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Walsh Bay Arts Precinct

Operational Plan of Management

NSW GOVERNMENT | Create NSW
Arts, Screen & Culture

Tenancy fitout guide

Version control

Version	Issue date	Content contributors	Nature of change(s)
1.0	04/06/2020	DN	Draft issued to INSW for review
1.1	25/08/2020	DN	Revised to address comments from Heritage NSW
1.2	25/09/2020	DN	Updated Appendix A

CONTENTS

1 GLOSSARY OF TERMS

Abbreviations

Interpretation: For the purposes of this document, the following apply:

- **CMP**: Conservation Management Plan
- **DDA**: *Disability Discrimination Act 1992 (Aus)*
- **ESD**: Ecologically sustainable development
- **GECA**: Good Environmental Choice Australia. Environmental certification for building materials.
- **ICT**: Information and communication technology
- **LED**: Light emitting diodes
- **SHR**: State Heritage Register
- **VOC**: Volatile organic compound
- **WBAP**: Walsh Bay Arts Precinct

Definitions

Interpretation: For the purposes of this document, the following apply:

- **Authority/authorities**: Refers to Heritage NSW, NSW Department of Planning, Industry & Environment or City of Sydney Council, as appropriate.
- **Building fabric**: Refers to the structural materials, cladding or external walls, insulation and surface finishes that enclose the interior of a building, separating the interior from the external. The building fabric may include elements such as roof, walls, windows, doors, some floors and associated components. In some cases, it may be used to refer to all the original elements, finishes and surfaces.
    - **Significant building fabric**: Fabric that is significant and contributes to the importance of the place (regardless of provenance).
- **Green Star**: A voluntary sustainability rating system for buildings in Australia that is managed by the Green Building Council of Australia.
- **Hoarding**: Temporary board fence erected around the tenancy to protect public access areas from the chance of objects being dislodged during the period of planned works.
- **Lessee**: Also referred to as *tenant*. A person/organisation who rents land or property from the lessor. The lessee is required to uphold specific obligations as defined in the lease agreement and by law.
- **Lessor**: Create NSW, also referred to as *landlord*. A person/organisation who grants a lease to another party. As such the lessor is the owner of an asset that is leased under an agreement to a lessee. The lessee makes a one-time or series of periodic payments to the lessor in return for use of the asset.
- **Patina**: Refers to all processes associated with the ageing of surfaces. This may cause surface transformation such as encrustation. An example of this is copper verdigris whereby the copper becomes green with atmospheric oxidation and age.
- **Strongback**: A steel rod or plate fixed below a large timber beam to increase the strength of the beam by creating a truss.
- **Submit**: Submit to the lessor or lessor's representative.
- **Verdigris**: A bright bluish-green encrustation or patina formed on copper or brass by atmospheric oxidation, consisting of copper carbonate.

2 INTRODUCTION

Objective of this guide

This **Tenancy fitout guide** has been prepared to support new tenants (lessees) with the planning of their fitout works, to support the overall vision of the precinct and to ensure high standards are maintained for the design and construction of the lessees' fitout works. It is intended that the Guide will inform the lessee (their designers and contractors) on the set parameters for the fitout works' design and construction so that consistent standards are maintained for all tenants. It also provides a description of the design approval and construction process required by Create NSW, and the roles and responsibilities of stakeholders involved.

The aim of this guide is to encourage good decision making in the design and construction process, so the lessees' fitout works aesthetically complement the surrounding precinct environment and do not impact on the safety or operation of the precinct and other tenants.

Relationship to other documents

Read this Guide in conjunction with:

- Other sections of the Operational Plan of Management (OPM)
- The lease agreement
- Current building codes, regulations and standards cited in this document
- Any other document cited

If there are any inconsistencies between this Guide and the lease agreement, the lease agreement takes precedence.

Disclaimer

All descriptions, dimensions, statements and other information contained in this document are made in good faith and are believed to be correct, but any intending lessee should not rely upon them as statements or representations of facts or as any warranty and must satisfy themselves by inspection, site measurement or otherwise. Lessees should consult with their own advisors before entering any legally binding obligations.

The tenant and their designer/consultant/contractor are responsible for verifying all dimensions on the provided plan of the tenancy and on-site services when developing design concepts and documentation drawings.

