, First Aid (white on green);
  - Safety & Emergency such as Fire Equipment (white on red);
  - Mandatory such as ‘Hard Hat Area’ (blue on white);
  - Danger such as ‘Construction Site – Unauthorised Persons Keep Out’ (black on white);
  - Prohibition such as ‘Authorised Access Only’ (black on white); and
  - Warning/Caution such as ‘Vehicles in Use’ (black on yellow).
- Fixed with reusable cable ties where possible;
- Not be fixed to any building fabric or the Tarpeian Wall;
- Not contain advertising or logos unrelated to the event, or competing with existing Opera House business, sponsorship, or partners;



- Comply with planning requirements and heritage guidelines and colours, including in relation to any scrim or other screening (see **3.8 Heritage Management**);
- Be designed and weighted to withstand the site's wind load (it is not possible to anchor anything into the ground);
- Clearly display conditions of entry for all Forecourt events, which are subject to Sydney Opera House approval. These must also be listed on the website and displayed at the main entrance. They may include the following:
  - This is an outdoor event;
  - The event will proceed in all-weather if deemed safe;
  - Food and beverages will be available onsite;
  - Patrons are advised to bring sunscreen;
  - Limited parking is available at the Sydney Opera House carpark; we encourage the use of public transport;
  - This event is 18+ and ID check required;
  - Smoking in designated areas only;
  - No pass outs; and
  - ATMs / EFTPOS facilities within event footprint;

Our standard conditions of entry to outdoor events are as follows:

- All patrons must have a valid ticket;
- Patrons, their bags, and other items may be searched or screened for safety and security purposes;
- Patrons showing signs of intoxication will be refused entry or removed;
- Smoking in designated areas only;
- No food or liquids is to be brought into the venue (free water is available);
- Unruly behaviour will not be tolerated;
- Minors must be supervised;
- No commercial, promotional, or marketing activity is allowed unless approved by Sydney Opera House; and
- This venue is governed under the **Sydney Opera House Trust By-law**. Penalties apply. Contact for complaints or concerns:
  - *Check with your SOH rep for the name and number before signs are printed.*

The following items are prohibited:

- Alcohol;
- Illegal substances including controlled, dangerous, or illicit drugs;
- Flammable devices (flares, fireworks, and smoke bombs);
- Anything that may be used as a weapon such as sharp items including knives;
- Suspicious items or items which may look like a weapon;
- Laser pointers;
- No umbrellas / strollers / chairs / sparklers;
- No glass beverage containers;



- Professional cameras or recording devices;
- Political or offensive signage or clothing;
- Drones or unmanned aerial vehicles (UAVs);
- Musical instruments such as Vuvuzelas, drums, or amplified music; and
- Any other item that may cause harm or public nuisance or could interfere with the performance.

During the entire event period, appropriate signage should be:

- positioned clearly in front of work areas and care should be taken to avoid creating the perception that Sydney Opera House is closed;
- positioned to welcome our visitors and inform them about the event, including dates and times, and how to obtain tickets;
- positioned to assist patrons in finding the SOH theatres, box office, amenities, tour meeting points, restaurants and shops and Royal Botanic Garden.

#### **4.14 Recording, Broadcast & Technology Facilities**

SOH has a fully equipped Recording and Broadcast suite available for hire.

Internal recording services range from archival audio through to multi-camera directed productions with live streaming options.

External outside R&B can be supported. OB trucks and associated production can be accommodated within the event footprint or, subject to availability, at alternate positions across the precinct.

A comprehensive single mode optical fibre network interconnects all venues including the FCT, the OB positions, and the Recording & Broadcast Studio. This allows broadcast-quality audio and video to be transported using Riedel MediorNet, network bridges, or the Stagetec NEXUS network.

Communications system integration between OB trucks and Sydney Opera House's stage intercoms and two-way radios is available.

Note commercial recordings are subject to various licencing, fees, and usage conditions.



#### 4.15 Emergency Warning Intercommunication System (EWIS)

Sydney Opera House will install an extension to the internal Emergency Warning Intercommunication System (EWIS). A warden telephone handset connected to the EWIS will be set up on the Forecourt at a strategic location, and additional warden telephone points will be supplied at either end of the Monumental Steps.

#### 4.16 Special Effects and Pyrotechnic Displays

Any proposed special effects and pyrotechnic displays are approved by Sydney Opera House with the appropriate notification time prior to the scheduled display

Please refer to **9.3 Special Effects** for the application and approval of all SFX



If the display would be considered a distraction for drivers on the Cahill Expressway, then the TfNSW Transport Management Centre must be consulted. This includes lighting of the Opera House Sails.

Link: ***Transport for NSW Event Management Guidelines***

#### **4.17 Drones**

Any drone activity over the Sydney Opera House site will need the applicable consenting authority's approval in addition to Sydney Opera House approval.

#### **4.18 Headset Communications**

Wired and wireless headset communications devices are available at extra cost and should be negotiated well in advance through your Production Manager.

#### **4.19 Two-way Radios**

Sydney Opera House can arrange two-way radios on various frequencies that can be used by your event operational staff and to communicate with show crew. These can integrate with the Sydney Opera House two-way system (and stage intercom system) or operate in isolation.

To ensure the availability of equipment, allow sufficient lead time when requesting two-way radio coverage for your event.

#### **4.20 Telephone Landlines**

Sydney Opera House runs a VoIP phone system. VoIP telephones with precinct, local, interstate, or international dialling are available. POTS and ISDN services are not installed as standard.

#### **4.21 Suppliers and Subcontractors**

Any proposed contractor or subcontractor coming onto the site must be approved by Sydney Opera House at least 4 weeks prior to bump in. We can supply a list of contractors familiar with our site on request.

When you engage external suppliers and / or subcontractors, you will need to ensure they meet all Sydney Opera House requirements and expectations, particularly in the areas of safety and protection of the building and other assets. All personnel working onsite must complete the Sydney Opera House Safety Induction prior to commencing.

When engaging temporary structure engineers please ensure there will be full compliance with ***5 Infrastructure Planning & Management***.

No contractor is authorised to be on SOH site without a SOH staff member or representative present.

#### **4.22 Event Notification**

Sydney Opera House must notify certain authorities and neighbours (as per condition 39 of the SOH DA) of all event and function details. This will be managed by Sydney Opera House for all events entirely on our land. For any citywide event, the event organiser is responsible for event notifications.



#### 4.23 Telephone Hotline

During all events and functions, Sydney Opera House operates a telephone complaints hotline for the purpose of receiving any complaints from members of the public in relation to any noise generated.

- Do not talk to or answer questions from the media
- Do not respond to complaints from the general public
- In all instances call the SOH Site Manager or Event Safety Officer

Hotline: **+61 (0)2 9250 7113.**





## 4.24 Diagrams

This section contains Event Services Diagrams for the following venues across the Opera House site:

### **Northern Broadwalk**

### **North Bronze Door & Vehicle Concourse Area**

### **Western Broadwalk & Upper Podium**

### **Forecourt**

#### 4.24.1 Systems Equipment Abbreviations

<b>AES</b>	Copper cable for digital audio, balanced three pin XLR connectors
<b>APC</b>	Angled Physical Contact fibre cable connector – usually for single-mode fibre, used most often in the House for two-way radio systems and telecommunications.
<b>CAT6</b>	Category 6 copper Ethernet cable
<b>DVN</b>	Digital Video Network – point to point fibre optic network for transporting video between Sydney Opera House and other venues or television networks, operated by Chief Entertainment
<b>IDF</b>	Intermediate Distribution Frame – copper patching frame, largely used for telephony, connects back to main distribution frame
<b>IP</b>	IP network switch – to switch on Opera House network, capable of delivering event internet or transporting other IP-encoded media between switches over VLANs
<b>MDF</b>	Main Distribution Frame – copper patching frame, largely used for telephony systems, connects Opera House to world
<b>OM1</b>	Multimode Optical fibre
<b>OS1</b>	Single-mode Optical fibre
<b>RCP</b>	Rack-mount Communications Panel – Riedel wired stage communications panel, rack-mount type

#### 4.24.2 Location Abbreviations

<b>CCR</b>	Central Control Room – main fibre optic, audio, and video interconnection point for Sydney Opera House
<b>FCT</b>	Forecourt Event
<b>JST</b>	Joan Sutherland Theatre
<b>OBE</b>	Outside Broadcast Power and Communications Connection Panel – East Panel
<b>OBW</b>	Outside Broadcast Power and Communications Connection Panel – West Panel



### 4.24.3 Northern Broadwalk

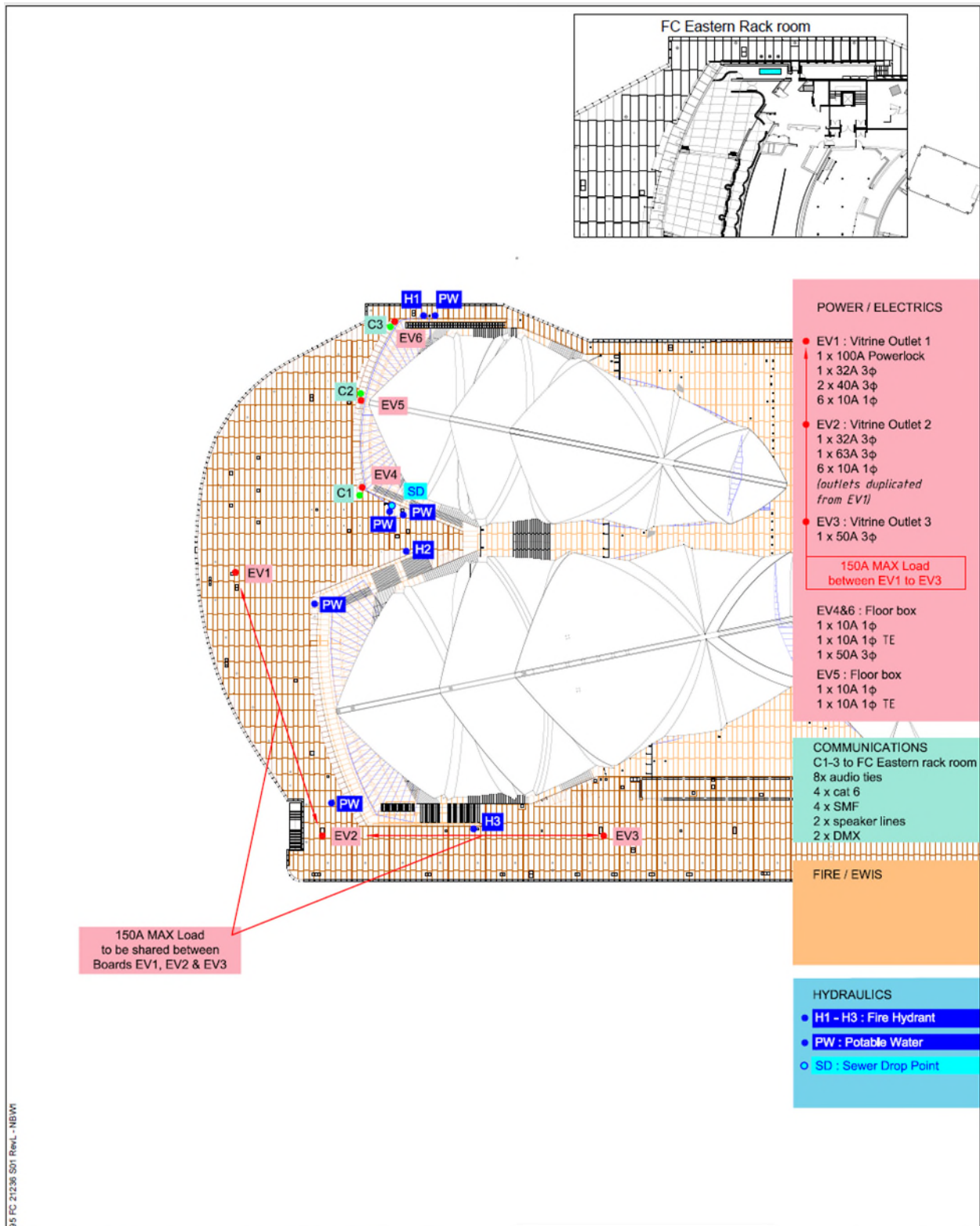
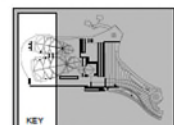


Figure NBW1 : Northern Broadwalk - Event Services as at July 2019







#### 4.24.4 North Bronze Door & Vehicle Concourse Area

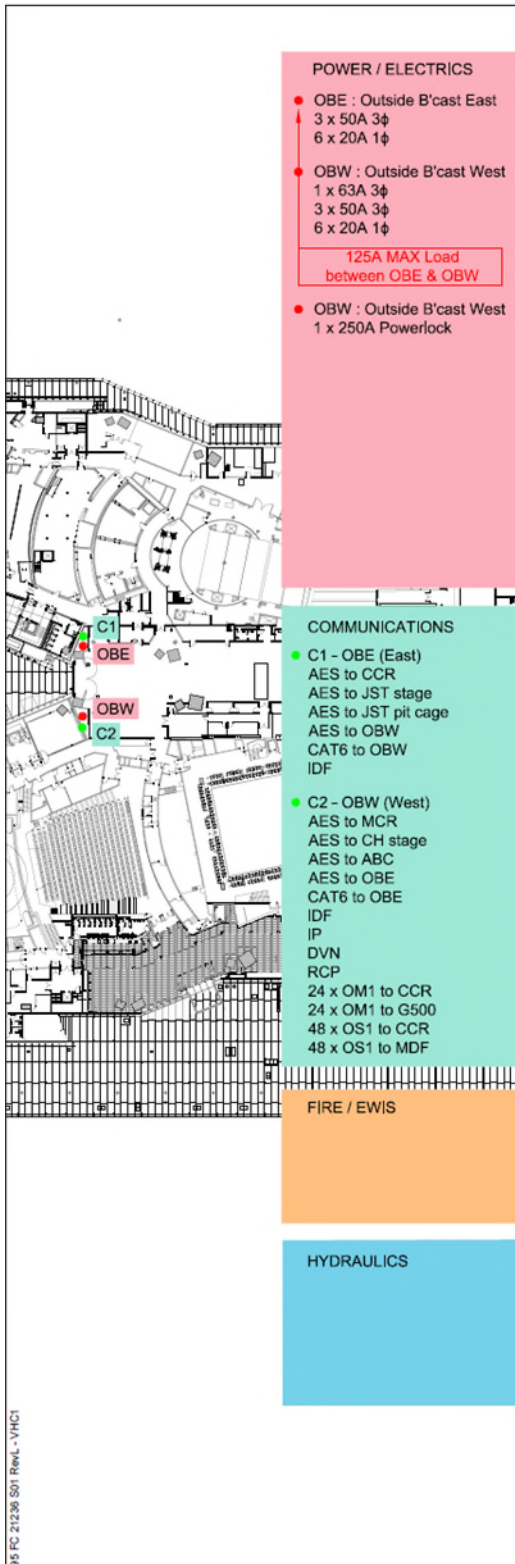


Figure NBD1 :  
North Bronze Door  
OB Van Connection  
as at July 2019

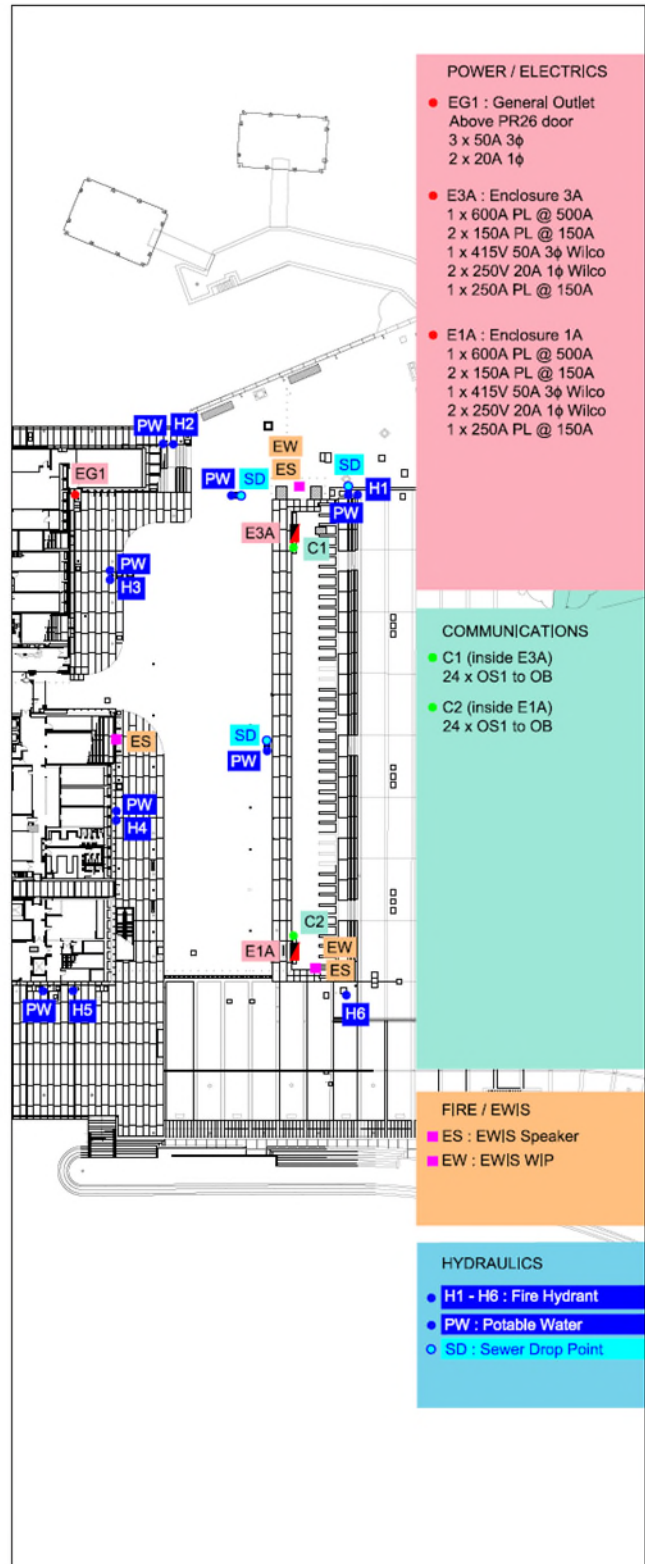


Figure VHC1 :  
Vehicle Concourse Area  
as at July 2019





## 4.24.5 Western Broadwalk & Upper Podium

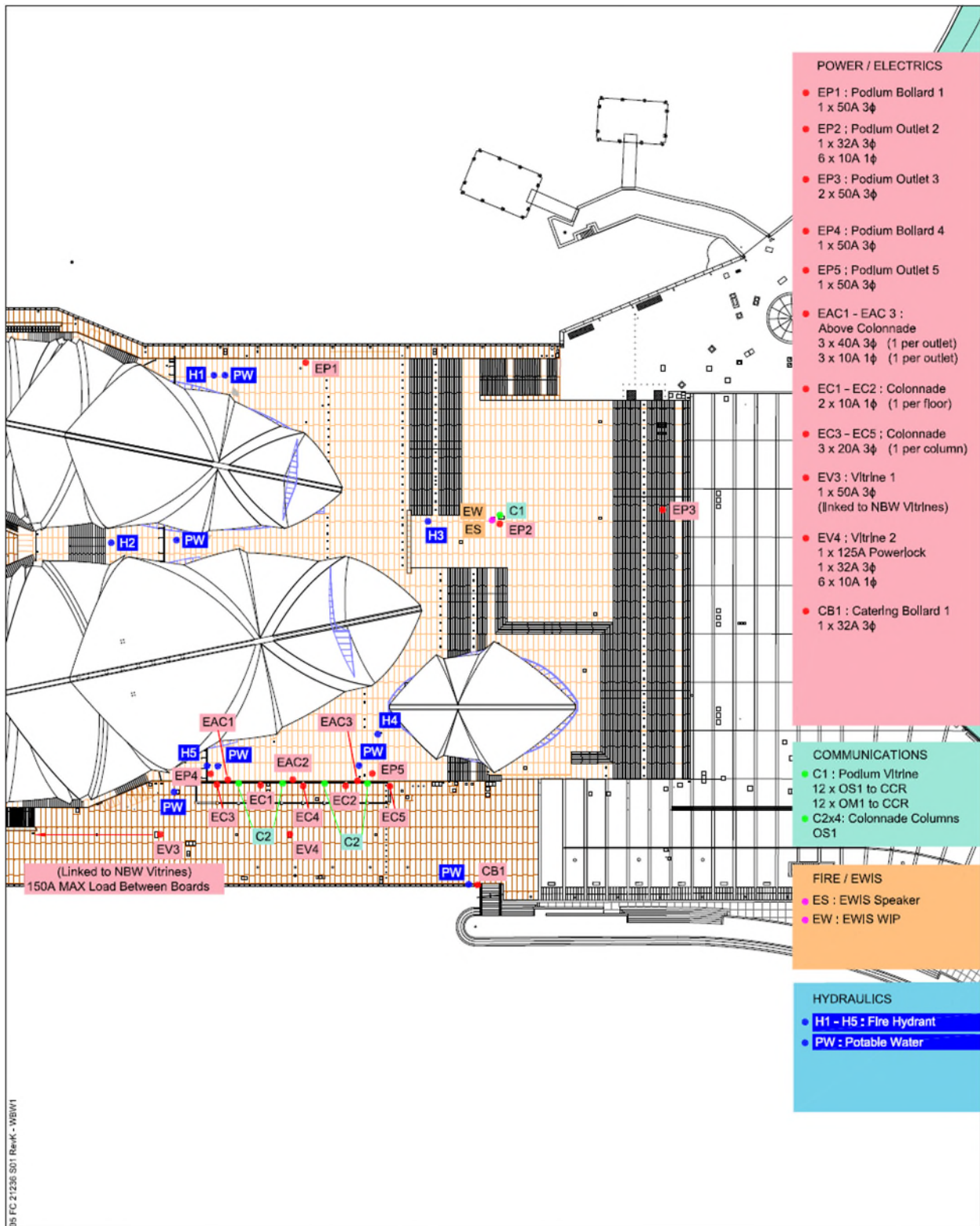
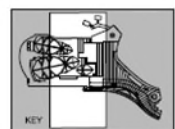


Figure WBW1 : Western Broadwalk & Upper Podium - Event Services as at February 2019







## 4.24.6 Forecourt

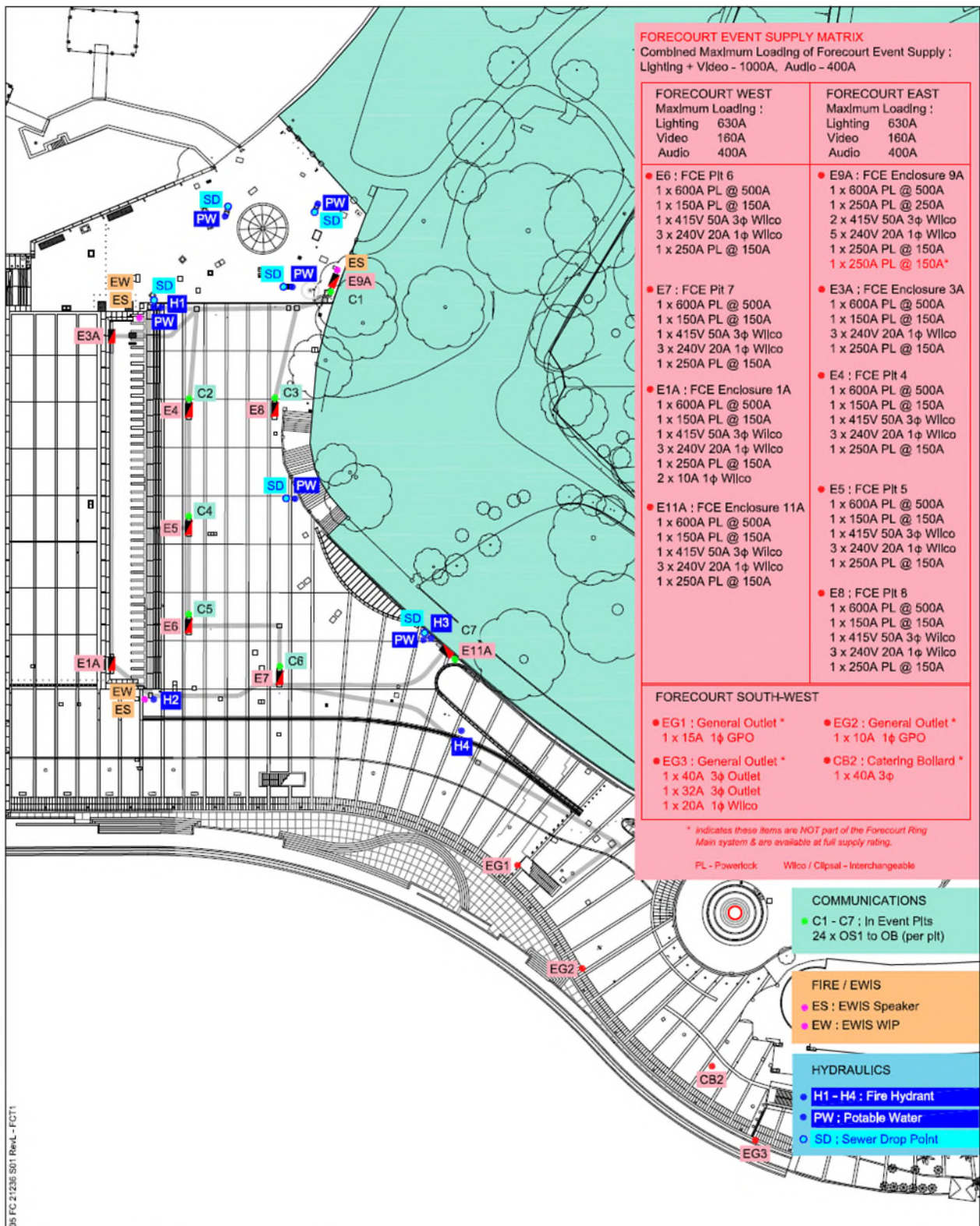
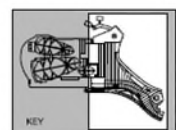


Figure FCT1 : Forecourt - Event Services as at February 2020





## 5 Infrastructure Planning & Management

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### 5.1 Overview

There are 5 main areas to be incorporated into event infrastructure planning and management:

- All infrastructure to be positioned on an Event Site Layout plan, developed in consultation with SOH Production;
- All temporary structures are to be designed & constructed in accordance with relevant standards and are subject to a Design & Construction certification by a Chartered Professional Engineer. See **5.4 Structural Integrity**.
- All infrastructure must have an established rig/derig/evacuation wind speed incorporated in a Wind Management Plan (WMP). See **8.8 Weather Conditions Management**
- All infrastructure dead and live loads to be calculated with reference to the defined weight loading for the area. See **5.7 Weight Loadings**.
- It is important that temporary structures are consistent with the presentation standards expected of a World Heritage site and in line with the principles of the Conservation Management Plan. See **3.8 Heritage Management**.

**Within this section are the relevant Australian Standards & definitions; and the design, construction & management standards required by Sydney Opera House.**

### 5.2 Definition of Temporary Structures

Definition of a Temporary Structure

The Building Act 2000 and the Building Regulations 2014 provide that a 'temporary structure' includes any: —

- booth, tent, or other temporary enclosure, whether or not a part of the booth, tent or enclosure is permanent; or
- temporary seating structure; or
- a mobile structure;
- a temporary bridge;
- a temporary stage;
- a temporary platform;
- a temporary tower.

This is not an exhaustive list of the types of temporary structures.

All temporary structures related to events must be confined to the event site area, be located in the defined SOH infrastructure zones and must comply with planning regulations, the National Construction Code and applicable Australian Standards including the ABCB Temporary Structures Code 2015.

Full details of the structure(s) need to be submitted to Event Operations, along with engineering plans, schematics, and elevations.

Ground protection must be laid under all concrete blocks to protect granite surfaces.



### 5.3 Australian Design Standards

- All events at Sydney Opera House that have load bearing temporary structures being incorporated into the event must be assessed by an appropriately competent person under the requirements of the National Construction Code: Volume 1 (NSW Provisions, Part H102 Temporary structures) as a Class 9b building – entertainment venue.
- All temporary structures used as entertainment venues must be in accordance with the Building Code of Australia, NSW Provisions Part H102 Temporary structures. These requirements include the fabric that is used in the construction of a Temporary structure; this will involve a maximum Flammability Index which is to be supplied by a registered testing laboratory.
- All Temporary Entertainment Venues are to be in accordance with the New South Wales State Environmental Planning Policy (SEPP) (Exempt and Complying Development) 2008.

Relevant Australian Standards	
<b>AS/NZS 1170</b>	Structural design actions, Parts 0 to 3
<b>AS 1530</b>	Methods for fire testing on building materials, components and structures, Parts 1 and 2
<b>AS 2293</b>	Emergency escape lighting and exit signs for buildings
<b>AS 4100</b>	Steel structures
<b>AS/NZS 4600</b>	Cold-formed steel structures
<b>AS/NZS 1664</b>	Aluminium structures, Parts 1 and 2
<b>NCC</b>	National Construction Code

Design Guidance	
<b>ABCB*</b>	Temporary Structures Standard 2015;
<b>HRIA</b>	Hire & Rental Industry Association – Marquee Weighting Guide

*\*Compliance with this Standard is not required by NSW legislation and the provisions of NSW legislation prevail over this Standard which it back references. It is however intended to be the primary national reference document for State authorities. The HRIA has provided supporting documentation to this Standard.*

### 5.4 Structural Integrity

- Temporary structures must meet engineering safety requirements. You must provide an Engineer's Certificate from a Chartered Professional Engineer (CPEng) that confirms that all temporary structures are designed and installed in accordance with the relevant standards and codes. Design certificates should be sent through in the planning phase of your event, at least two weeks prior to event. This is a mandatory requirement.



- Engineers' Inspection Certificates must be received on the same day or within 24 hours of the completion of installation and before any general public are allowed onto the event site.
- All temporary structures that may be affected by wind actions or dead and live loads are to be provided with adequate anchorage, dead load weights / tie-downs. The use of masonry anchors is not allowed. They must be designed and erected in accordance with:
  - the current National Construction Code, Section B Structural Provisions,
  - AS 1170.1 Structural Design Actions – Permanent, Imposed and other Actions
  - AS 1170.2 Structural Design Actions – Wind Actions.
- All platforms and stages must be designed to suit the intended use, including all dead and live loads associated with the structure in accordance with the National Construction Code and Australian Standards.

## 5.5 Site Specific Design Criteria

There are a number of site-specific design requirements in respect to wind rating & ballasting of structures. Visual impact is addressed in **3.8.2 Visual Impact**.

The SOH precinct is an open public space. Temporary infrastructure will be in place at times when there is not readily available site crew to enact a derig. Therefore, structures are required to have a higher than typical wind performance.

SOH engaged Event Engineering Pty Ltd to provide minimum ballast standards for regularly used configurations of fencing, marquees, truss arches, scaffold platforms & container walls based on first principles engineering (**12.5 Outdoor Structures Design Specifications**).

This data takes into account site specific conditions such as the lower coefficient of friction of pre-cast granite surfaces, the wind speed profile of the site, and in the case of fencing the limited space available for other systems of bracing.

Design & Construction certification for event infrastructure must be provided by a practising qualified CPEng. Your SOH Production manager can advise a list of companies familiar with engineering specific to the SOH site.

### 5.5.1 Site Wind Speed Zones (Terrain) Data

The base Wind Speed zone for the Precinct is  $V_{30m/s;3s}$  gust, expressed as  $V_{30m/s;3s}$ . Large bespoke structures require a higher design wind rating as do structures in high wind areas as identified in **12.5 Outdoor Structures Design Specifications** and require that proposed infrastructure in these areas are assessed by a CPEng. in the design phase.

### 5.5.2 Stages & Other Large Bespoke Structures

The wind rating of stages & large bespoke structures will vary depending on their position on site, with standby, de-rig, & evacuate wind speed advised in the Design Certificate. We require a design speed of greater than or equal to  $V_{38m/s;3s}$ . with a de-rig speed in the range of  $V_{20-25m/s;3s}$ .

There are specific considerations for installations on the Northern Broadwalk due to the permitted weight loading in the area (**Event Loading Diagram –External/ Internal Areas**) and the potential for high winds greater than  $V_{38m/s;3s}$ .





### 5.5.3 Container Walls (Acoustic Barrier)



Container walls are often required as acoustic barriers behind the stage in the Typical Forecourt Configuration (Southwest) position. The Design Certificate in **12.5 Outdoor Structures Design Specifications** provides for a design wind speed of  $V_{38m/s;3s}$

Containers have to arrive pre-painted in Tea House Grey. The 3 lower units have to be side opening to load ballast. A Tea House Grey scrim needs to be attached by catenary to the rear & sides.

### 5.5.4 Truss Arches

The Design Certificate in **12.5 Outdoor Structures Design Specifications** addresses truss arches in various configurations constructed with F44 aluminium truss and using 900m<sup>2</sup> steel base plates.

The design wind speed is  $V_{30m/s;3s}$ .

### 5.5.5 Basic Scaffold Structures

The Design Certificate in **12.5 Outdoor Structures Design Specifications** addresses small scaffold structures in various configurations. The design wind speed is  $V_{30m/s;3s}$  fully scrimmed.

Alternative configurations require a specific design certificate.

### 5.5.6 Marquees

It is not intended that the **HRIA Weighting Guide** or the design certificates in **12.5 Outdoor Structures Design Specifications** supersede or override any manufacturer's specifications. However, if a discrepancy between the manufacturers recommendations exists you must adopt the greater load ballasting or consult a CPEng.

The design wind rating should be a minimum of  $V_{30m/s;3s}$ . with standby, de-rig, & evacuate wind speed to be supplied by the Contractor prior to install and confirmed by a CPEng. inspection certificate before occupancy.

Marquees erected & dismantled on the day for a one-day event can, if the forecast site wind gusts are below  $V_{15m/s;3s}$ , be ballasted to the lower HRIA guidelines at the discretion of SOH.

In the high wind areas of the site, consult with a CPEng & your contractor.

Note "Pagoda" style marquees & "Circus" style structures are not permitted.

### 5.5.7 Fencing

Fencing and associated scrim is generally used to delineate the event area from the general public and needs to be visually presentable and professionally installed.



Dependent on location, we require that fencing is 100% block out scrimmed in an approved hue. This generally means a double layer, for example grey or beige over black backing.

In BOH areas where site sheds are in use, the public facing fencing should ideally be 2.4m to hide site sheds as much as possible. This requires scrim to be special ordered. 1.8m fencing is acceptable elsewhere and scrim is readily available.

It is not acceptable to slash scrim to relieve pressure unless in an emergency situation. It must be removed and replaced.

Fence panels should be the “heavy duty” type which have uprights  $\geq 40\text{mm}$  diameter.

Professional fencing contractors issue Design Certificates for their products however the usual configurations, which generally require front & back bracing, are not practical on this site due to space limitations. The Design Certificate in ***Outdoor Structures Design Specifications*** can be used instead.

This provides for wind rating/derig speed up to  $V_{30m/s;3s}$ . fully scrimmed,  $V_{41m/s;3s}$ . with scrim removed.

- **1.8m(H) Fence:** min 27kg Fence blocks per 2.5m bay lengths. Min. 750kg ballast every fourth bay (this can be 2x 500kg) placed on a suitable membrane such as rubber carpet tile;
- **2.4m(H) Fence:** min. 32kg Fence blocks per 2.25m bay lengths. Additional 1000kg ballast every fourth bay (this can be 2x 500kg) placed on a suitable membrane such as rubber carpet tile.

**Mojo™ High Barrier:** An alternate product with a good aesthetic. At 2.4m high it is ideal for blocking sightlines to an event from non-attending public (the high top is available in black or clear). It's typically used on the western side of the site in conjunction with Mojo™ 3m wide emergency vehicle access gates.



- **Mojo™ Barrier:** Crowd crush barrier used on site needs to be installed with a rubber membrane between the base of the barrier and granite pre-cast or cobbled surfaces.
- **Crowd Control Barrier (CCB):** Apex foot barrier is preferred for general purpose use due to its light weight and ability to be set and struck quickly however it cannot be used with a scrim facia. In high winds V bracing configurations should be used to stabilise long runs.

Flat foot barrier is heavier & more stable however all legs must be checked for flatness before install & if a scrim facia is used 2 “donut” weights of 35kg must be used at each junction.