3 BACKGROUND

Site context and history

The Walsh Bay Arts Precinct is located to the northern periphery of Sydney CBD's geographic peninsula, with a main frontage and entrance along the north western alignment of Hickson Road, from which it protrudes into Sydney Harbour. Pier 2/3 (originally completed 1912 to 1922) and Wharf 4/5 (completed 1913 to 1922 and refurbished in 1984) are located within the Walsh Bay Wharves Precinct listed on the State Heritage Register (SHR) as an area of cultural heritage significance.

The Walsh Bay Wharves and associated buildings are significant intact port and stevedoring facilities created by the Sydney Harbour Trust for maritime trade (completed 1900s-1910s). There are ten berths (4 finger wharves), associated sheds and neighbouring bond stores, generally constructed in the early 20th Century. Except for Pier 2/3, the majority of Walsh Bay was redeveloped between 1997 and 2004, predominantly for residential, commercial and cultural purposes. Pier 2/3 also currently houses a large collection of movable heritage items from Walsh Bay and other NSW Maritime sites.

The current land use in the Walsh Bay Wharves Precinct generally comprise of:

- Pier 1 – Sebel Pier One Sydney Hotel
- Pier 2/3 – used for regular cultural events such as the Sydney Biennale and the Sydney Writers' Festival
- Wharf 4/5 – Sydney Theatre Company, Bangarra Dance Theatre (BDT), Sydney Dance Company and other arts organisations
- Pier 6/7 – residential apartments and marina facilities
- Pier 8/9 – commercial office development
- Shore sheds and bond stores – a range of commercial uses, including offices, restaurants, shops and cafes

Project philosophy

Heritage

As the whole of the Walsh Bay Arts Precinct is located within the Walsh Bay Wharves Precinct that is listed on the State Heritage Register (SHR No: 00559), the lessee and lessor are responsible for complying with the *Heritage Act 1977* (NSW) and other associated planning requirements. Pier 2/3 and Wharf 4/5, including Shore Shed 4/5 and the surrounding environment, are individually also considered as being of state significance.

Any works planned for the precinct will need to align with the requirements of the latest endorsed Conservation Management Plan (CMP) for the precinct. The CMP provides guidance on preserving and maintaining the precinct.

Sustainability (ESD)

The precinct redevelopment has been completed to the *Walsh Bay Arts Precinct Sustainability Framework*, it is expected that the tenant complies with the framework and its seven following key principles:

- Energy efficiency and carbon emission reduction
- Reduction of potable water usage
- Sustainable materials
- User/occupant comfort and wellbeing
- Sustainable transportation
- Sustainable operation
- Social sustainability and community

Initiatives and measures were adopted for the precinct redevelopment, and these are to be reinforced and continued in any subsequent fitout works. These include:

- Design works to minimise impacts on the significant building fabric.
- Use of LED light fittings for energy efficiency.
- Re-use of existing fabric and materials where possible.

- Where possible, utilise natural ventilation.
- Where possible, utilise renewable energy.

The **Sustainability Tenancy Fitout Guide** has been developed by LCI to clarify environmental performance requirements for compliance with the Framework. A full copy of the Sustainability Framework is included in **Appendix A** of the Guide.