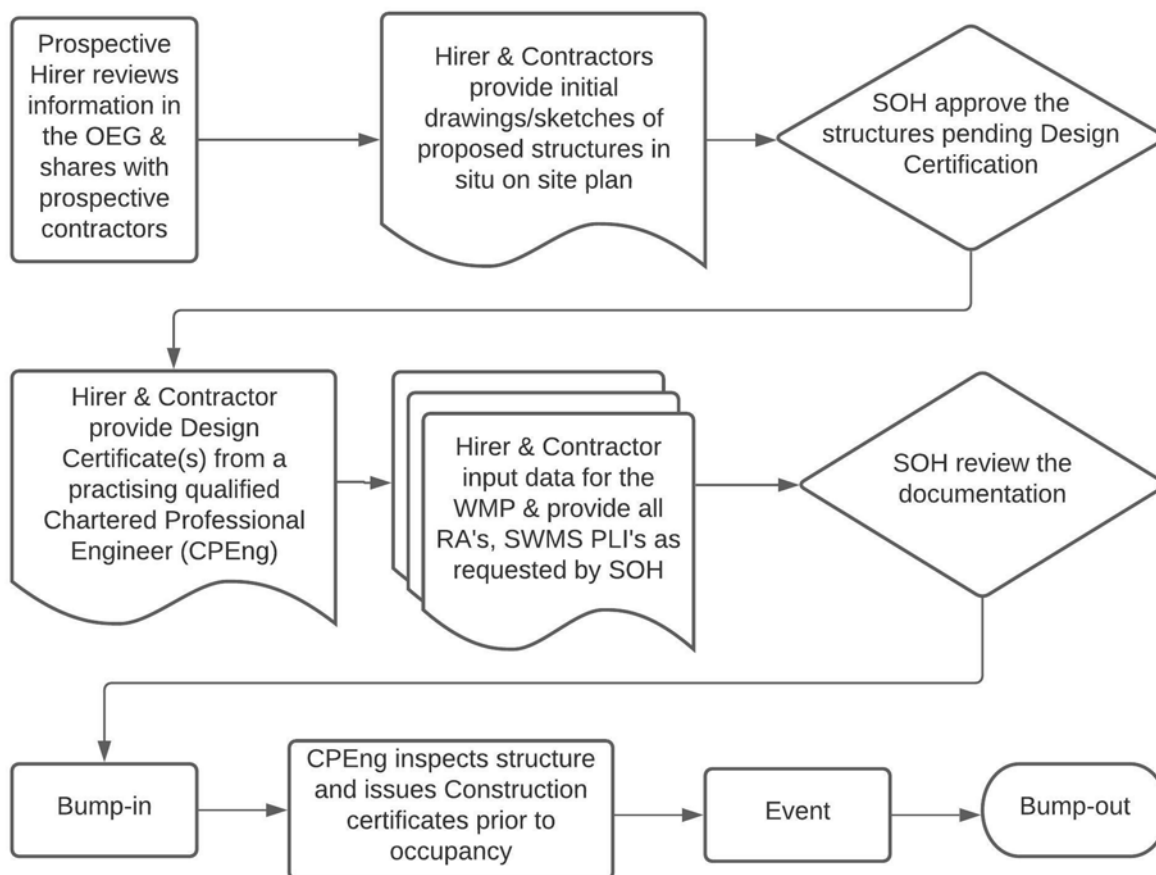
### 5.5.8 Ancillary Event Items

Items that do not have a Design Certificate such as tables, chairs, bins are included in the WMP database.

Items such as awnings on catering trucks are also to be included in the WMP.

### 5.5.9 Flow of Information & Approvals Process

The figure below outlines the basic flow of information and approvals process that is required prior to and during the construction of a temporary structure.



## 5.6 Protection of Building Surfaces

The Forecourt is paved with cobblestones and the Broadwalks are clad with granite aggregate slabs suspended on pylons over the Harbour. There are restrictions on the load that can be carried and load capacities must be strictly observed (see **5.7 Weight Loadings**).

Refer to **4.5 Food and Beverage Services** for site protection guidance specific to food and beverages.

Wherever there is a risk of damage to Sydney Opera House, appropriate measures must be taken to ensure the protection of building surfaces. Nothing is to be attached to or penetrated into building surfaces.

You must provide suitable rubber pads or ply sheets to protect the granite and building surfaces. These must be used in all situations where the granite or building fabric may be at risk of damage, for example:



- Under the feet of stages, scaffolding or marquees, to prevent slipping and rust stains or gouges in the granite;
- Under the tyres or engines of trucks or cranes to avoid tyre marks or oil stains, when appropriate;
- Under food preparation and service areas;
- Under portable toilet units when on granite surfaces; and
- Granite slab protection over the underground loading dock tunnel head granite slabs (These will be supplied in-house, organised by Event Operations at a cost to the Hirer)

For events on the Western Broadwalk, we require the following protection:

- Column protection installed to protect the concrete columns of the Colonnade. (These will be supplied in-house, organised by Event Operations at a cost to the Hirer)

## **5.7 Weight Loadings**

All areas of the site have defined weight loading limits, which must be strictly adhered to. Refer to the Event Loading Diagrams in the next pages.

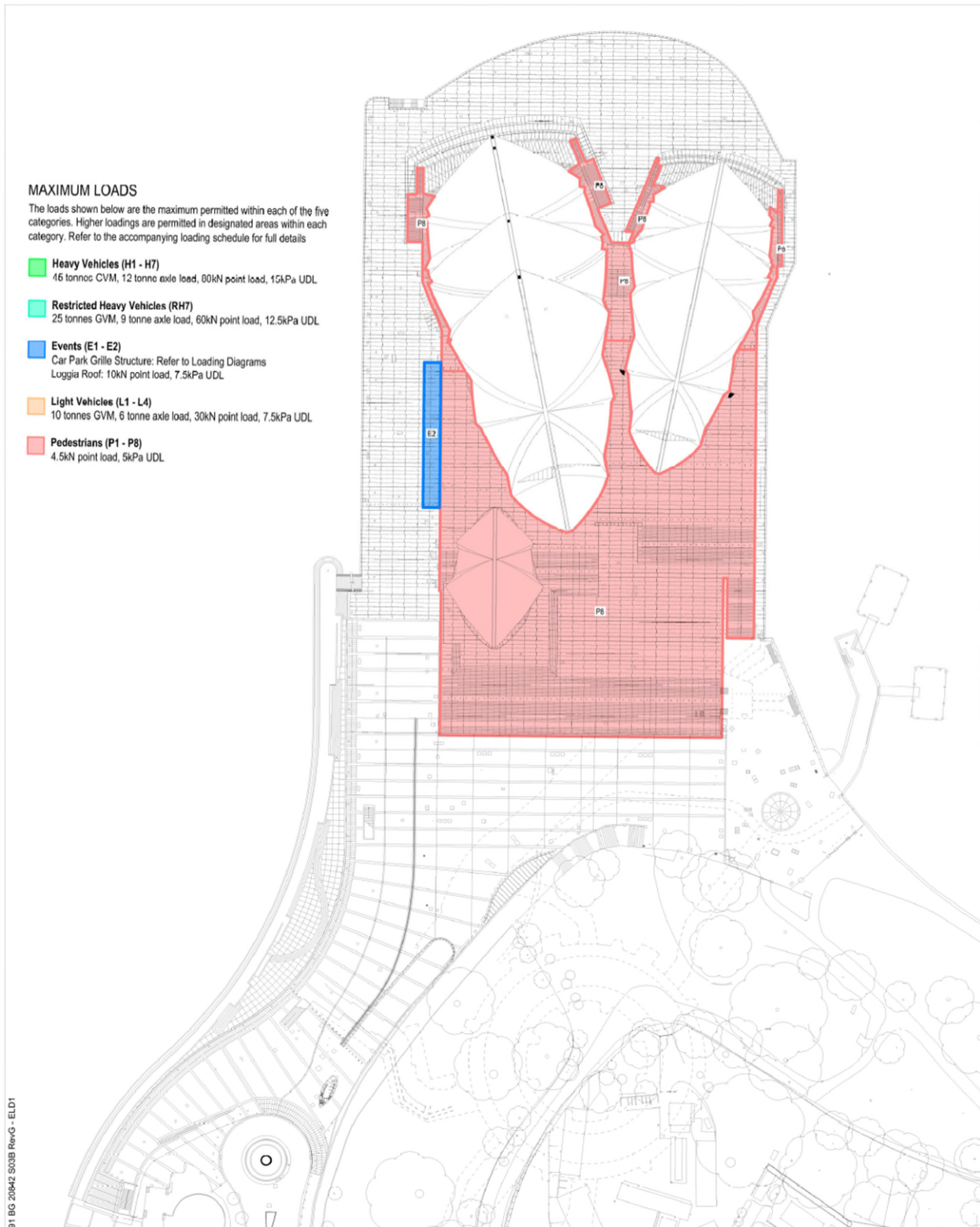
***Event Loading Diagram – Upper Areas***

***Event Loading Diagram –External/ Internal Areas***

***Event Loading Diagram – Loading Schedule***



## 5.7.1 Event Loading Diagram – Upper Areas

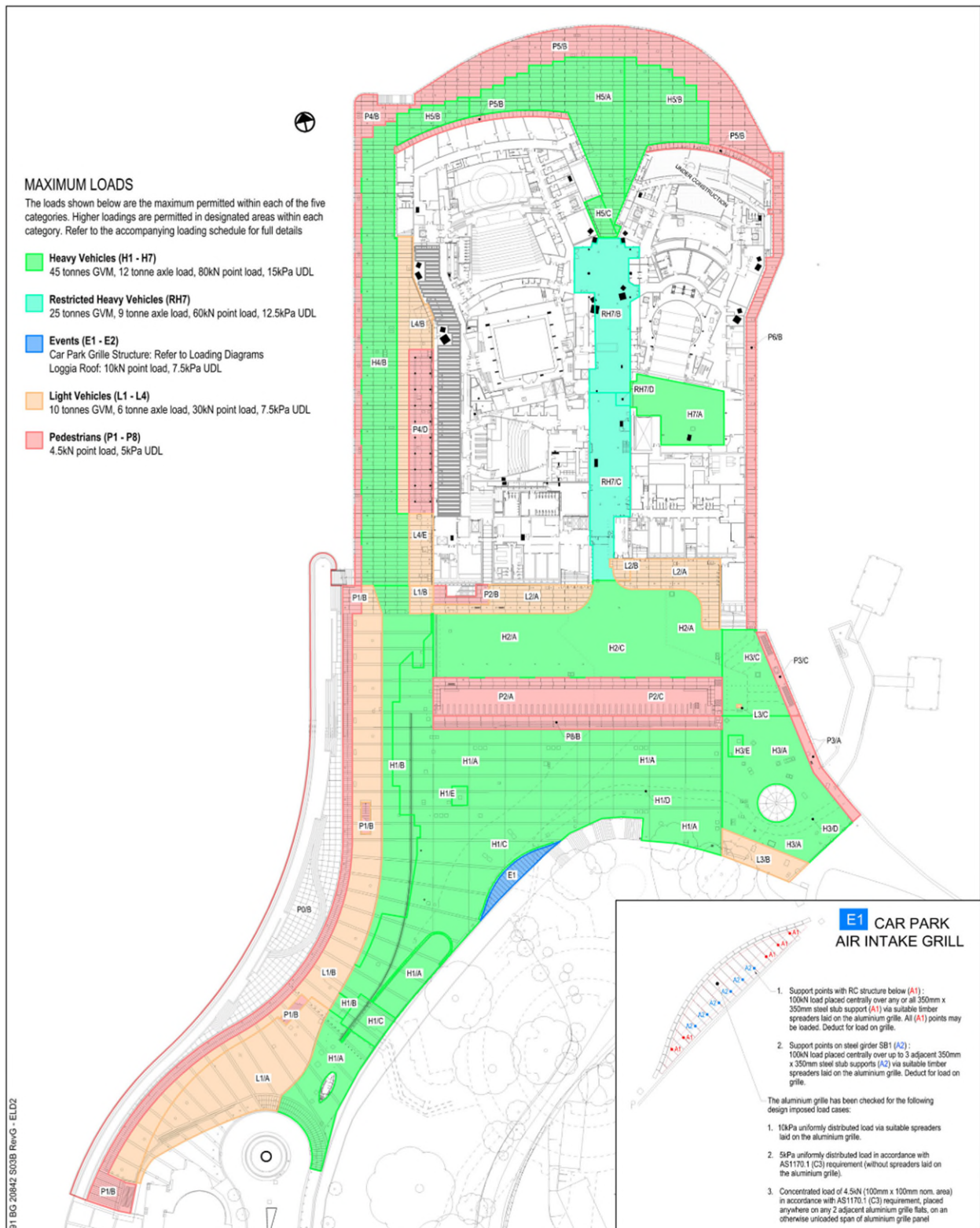


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## 5.7.2 Event Loading Diagram –External/ Internal Areas



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 Revised April 2019





### 5.7.3 Event Loading Diagram – Loading Schedule

Zone		Underlying structure and surfacing/finishes	Arup M.Cook – Rev 1. 4 September 2017						
H – Heavy Vehicle Loading			Vehicle Mass (t)	Axle Load (t)	Wheel Load (t)	Point Load (kN)	UDL (kPa)	Patch Load (kPa)	Comments
H1		Forecourt	45	12	6	80	15		
		<i>Finishes: Granite Setts/Calca Bands (bedded)</i>							
	A	Slab on ground	60	12	6	100	30	150^	^Crane outrigger pad
	B	Lower Concourse roof structure*	45	12	6	80	15		
	C	VAPS roof structure*	45	12	6	100	15		
	D	Bennelong Drain structure*	45	12	6	100	15		
	E	HV pit structure*	45	12	6	100	15		
	F	Misc. Pits and gatic covers	45	12	6	100	15		Class D Covers
		<i>*overlay by 200mm thk slab</i>							
H2		Vehicle Concourse	45	12	6	80	15		
		<i>Finishes: Asphalt</i>							
	A	Slab on ground	60	12	6	100	30	150^	^Crane outrigger pad
	C	VAPS roof structure	45	12	6	80	15		
H3		Eastern Forecourt	45	12	6	80	15		
		<i>Finishes: Asphalt</i>							
	A	Slab on ground	45	12	6	80	30	150^	^Crane outrigger pad
	C	VAPS roof and plenum structures	45	12	6	80	15		
	D	Bennelong Drain structure	45	12	6	80	15		
	E	HV pit structure	45	12	6	80	15		
H4		Western Broadwalk	45	12	6	60	15		
		<i>Finishes: Precast pavers Type HT (spanning)</i>							
	B	Western Broadwalk structure	45	12	6	100	15		60 tonne GVM crane – subject to condition inspection
H5		Northern Broadwalk	45	12	6	60	15		
		<i>Finishes: Precast pavers Type HT (spanning)</i>							
	A	Slab on ground	60	12	6	100	15		
	B	Northern Broadwalk structure	45	12	6	100	15		No stopping zone. Subject to condition assessment.
	C	Duct roof structure							Structure loading capacity not calculated
	D	Blinding on ground	45	12	6	100	15		
H7		Scenery Dock	45	12	6	60	15	150^	^Crane outrigger pad
		<i>Finishes: Concrete</i>							
	A	Slab on ground	45	12	6	60	15	150^	^Crane outrigger pad
RH – Restricted Heavy Vehicle Loading			Vehicle Mass (t)	Axle Load (t)	Wheel Load (t)	Point Load (kN)	UDL (kPa)	Patch Load (kPa)	Comments
RH7		Central Passage and Scenery Dock	25	9	6	60	12.5		
		<i>Finishes: Concrete</i>							
	B	Central Passage (N) floor structure	25	9	6	60	12.5		12 tonne axle loads subject to Engineers approval
	C	Central Passage (S) floor structure	25	9	6	60	12.5		12 tonne axle loads subject to Engineers approval
	D	Gatic Covers to Scenery Dock	25	9	4.5	45	10		Gatic support beams restrict load capacity
E – Special Event Loading			Vehicle Mass (t)	Axle Load (t)	Wheel Load (t)	Point Load (kN)	UDL (kPa)	Patch Load (kPa)	Comments
E1		Carpark Air Shaft Grille	–	–	–	4.5	5		
		<i>Finishes: Aluminium Grilles</i>	–	–	–	4.5	5		
		VAPS Car Park Air Grille structure	–	–	–	100**	10**		**Refer load diagram for detailed requirements
E2		Podium –Loggia Roof	–	–	–	10	7.5		
		<i>Finishes: Precast pavers Type HP (spanning)</i>	–	–	–	10	7.5		
	B	Podium –Loggia Roof structure	–	–	–	10	7.5		
L – Light Vehicle Loading			Vehicle Mass (t)	Axle Load (t)	Wheel Load (t)	Point Load (kN)	UDL (kPa)	Patch Load (kPa)	Comments
L1		Forecourt	10	6	3	30	10		
		<i>Finishes: Granite Setts/Calca Bands (bedded)</i>	10	6	3	30	10		Setts/bedding in poor condition
	A	Slab on ground	28	9	4.5	60	20		
	B	Lower Concourse roof structure	10	6	3	30	10		
L2		Vehicle Concourse	10	6	3	30	7.5		
		<i>Finishes: Precast pavers Type P/T (spanning)</i>	10	6	3	30	7.5		Paver and support type not verified
	A	Slab on ground	60	12	6	100	60		
	B	Central Passage floor structure	28	9	6	80	15		Structure loading capacity not calculated
	C	VAPS roof structure	45	12	6	80	15		
L3		Eastern Forecourt	10	6	3	30	10		
		<i>Finishes: Asphalt</i>							
	B	Substation roof structure	10	6	3	30	10		Structure loading capacity not calculated
	C	VAPS substation access hatch	10	6	3	30	10		Hatch thought to be Class A or B – not known.
L4		Western Broadwalk	10	6	3	30	10		
		<i>Finishes: Precast pavers Type P/T (spanning)</i>	10	6	3	30	7.5		Paver and support type not verified
	B	Western Broadwalk structure	10	6	3	30	7.5		Structure loading capacity subject to condition inspection
	E	Western Foyers structure	25	9	4.5	45	12.5		



P – Pedestrian Loading		Vehicle Mass (t)	Axle Load (t)	Wheel Load (t)	Point Load (kN)	UDL (kPa)	Patch Load (kPa)	Comments
P0	Lower Concourse				4.5	5		
	<i>Finishes: Calca Pavers (spanning)</i>				4.5	5		
	B Lower Concourse floor structure							Structure loading capacity not calculated
P1	Forecourt				4.5	5		
	<i>Finishes: Calca Pavers (bedded)</i>				4.5	5		
	B Lower Concourse roof structure							Structure loading capacity not calculated
P2	Vehicle Concourse				4.5	5		
	<i>Finishes: Precast pavers Type P (spanning)</i>				4.5	5		
	A Slab on ground				80	15		
	B Lower Concourse roof structure							Structure loading capacity not calculated
P3	Eastern Forecourt				4.5	5		
	<i>Finishes: Asphalt/Air Grilles</i>				4.5	5		Governed by Air Grilles
	A Slab on ground				30	5		Surcharge restricted adjacent to Sea Wall
	C VAPS Plenum structure				80	15		
P4	Western Broadwalk				4.5	5		
	<i>Finishes: Precast pavers Type P (spanning)</i>				4.5	5		Governed by Pedestrian type pavers under Loggia
	B Western Broadwalk structure							Structure loading capacity subject to condition inspection
	D Colonnade structure							Structure loading capacity not calculated
P5	Northern Broadwalk				4.5	5		
	<i>Finishes: Precast pavers Type P (spanning)</i>				4.5	5		Pavers have 8 plinths – may be HT
	B Northern Broadwalk structure							Structure loading capacity subject to condition inspection
P6	Eastern Broadwalk				4.5	5		
	<i>Finishes: Precast pavers Type P (spanning)</i>				4.5	5		
	B Eastern Broadwalk structure							Structure loading capacity subject to condition inspection
P8	Podium	3	1.6	0.8	4.5	5		3 tonne GVM as per AECOM advice
	<i>Finishes: Precast pavers Type P (spanning)</i>	3	1.6	0.8	4.5	5		Subject to adequate support of pavers/treads
	B Podium structures							Structure loading capacity not calculated

Notes: Type P = Pedestrian Bearing Slab: 6 support plinths (corners and mid-side)  
 Type HP = (Heavy) Pedestrian Bearing Slab: (Loggia Roof)  
 Type T = Traffic Bearing Slab: 6 support plinths (corners and mid-side)  
 Type HT = (Heavy) Traffic Bearing Slab: 8 support plinths (corners and side 1/3 points)

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## 5.8 Site Handover

Sydney Opera House will undertake a dilapidation report of all outdoor areas the day before your bump in. Any existing damage to the space will be recorded, providing a baseline for assessing the condition of the venue after the event.

At the commencement of bump in, a site inspection will be held between you and a Sydney Opera House representative to agree on the condition of the area and hand the site over to the event. The day after the bump out, the area will again be assessed for any damage. The cost of the dilapidation report and any repair costs will be passed onto the Hirer.



## 6 Environmental Management

It is important to consider the potential environmental and social impacts of your event. Apply sustainability principles to reduce your event's energy and resource use as much as possible.

### 6.1 Sustainable Event Management

The **SOH Environmental Action Plan 2020-23 (EAP)** outlines Sydney Opera House's commitment to Sustainability. We believe that to achieve an enduring contribution to our culture and society and to maintain economic viability, we must live responsibly within our environment, considering both current and future generations. Managing outdoor events in line with our environmental goals is important for achieving the targets and objectives set out in the EAP.

Please consider implementing environmentally sustainable options and initiatives to directly link to the Plan.

### 6.2 Environmental Plan Goals

The Sydney Opera House is committed to embedding sustainability across the organisation in order to hold itself the highest standard of conserving natural resources, minimising waste and protecting the natural environment.

This commitment is reflected in our fourth **EAP**. The plan sets out ambitious goals ahead of our 50<sup>th</sup> anniversary in 2023 that will ensure that SOH continues to lead by example in sustainability and inspire positive change in our community.

The goals include achieving Sustainable Event Management Certification (ISO 20121) for our events, performances, and festivals; eliminating single-use plastic packaging from all our venues and restaurants; and implementing a pathway to becoming climate-positive.

## Sydney Opera House Goals 2020–23





## 6.3 Cleaning and Waste Management

### 6.3.1 Cleaning

Sydney Opera House Building Operations will provide cleaning services for your event through our cleaning contractor. An estimate of charges will be provided on receipt of all event details.

We strongly encourage sustainable event practices. All cleaning products should consider where the product will end up after use.

### 6.3.2 Waste Management

Sydney Opera House will manage the waste generated during your event. This service will be supplied by Building Operations at your cost. Prior to your event, you will be given the option to recycle waste into the streams indicated in **Waste Streams**. At a minimum, you must arrange for the separation of general waste and mixed (co-mingled) recycling and follow instructions from Building Operations on the process for emptying bins.

It is your responsibility to manage and dispose of any other waste that is generated. Building Operations can provide this service to you at an additional cost.

We strongly encourage sustainable event practices. All event products used across the performance, including food and beverage, retail and audience giveaways should consider where the product will end up after use. Recyclable, certified compostable, reusable, and sustainable packaging is always preferred, in order to divert waste from landfill. Provisions should be made for rubbish bins in the event layout, as well as a back of house bin compound as required.

Audience giveaways need to be discussed and approved by SOH.

Waste will be recycled and disposed of according to Sydney Opera House's waste management practices. General waste will be separated from recycling items to avoid contamination of recycling streams. Improper disposal of waste can lead to contamination of recycling, increasing waste to landfill. Labelled recycling bins provide patrons with the option to sort waste at your event.



### 6.3.3 Waste Streams

Waste Stream	Bin facilities available to Hirer	Event Requirement
<b>Mixed recycling (co-mingled) including polystyrene</b>	Yellow lid bins	<p><b>Required waste stream</b></p> <p>Includes aerosol cans, juice / milk cartons, glass bottles, plastic bottles, metal cans / lids.</p> <p>Mixed recycling should be collected in bins without liners. Black plastic bags ARE NOT to be used to collect mixed recycling. The waste collection company will not collect recycling in black plastic and it will be sent to landfill.</p>
<b>Container Deposit Scheme</b>	White lid bins	<p>Plastic bottles and containers</p> <p>Glass bottles and jar</p> <p>Aluminium cans</p> <p>Items will display a 10c symbol on label.</p>
<b>Paper</b>	Blue lid bins	<p>Small events: paper to be disposed of in co-mingled bins.</p> <p>Large events: blue lid bins for paper are to be provided.</p>
<b>Cardboard</b>	Blue lid bins	<p>Small events: cardboard to be disposed of in co-mingled bins.</p> <p>Large events: blue lid bins for cardboard are to be provided.</p>
<b>Food &amp; Compostable take away packaging</b>	Maroon bins	<p>Separate food waste from other waste streams through colour coded bins. All compostable take away food packaging must be disposed of in the food waste bin.</p>
<b>Cooking oil (if use is approved)</b>		<p>Waste oil MUST NOT be poured down sinks or drains. Hirers are responsible for the safe disposal of waste oil, which must be transported off site.</p> <p>The Hirer must retain disposal receipts and provide to Sydney Opera House upon request.</p>
<b>Paint wash bay</b>		<p>Paint washroom located off Central Passage inside Sydney Opera House.</p> <p>If paint wash bay is not used, all paint waste must be removed off-site.</p> <p>Paint MUST NOT be poured down drains, sinks, gutters, or stormwater drains.</p> <p>No painting is to be done on or near granite or other building surfaces.</p> <p>Prevent spills / leaks and clean up spills.</p> <p>No oil-based paints are allowed.</p> <p>Provide an SDS of all chemicals used onsite.</p> <p>Keep track of paint waste and keep disposal receipts.</p>
<b>Light bulbs</b>		<p>Includes fluorescent tubes and light globes.</p> <p>Separate light bulbs from other waste streams.</p>
<b>Toner</b>	Toner boxes	<p>Separate toner from other waste streams.</p>
<b>Small e-waste (batteries)</b>	Battery bins	<p>Place batteries in battery bins in Central Passage.</p>
<b>Large e-waste</b>		<p>Separate large e-waste from other waste streams and bins located in Central Passage.</p>



### **6.3.4 Reporting and Compliance**

The processes described in this section are necessary to help achieve compliance with the waste management requirements of our DA.

The cleaning and waste management outcomes of your event are captured in the reporting process managed by our Building Operations team.

## **6.4 Efficient and Responsible Use of Resources**

### **6.4.1 Energy**

Events must strive to reduce energy use. Consider implementing for your event:

- Energy efficient equipment and lighting;
- Using lighting control systems which efficiently manage electricity use;
- Generators using biofuels from sustainable sources;
- Portable renewable energy generators to power stalls or part of the event (solar and wind) and;
- Turning off equipment and lighting when not in use

### **6.4.2 Water**

Increase water efficiency through:

- Using water efficient fittings, equipment, and appliances;
- Metering event water use;
- Protecting all stormwater drains, gutters and waterways from event produced liquids, oils, grease, or chemicals run off and spills;);
- Capture and recycle systems to take event water offsite for reuse (where appropriate);
- Turning off taps connected to water equipment and appliances when not in use; and
- Training event staff in water efficient practices (when they are responsible for water using equipment, appliances and or activities).

### **6.4.3 Sustainable Materials**

Good purchasing decisions ensure materials are sourced responsibly, can minimise event waste and the impact on the environment. Purchasing materials for events should consider the following:

- Products that have limited packaging;
- Requesting that suppliers reduce packaging or have a return scheme after use
- Products that can be reused during the event (e.g., drinkware);
- Products which can be recycled or repurposed after use;
- Products with a high percentage of recycled content;
- Products that support local business;
- Locally produced products to minimise transport footprint; and
- Products from certifiable sustainable and renewable sources;





## 6.5 Waste Less, Recycle More

Recycle stations will be provided to separate waste in accordance with SOH's EAP. An overview of separation of waste stream is as follows:

- Glass
- Organic waste (including Food Donation)
- Cardboard packaging and office paper
- Wax cardboard boxes
- Cooking oil
- Comingled recyclables (cans, bottles, drink containers etc.)
- Batteries and e-waste (including mobile phones)
- Polystyrene boxes
- Lighting (fluorescent tubes)

### 6.5.1 Excessive Food Waste

Large amounts of waste, including food waste, is generated from food and beverage activities during events. Minimise wastage of products and unnecessary generation of waste by:

- Monitoring waste volumes and identifying issues;
- Discouraging wastage of food through awareness programs; and
- Establishing connections with surplus food collection services.

### 6.5.2 Reduce Single-use Plastic

The Opera House is committed eliminating single-use plastic on site by 2023. Plastic items including plastic bags, plastic straws and balloons are not permitted on site. Events should provide alternatives for single use items; including cable ties, drinkware, food and beverage packaging / cutlery, promotional material, and audience giveaway items. Audiences should be encouraged to bring refillable water containers and provide water fountains to avoid use of single use plastic bottles.

### 6.5.3 Balloons and Confetti

Releasing balloons inflated with a gas into the air is harmful to the environment and an offence under the ***Protection of the Environment Operations Act 1997 No 156 section 146E***.

The release or use of balloons is not permitted under any circumstances. Confetti is also not permitted at outdoor events due to the risk posed to Harbour waters.

### 6.5.4 Sustainable Packaging

All Food & Beverage packaging must meet AS4736 *Biodegradable Plastics: biodegradable plastics suitable for composting and other microbial treatment*.

Events must use packing with minimal or no impact to the environment, where possible, including:

- Products with minimal or no packaging needs;
- Using collapsible reusable crates to transport event material;
- Packaging made from recycled material;



- Packaging produced from certified renewable resources;
- Compostable (and deemed accepted by SOH waste service provider); and
- Packaging which can be reused.

“Packaging” includes but is not limited to:

- Food and beverage: drinkware, utensils, plates, take away containers and plates, refresher towels and napkins;
- Retail: customer facing packaging; and
- Transportation: packaging for transport.

### 6.5.5 Reduce Paper

Events should develop a strategy to reduce the use of printed marketing material, including posters, pamphlets, ‘what’s on’ guides and seat drops. This reduces paper use and prevents additional litter.

Paper stock use for marketing collateral and promotion is recommended to contain recycled content and be Forest Stewardship Council (FSC) certified where possible.



## 6.6 Environmental Risk Management

Environmental Risks must be addressed in your event risk assessment. You should document:

- Environmental assessment of the event’s activities;
- Possible negative impacts (risks) to the natural environment; and
- Management actions implemented to reduce the chance of that risk occurring.

You should consider and address any possible pollution sources and transport avenues such as how pollutants are transported into the environment.



Environmental pollution incidents should be reported to Sydney Opera House in accordance with the *Protection of the Environment Operations Act 1997*. SOH is responsible for reporting all significant incidents to the Environment Protection Authority (EPA) and other regulatory authorities.

A record of how event staff responded to the incident must be recorded in detail. Any incidents or near misses are also to be entered into the Sydney Opera House Incident Reporting System.

### **6.6.1 Pollution of Waterways**

Due to the sensitive location of the Sydney Opera House, events must be particularly careful not to dispose of harmful materials and or liquids which could cause pollution to waterways.

### **6.6.2 Cleaning**

When using water or products for cleaning, the Sydney Opera House Cleaning Guidelines must be followed. Low impact cleaning protects the building fabric, materials, environment and health and safety.

Compliance with SOH Cleaning Guidelines includes, but is not limited to the following summarised conditions:

- Maintaining a record of all chemicals stored on site (Chemalert register).
- Corrosive chemicals such as bleach are not permitted on site for cleaning.
- All chemicals on site approved by SOH prior to use
- No chemical used or mixed near stormwater drains.
- Cleaning procedures, Work Method Statements, Safety Data Sheets and Disposal Plans should be provided prior to entry on site;
- 100% staff trained in the storage, use and handling of chemicals.
- Use Good Environmental Choice Australia (GECA) accredited products;
- Clean spills or report immediately if additional resources from SOH required;
- Establish processes and signage for proper disposal of liquids from cleaning machines;
- Track waste and keep disposal receipts; and
- Provide training to operators and staff.

All disposal of chemicals must be undertaken in accordance with legislative requirements and by an EPA licensed operator.

### **6.6.3 Outdoor Food Preparation**

To prevent oil and grease used in temporary food stalls and food carts from spilling onto outdoor surfaces and into stormwater while in use or while being transported from storage:

- Use only Sydney Opera House authorised catering vendors who are reputable operators and are required to operate and maintain a compliant food preparation process;
- Ensure clean and maintained food preparation spaces;
- Provide secure storage for cooking and waste oils and ensure their appropriate collection and removal from site;



- Contain and clean spills in a timely fashion;
- Provide signage to advise food preparation staff of proper handling and disposal of oil; and
- In general, comply with **4.5.4 Food and Beverages on Sydney Opera House Surfaces.**

Dumping of oils and grease into the sewer system is not permitted.

#### **6.6.4 Temporary Toilets**

To prevent portable toilets from causing overflow from the sewerage system to the stormwater system or runoff directly into the stormwater system during cleaning or pump out:

- Select a competent operator to manage the cleaning of toilets;
- Develop a contingency plan in place to manage toilets / blockages during events;
- Locate toilets away from Harbour's edge and Broadwalk as far as practicable;
- Implement additional controls and contingency processes where toilets must be on the Harbour edge or on the Broadwalk;
- Connect toilets to the sewer by licenced plumbers, where possible;
- Documented work methods;
- Seek SOH approval for any toilets not connected to sewer (e.g. Backstage units);
- Arrange for a pump out truck on standby during your event; and
- Arrange for a plumber onsite during your event to address issues as a contingency.

#### **6.6.5 Fuel**

Mobile equipment such as generators and machinery require the use of fuel. To prevent fuel spills into stormwater from occurring during operation, refuelling, or decanting, and to prevent fuel and chemicals from leaking while in storage:

- Do not store fuel onsite;
- Develop and implement processes for the storage and handling of fuel and chemicals;
- Set up small amounts in temporary storage in a secure location;
- Undertake decanting / mixing / transfer of chemicals away from drains / stormwater / Broadwalk / Harbour's edge;
- Detail the quantity, location and controls around event equipment requiring fuel;
- Place controls and bunding under generators and static equipment;
- Provide Work Method Statements to control activities using fuel and chemicals; and
- Clean up spills immediately and notify EPRG (dial 2 from an in house phone) for spill response assistance.

#### **6.6.6 Litter**

- Small Items

Littering infringements during events can be caused by small items, such as cigarette butts, food scraps, fireworks, golf balls, tennis balls and other litter from patrons. Some of these items can enter cracks between granite slabs, then pass into the stormwater system and the Harbour. To mitigate this risk:



- Allow for bins with appropriate capacity, lids, location, and signage;
  - Arrange for timely collection of food and litter;
  - Collect all fireworks residue; and
  - Establish a designated smoking area and encourage proper disposal of cigarette butts where smoking is permitted.
- Large Items
    - The risk with large items, such as outdoor furniture, is their potential to litter the Harbour. To mitigate this:
    - Use appropriate furniture that is not likely to be picked up and thrown, and
    - Ensure that furniture is appropriately secured.

### 6.6.7 Air Quality

- Exhaust emissions
  - Exhaust emissions from trucks / generators / equipment can affect the air quality on site. You must:
  - Ensure equipment is properly maintained and operated; and
  - Remove smoky vehicles from site unless they can be repaired.

For further information on air quality and details surrounding bushfire smoke, please refer to **8 Risk Management & Safety** of this document.
- Toilet Odours
  - Temporary toilet pump out can cause undesirable odours on site. You must:
  - Choose locations where sewer connections for temporary toilets are available; and
  - Use a reliable truck / pump company that can guarantee no odour.
- Cooking Fumes
  - Temporary outdoor food preparation can be a source of cooking fumes. You must:
  - Establish kitchens with exhaust extraction;
  - Locate exhausts which will likely be smoky away from patrons and nearby residents; and
  - Generally, comply with **4.5 Food and Beverage Services** when cooking outdoors.
- Noise and Vibration
  - Noise control and regulation is detailed in **4.2 Acoustic Monitoring**.

## 6.7 Inspiring Positive Change

Embedding sustainability in our business is one of the focus areas of the EAP. As a prominent icon in a sensitive marine environment, Sydney Opera House seeks to actively manage environmental and reputational risks through developing systems, processes, and training to ensure that managing risks to the environment is embedded in the way we operate.



### **6.7.1 Accountability**

We encourage you to report on the sustainability outcomes of your event through metrics such as financial and social co-benefits. These could include time saving and process efficiencies measured during your event.

### **6.7.2 Skills and Training**

We encourage you to develop an environmental training strategy. This would include a statement of competencies and behaviours required for your event staff to address environmental risks and environmental sustainability opportunities.

### **6.7.3 Awareness and Engagement**

We encourage you to develop a staff awareness and engagement strategy. This would include a recognition program to support sustainable behaviours by your staff.





## 7 Emergency Management & Security

### 7.1 Emergency & Security Management Plan

Our staff will work with you to ensure all appropriate safety and security measures are implemented for the duration of your event.

In the event of an emergency onsite, the Sydney Opera House Emergency Management and Business Recovery Plan would be activated, under the control of the Sydney Opera House Emergency Planning and Response Group (EPRG) and / or external Emergency Services.

At all times, Sydney Opera House remains the controller of the site and our Emergency Planning and Response Group should be contacted first in an emergency.

- Phone: **+61 2 9250 7200**

Sydney Opera House EPRG team will develop the evacuation plan for your event once site plans have been received.

### 7.2 Event Control

Sydney Opera House establishes an event control room for all major outdoor events. The Hirer must have a representative in the control room along with Sydney Opera House security and event operations.

### 7.3 Emergencies

To report any emergencies when working outside the Sydney Opera House (e.g. fire, medical assistance, gas leak, fuel spills, etc.):

- Report directly to either the SOH Production Manager, Site Manager, Event Safety Officer, or on-site security personnel immediately: or
- Call **9250 7200** from any mobile phone. You will be connected to Sydney Opera House Security. Tell the Security Officer who you are, where you are and the type of emergency and follow the Security Officers instructions.

### 7.4 Evacuation

#### 7.4.1 Bump-in, Construction, and Bump-out Phases

In the event that the SOH is evacuated, an audible warning system extended out to the FCT will alert you to an emergency. When you hear the warning system, listen carefully to the Chief Warden's instructions that will follow.

**Alert tone:** "beep, beep, beep".

*Be aware we are investigating a possible emergency. Stand by and follow the instructions from the Chief Warden or SOH Site Manager.*

**Evacuate tone:** "whoop, whoop, whoop".

Follow instructions from the Area Warden or SOH Site Manager.

Evacuation Assembly Points	
Staff, contractors, and performers	Forecourt East
Patrons and visitors	Forecourt West
Alternate assembly points depending on forecourt use	Refer to Emergency Planning for the event



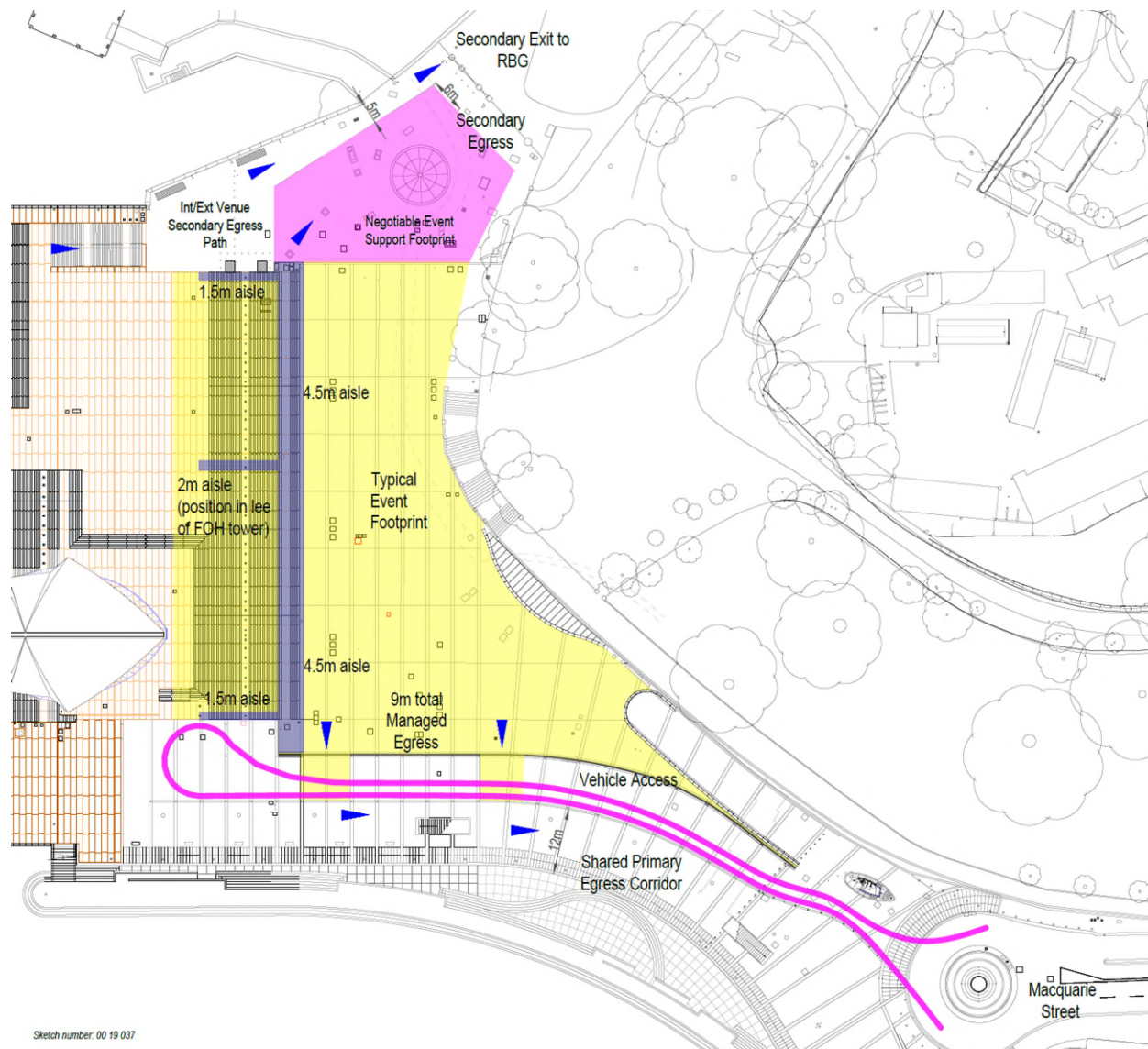
## 7.4.2 Show or Event Phase

Every event must develop a show stop procedure. This will need to align with the SOH Emergency Management Plans.

## 7.5 Forecourt Egress

The following minimum conditions apply to all events on the Forecourt:

- Access to the Royal Botanic Garden (RBG) is required for emergency egress for all events. A minimum 6 metres clear exit width from within the event site is to be provided from the east area of the Forecourt into the RBG;
- The main road width must not be greater than two lanes and must not reduce the egress width on the western pavement (from the edge of the Lower Concourse to the crowd control barriers) to below 12 metres; and
- There will be a designated crossing point where the majority of patrons will exit. This point must not be less than 9 metres in total width.





## 7.6 Security Services

All security required for an Event will be determined and arranged by SOH in consultation with your requirements.

The cost of security arranged by SOH will form part of the Venue Charges.

Hirers are responsible for securing their own property and you must ensure that your Personnel follow directions which may be given by SOH's security officers in relation to safety and security matters.

All security concerns should be brought promptly to SOH's attention.

Any requirements to engage with established close personal protection guards for artists or VIPs attending the site must be discussed in advance of your event.

## 7.7 Security Requirements and User Pays Police (UPP)

Sydney Opera House engages User Pays Police (UPP) during certain peak periods and events. Their role is to provide high visibility policing to the whole of the Sydney Opera House site.

EPRG will assess the required staffing levels for an event and will provide a security staffing plan as soon as a site plan has been drafted and EPRG briefed on the specifics of the event.

EPRG will advise Sydney Opera House Event Operations team of the required security overlay for an event. This will include security and police numbers, along with any additional security measures required to ensure a safe and secure event which takes into account the current environment.

Sydney Opera House will book the additional security and police required for an event. This cost will be passed onto the Hirer.

## 7.8 Lighting

Emergency lighting towers must be placed around the site for any event operating during night time hours, for performances and bump in / out.

Any lighting associated with events must not cause adverse impact on the area surrounding the site. Light spill from the site to neighbouring areas, including across the Harbour and commercial tenancies must be closely controlled and monitored. This is a condition of our government approval to stage outdoor events. Operating procedures of any emergency lighting tower must be included in the Emergency Management Plan.

Outdoor lighting must comply with, where relevant, AS / NZ1158.3 Lighting for roads and public spaces Pedestrian area (Category P) lighting – Performance and design requirement and AS 4282 Control of the Obtrusive Effects of Outdoor Lighting.

## 7.9 Security Bag Checks

All patrons must present their bags and personal belongings for inspection by Sydney Opera House security staff prior to entering any venue as a safety precaution and condition of entry.

Any decision not to check patrons' bags is at the discretion of Sydney Opera House Head of Security or their representative.

Patrons may also pass through electronic screening (if required).



## 7.10 Media Management

Should an adverse incident occur, public messaging will follow the direction of Sydney Opera House External Affairs.



## 8 Risk Management & Safety

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### 8.1 Legal Obligations

In NSW, if you conduct a business or undertaking, you are legally obliged to manage certain risks. In particular, you must:

- Identify and eliminate risks to health and safety, or, if that is not practicable, then minimise those risks so far as is reasonably practicable; and
- Ensure the health and safety of your own workers, AS WELL AS ensure that other workers' or persons' safety is not put at risk by work carried out as part of your business or undertaking.

Work health and safety obligations in NSW are non-transferable and concurrent. This means that:

- Each business or person with safety obligations must comply with their WHS requirements; and
- If more than one business or person has a duty under the law, then they must comply to the extent that they can influence or control the safety matter.

This Guide contains general information only and does not contain a complete statement of all risk management issues or your legal obligations. You should seek independent professional advice on your risk management obligations.

For more information, please contact your SOH Production Manager.

### 8.2 Information and Training

It is a requirement that all persons, including contractors and sub-contractors undertaking work onsite, complete a Sydney Opera House Site Induction prior to commencement of work or bump in. Site inductions can be completed online. Instructions for online access below. Face to face inductions can also be arranged through your SOH Production Manager if online access is unavailable or a face-to-face induction is preferred.

A face-to-face induction is conducted by an Event Safety Officer (ESO) prior to shift commencement. On completion of the induction, staff & hirers are required to sign-in on the Outdoor Events – Record of Site Safety Induction.

Inductions must be renewed every 12 months. Please check with your SOH Production Manager to identify the training you require.

Please also refer to section **8.4 Safety Plan for Outdoor Events** for further information on inductions.

#### 8.2.1 Online Site Safety Induction

Access to the online Site Safety Induction can be found at:  
<https://learning.sydneyoperahouse.com/>

To begin an online induction, click '**Create New Account**'

#### 8.2.2 Toolbox Talks and Shift Briefings

Toolbox talks must be completed as part of every shift briefing to discuss the risks of the shift. Hirers must ensure that all their workers attend the shift briefing and keep records of attendance.



Please also refer to section **8.4 Safety Plan for Outdoor Events** for further information on Toolbox Talks and briefings.

### **8.2.3 Site Access and Passes**

A single point of entry to the site will be identified and allow for controlled and secure access for all personnel.

Wristbands or accreditation passes are issued to all staff following induction. Personnel must wear the wrist band or accreditation pass so it is easily visible or be prepared to show it on request by security or event staff.

The wrist band or accreditation pass is only valid for the day of issue, and any staff without wrist band or accreditation pass will not be allowed onto the site.

Once workers have been inducted onto the site, then they only need to sign-in and receive the wristband or accreditation pass for each day.

Please also refer to section **8.4 Safety Plan for Outdoor Events** for further information on access, inductions, and personal accreditation.

### **8.2.4 SOH Code of Conduct**

SOH Code of Conduct outlines the expected behaviour and conduct for all personnel on site. All workers must abide by this code and will be asked to leave the site upon any non-compliance. The code is based on the following six key principles and provides guidelines for everyone's behaviour at SOH;

- We act with fairness, personal integrity, and honesty;
- We maintain a safe and healthy working environment;
- We have respect for others and maintain a fair and harmonious workplace;
- We value our customers and are committed to service excellence at all times;
- We work with economy and efficiency; and
- We act in the best interests of the Opera House.

To obtain a copy of the Code of Conduct, please contact your SOH Production Manager.

### **8.2.5 Smoking, Drugs and Alcohol**

- Designated smoking areas will need to be identified outside of Work Zones, and will be communicated during the toolbox briefing
- Consumption or being under the influence of drugs or alcohol is strictly prohibited whilst working at SOH.

## **8.3 Risk Management**

### **8.3.1 Risk Assessments and Safe Work Method Statements (SWMS)**

Risk Assessment is the term given to the overall process of risk identification, risk analysis and risk elimination or control. A Risk Assessment can help determine how severe a risk is, the effectiveness of existing control measures, action required to control the risk, and the urgency.

To enable hirers and resident, touring and other production companies using SOH premises to plan and undertake work in a safe manner, SOH has provided a Standard Site Risk Assessment as part of this document, which can be found in **Appendices**.





The Site Risk Assessment identifies the inherent risks, controls and responsibilities associated with the external areas. It does not include operational production or event specific risks that will vary from production to production or event.

Contractor and Hirer Risk Assessments and SWMS must be provided to and approved by the SOH Production Manager prior to the event.

- SOH and Hirer Risk Assessment, Production Schedule, Access Lists and Plans will be kept in the site shed for the duration of the event
- Due the volume of safety documentation, all other contractor documentation will be made available on request

Hirers must develop a Production Risk Assessment that takes into account the risks identified in the SOH Risk Assessment and any other foreseeable hazards and their controls associated with the bump in, set up, rehearsal, performance, stage management and bump out of the production or event.

The Production Risk Assessment identifies reasonably foreseeable hazards that arise from:

- Physical work environment;
- Equipment, materials, and substances used;
- Work tasks – How they are performed and managed; and
- Interaction of the above aspects.

The Draft Production Risk Assessment must be submitted to your SOH Production Manager no less 4 weeks prior to the set up or bump in date of all shows and events and where applicable must be in accordance with your agreement with the Sydney Opera House and relevant legislation, Australian Standards, Guidelines and Codes of Practice. A final risk assessment must be received two weeks prior to bump in.

In addition to a Risk Assessment, Hirers may be required by WHS legislation to develop and implement Safe Work Method Statements (SWMS) for high risk work and/or Safe Work Procedures (SWP).

A SWMS is a document that outlines the high risk work activities to be carried out, the hazards arising from these activities and the measures to be put in place to control the risks.

One SWMS can be used for work that involves multiple high risk work activities, for example a work activity that requires using powered mobile plant, working at heights of more than 2 metres and working adjacent to mobile plant.

A SWMS is not intended to be a procedure, but rather a tool to help supervisors and workers confirm and monitor the control measures for high risks required at the workplace.

For further clarification surrounding SWMS, please consult SOH Production Management.

### **8.3.2 Writing a Production Risk Assessment**

When developing the Production Risk Assessment, keep in mind the following:

- Document all high risks, such as working at heights, mobile plant, hazardous manual tasks, and hazardous chemicals being used;
- Include an initial risk rating (e.g. Low, Medium, High, Extreme) based upon the potential consequence and severity of the hazard, and then a final risk rating based on the implementation of the controls; and



- Identify the person who will be responsible to ensure that the agreed risk controls are in place and being followed.

### 8.3.3 Risk Assessment Timing

Timing	Action
4 Weeks before bump-in	Provide draft Production Risk Assessment for SOH consent to proceed
2 weeks before bump-in	Provide updated Production Risk Assessment to SOH (any variation is subject to SOH consent to proceed)
Consent to proceed is given based on final Risk Assessment	Distribute the Production Risk Assessment to all your workers (including sub-contractors and their employees or agents) and ensure all your workers are familiar with the contents

SOH can help Hirers prepare the Production Risk Assessment by providing relevant information about SOH site and procedures, however, Hirers are entirely responsible for its preparation and content. Production Manager receipt of a Production Risk Assessment does not indicate approval of the adequacy of its contents or consent to proceed.

A standard Production Risk Assessment example can be found in **Appendices** of this guide.

### 8.3.4 Incidents and Hazards

Sydney Opera House requires all workers to immediately report all hazards and incidents including near misses.

Following the report of an incident or hazard you must:

- Report any incident to the SOH Production Manager, Stage Manager or SOH Supervisor straight away and inform us of actions taken to eliminate or minimise it;
- Comply with requests from SOH staff to implement control measures;
- If the incident or hazard is severe, participate in and provide information for any subsequent investigation; and
- Serious incidents, such as fatalities, amputations, serious burns, spinal injuries, electric shock, fire, explosion and fall from height must be reported to the regulator, SafeWork NSW. SOH Event Safety will work with all relevant parties in determining reporting responsibility.



## 8.4 Safety Plan for Outdoor Events

The following sections outline the access process and requirements for each phase of the event;

### 8.4.1 Bump-In – Construction and Bump-Out – Dismantle

The 'Construction' and 'Dismantle' phases includes the erection and dismantling of structures, for example the stage and towers, high flow of truck traffic and the use of heavy plant and equipment such as cranes and forklifts. SOH has determined that this is equivalent to a "Construction Site" and the rules that would apply to such a site also apply here. For the duration of these phases, the Site Safety Rules and the following procedures apply for all personnel working on the site:

- During the main (High Risk) hard build phase of the bump in and out, all workers must have a NSW Construction Induction Card (White Card) or other states equivalent with them at all times. No white card, no site entry.
- Workers must show their White Card and high risk licenses upon site entry. This will be documented for SOH records.
- Tool box talk must be completed prior to the commencement of work every day.
- Visitors that don't have a white card during the High Risk Work Construction Phase must be escorted by SOH ESO, SM or delegate.
- During this phase of the event, all workers must wear High visibility vests and ankle-high leather/protective work boots with steel or composite toe cap protection and slip resistant soles at all times.
- Hard hats may also be required depending on the risk of the works being undertaken e.g. crane lifts. See **8.12 Working at Heights** for more details.

### 8.4.2 Bump-In – Production & Rehearsals

The 'Production' phase of the event follows the hard build. In this phase there is no Construction of stages or other high risk work and minimal use of mobile plant and equipment with the exception of forklifts for unloading road cases. The work is of a lower risk level with lighting, sound, and stage elements such as backline, special effects being installed. This phase also includes rehearsals and the assembly of low risk structures for example food and beverage outlets. During this phase the Site Safety Rules and the following procedures apply:

- Tool box talk to be completed at beginning of each day
- Workers NOT working on stage, must wear high visibility clothing or vests and ankle high leather/protective work boots with steel or composite toe cap protection and slip resistant soles. No open-toed shoes or thongs allowed.
- Additional PPE and restrictions may be required as directed by the Event Safety Officer or site management.

### 8.4.3 Event

In the 'Event' phase, all installation of equipment has been completed with only minor adjustments and deliveries made as required. During this phase the Site Safety Rules and the following procedures apply:

- Until the site opens to the public, controlled and secure site access will be provided via single point of entry for personnel.



- All Artists and their touring crew are inducted by the Stage Manager and provided with a wrist band or accreditation pass.
- All other Event Workers entering the site must complete a face-to-face induction conducted by the Event Safety Officer (ESO). On completion of the induction they are required to sign in on the Outdoor Events – record of Site Safety Induction.
- The wrist band or accreditation passes indicate the level of access the wearer has to sections of the event area. Event staff cannot enter an area without the correct access level.

## 8.5 Event Safety Officer (ESO)

The Sydney Opera House Event Safety Team has a number of Event Safety Officers who oversee the safety assurance for outdoor events. Our team has a focus on construction safety and public safety for events.

Our Event Safety Officers will oversee site and safety management. This includes delivering safety inductions, conducting workplace inspections, monitoring contractor safety performance, monitoring public safety, and consulting with our key stakeholders.

They assist with the event interface of the unique nature of our site, being a high-profile tourist destination with multiple venues and high vehicle and pedestrian traffic.

They proactively provide advice and assistance when problems arise and endeavour to resolve problems quickly and effectively.

At a minimum, our Event Safety Officers have a Certificate IV in Work Health and Safety. They have a range of safety experiences and backgrounds, including theatre, events, high risk environments, public safety, and construction. Please liaise with Event Operations for further information about our Event Safety Officers.

## 8.6 First Aid

Adequate First Aid facilities and qualified personnel must be provided for all phases of outdoor events.

The First Aid arrangements shall be documented in a Medical Management Plan provided by the First Aid provider and will vary depending on event factors such as audience size and profile, event duration, sale of alcohol, time of day and weather conditions. Some events may require paramedics to be stationed onsite.

All nominated First Aid providers to events at Sydney Opera House must be able to comply with the below requirements.

- Medical Risk Assessment developed in consultation with SOH
- Appropriately experienced staff for the event as identified in the RA. Experienced Paramedics, Registered Nurses and/or First Aiders with supplied registration and training qualifications, including security clearance and current Working with Children Check.
- Staff with First Aid experience working in large outdoor events
- Provision of sufficient resources to cover event capacity
- Provision of own first aid supplies, including comprehensive mobile first aid kits including oxygen and AEDs
- Provision of vehicle and/or appropriate outdoor set up for First Aid provision e.g., stretchers. (If a marquee is required, please advise contracting party or SOH as conditions apply to the installation of marquees on SOH land).



- Proactive approach to Event First Aid, conducting regular patrols of the site.
- Efficient and clear administration and communication channels with SOH. An event radio for communications during event will be provided.

Medical and First Aid personnel must be familiar with the event's Security Crowd & Risk Management Plan. In case of a more widespread incident or emergency, this plan will take precedence and the chain of command will defer to the Head of Emergency Planning & Response Group.

## 8.7 Compliance Requirements

### 8.7.1 National Construction Code (NCC)

Under the NCC classification, SOH is designated as a Class 9b building. Your event activities must comply with all provisions of the NCC for a Class 9b building. This also includes all temporary structures you may wish to erect on SOH site.

### 8.7.2 Personal Protective Equipment (PPE)

All personnel must wear job specific PPE as outlined in the Risk Assessment. This PPE includes but is not limited to;

- High visibility vest
- Ankle high leather/protective work boots with steel or composite toe cap protection and slip resistant soles
- Hard hat

### 8.7.3 Noise

All workers, including musicians, performers, and crew, must be protected from hearing damage that may potentially be caused by prolonged exposure to noise. Hirers are responsible for the provision of hearing protection for their workers and contractors.

### 8.7.4 Electrical Safety

All electrical equipment and temporary installations must comply with the **Work Health and Safety Regulation 2017 (NSW)**, Part 4.7 and Division 3, 4, 5, the Code of Practice "Managing electrical risks in the workplace".

All electrical wiring is to be installed in accordance with AS/NZS 3000, Electrical installations (known as the Australian/New Zealand Wiring Rules) and certified as safe by a qualified Electrician.

Electrical equipment must be inspected and tagged and comply with the Australian Standard for Safety inspection and testing of electrical equipment AS/NZS 3760. SOH can arrange the inspection and tagging if Hirers supply the equipment more than 48 hours before you need to use it. This will incur additional cost.

All cables must be secured in a cable tray or similar, suitable for outdoor use and with a load capacity suitable for their location on the site (consider pedestrian or vehicle traffic). Cabling must not be attached to barriers or structures that could transmit electricity if in contact with a damaged cord.

Residual Current Devices (RCDs) must be used where required including all handheld electrical appliances and tools.

All SOH mains supply of 50amps and above are not protected by RCD, as per the compliance requirements of AS / NZS 3000, Electrical installations. Incoming Hirers and



suppliers must ensure that their Risk Assessment addresses safe and appropriate controls for their plug-in equipment and operational requirements.

Double adaptors are not to be used under any circumstances.

All leads, plugs, etc. shall be protected from the weather and sealed to protect from hazards such as water or liquids or have an IP rating suitable for outdoor use.

Generators shall be located in a well ventilated, secure area away from the public.

All electrical items are subject to a spot check for compliance by SOH production staff or Event Safety Officers.

Stages must be earthed.

### 8.7.5 Hazardous Chemicals

Hazardous chemicals include flammable liquids, acids, gases, solvents, and dangerous goods. Please consult your SOH Production Manager for the SOH requirements for Hazardous Chemicals.

The following either have a strict approval processes and conditions of use, or are not permitted on SOH site:

- **Oil-based Paints and Solvents:** Hirers require SOH written approval to use oil-based paints and solvents. Hirers are responsible for taking all oil-based paints, residues, and cleaning materials off site for disposal at appropriately licensed waste management facilities;
- **Spray Painting:** Please arrange with your Production Manager and Building Operations a suitable location to spray paint as required.
- **Fibre Glassing:** Not permitted on SOH site.
- **Medium Density Fibreboard (MDF):** May be used at SOH, however, must not be CUT on site as it contains formaldehyde which is released in the dust created from cutting or sanding.
- Hirers shall provide Safety Data Sheets and complete a Risk Assessment for the use of any hazardous chemicals whilst on SOH site.
- Any Hazardous Chemicals must be approved by SOH Production Management prior to coming onto site.
- Storage of Hazardous Chemicals
  - Only essential hazardous chemicals can be brought onto SOH site.
  - All chemicals and liquids must be stored within spill containment devices.
  - Storage areas must have correct signage.
  - Cylinders must be stored upright and secured to prevent falling over.
  - LPG must be stored away from ignition sources.

## 8.8 Weather Conditions Management

Outdoor events always have a degree of uncertainty around weather conditions. There is no shelter for patrons attending a Forecourt event, so there will be exposure to the elements. Wind, heavy rain, heat, and thunderstorms may have the potential to delay or cancel an outdoor event.

Wind loads are generally higher on the Sydney Opera House site than other locations. A Wind Management Plan will need to be prepared for your event. This will be done in





consultation with the Opera House Production Manager, who can provide information and guidance.

You must also prepare a delay and cancellation policy. The person responsible for decision making in the case of inclement weather must be clearly identified. They will liaise with the Opera House Production Manager, Account Manager, and Head of Emergency Planning & Response Group to enact the plan.

Clear public messages need to be prepared to ensure consistent and accurate information is given to the public in the event of a delay or cancellation. Event advertising and ticketing information must advise ticket holders whether the event will proceed in the rain or other weather conditions.

Key points to consider:

- Depending on the season, conditions out on the granite can be very hot or cold. Please provide your staff with sunscreen and sun protection, adequate water supplies and PPE suitable for the weather conditions and allow for adequate breaks during extremely hot weather. Water is available for staff – please ask the site manager or Event Safety Officer if you need some.
- During wet weather conditions exercise care when handling or using electrical equipment.
- During windy conditions loose objects must be prevented from becoming airborne.
- Wind and lightning conditions are monitored by the SOH site manager or Event Safety Officer.

### **8.8.1 Inclement Weather and Wind Management Plans**

An Inclement Weather Plan details responses to weather events such as lightning and heavy rain across the Precinct.

A Wind Management Plan (WMP) details the actions to be taken in response to real time and forecast wind conditions for temporary structures. Infrastructure must be wind rated as per the relevant Design Certification and documented.

SOH has developed a WMP template in conjunction with Event Engineering Pty Ltd. This details specific actions to be followed at specific wind speeds. A template can be provided if required.

It is important that the relevant contact numbers for contactors are recorded in the WMP and their typical response times.

### **8.8.2 Site Wind Speed Zones (Terrain) Data**

The base Wind Speed zone for the Precinct is V30m/s:3s gust, expressed as V30m/s:3s. High wind areas are identified in **12.5 Outdoor Structures Design Specifications** and require that proposed infrastructure in these areas is assessed by a CPEng. in the design phase.

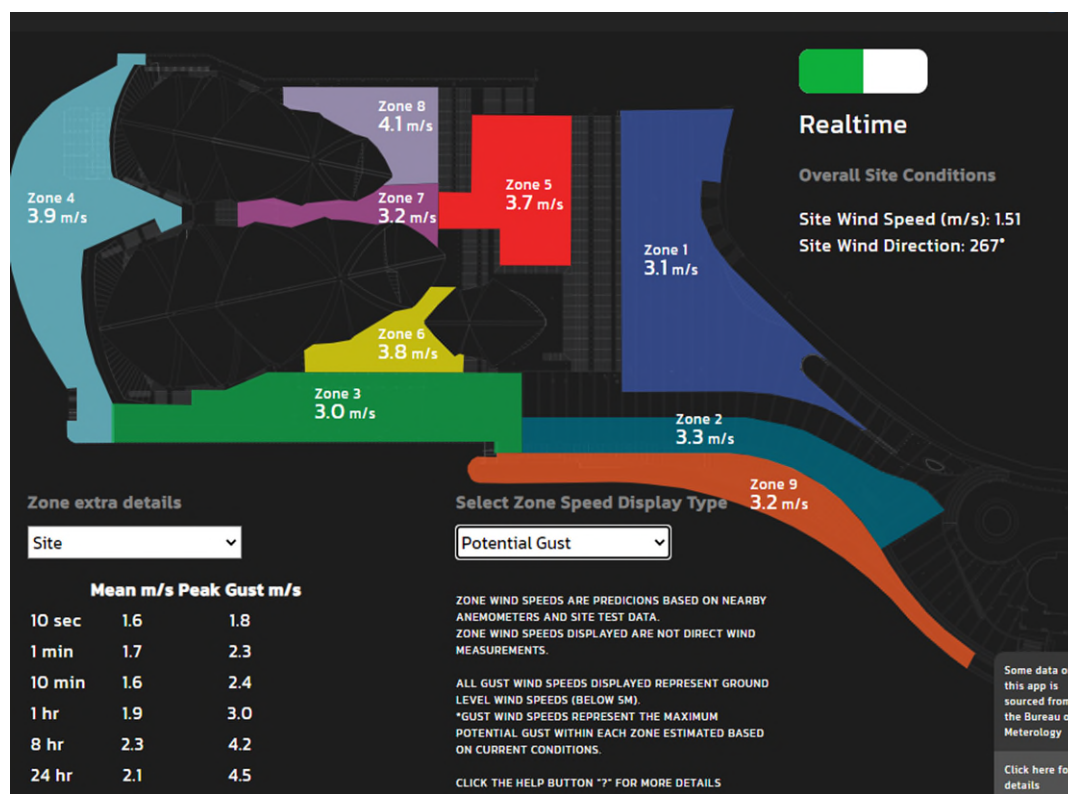
### **8.8.3 Wind Monitoring**

Due to the position & size of the Sydney Opera House, wind speed and direction can vary markedly from the Bureau of Meteorology (BOM) forecasts across the site.

To provide accurate as possible on-site readings we have access to site specific wind management software developed by CPP Wind Engineering Consultants in Sydney. Real-time data from an anemometer on site is combined with real time and forecast data from the BOM.



The interface is a website which can be accessed on any device.



It must be stressed that this only an aid to forecasting. Larger structures such as stages must have an anemometer fitted directly to the structure. This may also be a condition imposed by your CPEng. in the Design Certificate.

In the event of a forecast of extreme weather, the BOM must be contacted directly for expert advice on:

**(02) 9296 1546.**

#### 8.8.4 Bushfire Smoke

Poor air quality due to smoke from bushfires or nearby fires has a significant impact on human health. In the event of widespread bushfires and accompanying smoke affecting the Sydney CBD, a separate Air Quality Risk Assessment must be completed based on the concentration levels and the associated activity restrictions.

Please refer to the NSW Air Quality monitoring website at <https://www.dpie.nsw.gov.au/air-quality> for further guidance on Risk Assessment development.

#### 8.8.5 Air Contamination

Air contamination can also be caused by a gas release or local fires releasing hazardous smoke. In the event of local air contamination follow the direction of Fire and Rescue NSW and evacuate if necessary.

### 8.9 Fatigue

The Opera House has a duty to ensure the health and safety of all workers, patrons, partners, and visitors at the Opera House. As far as far as reasonably practicable and within legal limits, SOH will work with PCBUs, including business partners, contractors, and subcontractors to manage fatigue-related risk.



PCBUs that share a duty of care with SOH are responsible for following reasonable instruction in relation to hazard reporting, incident reporting, and safe work policies and procedures; having been trained or provided guidance in relation to fatigue risk management.

Hirer's Risk Assessments must include the management controls for fatigue. The Production Schedule must allow for all workers to take breaks or have more frequent breaks depending on the type of work or the environment they are working in, in order to manage fatigue.

## 8.10 Hot Works Permit

A Hot and Dusty Work Permit is required for any operation involving open flames, smoke or producing heat and/or sparks, whether internal or external to the Building. This includes, but is not limited to the following: Brazing, cutting, grinding, soldering, thawing pipe, torch-applied roofing, and welding.

Hot and Dusty Work Permits are issued by the Duty Fire Safety Officer. Please consult your Production Manager if you require a Hot and Dusty Work Permit.

## 8.11 High Risk Work

Any work meeting the **NSW WHS Regulation 2017** Part 4.5 definition of 'High Risk Work' must only be carried out by a person holding a High Risk Work Licence (unless that person is in training and under licensed and competent supervision). Workers in this instance must retain their licences for inspection, and SOH is required to sight licences before work can commence.

Relevant High Risk Work Licences include:

- Dogging, rigging and scaffolding work;
- Crane and Elevating Work Platform (EWP) operation; and
- Forklift operation.

## 8.12 Working at Heights

Under the **NSW WHS Regulation 2017** Part 4.4 Falls, a Person Conducting a Business or Undertaking (PCBU) must manage the risk to health and safety associated with a fall of a person from one level to another that is reasonably likely to cause injury. You must ensure that your risk assessment includes controls to ensure work is carried out in such a way that eliminates or controls the risk of injury from a fall.

The Risk Assessment must include:

- Provision of training in relation to the risks associated with working at height;
- Provision of Safe Work Procedures, safe sequencing of work and use of ladders, appropriate signage and permits;
- Wherever possible, provision of temporary work platforms;
- All work at height should be conducted by an authorised user with fall protection training;
- Ensure that the stage is kept clear while work is performed overhead, if this is not practicable workers must wear hard hats (Petzl helmets are accepted); and
- All tools used at height must be tethered.



- SOH promotes best practices of avoiding working at height wherever possible, and the mitigation of any requirements for this at the design phase.
- Designers should ensure the protection and guarding of any voids or openings.
- If work at heights is required then consider how the tasks can be completed safely with the use of fall protection such as temporary work platforms, guardrails, and scaffolding, and fall arrest systems if fall protection is not possible.

#### **8.12.1 Fall Arrest Emergency and Rescue Procedures**

If you use a fall arrest system as a control measure, you must establish emergency procedures, including rescue procedures, in relation to the use of the fall arrest system.

#### **8.12.2 Scaffolding**

All scaffolding must comply with Australian Standard AS/NZS 1576 Scaffolding and be erected and dismantled by competent persons. Scaffolding builds over 4 metres in height must be completed by a certified scaffolder.

Mobile scaffold wheel locks should be engaged before any person works on the scaffold. Before scaffolding is moved, all persons should exit the structure.

#### **8.12.3 Portable Ladders**

Portable ladders should only be used as a work platform for light work of short duration if other alternatives, such as scaffolding or elevated work platforms are not reasonably practicable. Ladders and the use of them must comply with the **SafeWork Code of Practice Managing the Risk of Falls at Workplaces**. Ladders must be well maintained and suitable for the work being undertaken.

Ladders must be held by a second person when in use or secured to the structure. Road cases are not to be used to stand on. Ladders can be provided from SOH if required.

Choose the right ladder for the job. The ladder should meet Australian standards and the load requirements of the job. An A-frame or extension ladder may be appropriate for some tasks, but a platform ladder is safer in the majority of tasks.

#### **8.12.4 Shipping Containers**

Work on shipping containers such as attaching scrim must only be completed from an EWP. If the top of a container needs to be accessed a suitable fall restraint system must be set up on the container and used by workers.

#### **8.12.5 Rigging**

All rigging must have engineering sign-off from a qualified rigger and must be detailed in the Risk Assessment.

### **8.13 Fire Retardants**

All sets must be built with materials that minimise the potential to cause a fire hazard and must be fire retarded. Drapes require manufacturers' certification, labelling or other documentation certifying use of a fire retardant material. You must provide SOH with copies of registered test certificates, proof of fire retarding or compliance with the provisions of the Australian Standards 1530 part 1 and part 3 prior to bump-in.

Combustible materials that cannot be properly treated with a fire retardant, such as foam rubber, polystyrene, dry flowers, and leaves, or sets with a high fire load such as multiple



cardboard boxes are required to be assessed and approved prior to bump in by SOH Fire Safety Manager.

## **8.14 Mobile Plant and Vehicles**

Mobile plant must be operated in accordance with ***NSW Code of Practice – Managing the risk of plant in the workplace.***

There shall be separate work areas from forklift and mobile plant travel paths where possible. Spotters may be required when moving plant around the site.

All vehicle drivers must carry valid and current Australian Driver's license or international approved equivalent and must always carry these licenses when driving onsite.

All vehicles access the SOH site via the gatehouse where they must wait until given authorisation to enter.

If the vehicle is moving outside the perimeter of the work zone it must be escorted by a spotter(s) wearing high visibility clothing or vest until the vehicle is inside the work zone behind the CCB fencing.

All mobile plant must be operated within the barricaded work zones unless escorted by an Event Safety Office or site management crew.

### **8.14.1 Elevated Work Platforms (EWPs)**

EWPs can only be operated by a qualified person holding a valid EWPA Yellow Card (VL, SL or BL type). Licence must be lodged with SOH prior to arrival.

Persons working on or underneath EWP's must also complete an in-house Induction to the SOH EWP machinery that outlines the operations of the EWP on site, PPE and other safety requirements including rescue procedures.

### **8.14.2 Forklifts**

The forklifts at Sydney Opera House are fitted with Fork Track technology and can only be started using a swipe card. Only authorised and licensed workers holding a current High Risk Work Licence – Forklift Operations are permitted to operate forklifts. Only electric forklifts can be used inside the building.

Please consult your SOH Production Manager for forklift access.

Forklifts for dedicated use on an outdoor event should be hired from an external supplier.

Forklifts operating in shared zones with pedestrians must be accompanied at all times by a spotter wearing a high visibility vest/clothing.

## **8.15 Crowd Control Barrier (CCB)**

CCB fencing will be installed along the roadway to separate the work zone from the public. To ensure integrity of barriers, staff can only access the site through designated entry point denoted by a red flag.

Security monitor the perimeter CCB fence at all times to ensure there are no unauthorised breeches.

Workers opening the CCB must close it immediately to prevent any security breaches by unauthorised persons.



## 8.16 Aerial and Stunt Performers

The following conditions must be complied with for performances involving aerial and/or stunt performers in addition to sections surrounding rigging:

- A detailed Risk Assessment of the performance must be provided that includes a rescue plan;
- Plan aerial performance sequences with appropriate rigging for the size of the performer(s) and the task to be completed;
- Include consideration of the need for crash mats, safety netting, appropriate emergency and contingency procedures;
- Provide detailed engineering calculations for potential shock and point loads on structures;
- Ensure performers are experienced and that the sequences are well rehearsed;
- Ensure establishment of exclusion zones; and
- An advanced rigger qualification is required to set up the aerial system, e.g., a winch. SOH can provide a rigger with these qualifications. Contact your SOH Production Manager if this is required. A competent rigger must regularly check the rigging during the show season.

## 8.17 Hazardous Manual Tasks

SOH has mandatory control measures for the management of hazardous manual tasks, including but not limited to:

- Where possible, scenery and equipment to be designed so it can be manoeuvred with mechanical lifting aids or hoists;
- Identification of rigging attachment points on all scenic elements that are rated and may be rigged to a hoist during the build process;
- Set / scenery build procedures;
- Weight labelling of all scenic elements over 20 kg, and;
- Storage of equipment at appropriate heights.