Community

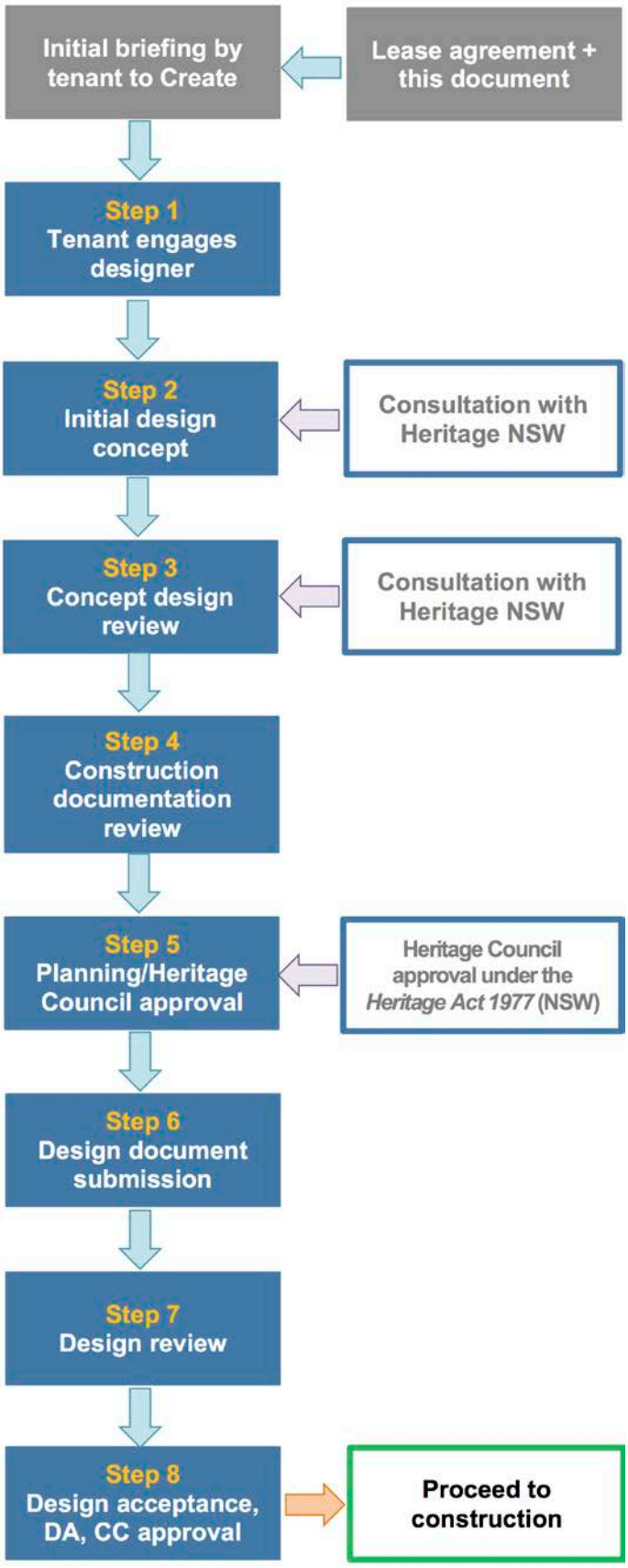
A community already exists on-site with a mix of tenancies consisting of the resident arts organisations. The redevelopment provides an opportunity for new tenants to be added to the precinct and to add to the existing community mix, with the aim of creating a more holistic and sustainable community focused development.

Diversity of spaces

Diversity of uses, support services and tenants are the key that links community, sustainability and heritage together.

4 FITOUT DESIGN AND CONSTRUCTION PROCESS

Design review



Tenant

The tenant is responsible for all requirements for obtaining development and construction consent/approvals, paying for all authority approvals, and ensuring lease agreements and the fitout criteria in this Guide are adhered to. They may also be required to engage an external heritage consultant, as appropriate.

Designer

The designer acts on behalf of the tenant to:

- Develop a concept design
- Ensure compliance with the *Heritage Act 1977* (NSW) and address requirements by Heritage NSW
- Produce construction documentation
- Verify site works during construction

The designer must be an architect, interior architect or reputable retail designer with professional qualifications in architecture, interior design or similar fields. It is expected they also have sound experience in the design and fitout of retail tenancy and strong knowledge of the National Construction Code.

Lessor

Create NSW, also known as the **landlord**.

Principal certifier

The statutory authority or a private accredited certifier may be appointed by the tenant to take responsibility for all requirements under the *Environmental Planning and Assessment Act 1979* and the issuing of a Construction Certificate and Occupation Certificate.

Precinct Manager

The tenancy coordinator who acts on behalf of Create NSW (and maybe internal to or contracted by Create NSW). The Precinct Manager reports directly to the Create NSW property management team.