## 8.18 Water Safety

Life rings are located around the SOH site perimeter in case a person is to fall into the water. Advise SOH site manager or Event Safety Officer immediately so emergency services can be notified. On the western wall there are steps where people can be exited from the water.

Hirer must identify water risks and control methods.





## 9 Theatrical Elements and Special Effects

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All special effects are subject to an approval process and review by SOH Event Safety. All special effects with the exception of haze and flutter / streamer cannons require a demonstration prior to approval. A Fire Safety Officer may be required to be in attendance during the activation of the special effect, at your cost.

SOH must be notified if any of the following are involved in your production:

- Animals;
- Firearms and prohibited weapons (for example, swords and daggers), this includes replica weapons;
- Special effects:
  - Flames (for example, candles, fire gel, cigarettes);
  - Gas (for example, LPG and natural, CO<sub>2</sub>);
  - Fumes from the combustion of fuel;
  - Liquid nitrogen;
  - Smoke, fog, haze, snow, & dry ice machines;
  - Pyrotechnics;
  - CO<sub>2</sub> jets;
  - Flutter / streamer cannons;
- Vehicles on stage;
- Lighting effects:
  - Strobe;
  - UV;
  - Laser.

### 9.1 Animals

Special by-laws for the use of animals must be complied with for performances, and any proposal to use animals in a performance must be notified to the SOH Production Manager for consideration in the initial production meeting.

### 9.2 Firearms, Replicas and Prohibited Weapons

SOH has strict guidelines on the use of firearms, replicas and prohibited weapons. Please request a copy of the SOH procedure from your SOH Production Manager. The following documentation must be completed prior to the arrival of the firearms and or weapons.

#### 9.2.1 Risk Assessment

A comprehensive risk assessment detailing the activities, training and purpose of any firearm or weapon used in the production must be submitted to SOH.

#### 9.2.2 Permits and licenses

- For firearms, a Theatrical Armourer's Dealers Licence issued by the NSW Police Service, or a Film / Television / Theatrical Production Permit issued by the NSW Police service;



- For prohibited weapons, a Theatrical Weapons Armourer Permit issued by the NSW Police service;
- Only approved blank fire ammunition supplied by a Theatrical Armourer Dealer must be used; and
- All firearms replicas and prohibited weapons must be stored in accordance with the permit.

### 9.2.3 General safety

- SOH does not provide storage for Firearms and Prohibited weapons. You must provide your own and notify your Production Manager so they can arrange for installation;
- Firearms, replica firearms, imitation firearms and other prohibited weapons must only be used in accordance with NSW legislation and regulations;
- All firearms and prohibited weapons must be concealed upon delivery;
- All swords, knives, blades, and needles must be blunted and made safe for use;
- The use of blank fire ammunition must not exceed sound levels of 85 dB(A) over an 8 hour period or peak at more than 140 dB(C) as stated in the **NSW WHS Regulation 2017**; and
- The Licenced Armourer and or permit holder must provide, to cast and crew, appropriate warnings and safety briefings, instruction on safe handling of the item, and ensure the action sequences are safe and ensure all persons maintain safe distances.

It is an offence to bring any firearm, replica, or weapon into the SOH precinct unless it is under the above conditions. Live ammunition must never be used. Please discuss your requirements with your SOH Production Manager.

## 9.3 Special Effects

### 9.3.1 Flutter or Streamer Cannons

Flutter, streamer cannons, or confetti are not permitted for outdoor use on the SOH site.

### 9.3.2 Naked Flames

Your Production Risk Assessment should cover how you will eliminate or control the risk of fire to costumes, props, set and venue infrastructure.

Naked flame poses a specific hazard to a venue and requires approval from the SOH Fire Safety Manager.

### 9.3.3 Fire Performers

Fire performers must be trained, well-rehearsed in the venue and experienced in the use of fire in their act. Safety Data Sheets must be provided for the type of fuel they are using. The performer must use the minimum volume of fuel required to perform the act. You must also ensure a spotter with the correct fire extinguisher type is on standby during the performance. A demonstration prior to the performance for SOH approval is required.

### 9.3.4 Gas

The following conditions must be complied with in relation to gas use on site:



- All gas cylinders must be stored upright and restrained to prevent them from falling;
- Cylinders are to be stored in a cool well-ventilated place; and
- Suitable trolleys are to be used to move cylinders and cylinders are not to be dragged or rolled into position.

Your Production Risk Assessment must address the specific safety hazards associated with the gas you are using in context of the application.

### **9.3.5 Carbon Dioxide (CO<sub>2</sub>)**

The following conditions must be complied with in relation to CO<sub>2</sub> use on site:

- CO<sub>2</sub> cylinders must be stored in an open, well-ventilated area and away from heat sources;
- Cylinders must be clearly labelled;
- The use of CO<sub>2</sub> jets must be approved prior to use and must be operated by a competent person; and
- The jets must be of a suitable size for the venue and not aimed at the audience.

CO<sub>2</sub> is an asphyxiation risk and extremely cold when released. CO<sub>2</sub> jets must be included in your risk assessment.

### **9.3.6 Liquefied Petroleum Gas (LPG)**

The following conditions must be complied with in relation to LPG use on site:

- LPG must be hard plumbed by a licensed gas fitter approved by SOH;
- LPG cylinders must be stored in a cage in a well-ventilated area and away from ignition; sources and direct sunlight; and
- Cages must have correct labelling and placarding.

### **9.3.7 Pyrotechnics**

For all outdoor pyrotechnic displays, additional information is required to ensure the safety of the display. Sydney Opera House requires detailed planning of display and Risk Assessment carried out by both the Hirer and the engaged pyrotechnic company. Under state legislation, fireworks may only be included at your event if they are provided and operated by a pyrotechnician who is licensed by SafeWork New South Wales. The Sydney Opera House production manager will require the following information:

- A copy of the SafeWork Notification of fireworks display;
- A copy of the pyrotechnician's licence number and details;
- A list of the types and quantities of fireworks to be used;
- A list of all relevant authorities and neighbouring businesses/residents consulted;
- A site plan detailing the pyrotechnic display including:
  - Exclusion zones (referencing AS 2187.1 (storage) and AS2187.2 (use, exclusion zones));
  - Location of spotters; and
  - Location of fire suppression equipment;
- A site-specific Risk Assessment of the fireworks display, which at minimum addresses the following risks:



- Suitability of the firing site;
- Risk of fire and explosion (including quantities of fire suppression equipment onsite);
- Damage to Opera House building fabric;
- Risk of debris and embers;
- Security of pyrotechnics;
- Dislodgement of fireworks during firing;
- Impact of weather during display and monitoring arrangements;
- Flammability of structures in close proximity to fireworks; and
- Communication process between show callers, spotters and pyrotechnicians.

All outdoor pyrotechnic displays must align and comply with the following standards:

- Explosives Act 2003 (NSW);
- Explosives Regulation 2013 (NSW);
- Australian Code for the Transport of Explosives by Road and Rail; and
- AS 2187.4 Explosives – Storage, transport and use – Pyrotechnic – Outdoor displays.

Liaise with your Production Manager for further information. For additional information about applying for a fireworks license or notification, contact SafeWork NSW on 131050 or visit their website at [SafeWork.nsw.gov.au](http://SafeWork.nsw.gov.au)

### **9.3.8 Haze, Snow, and Fog Machines**

Hirers must provide a current Safety Data Sheet (SDS) for the fluid used in hazers, snow, and fog machines and ensure a copy of the SDS is kept with the machine.

Hirers must also nominate a trained responsible person to operate the machine. This person is responsible for ensuring the machine is positioned correctly and accidental contact is minimised.

It is a requirement to ensure that residue is contained and provide adequate storage and handling solutions for the fluids used in the machine.

Note: Oil-based haze machines are not permitted at SOH.

### **9.3.9 Dry Ice**

Dry ice is to be stored in a well-ventilated location and placed in a Styrofoam chest, insulated cooler, or a special cooler designed for the storage of dry ice. Suitable eye and hand protection must be worn when handling dry ice.

## **9.4 Vehicles on Stage**

Your Production Risk Assessment must cover the vehicle's use, spillage containment and emissions. Any combustion driven engine on stage requires a separate Risk Assessment and approval from the SOH Fire Safety Manager. The stages engineering design and build certification will need to approve the weight loading of the vehicle.

## **9.5 Lighting Effects**

### **9.5.1 Strobe**

Hirers must ensure:



- Only competent and trained persons are allowed to set up and operate stroboscopic lights;
- The flash rate is maintained at/or below 4 flashes per second;
- All staff, crew and freelancers are warned prior to the use of stroboscopic lights that they are to be included in the programme/event; and
- Warnings are posted at the entrance doors for public “WARNING: Strobe lights are used during this performance”.

### **9.5.2 UV**

Use of UV or black lights must be documented in the Production Risk Assessment. Lights must be located so they can't be looked at directly by the naked eye.

### **9.5.3 Laser**

Lasers used in performances must be detailed in a Special Effects Form and in the Production Risk Assessment. There are five classes of lasers. Class 1 products only are considered safe for performances without a Laser Safety Officer. Class 2-4 lasers should not be considered for display purposes without a detailed Risk Assessment. Laser installation must be completed by a qualified operator. Operation of the laser must be supervised by a qualified operator and a trained laser Safety Officer nominated for the production.

The following documentation should also be provided in addition to the Production Risk Assessment:

- Intended scope of use;
- Plan showing the laser display in both plane and elevation, positions of laser sources, mirrors and target areas with relevant trajectories, distances, and dimensions;
- Qualifications of the laser operator;
- Control measures in the event of power failure or knocking of the laser device that might result in freezing or displacement of the laser beam;
- Specification sheet of the lasers;
- Compliance to the Australian Standard AS/NZS IEC 60825.3:2016; and
- Notification to patrons.

### **9.5.4 Smoking**

Smoking is only permitted on stage where it is essential for the performance and a Special Effects Application must be made. Smoking of illegal substances is not permitted.

## **9.6 Applying to use Special Effects and Pyrotechnic Displays**

### **9.6.1 Special Effects**

All special effects (e.g. haze, strobe lighting, lasers) require a Sydney Opera House special effects application and risk assessment.

### **9.6.2 SFX Application**

The Sydney Opera House special effects application and process governs the approval of special effects on the Sydney Opera House site. A Production Risk Assessment must be submitted detailing the relevant site-specific risks of the special effect. The Sydney



Opera House Production Manager will prepare the application on your behalf but will require specific information to authorise the special effect. Sydney Opera House will liaise with all relevant internal stakeholders to process the application.

### **9.6.3 SFX Demonstration**

As part of the special effects application process, a SFX demonstration will be organised by Sydney Opera House in consultation with you. The demonstration will require a representative from your company and relevant personnel involved in the special effect.





## 10 Portable Fire Equipment

The following guidance is provided for prospective Hirers regarding the selection of portable fire equipment needs.

This information has been prepared to provide consistent advice to assist in the selection and location of extinguishers and fire blankets. The Sydney Opera House Duty Fire and Safety Officers can be consulted at any time when considering the selection of equipment for events.

This information is consistent with the relevant statutory requirements. Further information is available in:

- Building Code of Australia Table E1.6 – Requirements for extinguishers; and
- AS 2444 Portable fire extinguishers and fire blankets – Selection and location.

### 10.1 Classes of Fire

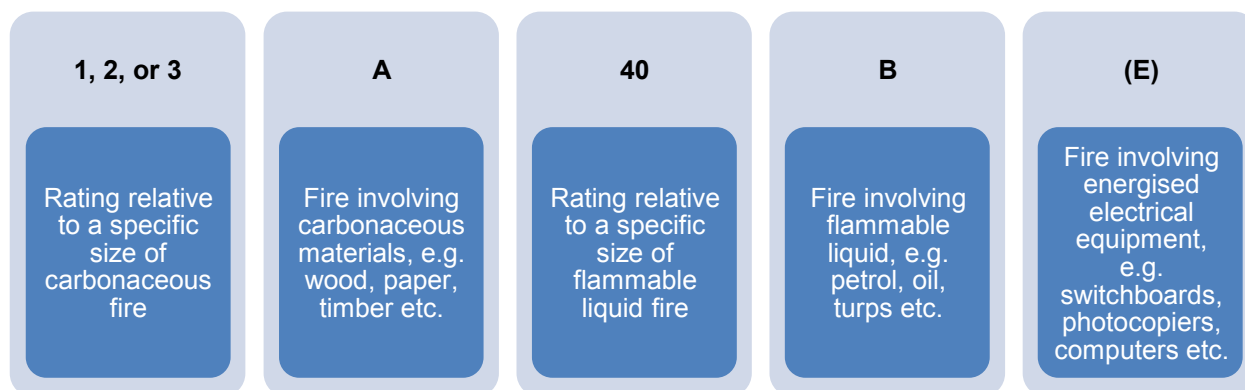
The classes of fire are defined as follows:

- Class A Fire involving ordinary combustible materials, such as wood, cloth, paper, rubber and many plastics;
- Class B Fire involving flammable and combustible liquids, greases and oils;
- Class C Fire involving combustible gases;
- Class D Fire involving combustible metals;
- Class E Fire involving energised electrical equipment; and
- Class F Fire involving cooking oils and fats.

### 10.2 Extinguisher Rating and Classification

Fire extinguishers which comply with Australian Standards are marked with a classification and rating, determined in accordance with AS/NZS 1850, that indicates the class and size of the fire for which the extinguisher has been tested. An extinguisher should be selected for its capacity to extinguish a perceived type and size of fire relevant to the identified risk.

When a fire extinguisher is rated for more than one class of fire, it is expressed in alphabetical order, e.g. 2A:40B(E), as follows:





### 10.3 Fire Extinguisher Use

Below is a basic chart showing which fire extinguisher to use for each class of fire, and subsequently the extinguishing medium to be considered.

<b>Class of Fire</b>	<b>Example of Fire</b>	<b>Extinguishing Medium to be Considered</b>
<b>A</b>	Clothing fire Pyjamas, shirt, pants	Water Fire blanket
<b>A</b>	Small carbonaceous fire Waste paper bin	Water Foam ABE powder Wet chemical Vaporising liquid Carbon dioxide (limited)
<b>A</b>	Large carbonaceous fire Pallet of cardboard	Water Foam ABE powder
<b>B</b>	Petroleum based liquids Petrol Oil Grease Turps	BE and ABE powder Foam Vaporising liquid (limited) Carbon dioxide
<b>B</b>	Polar solvents Cleaning spirits Alcohols	BE and ABE powder Alcohol resisting foam Vaporising liquid (limited) Carbon dioxide (limited)
<b>C</b>	Gas fires BBQ gas LPG Natural gas Acetylene	BE and ABE powder  Note: Gas fires are not to be extinguished unless the gas supply has been shut down first!
<b>D</b>	Metal fires Metal shavings	Special powder
<b>(E)</b>	Fires involving energised electrical equipment Fuse box Computer equipment	BE and ABE powder Carbon dioxide Vaporising liquid
<b>F</b>	Cooking oils and fats Dripping Butter Olive oil	Wet chemical BE powder Fire blanket Foam (limited) Carbon dioxide (limited)



## 11 Legal Disclaimer

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This document has been produced as a guide only, for persons using, visiting, or working on SOH site (including Hirers, performing companies and their staff, and subcontractors). This document contains general information only and should not be considered a comprehensive statement on the matters covered by it.

In preparing the information in this guide, SOH has not taken into account your individual circumstances or needs, or those of your production, and you should obtain your own advice on your risk management and legal and contractual obligations when using, hiring, visiting or working on SOH site.

For further details, you should refer to the Venue Hire Agreement, Presentation Agreement, Resident Company Agreement, or any other agreement concerning your use of, or visit to, Sydney Opera House. If there is any inconsistency with the provisions of this guide and that agreement, then the provisions of that agreement prevail to the extent of the inconsistency.

Information in this guide about legislation, Australian and International Standards, the Building Code of Australia, and any other legal requirements, is provided in summary form only, so you should refer to the source documents for a complete understanding of the requirements and to check whether there have been any changes.



## **12 Appendices**

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These headings link to the appended documents.

### **12.1 Outdoor Venue Risk Assessment**

### **12.2 Checklists**

- Bump-in
- Administration Checklist
- Pre-Show Checklist
- Sustainable Events Checklist

### **12.3 Planning consent DA 445–10–2003 as modified (DA)**

### **12.4 Heritage Guidelines**

### **12.5 Outdoor Structures Design Specifications**



**INTRODUCTION**

Venue Risk Assessments should be read in conjunction with the Sydney Opera House (SOH) Outdoor Event Guide, and relevant [Technical Specifications](#) to find out more information about existing structures, features, requirements and restrictions.

**PURPOSE**

This venue risk assessment, referred to as "bare walls" outlines potential site hazards and expected actions/controls when hiring a specific SOH site or venue space.

**RESPONSIBILITIES**

SOH is committed to working collaboratively with hirers to identify and eliminate risks to health and safety, or, if that is not practicable, then minimise those risks so far as is reasonably practicable.

Under the primary duties of the Workplace Health and Safety Act 2011, hirers, contractors and resident companies undertaking business at Sydney Opera House have a responsibility to ensure that the health and safety of their own workers and other persons and workers (such as SOH workers), are not put at risk from work carried out as part of the conduct of their business or undertaking – so far as reasonably practicable.

**RISK MANAGEMENT**

**Production Risk Assessment**

SOH requires that resident companies, hirers and clients develop and submit a production risk assessment 14 days prior to the event.

Production risk assessments are required to identify event activities, hazards associated with each activity and controls to eliminate and mitigate risks. Each hazard should be risk assessed and controls put in place to reduce risks as far as reasonably practicable. The SOH risk matrix can be used as a guide to evaluate risks:

RISK MATRIX		WHS	CONSEQUENCE				
			INSIGNIFICANT	MINOR	MODERATE	MAJOR	EXTREME (Note 1)
LIKELIHOOD	ALMOST CERTAIN	91-100% Expected to occur more than once a year.	Physical injury/illness not requiring first aid assistance. Negligible adverse impact to psychological health, no intervention or time off work.	Minor physical injury involving first-aid treatment. Adverse impact to psychological health requiring intervention. No time off work.	Physical injury requiring medical treatment incl. hospital visit. Psychological injury resulting in temporary time away from work (days or weeks) or changes to work arrangements.	Serious physical injury requiring hospital admission. Long-term or permanent disablement with some functional restriction. Psychological injury resulting in extended time off work (months). <i>WHS Critical Incident Level 3.</i>	One or more fatalities. Significant permanent disablement. Psychological injury resulting in inability to return to work.  <i>WHS Critical Incident Level 1-2.</i>
	LIKELY	61- 90% High chance of occurring at least once a year.	Low	Medium	Medium	High	Very High
	POSSIBLE	41 – 60% Could occur once every 2 to 3 years.	Low	Medium	Medium	High	Very High
	UNLIKELY	11 – 40% Once in every 3 to 10 year event.	Low	Low	Medium	High	Very High
	NOT EXPECTED	0 – 10% Not expected to occur more than once in 10+ year period.	Low	Low	Low	Medium	High

**Safe Work Method Statements/ Toolbox talks**

Safe Work Method Statements (SWMS) for high risk work and toolbox talks are required to be completed by hirers prior to commencing work.

**Induction**

All persons undertaking work at the SOH must complete relevant online [Site Safety Induction\(s\) prior](#) to commencement of work. Hirers must ensure their workers have the necessary training and competencies to undertake work activities safely.



Initial Risk Rating	RISKS	RISK CONTROLS REQUIRED	Residual Risk	Responsibility
<b>1. SITE ACCESS</b>				
<b>1.1 VEHICLE ACCESS</b>				
Medium	Unauthorised Vehicles	<p>To ensure vehicle site access, a vehicle access request needs to be logged into the SOH vehicle management system 24hours prior to the vehicle's arrival. Vehicle registration and drivers name must be provided to the relevant SOH Production and Events Representative for all vehicles prior to arrival to site.</p> <p>Booking can be made via an Account Manager, Production Manager, Production coordinator. Resident Companies who have access to Mobile Dock are able to make their own bookings.</p> <p>All vehicles must report to the gatehouse upon arrival and provide the booking reference number to access site. If accessing the loading dock, security will provide parking directions. If accessing the broadwalk either security or the relevant SOH representative will be contacted to escort your vehicle on shared pathways.</p>	Low	SOH Security manages entry of vehicles on site.
<b>1.2 VEHICLE MOVEMENTS</b>				
Medium	Person(s) hit by moving vehicle while travelling outside barricaded work zones.	<p>All vehicles and mobile plant must load/unload/operate inside the barricaded work zone. If this is not possible a temporary loading zone, with adequate barricades, must be established.</p> <p>All vehicles travelling outside barricaded work zones must have an escort of 2 spotters</p> <p>One spotter walks in front of the vehicle(s). Another behind. If there are more than one vehicle, additional spotters may be required.</p> <p>Spotters to watch nearby person(s) at all times particularly young children.</p> <p>Spotters must wear Hi-Viz clothing and safety boots at all times while escorting vehicles.</p> <p>Vehicle speed <b>must not</b> exceed Walking Pace.</p> <p>Give way to pedestrians at all times and watch nearby person(s), particularly young children</p> <p>Use hazard lights at all times, and headlights during inclement weather</p> <p>Not park or leave vehicle(s) unattended without SOH approval</p> <p>For more information refer to SWP 025 Vehicle Movement on Site</p>	Low	<p>SOH Event Operations representative</p> <p>SOH Event Safety</p> <p>Event Site Manager</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>1.3 BOLLARDS</b>				



# Venue Risk Assessment



Medium	When bollards are raised they may impact a passing vehicle or pedestrian causing injury	Raising and lowering bollards on site will be coordinated through EPRG under approved security procedures.  Clear pathways must be kept to allow access to the moveable centre set of bollards at all times.	Low	SOH Security
<b>1.4 ACCESS ROUTE WESTERN AND NORTHERN BROADWALKS</b>				
Medium	Emergency vehicle access obstructed due to temporary structure or large crowd numbers	Site layout of temporary structures and scenic elements must allow for a 4 metre wide clear emergency vehicle pathway through the site at all times.  Note: Fibreglass bench seating can be removed as a last resort to facilitate pedestrian pathways. If seats are removed, securing bolts set into granite slab can create a trip hazard that must be managed with adequate signage and temporary barriers.	Low	SOH Event Operations representative SOH Event Safety Event Site Manager Hirers must ensure compliance to SOH requirements
Medium	Vehicles making deliveries to Northern end of site may impact with pedestrians on boardwalk	Spotters must be used for each moving vehicle on the boardwalk. Spotters must walk in front and to one side of the vehicle ensuring clear communication. If the moving vehicle has to reverse the spotter must reposition to the rear of the vehicle and to one side so the driver can see the person in their rear vision mirrors  Trucks may, at SOH discretion, use Western Boardwalk and park outside Central Passage Northern Door to unload	Low	SOH Event Operations representative SOH Event Safety Event Site Manager Hirers must ensure compliance to SOH requirements
<b>1.5 VITRINES (Northern and Western Boardwalk Hirer's)</b>				
Medium	Maintenance workers may not be able to reach services contained in Vitrines in an emergency.	Clear access must be maintained at all times by establishing a one metre exclusion zone around the perimeter of each vitrine, unless prior approval has been given by relevant SOH Event Operations representative.	Low	SOH Event Operations representative SOH Event Safety Event Site Manager Hirers must ensure compliance to SOH requirements

## 2. SITE SETUP

### 2.1 BUMP IN /OUT GENERAL HAZARDS

# Venue Risk Assessment



Medium	Unauthorised workers accessing the work area	<p>A construction white card will be required during high risk work during bump in/out</p> <p>All event workers and contractors must complete an SOH site safety induction before commencing work onsite.</p> <p>Single entry point to workzone identified by a flag monitored by Event Safety and or Security</p>	Low	<p>SOH Event Operations representative</p> <p>Hirers must ensure compliance to SOH requirements</p>
Medium	Slips, trips and falls from unauthorised access to work area by pedestrians and general public	<p>Work zones must be barricaded with temporary CCB fencing to isolate pedestrians from the site and restrict access to only workers. Event Safety Officer to ensure that appropriate signage is displayed on perimeter fence.</p> <p>SOH Site Manager, ESO and Opera House security to closely monitor movements of the general public moving around the site perimeter and ensure they do not enter the work area.</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
Medium	Workers may slip, trip or fall due to trip hazards during build process	<p>Exits and exit routes must be maintained and not blocked in any way.</p> <p>Cables to be taped and made secure/cable mats or trays to be used.</p> <p>Trip hazards removed.</p> <p>Area to be kept tidy</p> <p>Access to egress paths and essential services must be maintained at all times.</p>	Low	<p>SPH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
Medium	Foot crush injury	<p>SOH requires workers to wear either steel toe or composite toe safety footwear with ankle protection (boots) during the bump in/out and set up. Footwear must be rated to the Australian Standard, AS/NZS 2210.1 Safety, Protective and Occupational Footwear Guide to Selection, Care and Use</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
High	Forklifts, EWPS, Cranes and other plant moving and operating on site	<p>SOH requires all workers to wear high visibility clothing.</p> <p>Create exclusion zones around EWP or Cranes. If exclusion zone not practicable around EWP or Crane, spotters to monitor workers and plant interaction at all times to ensure best safe work practise is maintained.</p> <p>Plant such as Forklifts, EWPs, and Cranes shall be operated in a safe manner by workers with a current license. If necessary, use spotters when plant is moving or working overhead.</p> <p>Hard hats must be worn when working near or under EWPs or Cranes.</p>	Medium	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>

# Venue Risk Assessment



Medium	<p>Muscular-skeletal injury from manual handling</p> <p>Equipment or property damaged by being mis-handled</p> <p>Crush or impact injuries handling equipment in tight spaces</p>	<p>Hazardous manual tasks must be outlined in the production risk assessment and suitable controls established or manual handling equipment provided to move heavy/awkward items.</p> <p>Correct Manual Handling techniques must be used at all times. Difficult loads must be assessed prior to moving and suitable manual handling techniques employed as directed by supervisors.</p> <p>Ensure appropriate level of staffing to carry out manual handling tasks safely.</p> <p>Where possible use of trolleys, forklifts or other mechanical aids to move items.</p> <p>Loads should be labelled to indicate any Musculo-Skeletal risks, and where appropriate, any necessary precautions when handling the load.</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
High	<p>Person(s) may trip or fall into pits</p>	<p>Open Pits must be covered or barricaded</p>	Low	<p>SOH Event Operations representative</p> <p>SOH Building Operations</p>
Medium	<p>Workers may be exposed to:</p> <ul style="list-style-type: none"> <li>• Excessive heat</li> <li>• UV radiation</li> <li>• Excessive Cold and rain</li> </ul>	<p>Review weather conditions and implement additional controls as needed</p> <p>Hirers and contractors to provide water, sunscreen and appropriate PPE (e.g. hats, jackets) for their workers</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
High	<p>Fatigue</p>	<p>Hirers must plan and adhere to breaks as outlined in the Production Labour Charging Policy and ensure staff are scheduled appropriately.</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>Hirers must ensure compliance to SOH requirements</p>

## 2.2 MONUMENTAL STAIRS (Forecourt Hirer's)

Medium	<p>Carrying equipment up and down steps:</p> <ul style="list-style-type: none"> <li>• Trip or fall down stairs.</li> <li>• Collide with pedestrians.</li> <li>• Equipment may be dropped and/or roll down stairs.</li> <li>• Over exertion</li> </ul>	<p>Use safe and approved manual handling techniques for the task.</p> <p>Ensure adequate staff numbers are available to move heavy or awkward equipment.</p> <p>Where possible use SOH internal lifts to move equipment from Central Passage to Box Office foyer and podium.</p> <p>Lift 5 - Do not exceed lift SWL 800Kg (Swipe card required for operation)</p> <p>Crews should be aware of the hazards of carrying loads up and down stairs</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>All workers</p> <p>Hirers must ensure compliance to</p>
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# Venue Risk Assessment



		<p>Correct Manual Handling techniques must be used at all times. Difficult loads must be assessed prior to moving and suitable manual handling techniques employed as directed by supervisors</p> <p>Where possible barricade of block access to the podium for general until work is completed</p>		SOH requirements
Medium	Erecting structures on steps	<p>Work zones must be barricaded with temporary CCB fencing to isolate pedestrians from the site and restrict access to only workers.</p> <p>Ensure that CCB fence is not left open to prevent unauthorised person(s) entering work site.</p> <p>Place appropriate signage on all sides of fencing.</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>2.3 PODIUM LEVEL (Forecourt Hirer's)</b>				
Medium	Temporary scaffold structures and open pits may not be isolated from general public.	<p>Erect CCB barricades around work site and pits.</p> <p>Ensure that CCB fence is not left open to prevent unauthorised person(s) entering work site.</p> <p>Place appropriate signage on all sides of fencing.</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
High	<p>Person(s) or equipment may fall from heights</p> <p>Persons working on structures close to podium rails</p>	<p>Observe all safe work at heights procedures and SWPs</p> <p>When working in close proximity to rails create a drop zone on the ground level underneath</p> <p>Do not use ladders when working within 2m of rails – use mobile platform instead</p> <p>All tools must be tethered</p>	Medium	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>2.4 USE OF MOBILE PLANT &amp; EQUIPMENT</b>				
High	Mobile Plant not operated correctly leading to Damage of property or equipment or workers	<p>Plant such as Forklifts, Elevated Work Platforms (EWPs), Cranes must:</p> <ul style="list-style-type: none"> <li>• Be only operated by licensed operators</li> <li>• Hard hats to be worn if work is being conducted overhead.</li> <li>• Have exclusion zones created where possible</li> <li>• Use spotters when plant is moving or working overhead.</li> </ul>	Medium	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to</p>



			SOH requirements
<b>2.5 TEMPORARY STRUCTURES, SITE FURNITURE AND SCENIC ELEMENTS</b>			
High	Structural failure resulting in personal harm or property and equipment damage	<p>The hirers Production Risk Assessment must identify all risks and controls for temporary structures, scaffolding and furniture.</p> <p>Marquees, scaffold, scenic elements and site furniture must be approved by SOH Event Operations Representative. Engineers sign off will be required for structures.</p> <p>Temporary structures must be installed to design specifications. Engineers sign off is required for temporary structures</p> <p>Assembling, altering or dismantling scaffolding requires workers to be trained and competent and hold the appropriate scaffold licence for the work to be carried out. Refer to <a href="#">Safe Work Australia-Scaffolding</a></p>	Medium SOH Event Operations representative Event Site Manager SOH Event Safety Hirers must ensure compliance to SOH requirements
High	Fall, collapse or movement of structures, or scenic elements	<p>Structures must be weighted correctly to prevent falling or collapse.</p> <p>The weight load ratings for the Forecourt, Western and Northern Broadwalks must be taken into consideration.</p> <p>Furniture must be secured to prevent movement in windy conditions</p> <p>The use of light weight furniture and umbrellas is not permitted due to the risk of being picked up in the wind and causing possible injury or damage. For example beach umbrellas or similar</p>	Medium SOH Event Operations representative Event Site Manager SOH Event Safety Hirers must ensure compliance to SOH requirements
<b>2.6 RIGGING</b>			
High	Impact or head injury from falling item as a result of poor rigging.	<p>ALL rigging and associated work must be either carried out by a licensed rigger holding a current Australian National Certificate of Competency.</p> <p>All shackles must be moused.</p> <p>All lights, AV and sound equipment must have safety wires attached.</p> <p>All flown elements must be safely secured to truss and not exceed weight loadings.</p> <p>Loads must first be lifted slowly to assess its stability.</p>	Medium SOH Event Operations representative Event Site Manager SOH Event Safety Hirers must ensure compliance to SOH requirements
<b>2.7 ELECTRICAL EQUIPMENT &amp; CABLING</b>			

# Venue Risk Assessment



<b>High</b>	<p>Faulty electrical equipment or unearthed power supplies</p> <p>Electrical Shock</p>	<p>Electrical equipment and cabling must:</p> <ul style="list-style-type: none"> <li>• Display current test and tag in accordance with AS 3000</li> <li>• Include appropriate weather protection for outdoor use</li> <li>• Be secured in a cable tray or similar</li> <li>• All faulty equipment must be tagged out of use</li> </ul> <p>Be earthed and protected by a suitable Residual Current Device (RCD). Ensure loose cables/cords are secured or covered to avoid trip hazards</p> <p>All temporary electrical power and equipment must have an Ingress protection (IP) rating suitable for the environment.</p> <p>For more detail on electrical installations please refer to the indoor event guide</p>	<b>Low</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>2.8 SEVERE WEATHER</b>				
<b>High</b>	<p>Severe weather conditions (wind or rain) may damage or destroy temporary structures.</p> <p>Severe weather conditions (wind or rain) loose items blown around.</p>	<p>SOH outside spaces can be subject to high wind shifts. Extreme weather and wind management plans must be developed and implemented.</p> <p>Weather conditions monitored by Event Site / Stage Manager – utilising onsite weather stations and Bureau of Meteorology resources.</p>	<b>Medium</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>2.9 ENVIRONMENT</b>				
<b>Medium</b>	Noise levels from amplified events may breach regulated environmental limits	A Noise Management Plan meeting the requirements of the Opera House's statutory regulations must be implemented when amplified events take place	<b>Low</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>Medium</b>	Use of paint and chemicals on site may lead to Sydney Harbour contamination from surface run off.	<p>Spill containment to be on site during event activities</p> <p>Chemicals to be kept to a minimum. Contact event Operations representative on what is permitted to be brought and stored on site</p>	<b>Low</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>Medium</b>	Waste	Waste management plan to be managed by SOH with onsite contractors	<b>Low</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
<b>2.10 NIGHT WORK</b>				



# Venue Risk Assessment



<b>Medium</b>	<p>Low lighting levels may create risk of trip, slips and falls.</p> <p>Certain tasks dangerous to attempt in low light.</p>	<p>If the site setup is planned outside day light hours appropriate temporary lighting must be installed to ensure there is adequate light to work in safely.</p> <p>If large crowds are anticipated, additional temporary emergency lighting must be installed to facilitate safe egress from the site in the event of an evacuation or emergency.</p> <p>Event staff to monitor movement of crowds, maintain exit routes and adequately illuminate hazards such as level changes in roadway if they impinge on evacuation routes</p>	<b>Low</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
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**2.11 WORKING AT HEIGHTS**

<b>High</b>	<p>Worker may fall from height</p> <p>Items may fall from height onto persons below</p>	<p>Protect all edges by installing guard rails and covering voids or openings</p> <p>Where ever possible, work at heights must be performed from an elevated work platform (EWP) such as a scissor lift or boom lift</p> <p>Where it is not possible to use a work platform, a fall restraint system with Australian Standard (AS) compliant Industrial harnesses must be used.</p> <p>If a fall restraint system is not possible, then a fall arrest system must be used.</p> <p>If a fall arrest system is used there must be a rescue procedure that is documented and rehearsed for each production or season</p>	<b>Medium</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
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<b>High</b>	<p>Items may fall from height onto persons below</p>	<p>Loose items must be tethered when working at height.</p> <p>Hard hats to be worn if work is being conducted overhead.</p> <p>Drop zones in the area underneath any overhead work areas must be isolated and no work should take place within the isolated areas</p>	<b>Low</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
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**2.12 WORKING NEAR SEAWALL**

<b>High</b>	<p>Risk of drowning.</p>	<p>A clear path along the perimeter of the sea wall must be maintained at all times</p> <p>Where there is risk of large crowds gathering at the edge of the seawall an exclusion zone can be established</p> <p>Life Saving devices are located at the gatehouse, the lower concourse near the retail store, the fire escape doors at the North end of the Western broadwalk and the base of the fire escape stairs near the northern central passage door</p>	<b>Medium</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
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<b>Low</b>	<p>Risk of damage to seawall or bronze handrail</p>	<p>Items must not be secured to / or supported by the bronze handrail or seawall</p>	<b>Low</b>	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
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**2.13 TELECOM TRANSMITTERS ON EASTERN LIGHTING TOWER**

# Venue Risk Assessment



Medium	<p>Electromagnetic Radiation exposure above height of 6.5m and within a 10m radius</p>	<p>Staff working above a height of 6.5m and within a 10m horizontal radius to be advised of proximity limits to RF Tower.</p> <p>If access above 6.5m required in this area SOH Event Operations Representative to contact Building Operations</p>	Low	<p>SOH Event Operations representative</p> <p>Event Site Manager</p> <p>SOH Event Safety</p> <p>Hirers must ensure compliance to SOH requirements</p>
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# Outdoor Events – Bump-In Checklist



This checklist is to be completed DAILY during the bump in phase and before the stage/venue is open for rehearsal. All personnel must be inducted onto the site prior to commencing work.

Event	Venue			
Date	Completed By			
	In Progress	Complete	N/A	Justification
<b>Infrastructure Markup</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Granite / Concrete Protection</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Work area secured and safety signage installed</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Temporary Structures</b>				
▪ Marquees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Stages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Site Sheds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Engineering Certification</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Electrical Certification</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>PPE Available</b>				
▪ Work Boots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ High Visibility Vests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Sunscreen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Harnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Helmets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Drinking Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Safety Inductions</b>				
▪ Crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Contractors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Communications</b>				
▪ Event 2-Way Radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Security Radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ WIP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Landlines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Back of House Compound</b>				
▪ Event Equipment Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Dangerous Goods Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Plant Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Power Requirements</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Cabling Secured</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Scenic Elements</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SFX Forms</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Preliminary Site Signoff</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

# Outdoor Events – Bump-In Checklist

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This checklist is to be completed DAILY during the bump in phase and before the stage/venue is open for rehearsal. All personnel must be inducted onto the site prior to commencing work.

Notes

# Outdoor Events - Administration Checklist



All administrative actions are to be completed prior to bump in. If any item is not completed before bump in, please stipulate the reason in the column marked "Justification".

Event	Venue			
Date	Completed By			
<i>Opera House only</i>	<b>Exempt</b>	<b>Not Exempt</b>	<b>DA in Progress</b>	<b>DA Approved</b>
<b>Planning Approval (SEPP)</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Opera House only</i>	<b>Exempt</b>	<b>Not Exempt</b>	<b>S60 in Progress</b>	<b>S60 Approved</b>
<b>Heritage Approval</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>In Progress</b>	<b>Complete</b>	<b>N/A</b>	<b>Justification</b>
<b>Other Relevant Approval</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Production Risk Assessment</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Wind Management Plan</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SWMS/RA from Suppliers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>PLIs and Certificate of Currency from suppliers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Contract status with suppliers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Event Site Layout Plans</b>				
▪ Bump-In	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Bump-Out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Crowd Control Barrier Plan</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Dilapidation Report</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Load Ratings Identified</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Schedules</b>				
▪ Event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Vehicles Movement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Deliveries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Exclusion Zones</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Emergency &amp; Security Management Plan</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>SOH to provide in conjunction with Hirer</i>
▪ Emergency Response Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Evacuation Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Food and Beverage Plan</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Food and Beverage RA</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<b>In Progress</b>	<b>Complete</b>	<b>N/A</b>	<b>Justification</b>

# Outdoor Events - Administration Checklist



All administrative actions are to be completed prior to bump in. If any item is not completed before bump in, please stipulate the reason in the column marked "Justification".

Event Manual	In Progress	Complete	N/A	Justification
Traffic Management Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
First Aid Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dressing Room Requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Noise Management Sub-plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Inclement Weather Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Retail Plan – programs and merchandise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sustainable Event Management Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Waste Management Plan</b>				
▪ Grey Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Cleaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Waste Disposal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<b>In Progress</b>	<b>Complete</b>	<b>N/A</b>	<b>Justification</b>
<b>Notes</b>				



# Outdoor Events – Pre-Show Checklist



This checklist must be completed **prior to the site being open to the General Public**.  
 If any item is not completed before the site is opened to the General Public, please stipulate the reason in the column marked “Justification.”

Event				Venue
Date				Completed By
	In Progress	Complete	N/A	Justification
All public access routes checked for safe ingress/egress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All signage complete, correct and secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All lighting operational and sufficient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency lighting towers, fire safety equipment and EWIS checked and/or tested	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency access routes clear and gates locked or open as required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Event staff briefed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Toilets stocked and open	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All fencing and CCB correct and secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All plant, boneyard, vehicles secured appropriately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Generators fuelled as appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Event Furniture/Public Seating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Noise Monitoring in Place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Final Site Sign off by Production Manager and Production Safety Representative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	In Progress	Complete	N/A	Justification
<b>Notes</b>				
<b>Signed</b>				

# Sustainable Event Checklist



<b>Event</b>	<b>Venue</b>			
<b>Date</b>	<b>Completed By</b>			

<b>Ticketing</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
E ticketing & print at home ticketing only: including complimentary and promotional tickets				
Use online registration or mobile event apps for free events				
Use online post show survey's to monitor event feedback				
Allocated seating labels printed on low tack, compostable materials – avoid all plastics & laminates				

<b>Marketing</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
Ensure sustainability messaging is consistent & highly visible across all promotions and media for the event.				
Event promotion campaigns driven through digital, online, radio and social media outlets – where practicable limit print media				
All patron communications via texts or e-DMs.				
Where practicable opt for non-print collateral				

<b>Branding &amp; Event Signage</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
Minimize use of printed branded signage onsite – if required ensure its compostable post event				
Where possible design printed signage for multiple event use				
Confirm collection arrangements for all onsite signage including pull up banners to be removed and recycled post event.				
Use VMS or digital screens to provide onsite event information & key messaging				
Opt for environmentally friendly alternatives to wristbands, laminates & lanyards				

<b>Programs &amp; Merchandise</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
Opt for digital downloads of event programs				
Ensure hardcopy program orders are based on ticket sales, not venue capacity				
Ensure merchandise stock orders are based on current ticket sales not venue capacity				
Opt for sustainable products e.g.: locally made printed t-shirts, canvas or hessian bags, reusable water bottles & keep cups – limit packaging, advise patrons to provide their own bags in pre-show comms				
Avoid audience giveaways, samples or showbags –SOH approval required * refer to Indoor / Outdoor Event Guides				
Single use wet weather poncho's not permitted – biodegradable options only: suggest: <a href="https://www.greengearsupply.com/">https://www.greengearsupply.com/</a>				
Advise to bring own wet weather protection if rain forecast				

## Sustainable Event Checklist



<b>BOH Hospitality</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
Select locally grown, seasonal produce & items for artist riders – avoid imported products and brands				
Cups, plates, napkins, glassware, and cutlery for artist riders to be reusable or compostable – avoid single use disposables				
Opt for water stations + glassware, glass bottled or canned water for artist riders				
Provide artists & Crew with refillable water bottles for onstage use				
Plan for post event leftovers to be collected by food rescue services such as Oz Harvest or SecondBite				

<b>Event Food &amp; Beverage</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
F&B operators selected on sustainable credentials – use of sustainable products & food stuffs, low carbon emissions, locally sourced, seasonal offerings.				
Menus align with event demographics				
Operators use biodegradable/compostable food containers & cutlery only				
Licensed Bar operators opt for local labels, stock canned beverages and canned water, use the Globelet polycarb glassware return system for wine & mixed drinks				
Provide F&B operators with accurate ticket sale numbers to minimize potential food waste				
Ensure vendors have own detailed food waste and grey water management plan				
Plan for post event leftovers to be collected by food rescue services such as Oz Harvest or SecondBite				

<b>Water</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
Install hands free water fountains: Suggest: <a href="https://www.meetpat.com.au/">https://www.meetpat.com.au/</a> – avoid all single-use plastic water bottles				
Patrons advised to bring own water bottles in pre-show comms				

<b>Transport</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
Promote all available public transport services and options for pre & post event travel				
Include links to public transport services, maps & timetable in pre-show comms				
Schedule efficient hire vehicles for artist & crew transport				

<b>Other</b>	<b>Yes</b>	<b>No</b>	<b>Actioned</b>	<b>Post Event Review</b>
Promote as a Smoke Free Event				
Include sustainability criteria when contracting suppliers and third party vendors				

# Modification of Minister's Approval

Section 75W of the *Environmental Planning & Assessment Act 1979*

I, the Executive Director, Key Sites and Industry Assessments as delegate of the Minister for Planning under delegation dated 16 February 2015, approve the modification of the project application referred to in Schedule 1, subject to the conditions in Schedule 2.

Anthea Sargeant  
Executive Director  
Key Sites and Industry Assessments

Sydney 14th October 2016

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## SCHEDULE 1

<b>Application No.:</b>	DA 445-10-2003 granted by the Minister for Infrastructure and Planning on 29 June 2004, as modified by MOD 6-1-2005, MOD 90-12-2007 and MOD 52-6-2008.
<b>Proponent:</b>	Sydney Opera House Trust
<b>Approval Authority:</b>	Minister for Planning
<b>Land:</b>	2 Circular Quay East, Bennelong Point, Sydney (Lot 5 DP 775888 & Lot 4 DP 787933)
<b>Project:</b>	Sydney Opera House – Use of the Forecourt, Monumental Steps for Temporary Events and Functions
<b>Modification Number:</b>	DA 445-10-2003 MOD 4
<b>Modification</b>	<p>The modification includes:</p> <ul style="list-style-type: none"><li>• re-allocate the number of events and durations currently permitted;</li><li>• permit a one-off 25 day event in 2016;</li><li>• amend acoustic conditions;</li><li>• amend the hours of operations;</li><li>• amend Condition 14; and</li><li>• delete Condition 3.</li></ul>

## SCHEDULE 2

- In Schedule 1, Part C delete the definitions of 'DEC', 'Department', 'Director', 'Director-General', 'Minister' 'L<sub>Amax</sub>' and 'L<sub>Cmax</sub>'.
- In Schedule 1, Part C insert new definitions in alphabetical order as follows:

Bump-in	means a period in which temporary infrastructure is assembled prior to the commencement of an event
Bump-out	means the period in which temporary infrastructure is dismantled at the conclusion of an event
Department	Department of Planning and Environment
EA	Environmental Assessment entitled 'Section 75W Modification Application to DA 445-10-2003 – Sydney Opera House – Use of the Southern Forecourt and Monumental Steps for Performing Arts / Community Events and Corporate Functions' prepared by JBA Urban Planning Consultants Pty Ltd, dated 8 August 2016 and the accompanying appendices.
EPA	Environment Protection Authority
FOH	Front-of-house
Heritage Office	Office of Environment and Heritage (Heritage Office)
Minister	Minister for Planning
RTS	Response to Submissions Report entitled 'Section 75W Modification Application to DA 445-10-2003 – Sydney Opera House – Use of the Southern Forecourt and Monumental Steps for Performing Arts / Community Events and Corporate Functions – Applicant's Response to Submissions' prepared by JBA Urban Planning Consultants Pty Ltd, dated 13 September 2016 and accompanying appendices.
Secretary	The Secretary of the Department (or nominee)
TNSW	Transport for NSW
Trust	Has the same meaning as Applicant

- Replace all references to 'DEC' and 'Department of Environment and Conservation' in the consent with 'EPA'.
- In Schedule 1, Part C delete the definitions of 'Director' and 'Director-General'.
- Replace all references to 'Director', 'Director-General' or 'Senior Planner, Urban Assessments' in the consent with 'Secretary'.
- Replace all references to 'DIPNR' in the consent with 'Department'.
- In Schedule 1, Part C replace the definitions of 'Event' and 'Function' in the definitions list as follows:

Event	An event as described in the EA and RTS
Function	A function as described in the EA and RTS

- In Schedule 2, Condition 2 is modified by the deletion of the ~~struck-out~~ words and the insertion of the **bold italics** words as follows:

2. The development shall be carried out generally in accordance with the development application No. 445-10-2003 submitted by the application on 17 October 2003, **as modified by MOD 6-1-2005, MOD 90-12-2007, MOD 52-6-2008 and DA 445-10-**

**2003 MOD 4. The development shall be carried out generally and** in accordance with the supporting documentation submitted with ~~that application~~ **those applications**, including, but not limited to, the following:

- (i) **the** Statement of Environmental Effects entitled Sydney Opera House – Forecourt and Site DA prepared by City Plan Services, dated October 2003, including revised Table 1 (Event Schedule) amended 21 May 2004; **and**
- (ii) **the EA and RTS for DA 445-10-2003 MOD 4.**

- In Schedule 2, insert a new Condition 2A follows:

2A. The stage configuration and front-of-house noise monitoring location/s for events and functions are to be generally in accordance with the plans referenced in the table below, unless otherwise amended by the approved Noise Management Plan (refer to Condition 45A of this consent).

Figure Number	Name of Plan	Document	Author	Date
2	Typical forecourt event configuration	Acoustic Report in the RTS (Appendix A)	Auditoria Pty Ltd	6 September 2016
3	Australia Day event configuration	Acoustic Report in the RTS (Appendix A)	Auditoria Pty Ltd	6 September 2016
4	Opera on the stairs event configuration	Acoustic Report in the RTS (Appendix A)	Auditoria Pty Ltd	6 September 2016
4	Indicative Western Broadwalk event footprint	Acoustic Assessment in the RTS (Appendix A)	Acoustic Studio	September 2016

- In Schedule 2, Condition 3 is replaced with the words '**Deleted**'.
- In Schedule 2, Condition 5 is modified by the deletion of the ~~struck-out~~ words and the insertion of the **bold italics** words as follows:

**MAXIMUM NUMBER OF EVENTS AND FUNCTIONS**

5. The maximum number of events and functions shall be as follows:

	<del>MAXIMUM NUMBER OF DAYS PER YEAR</del> <b>MAXIMUM NUMBER OF EVENTS AND DAYS PER YEAR (Inclusive of bump-in and bump-out)</b>	<del>MAXIMUM NUMBER OF EVENT DAYS PER YEAR</del> <b>MAXIMUM NUMBER OF EVENT DAYS PER YEAR</b>
Performing Arts / Community Events <b>and Corporate Functions</b>	<del>26</del> <b>5</b> events (maximum of 11 days per event, <del>and 99 days per annum</del> )	<b>Up to a maximum of 99 days per year</b>
	<b>3 events (maximum of 20 days per event)</b>	
	<b>1 event in 2016 (maximum of 25 days)</b>	
<del>Corporate functions</del>	<del>6 functions (maximum of 7 days per function, and 28 days per annum)</del>	



- In Schedule 2, Condition 7 is modified by the deletion of the ~~struck-out~~ words and the insertion of the ***bold italics*** words as follows:

### HOURS OF OPERATION FOR EVENTS AND FUNCTIONS

7. (a) The hours of operation for performing arts / community events **and corporate functions** shall be limited as follows:

COMMENCEMENT TIME	CESSATION TIME
8 am	<del>11 pm</del> <b>12 midnight</b>

- (b) ~~The hours of operation for corporate functions shall be limited as follows:~~

COMMENCEMENT TIME	CESSATION TIME
<del>8 am</del>	<del>12 midnight</del>

**Note:** Any amplification equipment during the performing arts / community impact events and corporate functions must comply with the relevant noise limits set out in Condition Nos. 42 – 44 (inclusive).

- In Schedule 2, insert a new Condition 9A as follows:
 

9A. The applicant shall ensure that a suitably qualified and experienced expert such as a lighting engineer is employed to set up or review the lighting set up for all events and functions. The applicant shall exercise ultimate control of event lighting including in response to any complaints received.
- In Schedule 2, Condition 14 is modified by the insertion of the ***bold italics*** words:
 

14. All forms of food functions or events must be notified to NSW Health either manually or online at [www.foodauthority.nsw.gov.au](http://www.foodauthority.nsw.gov.au). ***Food businesses may be exempt from this requirement if they meet the criteria listed by the NSW Department of Primary Industries, Food Authority.***
- In Schedule 2, Conditions 24 and 27 are replaced with the words '***Deleted***'.
- In Schedule 2, Conditions 25, 26 and 28 are modified by the deletion of the ~~struck-out~~ words and the insertion of the ***bold italics*** words as follows:
 

25. For all ~~performing arts/community~~ events ***and functions with amplified music***, noise levels must be continuously monitored in real-time, by an accredited consultant, throughout ~~the an entire performing arts / community~~ event ***or function***.

26. The ***monitoring of*** noise levels ***required by*** ~~in~~ Condition Nos ~~24 and~~ 25 of this consent must be monitored at the ~~specified front-of-house~~ locations ~~set-out~~ specified in Condition ~~42 32~~.

28. In addition to the noise monitoring requirements set out in Condition Nos ~~24 and~~ 25 ***and 26***, the ***Secretary Director, Urban Assessments***, may at any time require noise monitoring to be carried out should complaints be received in relation to noise.
- In Schedule 2, Conditions 32, 33 and 34 are replaced with the words '***Deleted***'.

- In Schedule 2, Condition 42 is replaced as follows:

*Noise Limits for Sound Amplification for Performing Arts/Community Events and Corporate Functions*

42. The applicant must ensure that amplified music is only played between the hours of 10 am and 11 pm (all days) and meets the front-of-house (FOH) noise limits specified in the table below when measured at the FOH.

Event	Leq <sub>(5 minute)</sub> dB(A)	Leq <sub>(5 minute)</sub> dB(C)	Stage Configuration and FOH Noise Monitoring Location
Typical Forecourt Event	92	102	Refer to Condition 2A of this consent
Australia Day	88	98	
The Opera on the stairs	80	90	
Western Broadwalk A – North End	90	100	
Western Broadwalk B – South End	85	95	

**Note:** If the FOH to stage distance is different to 40 metres, the above noise limits shall be adjusted in accordance with the table in Section G.1 of Acoustic Report in the RTS (Appendix A) or equivalent methodology.

- In Schedule 2, Condition 43 is replaced as follows:

43. Where the applicant determines an event to be held on the Monumental Steps and/or Southern Forecourt cannot achieve reasonable patron experience by meeting the noise limits in Condition 42, the noise levels may be increased by up to 5 dB subject to:

- a total performance duration of not more than 4 hours on any given day; and
- all amplified music ceasing by 10 pm.

**Note:** This condition does not apply to events held on the Western Broadwalk.

- In Schedule 2, Condition 44 is replaced as follows:

44. The applicant must ensure that between the hours of 8 am and 12 midnight noise from bump-in and bump-out activities (e.g. site pack-up) and temporary noise generating plant and equipment meets the noise limits specified in the table below when measured at the nearest residential receivers.

Location	Leq <sub>(15 minute)</sub> dB(A)
Nearest residential receivers (external)	60

- In Schedule 2, Condition 45 is modified by the deletion of the ~~struck out~~ words and the insertion of the ***bold italics*** words as follows:

#### **FINAL COMPLIANCE REPORT TO DIPNR ~~THE DEPARTMENT~~**

45. The applicant must provide a report in writing to ~~DIPNR~~ ***the Department and the EPA*** prepared by an accredited acoustical consultant by not later than twenty-eight (28) days after the completion of each event and function monitored under Condition Nos ~~24 25 – 31~~ ***25 – 31*** (inclusive). The report must contain the following:
- (a) the date and times the monitoring occurred;
  - (b) the activities that were occurring on land administered by the applicant during the monitoring;
  - (c) the sound pressure levels recorded, including any exceedences of the noise ~~level~~ limits specified in ~~Condition Nos 42–44 (inclusive)~~ ***of this consent***;
  - (d) if any exceedences did occur, what measures were implemented to ensure they did not re-occur during the event or function;
  - (e) the details of any complaints made during the event or function, including the details required by Condition Nos 35-38 (inclusive) of this consent; and
  - (f) any other information relevant to the consideration of the noise impact on residents or other sensitive receivers.

- In Schedule 2, insert a new Conditions 45A, 45B and 45C as follows:

#### **NOISE MANAGEMENT PLAN**

- 45A. Within two months of the date of this consent, the applicant shall prepare and implement an overarching Noise Management Plan for the carrying out of outdoor events and functions. The Plan must:
- (a) be prepared by a suitably qualified and experienced expert.
  - (b) be reviewed by the EPA and document how its concerns have been addressed;
  - (c) be consistent with the Acoustic Assessment and Acoustic Report in the RTS (Appendix A);
  - (d) detail the speaker arrangement, stage configuration and front-of-house location for all types of events;
  - (e) detail the noise limits and goals for events;
  - (f) describe all reasonable and feasible measures (e.g. use of limiters) to be implemented to minimise noise from the operation of outdoor events and comply with the noise limits in this consent;
  - (g) include procedures carrying out sound checks prior to and during events and rehearsals to ensure compliance with the noise limits in this consent;
  - (h) include measures to ensure quick and orderly patron departure, minimisation of patron noise and identification and minimisation of noisy bump-in and bump-out practices;
  - (i) include a suitable noise monitoring program;
  - (j) include an early warning system and reactive management procedure to ensure corrective actions are implemented prior to exceedences of noise limits in this consent;
  - (k) include a suitable complaints management system;
  - (l) include a suitable community consultation program including early notification of residents, prior to the commencement of events; and

- (m) include a program of continuous improvement to ensure the plan is regularly updated based on lessons learnt from events and functions held.

The applicant shall submit the final copy of the Plan to the Secretary for approval within 7 days of its completion.

#### **NOISE MANAGEMENT REVIEW**

- 45B. One year from the date of this consent and three years thereafter, the applicant shall undertake a review of the noise emissions from all outdoor events and functions held during the preceding period. The review must:
- (a) be undertaken in consultation with the EPA;
  - (b) document and consider all noise monitoring data recorded, and compliance report submitted, in accordance with the requirements of this consent;
  - (c) document and consider any identified exceedances of the noise limits in this consent and any complaints received; and
  - (d) evaluate the appropriateness of the noise limits and hours of operation for amplified music in this consent based on the review.

Each review must be submitted to the Secretary and the EPA within 7 days of its completion.

- 45C. The Secretary may direct the applicant to undertake noise attenuation works at any time in the event significant community noise complaints are received due to the operation of outdoor events and functions and/or the applicant is found to be exceeding the noise limits in this consent. These works must be undertaken to the satisfaction of the Secretary.

- In Schedule 2, Conditions 54 and 55 are replaced with the following:

#### **TEMPORARY STRUCTURES CONTINUED**

54. Temporary structures associated with events and functions shall comply with the following:
- (a) infrastructure associated with any event or activity should be designed and sited to minimise intrusion into primary view lines on the southern approach to the site and to maximise public access to the Forecourt and Monumental Steps;
  - (b) all structures, containers, scaffold towers and the like should be covered in a suitable screening material with appropriate graphics or artwork that reduces their visual impact and does not detract from or compete with the Sydney Opera House itself;
  - (c) no infrastructure element should be highly reflective, white or off-white, but a more neutral colour that does not compete with the Sydney Opera House shells or Podium;
  - (d) potentially intrusive items, or those that inhibit public access should be installed at the last possible opportunity and removed as soon as possible and practicable after the event;
  - (e) all event infrastructure and installations, including fencing and signage, should be of high quality design and execution that does not diminish or detract from the setting and presentation of the World Heritage Listed site;
  - (f) stage, rear and side-stage trucks and props for the one-off opera event in 2016, when not in use and between blocks of performances should, where

- possible, be moved to the eastern end of the monumental steps to minimise visual intrusion and to maximise public access to these steps; and
- (g) all temporary event structures shall comply with the relevant provisions of applicable Australian Standards and the Building Code of Australia.

**Note:** The requirement for no white or off-white infrastructure in subsection (c) of this condition would take up to 12 months from the date of this consent to implement.

## **SITE PROTECTION AND WORKS**

55. The applicant shall ensure significant building fabric and elements are protected from potential damage during all works associated with events and functions. Protection systems must ensure significant fabric is not damaged or removed.

- In Schedule 2, insert a new Condition 55A as follows:

### **NOMINATED HERITAGE CONSULTANT**

55A. The applicant shall ensure a suitably qualified and experienced heritage consultant is to be nominated to provide advice for all temporary events and functions in relation to potential impacts on heritage values, including the impact on significant fabric.

- In Schedule 2, Condition 59 is modified by the deletion of the ~~struck-out~~ words and the insertion of the ***bold italics*** words as follows:

59. ~~The use of the premises~~ ***Events and functions subject to this consent*** shall be operated at all times in accordance with the requirements of the ~~above~~ conditions of ***this*** consent.

- In Schedule 2, insert new Conditions 61 to 62 as follows:

### **TEMPORARY FOOD SALES – SET UP AND OPERATION**

61. If required, all temporary food stalls or temporary food vendors associated with Sydney Opera House events must have a current Approval from the City of Sydney in accordance with the requirements of the *Local Government Act 1993*. Approval numbers (Temporary Food Permit numbers) for all food operators must be submitted to the City 14 days prior to the event.

62. The set up and operation of any temporary food stall or vendor and associated equipment must comply with relevant sections of the City of Sydney fact sheet – "Requirements for the Operation of a Temporary Food Stall" and Standard 3.2.2, Food Safety Practices and General Requirements of the Australia and New Zealand Food Standards Code.

**Note:** The "Requirements for the Operation of a Temporary Food Stall, City of Sydney" and the "Temporary Food Stalls Event Register" and "Details of Temporary Food Stall " forms can be obtained from the City of Sydney website <http://www.cityofsydney.nsw.gov.au>

- In Schedule 2, insert new Conditions 63 to 67 as follows:

### **HERITAGE GUIDELINES**

63. All events and functions are to be undertaken in accordance with the latest version of the *Sydney Opera House Outdoor Events and Activities Heritage Guidelines*.

Within 2 months of the date of this consent, the applicant shall engage a suitably qualified and experienced expert to prepare an updated version of the draft *Sydney Opera House Outdoor Events and Activities Heritage Guidelines* (dated August 2016) in Appendix C of the RTS in consultation with the Heritage Office.

The applicant shall submit the final copy of the Guidelines to the Secretary no later than 7 days after its completion.

### **OUTDOOR EVENT GUIDE**

64. All events and functions are to be undertaken in accordance with the latest version of the *Sydney Opera House Outdoor Event Guide*.

Within 4 months of the date of this consent, the applicant shall prepare an updated version of the *Sydney Opera House Outdoor Event Guide* (dated 24 September 2015) in Appendix C of the RTS in consultation with Council, NSW Police, TNSW, the Heritage Office and the EPA.

The applicant shall submit the final copy of the Guide to the Secretary no later than 7 days after its completion.

### **EVENT MANAGEMENT PLANS**

65. All events and functions are to be undertaken in accordance with an Event Management Plan. The Plan must:

- (a) be tailored/specific to the event and/or function being undertaken;
- (b) be consistent with the latest versions of the *Sydney Opera House Outdoor Event Guide* and the *Sydney Opera House Outdoor Events and Activities Heritage Guidelines*;
- (c) describe the staging and timeline of events including key performances and activities, site establishment, bump-in and bump-out;
- (d) describe all statutory approvals required and obtained to undertake the event;
- (e) describe the roles and responsibilities of key employees involved in overseeing the event;
- (f) details how the environmental performance of the event would be monitored and managed, and identify what actions would be taken to address potential impacts;
- (g) comprehensively address the following:
  - (i) operational transport and traffic management;
  - (ii) pedestrian access management;
  - (iii) noise management, including reactive noise management measures and noise monitoring;
  - (iv) heritage and conservation management;
  - (v) security and staff management;



- (vi) lighting management;
  - (vii) emergency management/evacuation and incident response protocols;
  - (viii) alcohol and food management;
  - (ix) occupational health and safety;
  - (x) infrastructure and services management;
  - (xi) operational waste management;
  - (xii) water management; and
  - (xiii) community consultation and complaints management.
- (h) incorporate a Noise Management Sub-Plan (Condition 66).

The applicant shall submit the final copy of this Plan to the Secretary no later than 7 days prior to the commencement of the event.

### **NOISE MANAGEMENT SUB-PLAN**

66. All events and functions are to be undertaken in accordance with a tailored Noise Management Plan. The Plan is to be prepared by a suitably qualified and experienced expert and reviewed by the EPA. The Plan must:
- (a) be consistent with the Noise Management Plan required in Condition 45A and all other conditions of this consent;
  - (b) detail the speaker arrangement, stage configuration, front-of-house (i.e. mixing desk) location and all controls to be implemented to ensure compliance with the noise limits in this consent; and
  - (c) be certified (signed-off) by a suitably qualified and experienced expert confirming the event set up has the ability to comply with all noise limits in this consent.

The applicant shall submit the final copy of this Plan to the Secretary no later than 7 days prior to the commencement of the event.

### **THE OPERA EXEMPTIONS**

67. The one-off 25 day event to be undertaken in 2016 (Sydney Opera House – The Opera) is exempt from the requirements of Conditions 65 to 66 of this consent. This event shall be carried out in accordance with all documentation submitted in support of the application, in particular the recommendations made within:
- (a) the Heritage Impact Statement prepared by Design 5 Architects in Appendix K of the EA;
  - (b) the Acoustic Assessment prepared by Acoustic Studio and the Acoustic Report prepared by Auditoria in Appendix A of the RTS;
  - (c) the Lighting Impact Assessment prepared by Opera Australia in Appendix H of the EA; and
  - (d) the Traffic Management Plan prepared by Event Services International Pty Ltd in Appendix L of the EA.

- In Schedule 2, insert new Advisory notes AN2 and AN3 as follows:

**AN2. Commonwealth Environment Protection and Biodiversity Conservation Act 1999**

The Commonwealth *Environment Protection and Biodiversity and Conservation Act 1999* provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance (NES) matter; or Commonwealth land, without an approval from the Commonwealth Environment Minister.

This application has been assessed in accordance with the New South Wales *Environmental Planning & Assessment Act 1979*. It is the Applicant's responsibility to consult the Australian Commonwealth Department of Environment to determine the need for Commonwealth approval and you should not construe this grant of approval as notification to you that the Commonwealth Act does not apply. The Commonwealth Act may have application and you should obtain advice about this matter. There are severe penalties for non-compliance with the Commonwealth legislation.

**AN3. Heritage Act 1977**

It is advised that the application may require separate approval under the *Heritage Act 1977*.

This application has been assessed in accordance with the New South Wales *Environmental Planning & Assessment Act 1979*. It is the Applicant's responsibility to consult the Office of Environment and Heritage (Heritage Office) and the NSW Heritage Council to determine the need for separate approval under the *Heritage Act 1977* and you should not construe this grant of approval as notification to you that this Act does not apply.

**End of modifications to DA 445-10-2003 MOD 4**

# SYDNEY OPERA HOUSE – OUTDOOR EVENTS & ACTIVITIES

## HERITAGE GUIDELINES & KEY PERFORMANCE INDICATORS

### Purpose of Heritage Guidelines

The purpose of this document is to guide the scale, design and placement of event infrastructure on external areas, and to define and outline the spread of event free days throughout the year, so that significant values of Sydney Opera House are maintained and respected.

Zones for event infrastructure are identified and defined by primary views and vistas to and from the Opera House that should remain unobstructed.

These guidelines apply to any outdoor event or activity on the Sydney Opera House site (except maintenance and works), including community events.

These guidelines must be considered as a complete set and are to be applied in an integrated manner.

They are based on ***Respecting The Vision***, *Sydney Opera House – a Conservation Management Plan*, 4th edition, July 2017 (CMP).

### Compliance with Heritage Guidelines

Every event set-up has different requirements and from time to time infrastructure, including security, may be required outside of the Event Infrastructure Zones. In such instances, agreement must be reached with either the Opera House's heritage consultant, the Design Advisory Panel or the Conservation Council. Consideration must be given to reducing the impacts, particularly visual, on primary views and public access.

Note that temporary security-related infrastructure is permissible across the site, inside and outside Event Infrastructure Zones, under clause 12 of the Opera House's Site Specific Exemptions under the Heritage Act 1977.

Nothing in this document detracts from any obligation to comply with all applicable regulatory requirements.

These guidelines are to be reviewed and updated every 24 months to ensure objectives are being achieved.

### Heritage Guidelines structure

The guidelines are set out in the following order:

- 1.0 Relevant CMP Policies
- 2.0 Outdoor performing arts & community events – generally
- 3.0 Outdoor performing arts & community events – whole of site – high impact on setting and heritage values
- 4.0 Outdoor performing arts & community events – not whole of site – high impact on setting and heritage values
- 5.0 Outdoor performing arts & community events – medium impact on setting and heritage values
- 6.0 Events / activation – low impact on setting and heritage values
- Figure 1 Plan showing Primary Views & Event Zones
- 7.0 Primary views towards Sydney Opera House on approach and from setting – images and descriptions

## 1.0 RELEVANT CMP POLICIES

### 1.1 CMP 4<sup>th</sup> Edition (July 2017)

#### Policy purpose & framework

- **Policy 1.0 – Policy context and interdependence**

*Policies must only be considered with reference to the supporting discussion as it will make their context and meaning clear. They must not be considered in isolation from other policies related to them and are to be applied in an integrated manner.*

Policy 1.0 above sets the framework for reading and understanding all policies in the CMP.

### 1.2 Relevant CMP 4<sup>th</sup> Edition policies are as follows:

#### Section 4.1 The Primacy of Jørn Utzon's Vision

- Policy 1.1 – *Protecting Utzon's masterpiece*
- Policy 1.2 – *Utzon concepts*

#### Section 4.2 Importance of setting

- Policy 2.1 – *Landmark qualities*
- Policy 2.3 – *Protect setting*

#### Section 4.3 Protecting the values

- Policy 3.1 – *World, National and State Heritage values*
- Policy 3.2 – *Primary use as performing arts centre*
- Policy 3.3 – *Responsibility*

#### Section 4.4 Utzon, Hall & the approach to change

- Policy 4.1 – *Research to inform decisions*
- Policy 4.11 – *Significance, tolerance and opportunities for change*
- Policy 4.12 – *Levels of Significance – general policy*

#### Section 4.5 Open & uncluttered setting

- Policy 5.1 – *Permanent or semi-permanent structures or objects*
- Policy 5.2 – *Temporary or short-term installations and objects*
- Policy 5.3 – *Tarpeian Wall*

### Section 4.6 Events & uses externally

- Policy 6.1 – *Events externally*
- Policy 6.2 – *Design quality*
- Policy 6.3 – *Commercial leases and other uses*
- Policy 6.4 – *Food and beverage externally*
- Policy 6.5 – *Seating and umbrellas for outdoor events*
- Policy 6.6 – *Shelter on Podium and Lower Concourse*
- Policy 6.7 – *Western Colonnade open and unobstructed*
- Policy 6.8 – *Exterior furniture and objects*
- Policy 6.9 – *Soft landscaping inappropriate*

### Section 4.7 Conserving the exterior

- Policy 7.17 – *Fitouts in Lower Concourse*
- Policy 7.23 – *Covered (Vehicle) Concourse*

### Section 4.14 Lighting

- Policy 14.1 – *Lighting and visitor experience*
- Policy 14.3 – *Temporary lighting projections*

### Section 4.15 Signage

- Policy 15.1 – *Signage*
- Policy 15.3 – *Promotion and merchandising*

### Section 4.16 Interpretation

- Policy 16.1 – *Interpretation*
- Policy 16.4 – *Interpretation impacts on use*

### Section 4.18 Care of the fabric & housekeeping

- Policy 18.18 – *Housekeeping*
- Policy 18.19 – *Housekeeping – training and review*

### Section 4.20 Managing the process of change

- Policy 20.2 – *Unacceptable uses*
- Policy 20.3 – *Lease and hire agreements*
- Policy 20.7 – *Heritage advice*
- Policy 20.8 – *Heritage awareness and training*

## 2.0 OUTDOOR PERFORMING ARTS & COMMUNITY EVENTS – Generally

### 2.1 Description

- Temporary outdoor event or activity of any type or duration, whether or not requiring infrastructure including stage, structures, barriers, etc  
Note – bump-in and bump-out times are to be included in the total event duration.
- Sydney Opera House maintenance and construction works / activities are excluded.

### 2.2 Key Performance Indicators – any outdoor event or activity

The purpose of these guidelines / key performance indicators is to minimise potential negative impacts for any outdoor event or activity.

#### 2.2.1 Views

- Large structures that may impact on views and vistas towards the Opera House are kept to a minimum, sufficient only to hold the event (these views and vistas are defined in Policy 2.3 in CMP 4th edition).
- These guidelines do not include consideration of views or infrastructure zones for events or activations on the Lower Concourse, of which some areas are part of leased premises.
- Event infrastructure that is over 1.5m high on **Forecourt** and **Western Broadwalk** is located within the **Event Infrastructure Zones** described below and identified on Figure 1 attached and does not block **primary views 1a, 2 and 4 towards Sydney Opera House on approach** from the south east (as indicated on Figure 1). Key elements are the shells and Podium from a distance expanding to full width of Monumental Steps from closer views.
- Key to outdoor **Event Infrastructure Zones** shown on Figure 1 attached:
  - Zone 1** (Forecourt) protecting primary views towards the Opera House on approach and public access to full width of Monumental Steps.
    - Allowed zone for large structures such as covered stages, services etc, structures that potentially have a substantial visual impact and / or potentially restricted public access. Refer to primary views 1, 1a, 2, 3, 4 and 5.
  - Zone 2** (Forecourt) protecting view of shells and retaining public access to full width of Monumental Steps but allowing masking of eastern podium in primary views 1, 1a, 2, 3 and 4 towards the Opera House on approach.
    - Extended zone for large structures such as covered stages, front-of-house control towers, etc (**only** where these will not fit into Zone 1) that have a substantial visual impact and / or potentially restricted public access.
  - Zone 3** (Western Broadwalk – north) protecting principal views to and from Western Colonnade and Western Foyers.
    - Allowed zone for max 4m high structures such as covered stages etc, that potentially have a substantial visual impact and / or potentially restricted public access. Refer to primary views 8, 9, 18d, 18e, 19 and 20.
    - Umbrellas permitted only when associated with an event.
  - Zone 4** (Western Broadwalk – south) protecting principal views to and from Western Colonnade and Western Foyers.
    - Allowed zone for max 4m high structures that potentially have a substantial visual impact and / or potentially restricted public access. Refer to primary views 6, 7, 18e, 19 and 20.
    - Umbrellas permitted only when associated with an event.

- **Northern Broadwalk Activation Area**

- The whole of the Northern Broadwalk Activation Area is potentially an Event Infrastructure Zone but must only be used in accordance with these guidelines.
- Visual intrusion of any event or activation on the Northern Broadwalk is minimised, including views to and from the harbour setting, and across this Broadwalk. Because of its location, exposure and visibility, the scale, design and location of infrastructure are crucial factors in minimising impacts across this whole activation area. Refer to primary views 10 to 20.
- Any infrastructure to stage or support an event in the Northern Broadwalk Activation Area is as low scaled as possible for the particular event and no higher than 4m (other than high impact events), and in place for the minimum amount of time.
- High impact staged events on the Northern Broadwalk will occur no more than three times per year (including New Year's Eve staged concert), and event infrastructure including the stage are as low as possible for the event requirements.
- Visual impacts are reduced through the appropriate use of the SOH external colour palette and positioning of temporary infrastructure. The design and placement of event infrastructure is in accordance with Section 2.2.2 Design Quality.

- **Security, Barriers and Fencing generally**

- Low level fencing or barriers are no higher than 1.2m, are of a high design standard, not visually detracting, and of materials that will not damage or stain the granite paving or concrete.
- Fencing or barriers over 1.2m high, designed to block public vision across or into the Forecourt, Broadwalks or Podium are in principle not acceptable, regardless of the activity or event. If screening over 1.2m high is absolutely necessary for security, it should be no higher than the minimum required for the event, only be in place for the minimum time before and during the performance, and removed as soon as it is over. Fencing or barriers over 1.2m to screen back of house facilities only are acceptable for the duration of the event or installation. The objective is always to minimise the restricted area and loss of view.
- To avoid blocking off primary view lines, staffing of perimeters to achieve security is preferred to solid barriers. While meeting temporary security objectives, each installation must try to achieve the best possible outcomes in terms of retaining and respecting key views and a sense of openness.

- **Structures generally**

- No structures or facilities are placed anywhere in the area south of the underground loading dock entry at the southern entry of the site. This is to retain the unobstructed view lines and sense of openness at the main arrival point to the site.
- No covered stage, marquee or shelter structure is erected anywhere on the Podium or Monumental Steps. The Podium is elevated and visible from both short and longer views. Any covered structure on this platform will be visually too close to the shells. It is preferable to erect Front-of-House lighting or other tower structures for a Forecourt event, on the Forecourt itself and avoid the Monumental Steps or Podium. If there is no alternative to the placement of structures such as sound tents or towers on the Steps or Podium for a Forecourt event, every effort is made to minimise visual impacts of these structures.
- No stage, marquee, lighting or other structure is erected on the Western Colonnade roof.



- No covered stage, marquee or partially / fully enclosed structure is erected anywhere to the west or immediate vicinity of the Colonnade on the Western Broadwalk except in Zones 3 and 4. Minimal arrangement of separate temporary umbrellas permitted in this area.
  - Any structures or infrastructure on the Forecourt, or Western and Northern Broadwalks will be overlooked from the upper Podium, or important spaces within the building, even when screened at their perimeters. Those in the Forecourt will also be seen from the Royal Botanic Gardens from the Tarpeian Steps and the top of the Tarpeian Wall. It is essential that the guidelines noted in 2.2.2 Design Quality, include consideration of these views.
  - Festoon lighting is avoided and if considered, only permitted within Zone 1 and at low level.
  - No lavatories or support facilities are placed on the Podium or western part of the Forecourt, and not on the Broadwalks (except within the 'cleavage' space on the Northern Broadwalk). Such facilities are preferably placed towards the south-east corner of the Forecourt – away from key view lines and public access routes and are appropriately screened from view.
  - Very strong preference that lavatory facilities are not placed anywhere in the Covered Concourse. If they are placed here, they are to be at the south eastern end, for the minimum period of time, and appropriately screened. (To minimise impact on views and avoid unpleasant environment for other visitors and patrons in this important semi-enclosed arrivals foyer space.)
- **Public access**
    - Bump-in and bump-out times are planned to minimise disruption and maximise public access to as much of the external spaces as possible.

### 2.2.2 Design quality

- The design, placement and execution of all installations, infrastructure, signage and other objects are of exceptionally high quality, respect the unique location, character, quality and significance of Sydney Opera House and do not detract from or compete with it.
- The colour of all infrastructure and objects associated with the event, including signage, are not white, off-white, highly reflective, harsh tonal contrasts, or a light or distracting colour that may compete with the shells of the Opera House.
- The SOH external colour palette, in the *Outdoor Event Guide*, is followed to reduce visual impacts of temporary outdoor event infrastructure. Appropriate use of colours for outdoor infrastructure is undertaken in consultation with the heritage architect and developed as part of a 'kit-of-parts' for Sydney Opera House use.
- Preferred colour for any marquee, covering or cladding on structures seen in close relationship to the Podium or roof shells, is a muted colour equal or close to Dulux 'Coconut Husk'. For those seen in relation to the Tarpeian Wall, the preferred colour is a mid to dark grey tone, such as Dulux 'Teahouse Grey' or Black. Other colours must be muted and have prior approval from Sydney Opera House.
- Preferred colour for umbrellas anywhere on the site is a muted colour equal or close to Dulux 'Coconut Husk'.
- Fencing, barriers, stages and other infrastructure for events at the Opera House to be developed as a 'kit-of-parts' or a set of standards specific for SOH use.

### 2.2.3 Impact on fabric

- When the event or activity is over, all traces of it are removed as quickly as possible, leaving the place without damage and as it was before.
- Paving and other fabric, including concrete, granite and bronze is carefully and discretely protected from damage for the whole period of the event or activity. On conclusion of the event or activity, all protection is removed and the fabric inspected for damage.
- Food and beverage options that are likely to stain, discolour or otherwise damage the precast or solid granite paving are not offered.
- All damage to the fabric is rectified at the expense of the hirer, organisation, or persons responsible for the event.

### 2.2.4 Timing between events / activations (To minimise public perception of continuous activation of external areas.)

- A minimum of 2 periods of 30 consecutive days with no more than Low Activation is provided for each calendar year.
- Except for the temporary provisions outlined below during Concert Hall closure and Covid-19 related recovery period, (July 2020 – June 2023), a minimum of 11 days (including 2 weekends) with no more than Low Activation is provided between any two High or Medium Impact events or activations.
- Due to Concert Hall closure and the impact of the Covid-19 pandemic, the Opera House will stage events and activations in outdoor areas where social distancing rules will be easier to maintain. Over a three year period (July 2020 – June 2023), the 11 clear days requirement between high and / or medium impact events stated above, will be partially and temporarily relaxed.
- Between July 2020 and June 2023, the following key performance indicators apply:
  - No more than two sequential high and/or medium impact events can occur without 11 clear days in between, in the same location or different locations. If in the same location, sequential events should endeavour to utilise the same infrastructure to reduce bump-in and out times and impacts. Bump-in / -out days for sequential events can overlap. Every effort will be made to ensure sequential events without 11 clear days are as close together as possible to reduce the perception of long periods of activation and infrastructure in Sydney Opera House external areas.
  - Concurrent medium impact events in two different locations are permitted. Concurrent high impact events or high and medium impact events are not permitted.
  - An 11 clear day period is required before and after two sequential or concurrent high and / or medium impact events of any combination. The 11 clear day period that is adjacent to a high impact event must include two weekends. The 11 clear day period adjacent to a medium impact event should ideally include two weekends.
  - 11 clear days including two weekends must remain between whole of site high impact and medium or high impact events. Existing event infrastructure for the New Year's Eve staged concert on the Northern Broadwalk could remain before or after this event for additional staged performances on this Broadwalk.

- An assessment of the heritage impacts of the temporary relaxation of the 11 clear day requirement between events and activations will be reported annually to Conservation Council and the Design Advisory Panel in consultation with the heritage architect. At the conclusion of the three year period, the 11 day requirement between high and / or medium impact events will be reviewed.

**2.2.5 Seasonal spread of Low impact events / activation or event free days** (based on requirements of the SOH Conservation Council)

- Summer – at least 21 days, including 9 continuous days that include (where possible) 2 weekends during 1<sup>st</sup> half of January
- Autumn – at least 28 days, including (where possible) 9 continuous days that include 2 weekends during public school holidays
- Winter – at least 28 days, including (where possible) 9 continuous days that include 2 weekends during public school holidays
- Spring – at least 28 days, including (where possible) 9 continuous days that include 2 weekends during public school holidays

**3.0 OUTDOOR PERFORMING ARTS & COMMUNITY EVENTS – Whole of site – High Impact on setting and heritage values**

**3.1 Description**

- Event of any type or duration requiring covered stage and / or tall structures / staging towers for lighting, speakers, screens etc on at least one area of the site (refer Figure 1 attached).
- Event of any type having a high impact on close or longer views (defined by Policy 2.3 in CMP 4th edition and Primary Views in Figure 1 below).
- Restricted public access to whole of SOH site (refer to Figure 1 attached)

**Examples**

- New Year's Eve
- VIVID including Vivid Live on the Northern Broadwalk (NBW) and Vivid Sydney on the Forecourt (FCT)

**3.2 Key Performance Indicators**

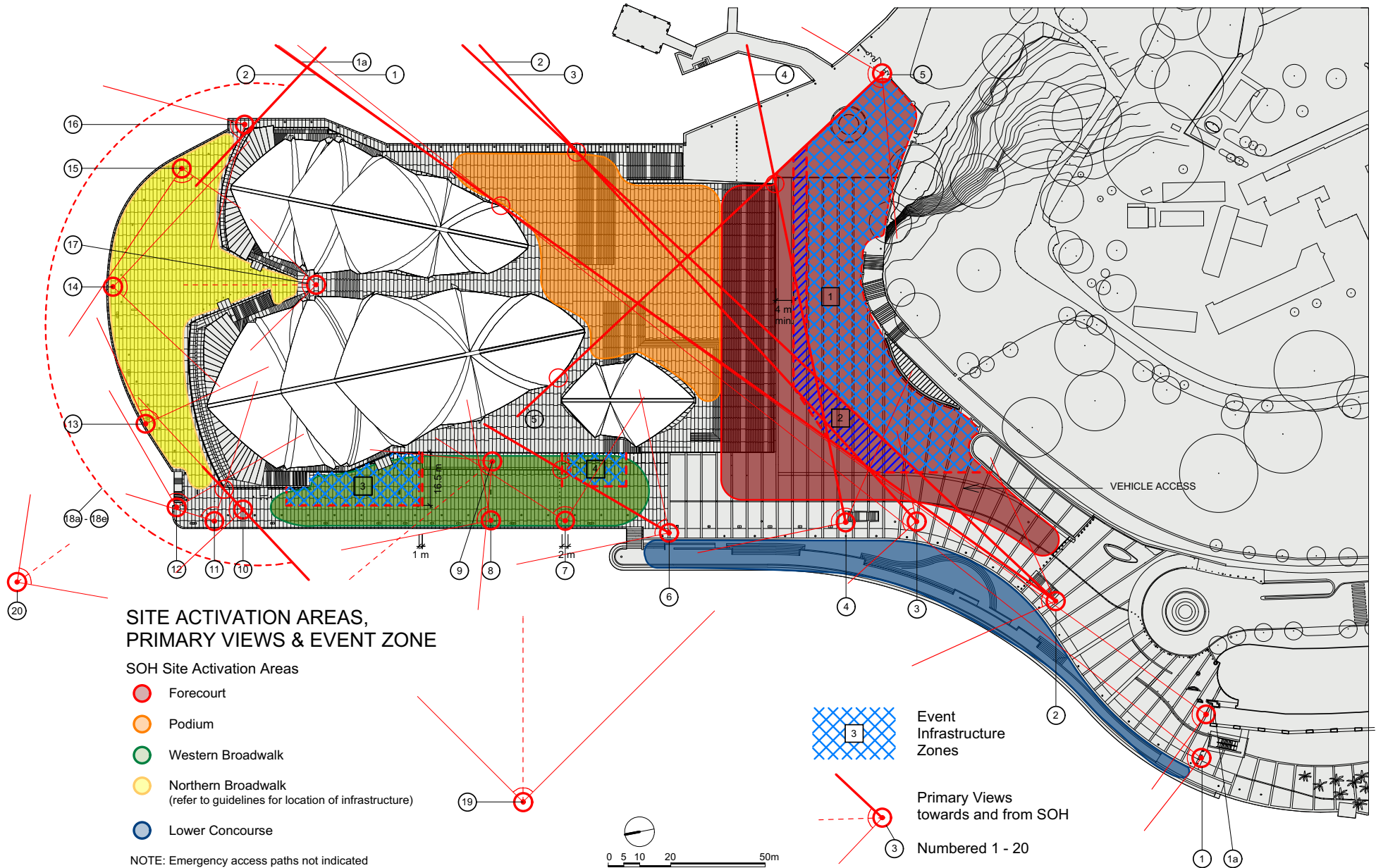
**3.2.1 Generally**

- **Whole of site High Impact events** to adhere as much as possible to guidelines / key performance indicators described in '2.0 OUTDOOR PERFORMING ARTS & COMMUNITY EVENTS – Generally' above. Barrier fencing and location of lavatories may be an exception.
- **Whole of site High Impact events** at the Opera House because of the status and public esteem of this place. These events have as their focus the building itself, either as the backdrop to activities, or the primary focus of them. All infrastructure should therefore avoid negative visual impacts wherever this is possible.

<b>4.0 OUTDOOR PERFORMING ARTS &amp; COMMUNITY EVENTS – High Impact on setting and heritage values</b>	
<p><b>4.1 Description</b></p> <ul style="list-style-type: none"> <li>• Event of any type or duration requiring covered stage and / or tall structures / staging towers for lighting, speakers, screens etc.</li> <li>• Event of any type having a high impact on close or longer views (defined by Policy 2.3 in CMP 4th edition and Primary Views in Figure 1 below).</li> <li>• Restricted public access to at least one area, but not whole of site (refer to Figure 1)</li> </ul>	<p><b>Examples</b></p> <ul style="list-style-type: none"> <li>• Staged performances on the Forecourt (FCT) or Northern Broadwalk (NBW)</li> <li>• The National 2018 (FCT)</li> <li>• Oprah 2010 (FCT)</li> <li>• Vivid Live 2019 (NBW)</li> </ul>
<p><b>4.2 Key Performance Indicators</b></p> <p><b>4.2.1 Generally</b></p> <ul style="list-style-type: none"> <li>• The guidelines / key performance indicators for <b>High Impact</b> events are as described in ‘2.0 OUTDOOR PERFORMING ARTS &amp; COMMUNITY EVENTS – Generally’ above</li> </ul>	

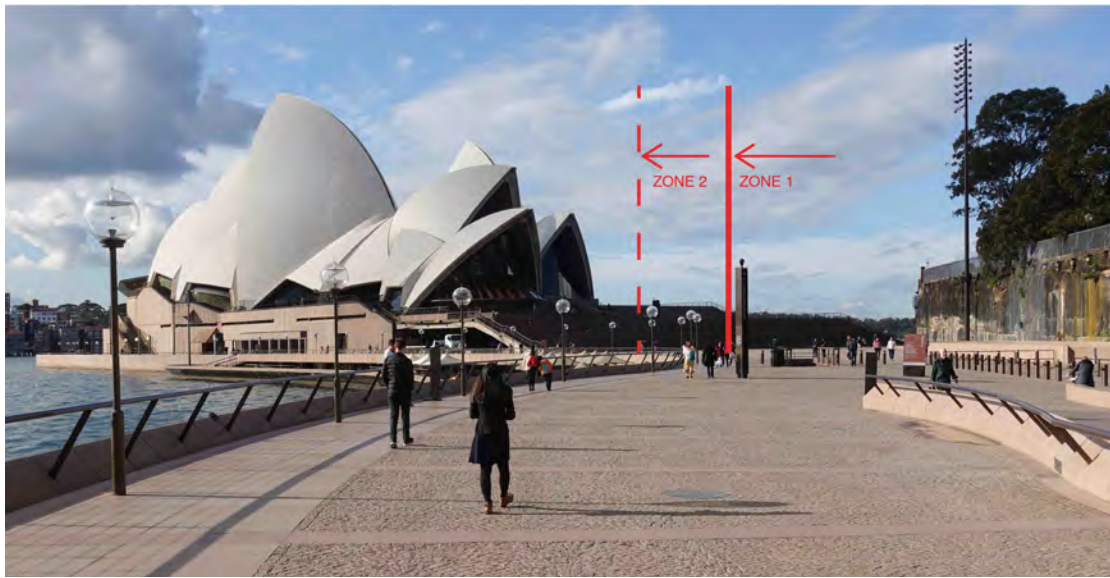
<b>5.0 PERFORMING ARTS &amp; COMMUNITY EVENTS – Medium Impact on setting and heritage values</b>	
<p><b>5.1 Description</b></p> <ul style="list-style-type: none"> <li>• Event of any type or duration requiring an uncovered stage and / or minimal small scale infrastructure, barriers etc.</li> <li>• Event of any type having a medium impact on close or longer views (defined by Policy 2.3 in CMP 4th edition and Primary Views in Figure 1 below).</li> <li>• Restricted public access to no more than one area of site (refer to Figure 1 attached)</li> </ul>	<p><b>Examples</b></p> <ul style="list-style-type: none"> <li>• Sydney Running Festival</li> <li>• Dance Rites (FCT)</li> </ul>
<p><b>5.2 Key Performance Indicators</b></p> <p><b>5.2.1 Generally</b></p> <ul style="list-style-type: none"> <li>• The guidelines / key performance indicators for <b>Medium Impact</b> events are as described in ‘2.0 OUTDOOR PERFORMING ARTS &amp; COMMUNITY EVENTS – Generally’ above with additional performance indicators as follows:</li> </ul> <p><b>5.2.2 Scale of infrastructure</b></p> <ul style="list-style-type: none"> <li>• No structures or infrastructure at all on Podium, Monumental Steps or Colonnade</li> <li>• Forecourt – <b>no</b> structures above 5 metres</li> <li>• Western Broadwalk Event Infrastructure Zones (3 and 4) and the Northern Broadwalk Activation Area – <b>no</b> structures above 4 metres</li> </ul>	

6.0 EVENTS / ACTIVATION – Low Impact on setting and heritage values	
<p><b>6.1 Description</b></p> <ul style="list-style-type: none"> <li>• Event of any type having <b>no</b> impact on close or longer views towards the place (defined by Policy 2.3 in CMP 4th edition and Primary Views in Figure 1 below).</li> <li>• Generally means unrestricted public access to whole of site (refer to Figure 1 attached).</li> <li>• Event or activations of any type requiring no to minimal infrastructure.</li> <li>• Events or activations are for a limited period of time (generally no more than 72 hours).</li> </ul>	<p><b>Examples</b></p> <ul style="list-style-type: none"> <li>• Greek National Day</li> <li>• Etihad Gala Dinner dance performance (NBW)</li> <li>• Photoshoots requiring minimal infrastructure</li> <li>• Televised event, e.g. live stream of Bob Hawke memorial (FCT)</li> <li>• Short activations with minimal infrastructure e.g. Masarati Showcase 2018 (FCT)</li> <li>• Ephemeral performance e.g. Chinese Dragons</li> <li>• Low scaled artwork, e.g. Antidote Festival 2019 Art Assembly by Jason Phu</li> </ul>
<p><b>6.2 Key Performance Indicators</b></p> <p><b>6.2.1 Generally</b></p> <ul style="list-style-type: none"> <li>• The guidelines / key performance indicators for <b>Low Impact</b> events / activation are as described in ‘2.0 OUTDOOR PERFORMING ARTS &amp; COMMUNITY EVENTS – Generally’ above with additional performance indicators as follows:</li> </ul> <p><b>6.2.2 Infrastructure</b></p> <ul style="list-style-type: none"> <li>• Minimal use of structures or infrastructure on any external areas (e.g. low platforms, TV screens).</li> <li>• Minimal use of barriers or fencing (e.g. crowd control barrier (CCB), rope and bollard).</li> <li>• Minimal use of signage describing the event including artwork and directional signage.</li> </ul>	





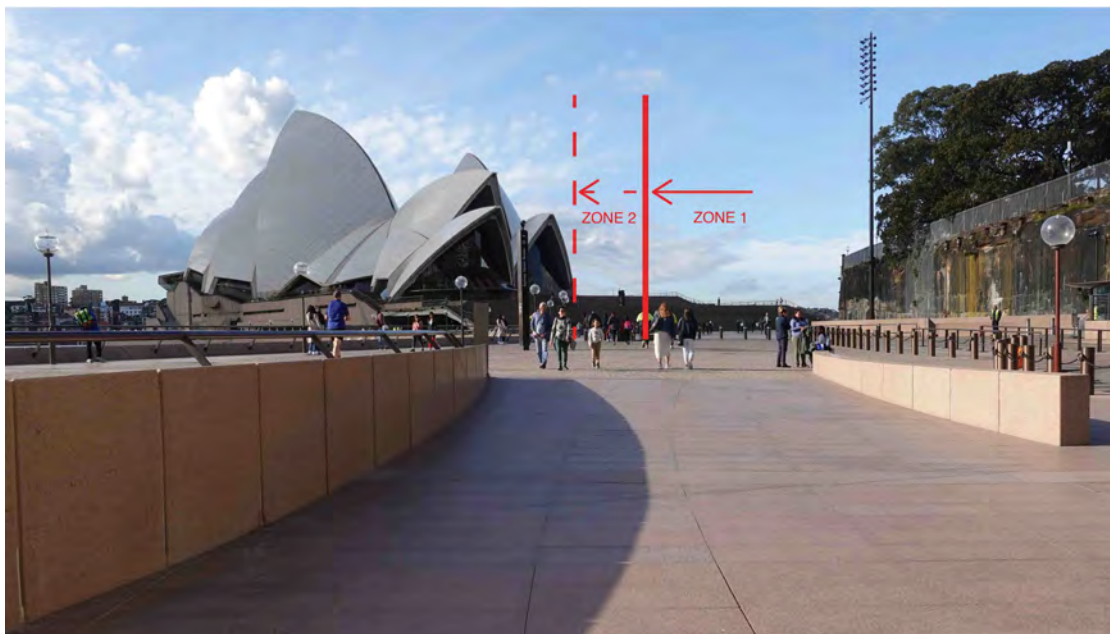
## 7.0 Primary Views toward Sydney Opera House on approach – refer to Figure 1



**View 1 - from southern entry to site at top of western ramp from East Circular Quay**

Key aspects are:

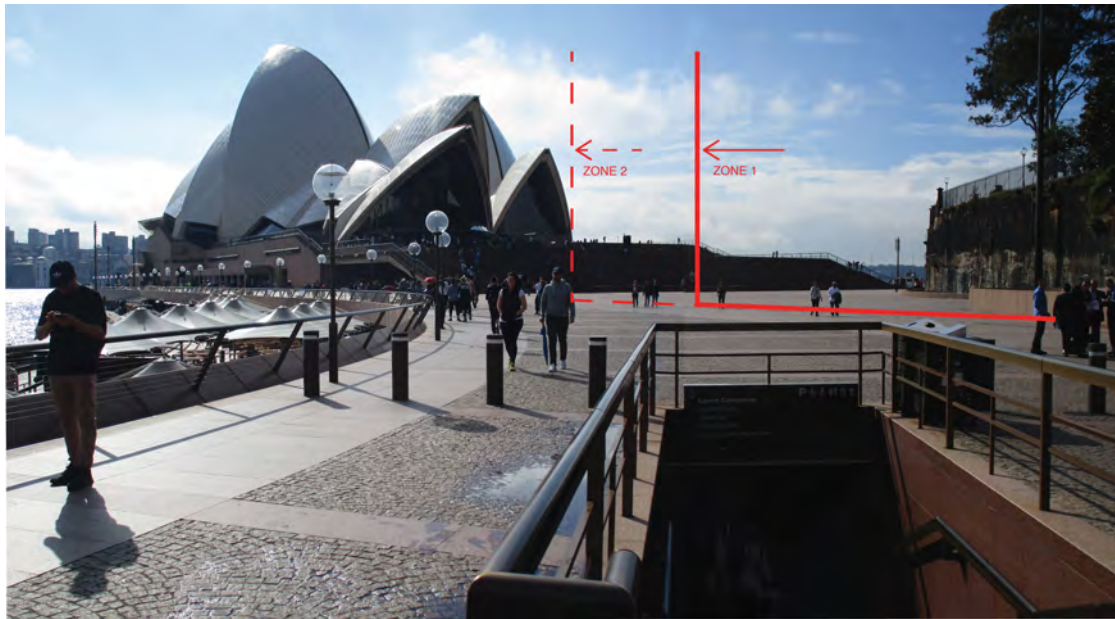
- Full suite of roof shells visible at all times
- Full width of top of podium visible with infrastructure within Zone 1
- East half of Monumental Steps obscured with infrastructure within Zone 1



**View 1a – from centreline of north end of west colonnade at N°1 Macquarie Street**

Key aspects are:

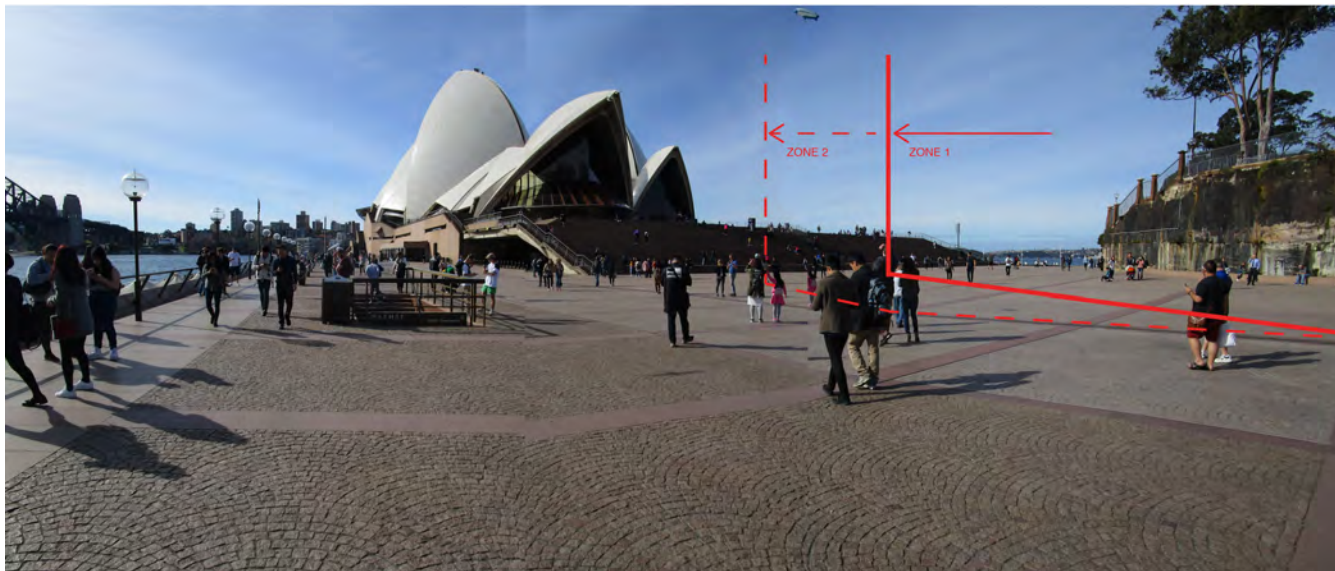
- Full suite of roof shells visible at all times
- Almost full width of top of Podium visible with infrastructure within Zone 1
- East half of Monumental Steps obscured with infrastructure within Zone 1



**View 2 – from SW corner of stair to lower concourse and carpark**

Key aspects are:

- Full suite of roof shells visible at all times
- Full width of top of Podium and majority of Monumental Steps visible with infrastructure within Zone 1
- East half of Monumental Steps obscured with infrastructure within Zone 1



**View 3 – from 3<sup>rd</sup> granite strip south of stair to lower concourse, Opera Bar and Opera Kitchen**

Key aspects are:

- View opening up to reveal more of eastern part of Podium and Monumental Steps
- East end of Monumental Steps obscured with infrastructure within Zone 1
- Eastern half of Monumental Steps obscured with infrastructure within Zone 2

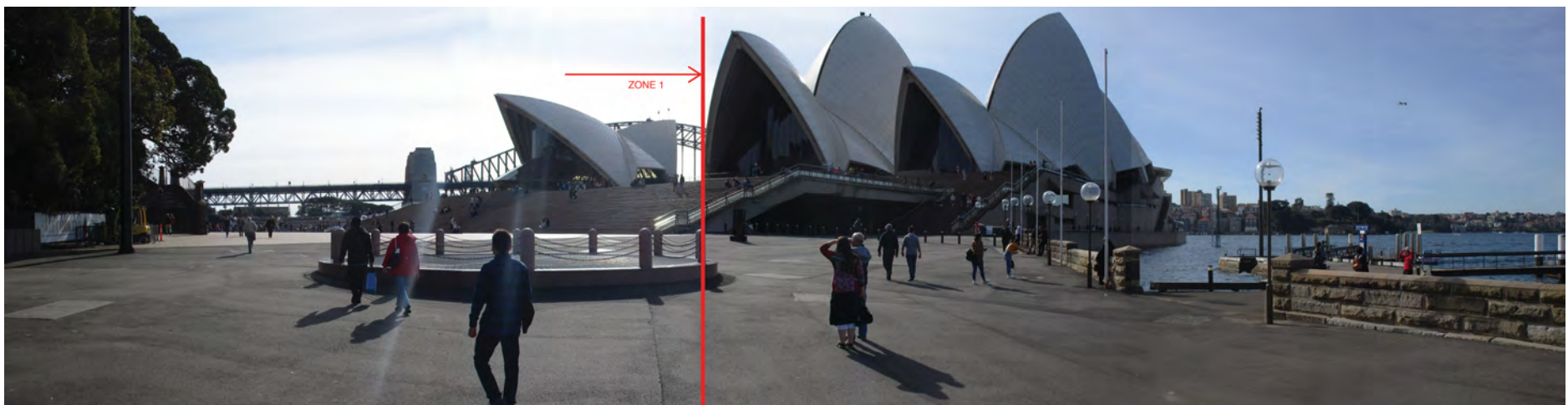




**View 4 – from NW corner of stair from Opera Bar and Opera Kitchen**

Key aspects are:

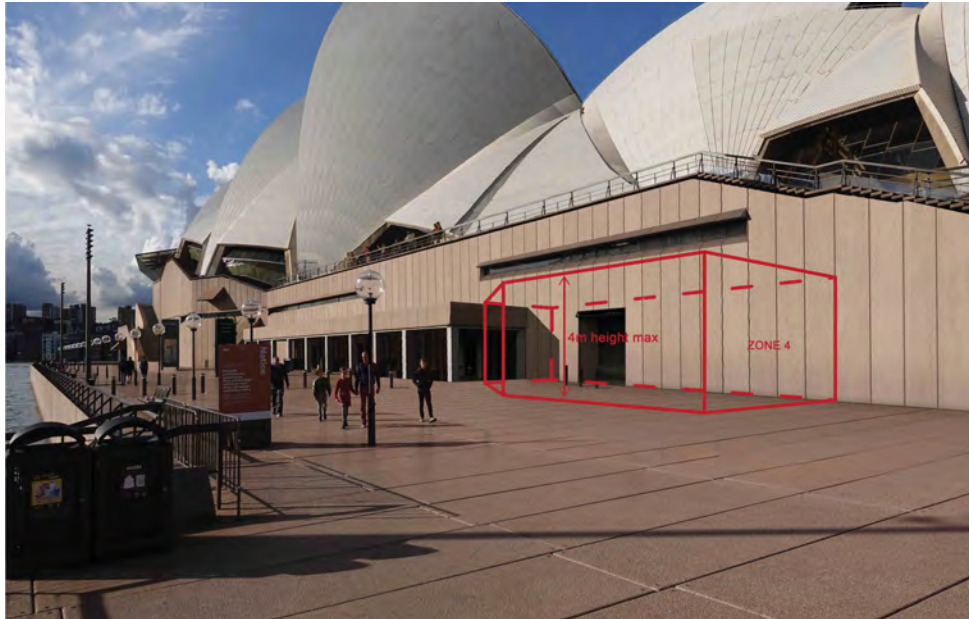
- Full width of roof shells, Podium and all except east end of Monumental Steps visible at all times
- View opens up to reveal full width of Monumental Steps with infrastructure within Zone 2



**View 5 – from in front of western pier to main gate to Royal Botanic Gardens**

Key aspects are:

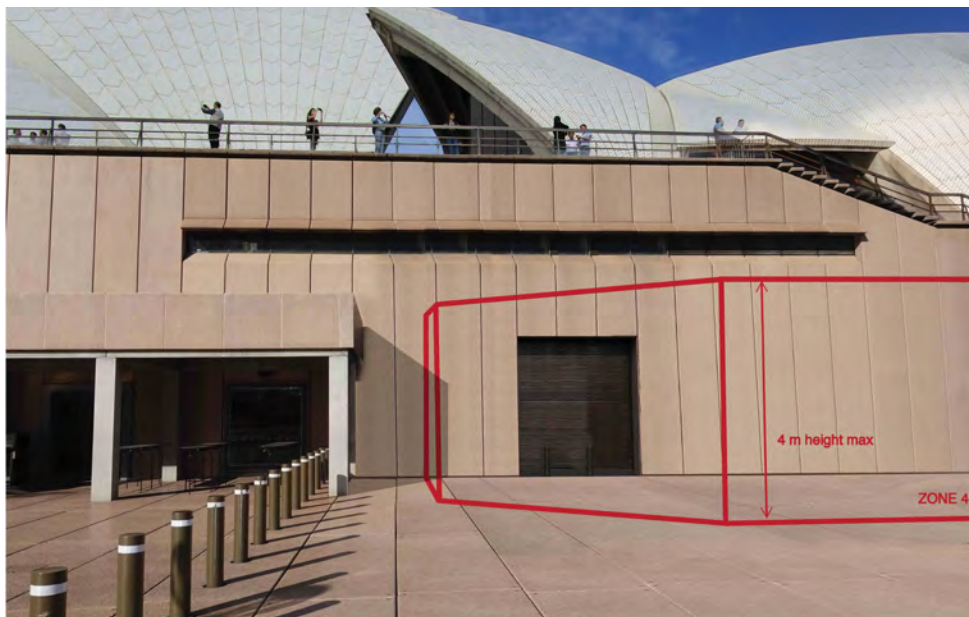
- Full suite of Concert Hall and Joan Sutherland Theatre roof shells visible at all times. Bennelong roof shells may be obscured



**View 6 – from north end of Forecourt paving at junction with Western Broadwalk precast paving**

Key aspects are:

- Full western face of Colonnade visible at all times from this location
- Southern end of Colonnade obscured with infrastructure within Zone 4
- Maximum height of infrastructure in Zone 4 is 4m – below top of parapet to Colonnade

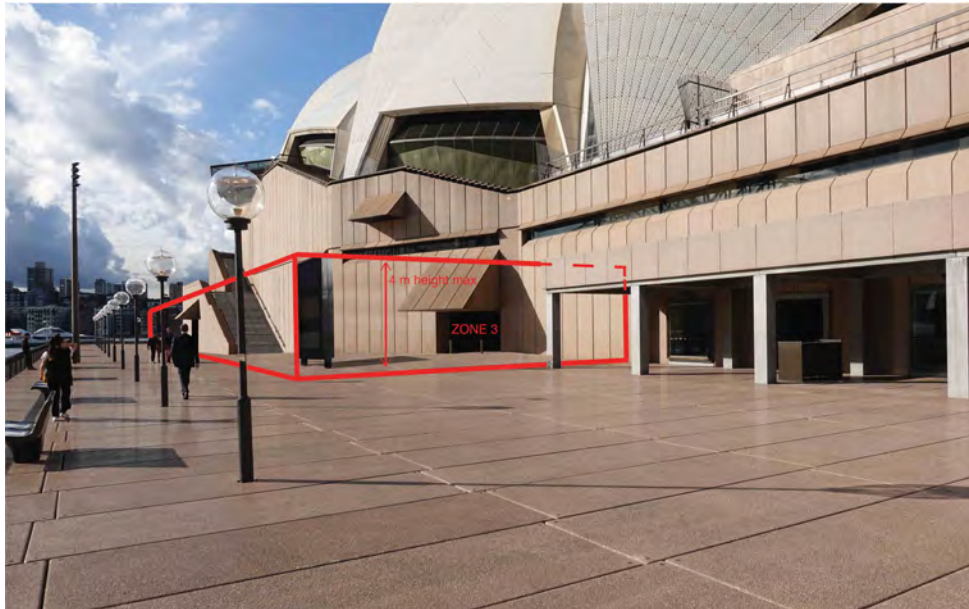


**View 7 – from directly west of south end of Western Colonnade**

Key aspects are:

- Full extent of Colonnade visible at all times with visual separation at each end to Event Infrastructure Zones 3 and 4
- Maximum height of infrastructure in these zones is 4m – below top of parapet to Colonnade





**View 8 – from western side of Western Broadwalk opposite centreline of Western Colonnade**

Key aspects are:

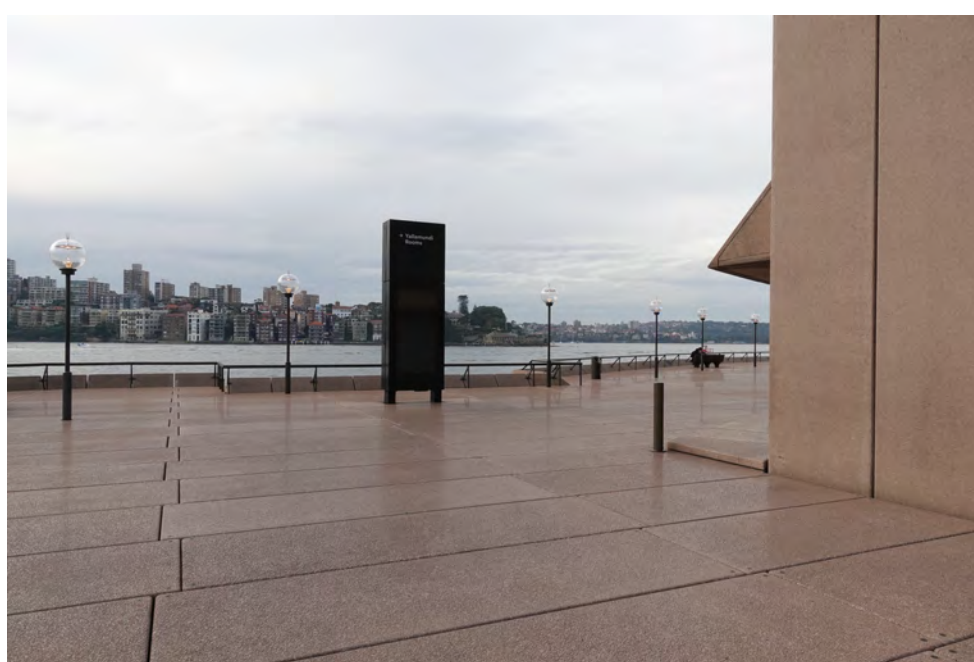
- Full extent of Colonnade visible at all times with visual separation at each end to Event Infrastructure Zones 3 and 4
- Maximum height of infrastructure in Zones 3 and 4 is 4m – below top of parapet to Colonnade
- Infrastructure layout in Zone 3 must accommodate public access to Drama Theatre entry beneath granite hood



**View 9 – towards Harbour Bridge from within Western Colonnade on its centreline**

Key aspects are:

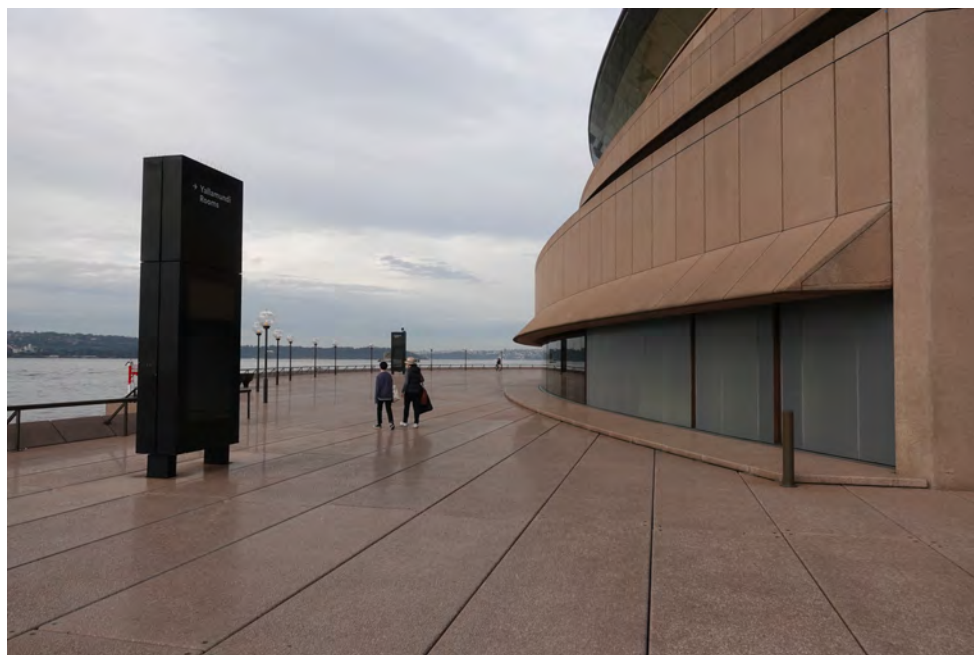
- Full view of Harbour Bridge from centreline with only northern approach to north pylon obstructed by infrastructure within Zone 3
- Unobstructed view directly to and from west Circular Quay



**View 10 – from almost north end of Western Broadwalk**

Key aspects are:

- First glimpse of Northern Broadwalk and expansive view north east towards harbour
- Stark clarity and drama of north west corner of Podium is important

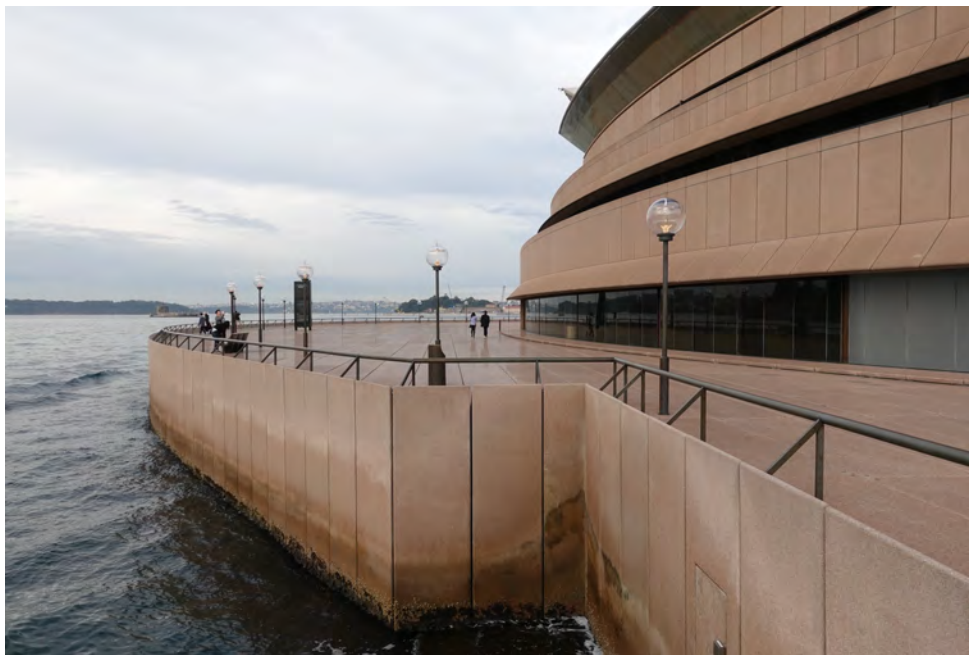


**View 11 – from Western Broadwalk, 10m north of View 10, at junction with Northern Broadwalk**

Key aspects are:

- Dramatic view of ‘headland’ quality of north end of western Podium with expansive open views east across Northern Broadwalk to harbout setting
- Open and uncluttered Northern Broadwalk is an essential part of sweeping views from within the Podium and Northern Foyers towards the harbour setting of the Opera House





**View 12 – from top of steps to boat landing, north end of Western Broadwalk**

Key aspects are:

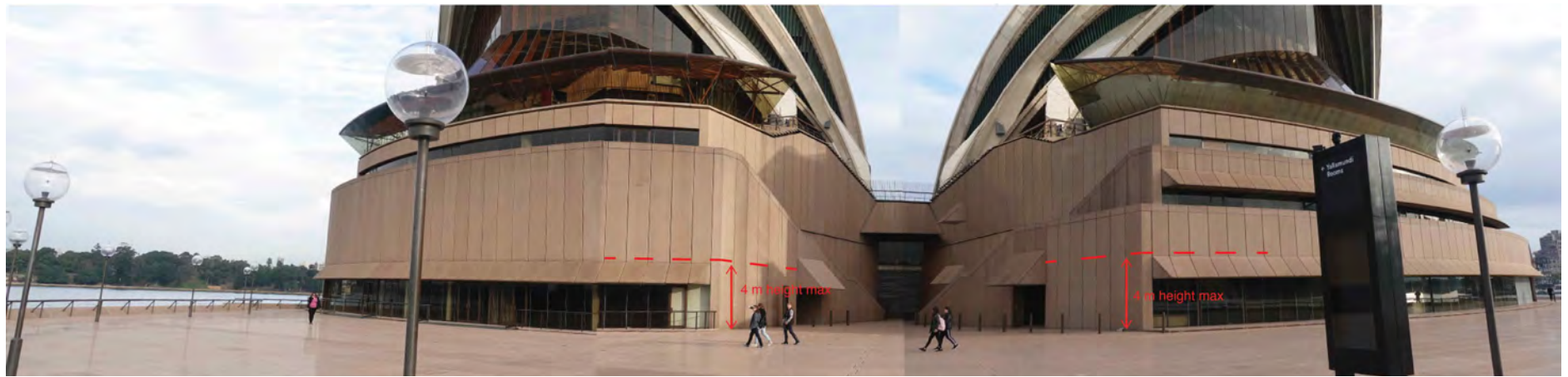
- Unobstructed view east across Northern Broadwalk and towards harbour
- Unobstructed view of dramatic ‘headland’ quality of north end of western Podium
- North end of eastern Podium not visible



**View 13 – from next to Broadwalk parapet near centreline of western half of Podium**

Key aspects are:

- Both eastern and western halves of Podium visible with their respective shell structures and glass walls enclosing the Northern Foyers rising above
- View of ‘headland’ quality of north ends of Podium rising abruptly from an open and uncluttered Northern Broadwalk with panoramic views to harbout setting
- ‘Cleavage’ space between Podium projections is not visible
- Open and uncluttered Northern Broadwalk plays an essential part in sweeping views from within the Podium and Northern Foyers towards the harbour setting of the Opera House



**View 14 – from northern edge of Northern Broadwalk on centreline of whole building** Key aspects are:

- Dramatic view of eastern and western Podium sections with glass walls and shell roofs above, all rising abruptly from open and uncluttered Broadwalk
- Clear and open panoramic views towards the harbour from all levels of the Podium, including Yallamundi Rooms (Broadwalk level +12), Boardroom, executive offices and Green Room (Level 1 +30), Northern Foyer lounge areas (Level 2A), and Northern Foyer granite levels (Levels 3A and 4 +61)
- Deeply shaded central window from Green Room, and upper side foyers and Northern Foyers overlook cleavage space (between Podium projections)
- Any event / activation Infrastructure potentially obscures parts of the Podium and clutters the Broadwalk



**View 15 – from east end of Northern Broadwalk in front of Yallamundi Rooms** Key aspects are:

- Dramatic views across Broadwalk to Concert Hall section of Podium and further to Harbour Bridge with sweeping views from Yallamundi Rooms

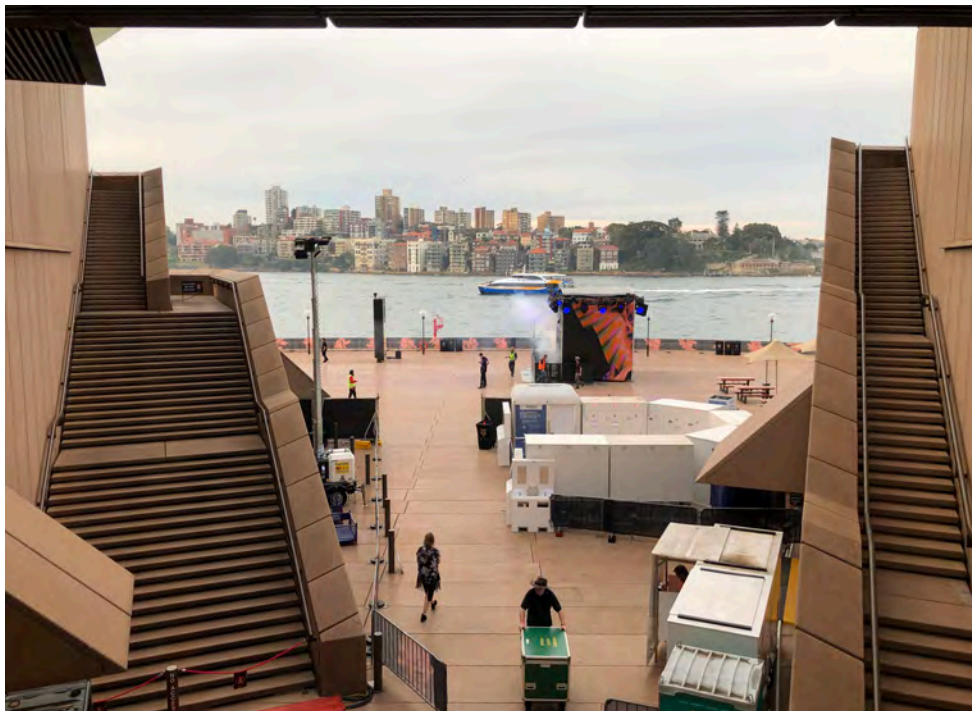




**View 16 – from eastern extremity of Northern Broadwalk at northern end of Eastern Broadwalk, adjacent to Yallamundi Rooms**

Key aspects are:

- Dramatic and sweeping view across Northern Broadwalk to harbour setting from Yallamundi Rooms



**View 17 – from north end of Green Room on Level 1 +30**

Key aspects are:

- Framed view along central axis of deepest section of Northern Broadwalk towards Kirribilli showing event infrastructure in place in May 2019
- ‘Cleavage’ space, extending to level with northern end of eastern Podium, is preferred location for any event / activation support infrastructure
- ‘Cleavage’ space between Podium ends is fully visible from the Green Room, from the adjacent ends of the Northern Foyers, and from north extremity of Podium platform externally above (presently not accessible by the public). Screening of detracting and discordant infrastructure in this area from above as well as as at its northern end will minimise visual impacts from these important viewpoints, including across this significant space. Such screening is highly recommended.
- Maximum height for any event / activation infrastructure is 4m



**Views 18a to 18e demonstrate the changing views towards the Opera House from its harbour setting revealing the sculptural beauty and genius of Utzon's design**

**View 18a – from Mary Booth Lookout Reserve, Kirribilli**

Key aspects are:

- Full sculptural assemblage of Opera House Podium, glass walls and roof shells rising from the open platform of the Northern Broadwalk
- Views towards this harbour setting from the narrow horizontal window slots in the Podium are all from important public spaces (Yallamundi Rooms and Northern Foyers) or executive offices and Boardroom
- Any event / activation infrastructure on this Northern Broadwalk is fully visible
- Northern end of Zone 3 is visible



**View 18b – from Beulah Street Wharf, Kirribilli**

Key aspects are:

- The many ferry wharves and public parks and spaces on or near the harbour foreshore provide dramatic views towards the Opera House for residents, commuters, visitors and tourists
- Admiralty House (the Governor General's official Sydney residence) and Kirribilli House (the Prime Minister's official Sydney residence) are respectively 100 and 150 metres east of this wharf. They frequently host visiting heads of state and important visitors.
- Any event / activation infrastructure on this Northern Broadwalk is fully visible – maximum height is 4m (except for limited number of High Impact events)
- Northern end of Zone 3 is visible





### View 18c – from the ferry from Neutral Bay

Key aspects are:

- The importance of the open and uncluttered Northern Broadwalk in views to and from the Opera House is evident
- Any event / activation infrastructure on this Northern Broadwalk is fully visible – maximum height is 4m (except for limited number of High Impact events)
- Zone 3 on Western Broadwalk is not visible from this north east view



### View 18d – from the ferry heading west towards the Harbour Bridge

Key aspects are:

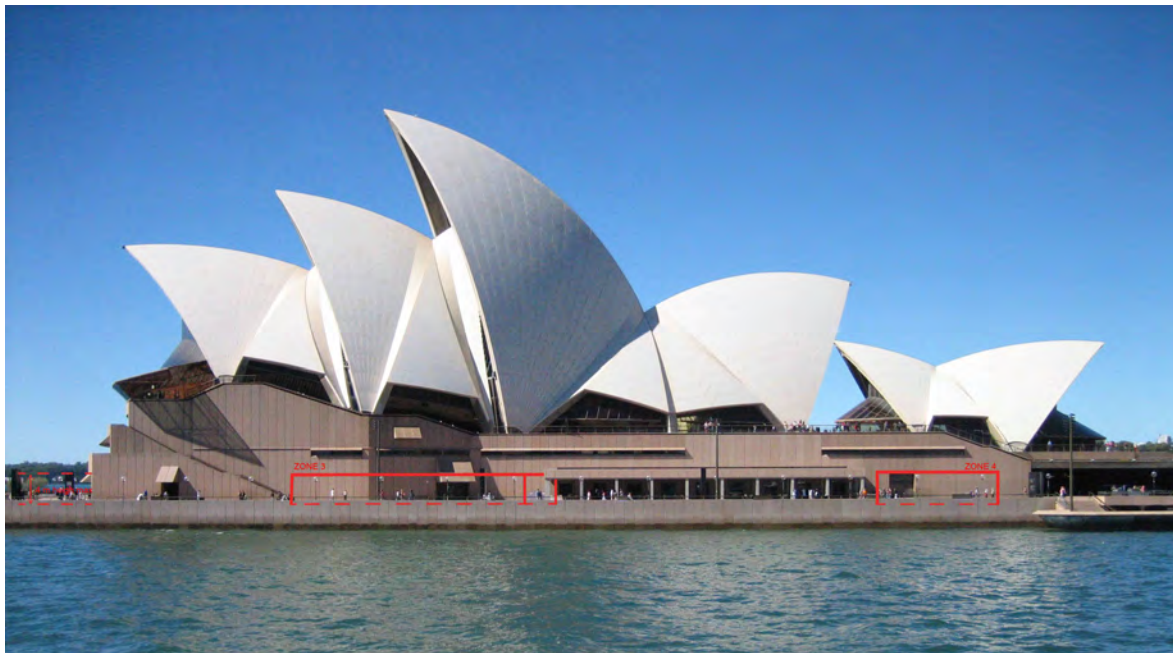
- Western Broadwalk now visible as well as Northern Broadwalk and sculptural assembly of the Opera House
- Shells over the Bennelong Restaurant and southern Forecourt flanked by the Tarpeian Wall coming into view
- Any event / activation infrastructure on Northern Broadwalk is fully visible
- Zone 3 is coming into view



**View 18e – from the ferry approaching Circular Quay**

Key aspects are:

- Full peninsular ‘headland’ form and profile of the Podium rising from the open Broadwalk platform now evident
- Glazed walls of Concert Hall western side foyer provide constant views to harbour setting as their stairs ascend the Podium
- Open Northern and Western Broadwalks provide promenade space for public enjoyment and appreciation of both the Opera House and its harbour setting
- Zones 3 and 4 are both visible
- Any event / activation infrastructure on Northern Broadwalk is also fully visible and will detract from ‘headland’ profile



**View 19 – from ferry approaching Circular Quay Ferry Wharf**

Key aspects are:

- The classic Opera House profile of granite clad Podium supporting the white tiled roof shells, all rising from a simple and open horizontal Broadwalks is revealed
- Zones 3 and 4 are fully visible but still allow full length of Western Colonnade to be visible – important for views both towards and from the Opera House
- Any event / activation infrastructure on Northern Broadwalk is also visible and will detract from Opera House profile





### **View 20 – from Bradfield Park, Milsons Point**

Note – this view is representative of views towards the Opera House from public spaces around the harbour.

Key aspects are:

- Full / framed view of the whole sculptural assembly of the Sydney Opera House on Bennelong Point in its harbour setting
- Visual appreciation of the scale, strength and beauty of the sculptural form of the Opera House seen from every direction, including from above.
- Visual appreciation of the Opera House being separated from the built form of the city
- The uncluttered open horizontal Broadwalks and Forecourt that surround the Podium providing a counterpoint to the ‘headland’ form of the Podium and the carefully arranged assembly of white tiled shell roofs that ‘float’ above it
- The visual and physical exposure of all external areas at the Opera House and hence the importance of minimising the scale and visual impacts of any event / activation infrastructure on these views

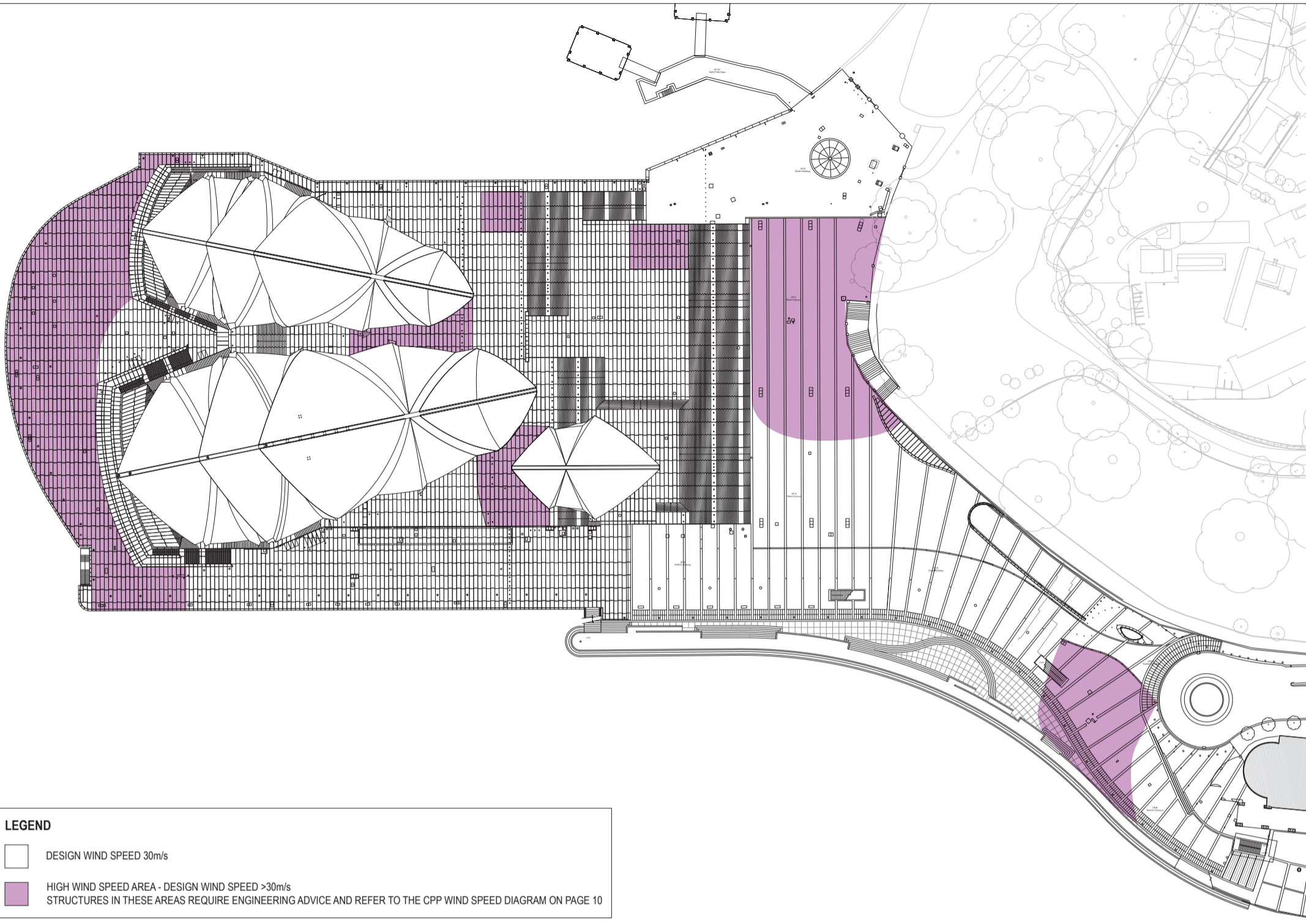


SYDNEY OPERA HOUSE  
**OUTDOOR STRUCTURES**  
DESIGN SPECIFICATIONS

WIND SPEED ZONES 02  
FENCING 03  
TRUSS ARCHES 05  
MARQUEES 06  
SCAFFOLD WALLS 07  
CONTAINER WALLS 08  
IMAGE REFERENCES 09  
CPP WIND DIAGRAM 10



# WIND SPEED ZONES





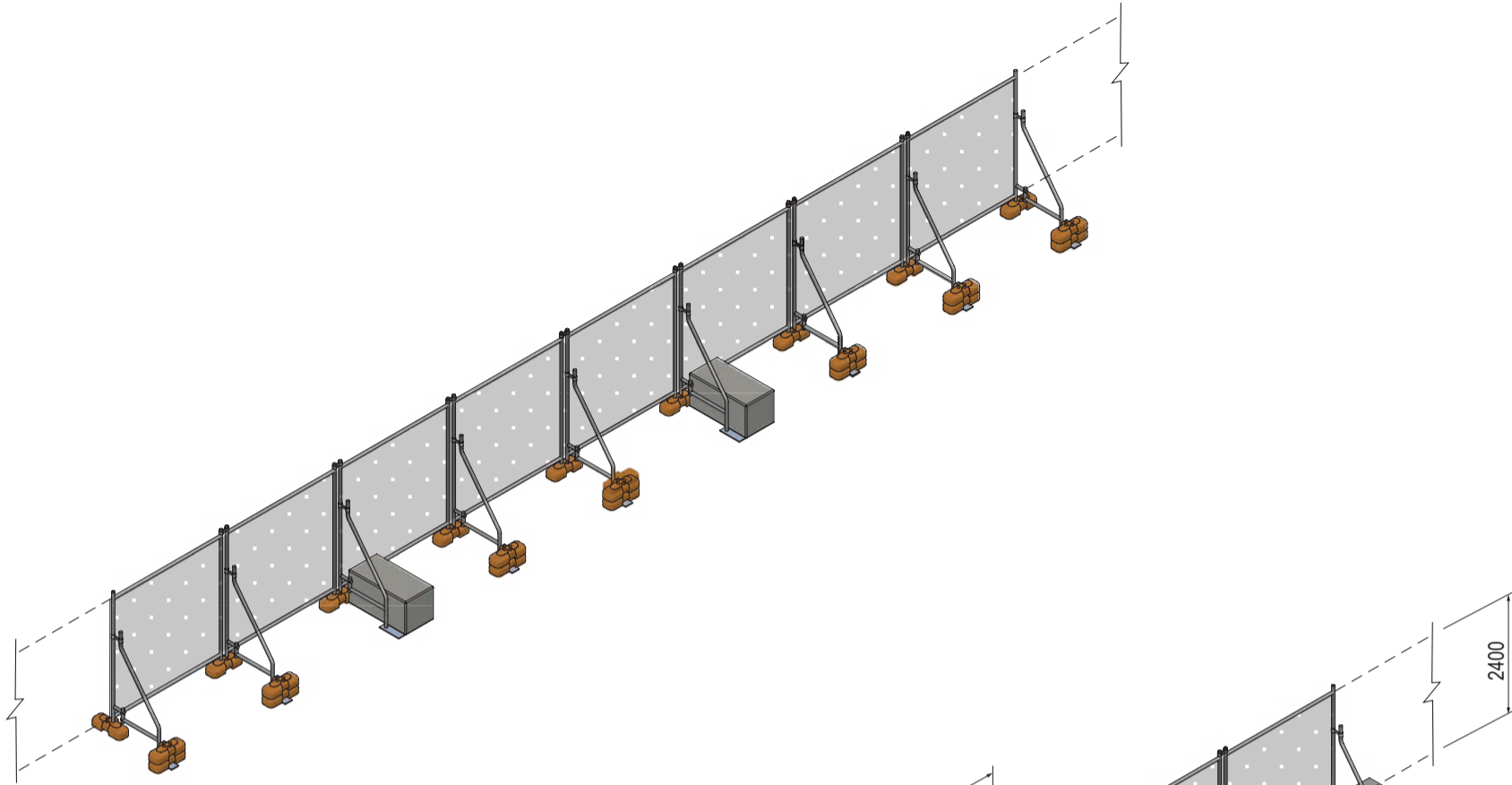
# 2.4m HIGH TEMPORARY FENCING

DESIGN WIND SPEED 30m/s

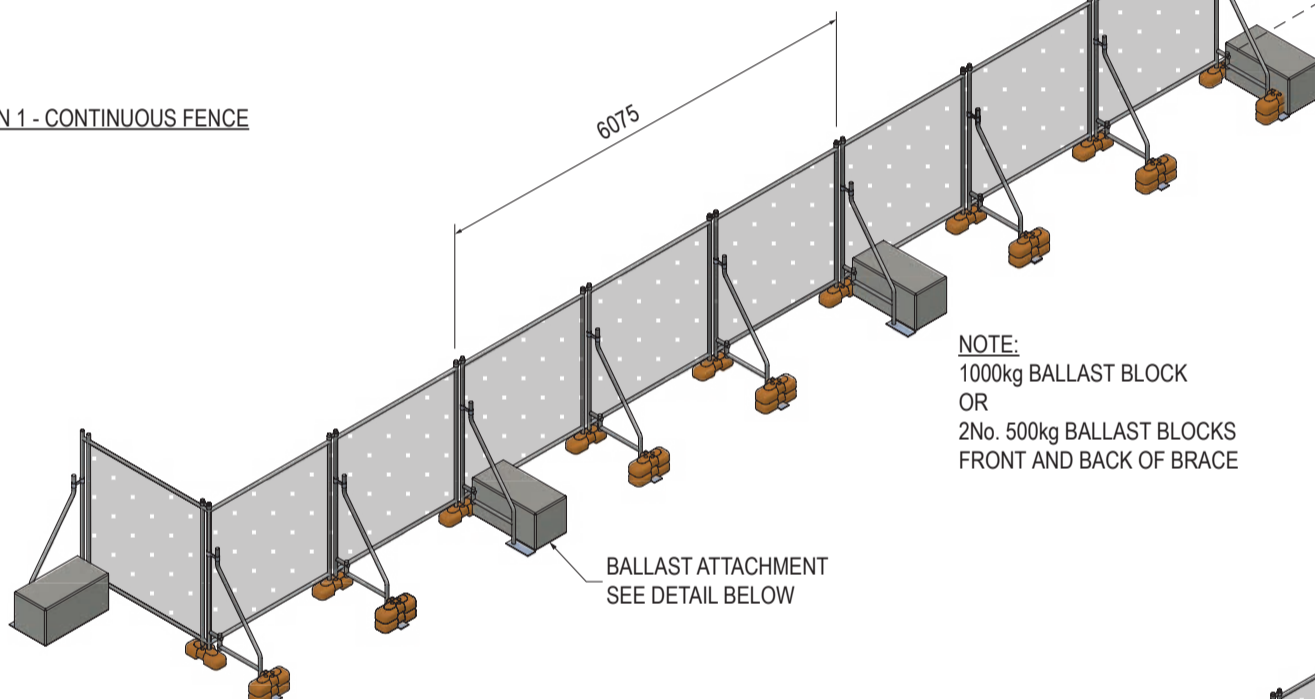
## MINIMUM SPECIFICATION REQUIREMENTS

SPECIFICATION	MIN. VALUE	FREQUENCY
FOOTING WEIGHT	32kg	EVERY BAY
CONCRETE BALLAST BLOCK	1000kg	EVERY FOURTH BAY

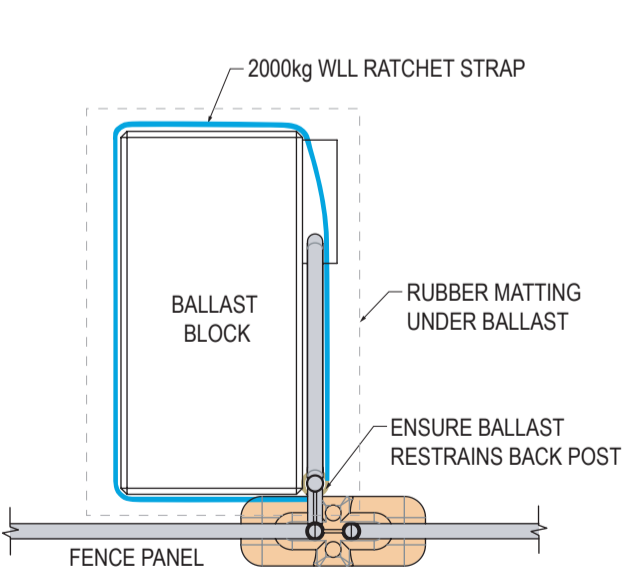
NOTE: DESIGN WIND SPEED IS CALCULATED FOR SCRIMMED FENCE.  
DESIGN WIND SPEED FOR UNSCRIMMED FENCE IS 41m/s



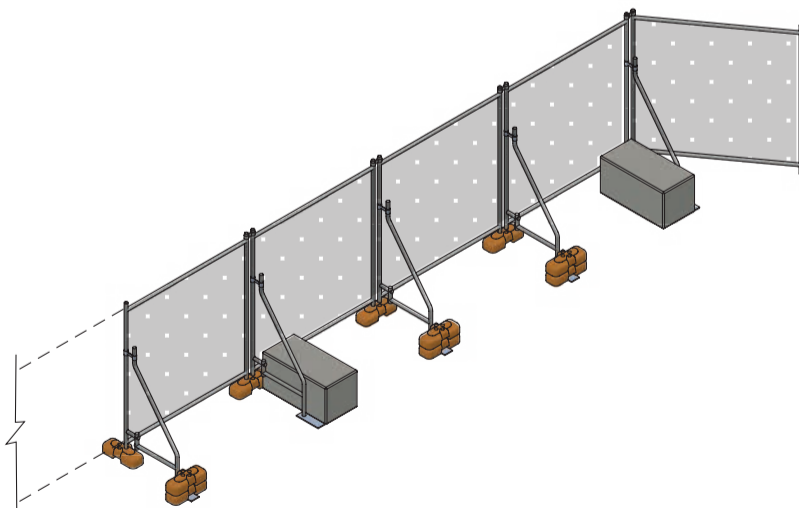
CONFIGURATION 1 - CONTINUOUS FENCE



CONFIGURATION 2 - FREE END



PLAN VIEW - BALLAST STRAPPING DETAIL



CONFIGURATION 3 - GATES

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PROJECT  
SYDNEY OPERA HOUSE

TITLE  
**TEMPORARY FENCING  
2.4m HIGH**

FOR CONSTRUCTION

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NTS 13/09/21 GC

JOB NO. DRAWING NO. AMDT.  
EE20 072 S1-1 A

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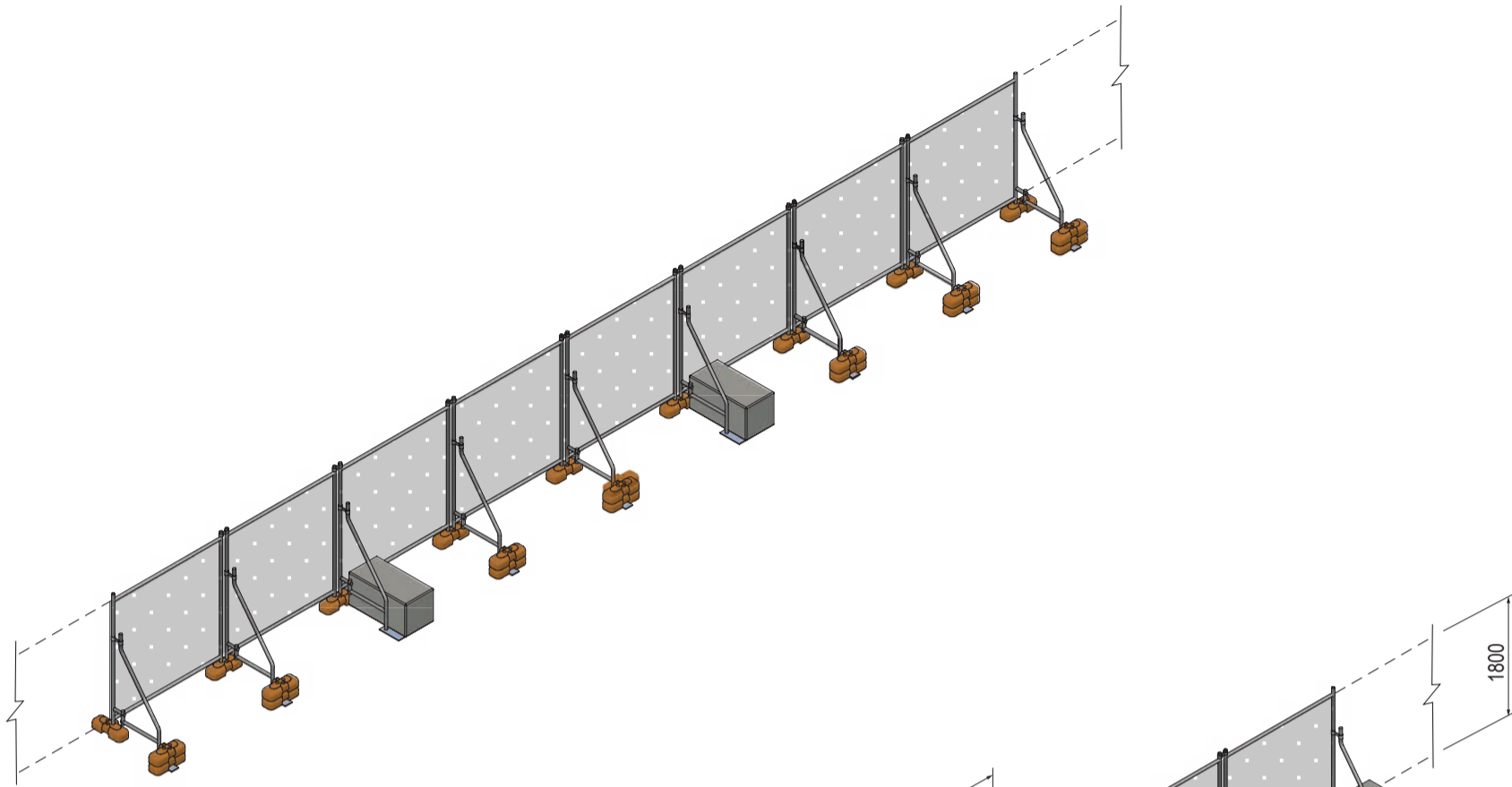
# 1.8m HIGH TEMPORARY FENCING

DESIGN WIND SPEED 30m/s

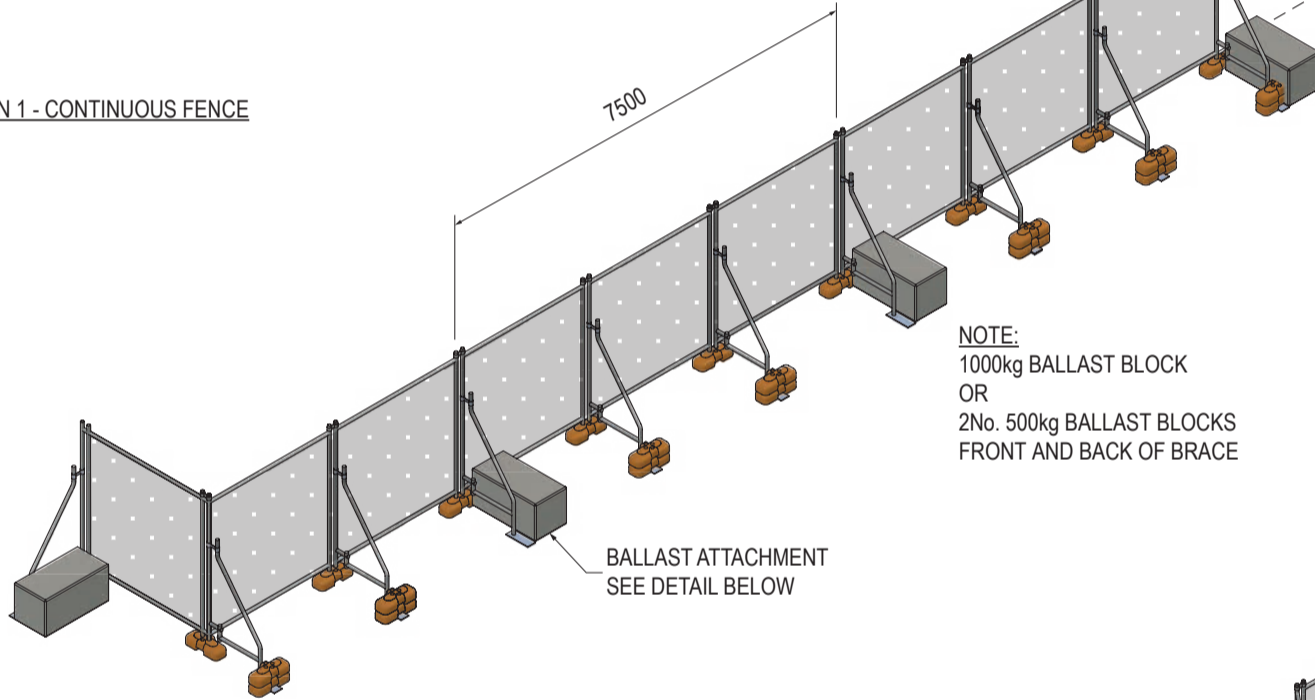
## MINIMUM SPECIFICATION REQUIREMENTS

SPECIFICATION	MIN. VALUE	FREQUENCY
FOOTING WEIGHT	27kg	EVERY BAY
CONCRETE BALLAST BLOCK	750kg	EVERY FOURTH BAY

**NOTE:** DESIGN WIND SPEED IS CALCULATED FOR SCRIMMED FENCE.  
DESIGN WIND SPEED FOR UNSCRIMMED FENCE IS 41m/s

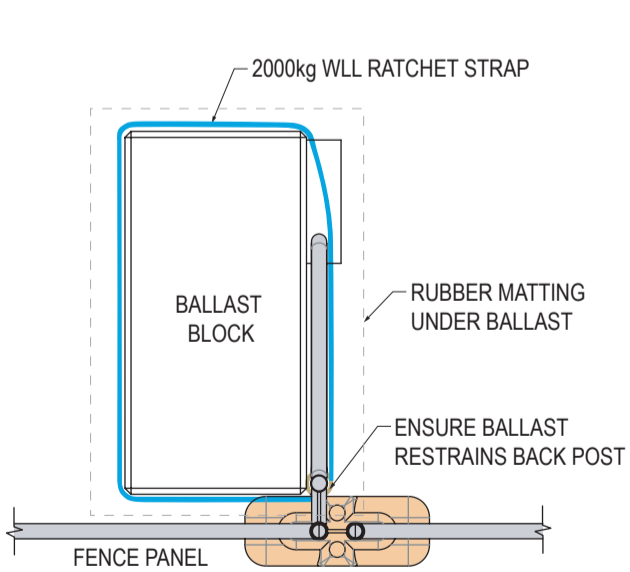


CONFIGURATION 1 - CONTINUOUS FENCE

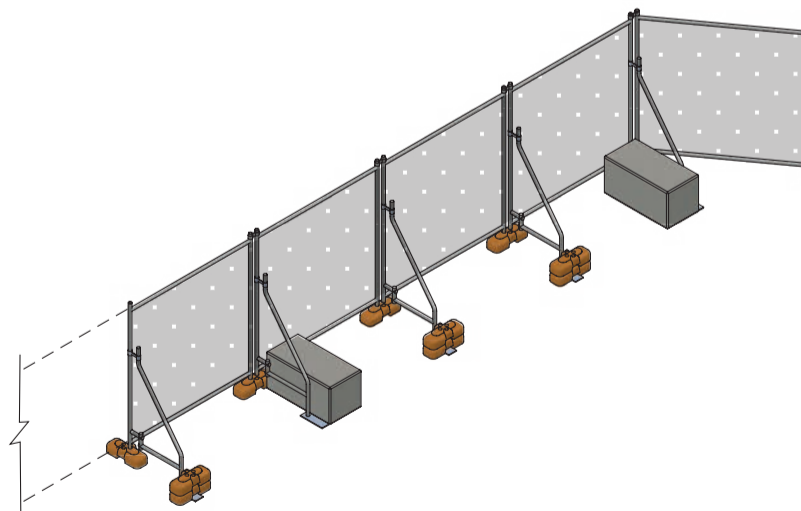


CONFIGURATION 2 - FREE END

**NOTE:**  
1000kg BALLAST BLOCK  
OR  
2No. 500kg BALLAST BLOCKS  
FRONT AND BACK OF BRACE



PLAN VIEW - BALLAST STRAPPING DETAIL



CONFIGURATION 3 - GATES

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**TEMPORARY FENCING**  
**1.8m HIGH**

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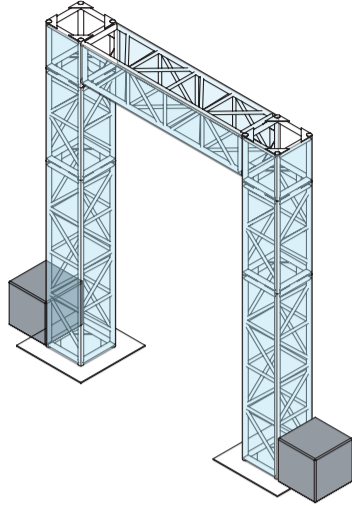


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# TRUSS ARCHES

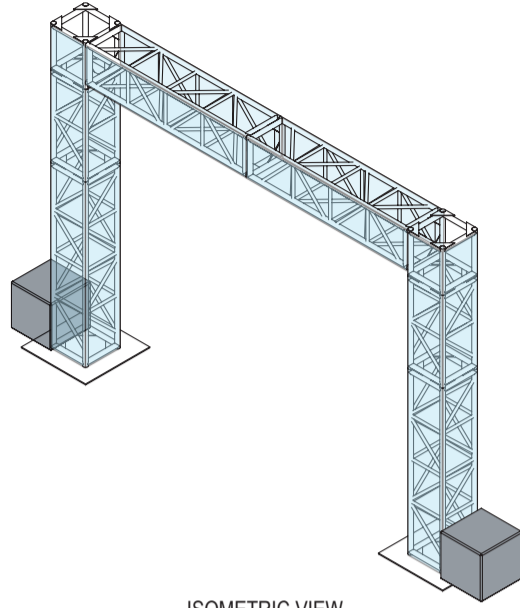
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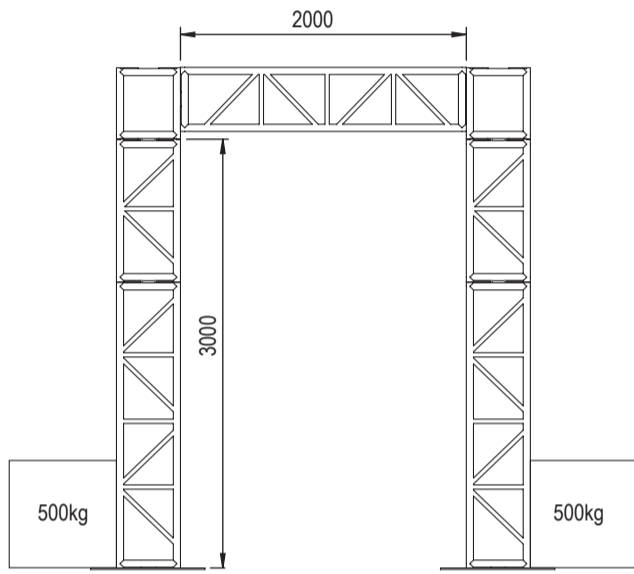


ISOMETRIC VIEW

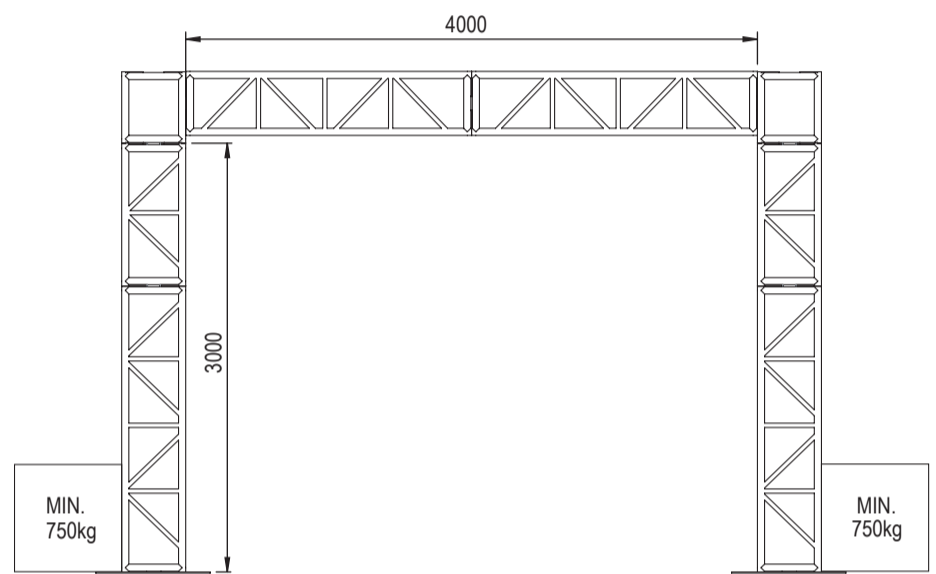
3m x 4m



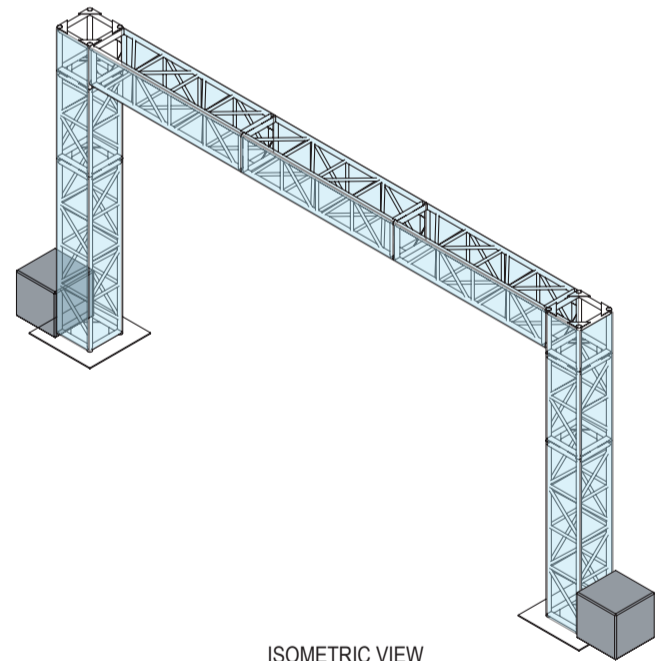
ISOMETRIC VIEW



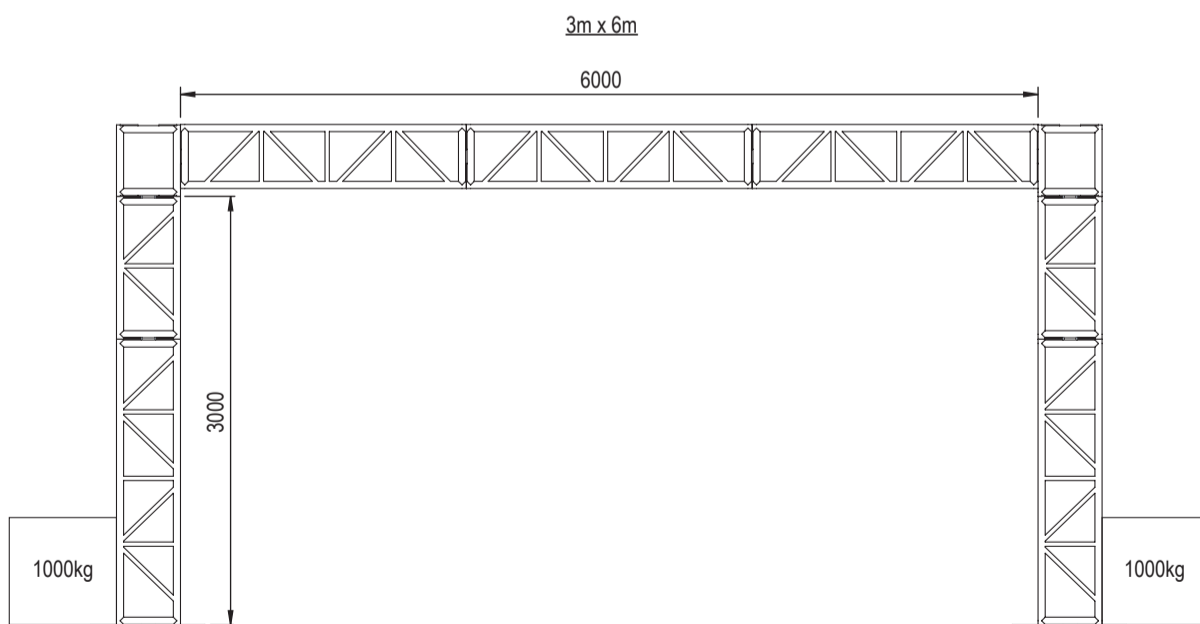
FRONT ELEVATION



FRONT ELEVATION



ISOMETRIC VIEW



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# MARQUEES

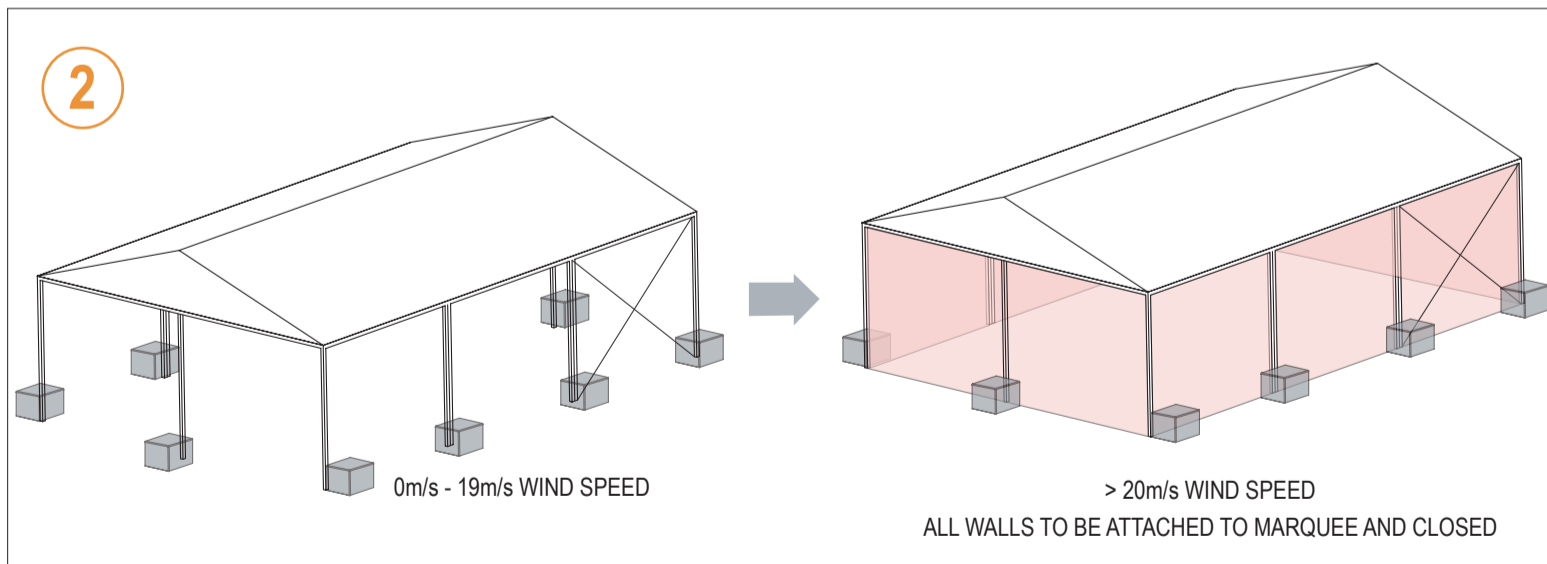
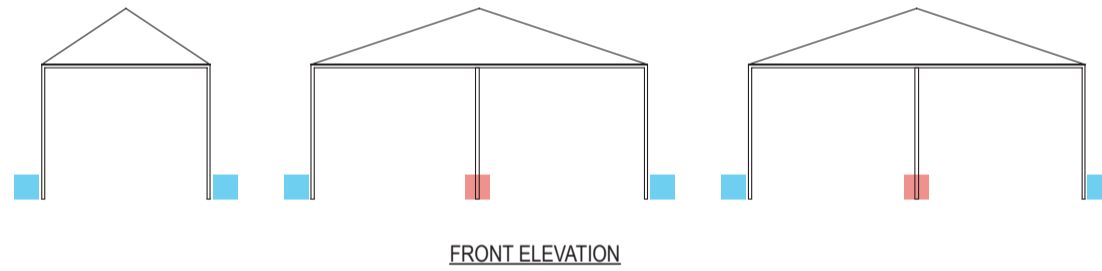
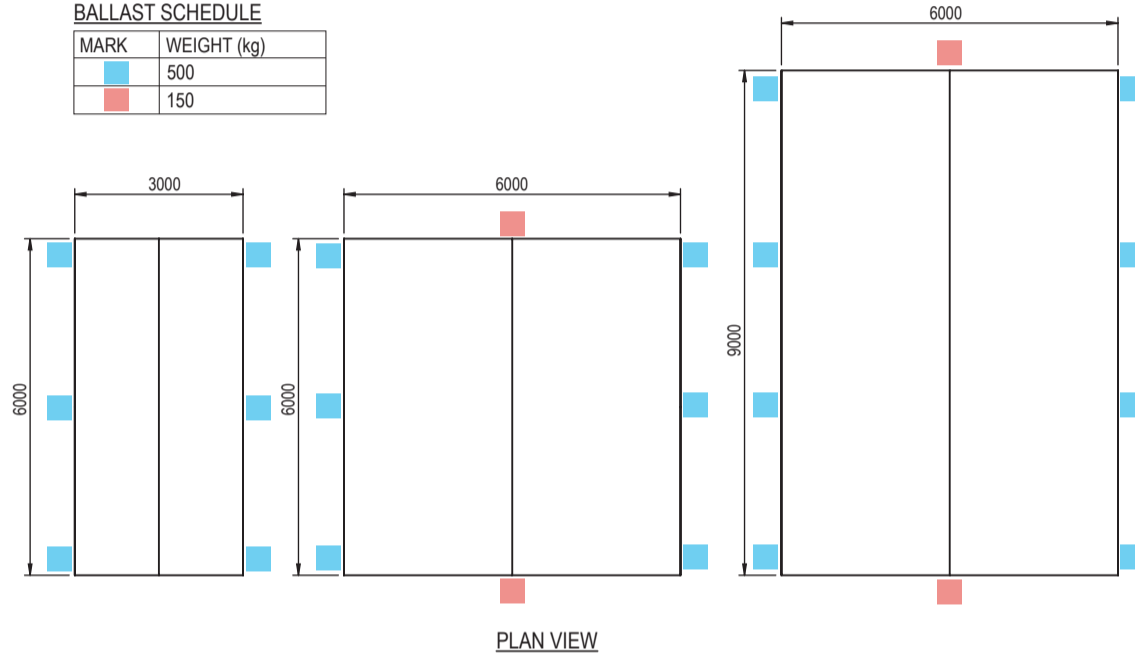
DESIGN WIND SPEED 30m/s

## WIND MANAGEMENT PLAN

PHASE	WIND SPEED	ACTION REQUIRED
① <b>PREPARE</b>	15m/s	PREPARATIONS TO MAKE SAFE
② <b>ACTION</b>	20m/s	ATTACH AND CLOSE ALL WALLS SECURE LOOSE ITEMS ACCORDINGLY
② <b>EVACUATE</b>	25m/s	FOLLOW CONTROL MEASURES AND APPLICABLE EVACUATION PLAN

### BALLAST SCHEDULE

MARK	WEIGHT (kg)
■	500
■	150



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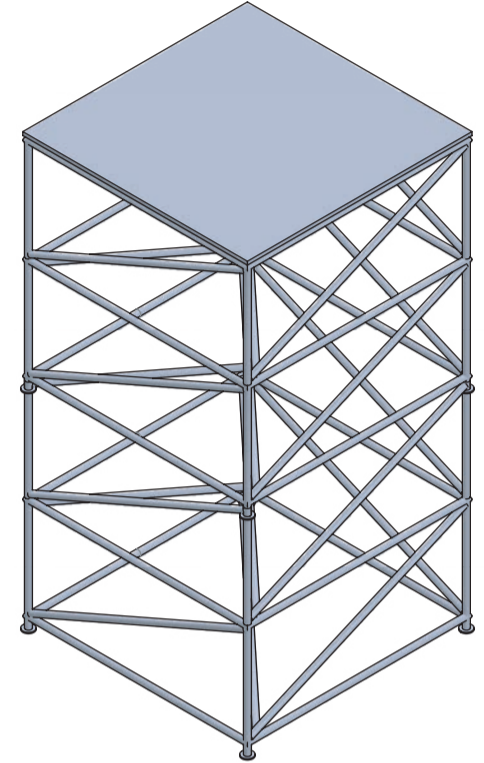
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# SCAFFOLD CAMERA PLATFORMS

DESIGN WIND SPEED 30m/s

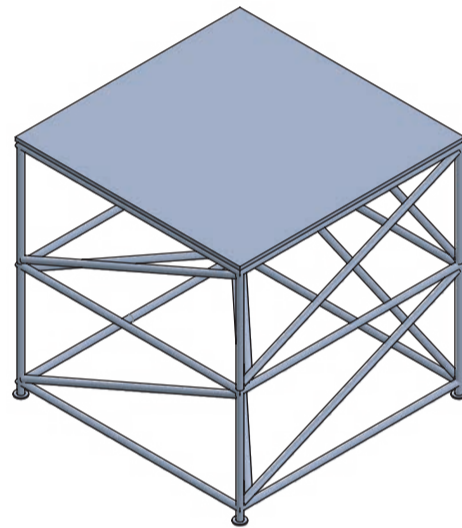
NOTE: DESIGN WIND SPEED IS CALCULATED FOR SCRIMMED PLATFORM.



ISOMETRIC VIEW

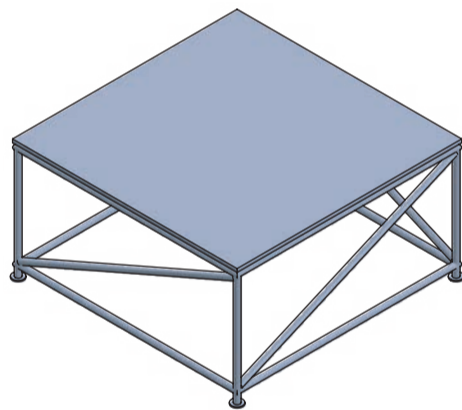
2000mm L x 2000mm W x 4000mm H

HANDRAILS (UNSCRIMMED) REQUIRED ON PLATFORMS HIGHER THAN 1m



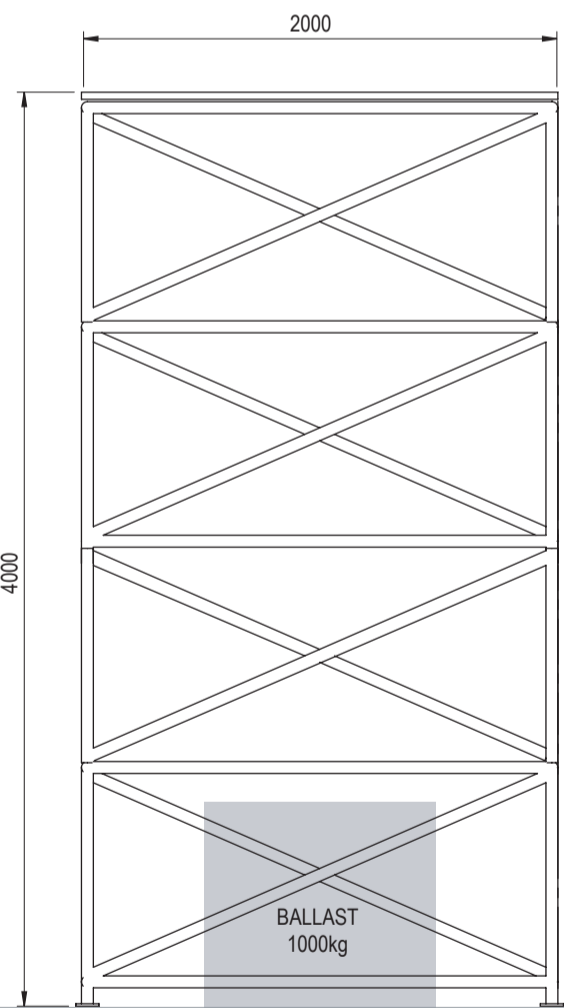
ISOMETRIC VIEW

2000mm L x 2000mm W x 2000mm H

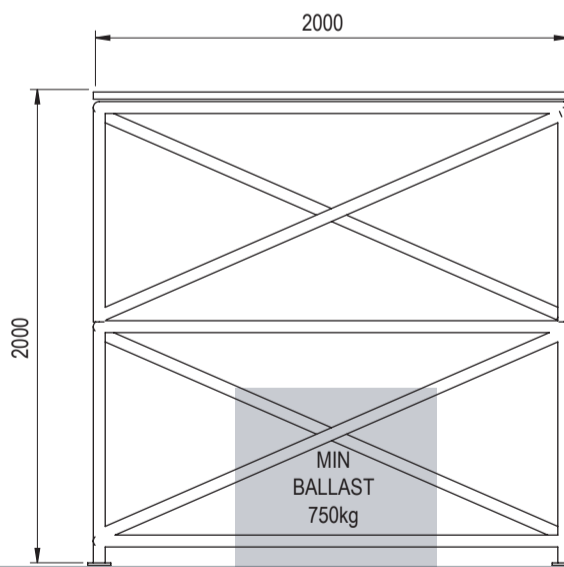


ISOMETRIC VIEW

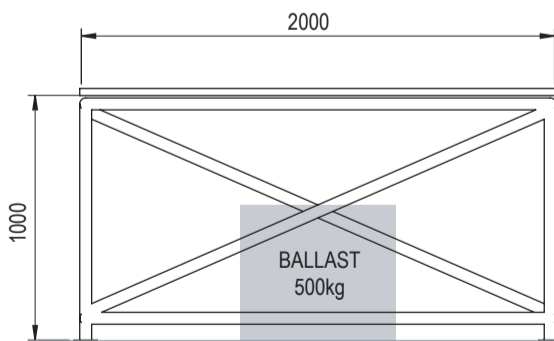
2000mm L x 2000mm W x 1000mm H



FRONT ELEVATION



FRONT ELEVATION



FRONT ELEVATION

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SCAFFOLD CAMERA PLATFORMS

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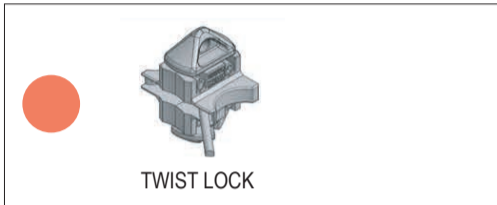
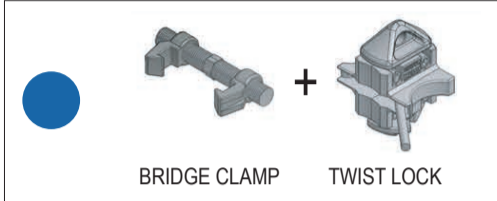
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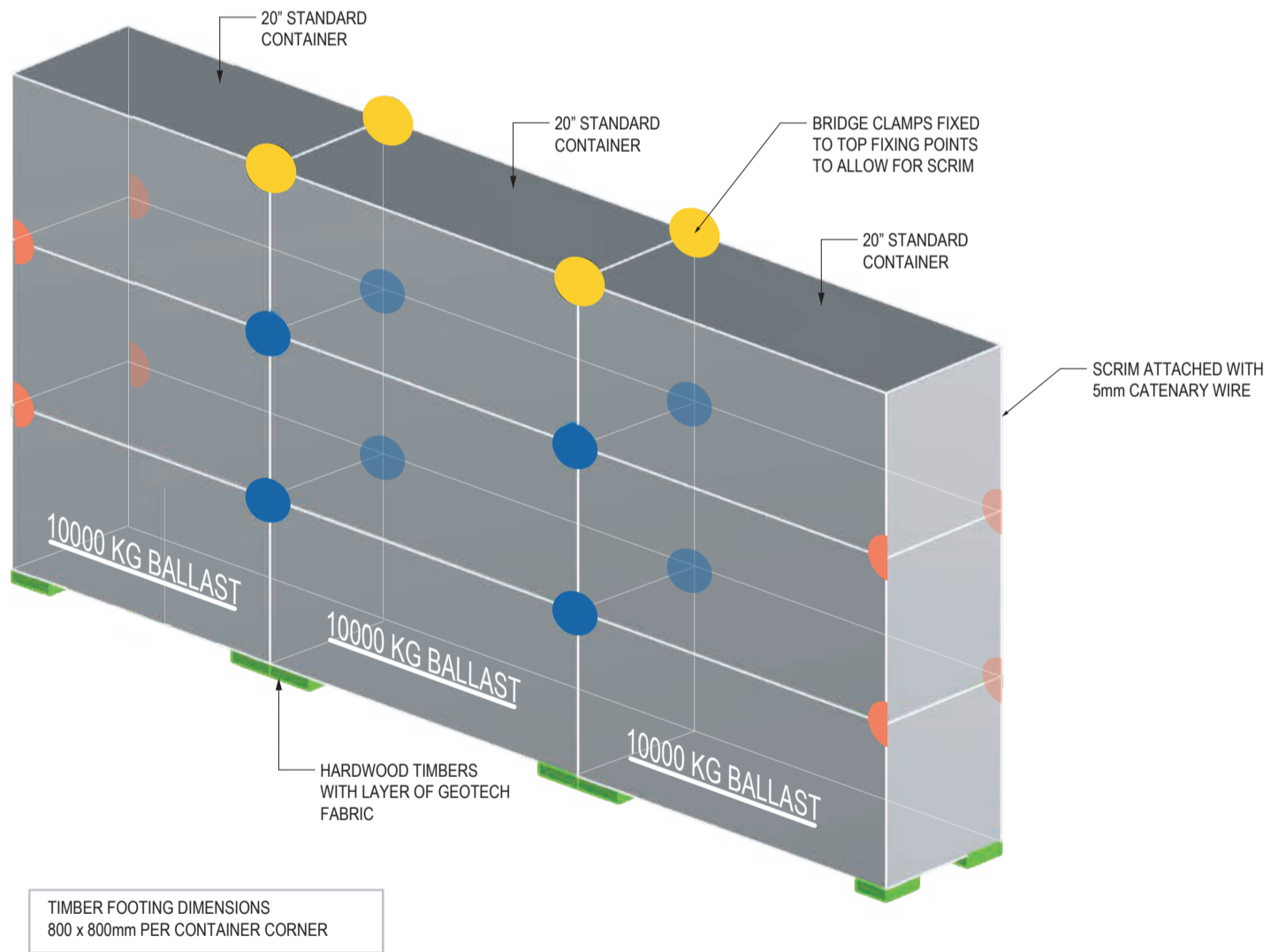
# CONTAINER WALL

DESIGN WIND SPEED 38m/s

## CONTAINER ATTACHMENT SCHEDULE



DRAWINGS MUST BE PRINTED IN COLOUR  
EE JOB NUMBER REF: EE19 058



TIMBER FOOTING DIMENSIONS  
800 x 800mm PER CONTAINER CORNER

CONTAINER WALLING 1  
SCALE N/A S1.1

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HOUSE

TITLE  
**CONTAINER WALLS**

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# IMAGE REFERENCES

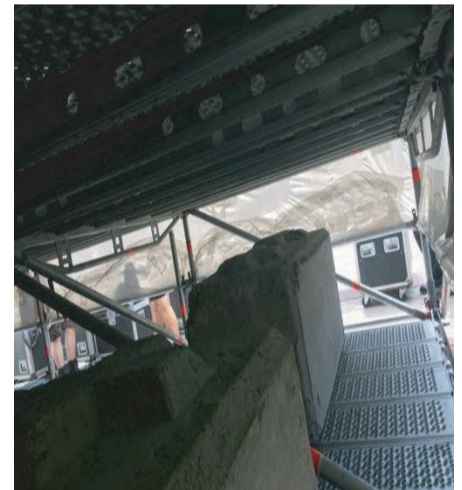
## CONTAINER WALLS



## TRUSS ARCHES

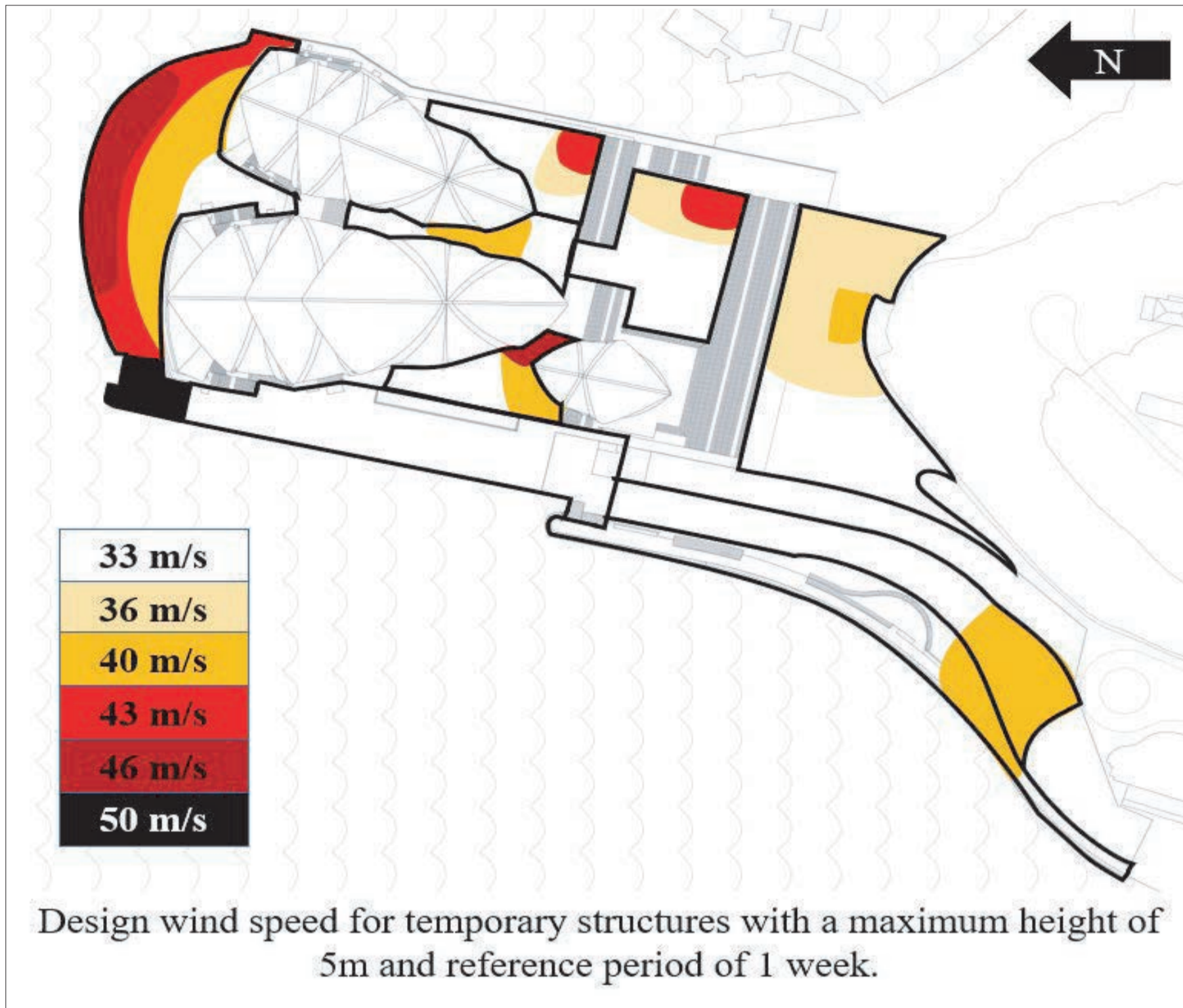


## SCAFFOLD PLATFORMS





# CPP WIND ENGINEERING CONSULTANTS WIND SPEED DIAGRAM



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