What to submit

Submit, to the lessor for review, all drawings, specifications, samples, finishes information, and completed forms as required to communicate the design and construction intent. At minimum, submit design documentation in A3 hardcopy and pdf format. If requested, submit the dwg file formats for the drawings. Include in the design documentation:

- Floor plans, elevations and sections.
- Reflected ceiling plan(s).
- Electrical services design.
- Mechanical services design.
- Fire services design.
- Hydraulic services design, if applicable.
- Schedule of materials and finishes.
- Detail drawings

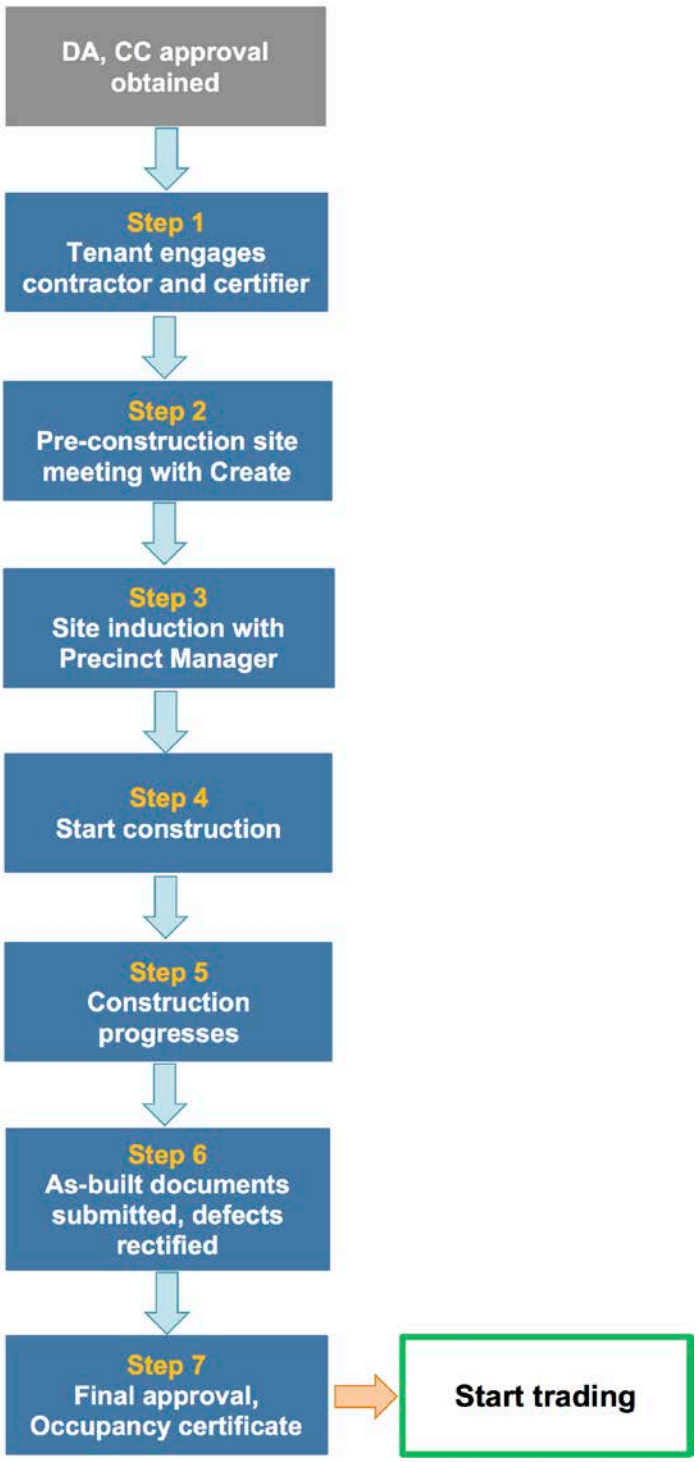
Food and beverage tenancies

If applying for a tenancy fitout that includes food and beverage operations, provide the following details:

- Proposed use, including trading hours
- Fitout design, including plans
- Signage
- Services and waste
- Evidence of compliance with the *Food Act 2003* (NSW) and the National Construction Code. If required, use accredited certifiers
- Indoor and outdoor seating
- Menu (including alcohol). This may be submitted for approval before commencing trade.

Refer also to **Section 8: Food and beverage** of this Operational Plan of Management.

Construction process



Before construction

Insurance during construction

The fitout contractor and tenant are responsible for all insurances, including those of any contractor/subcontractor for design and construction of the fitout. Make sure the insurance covers:

- Workers' compensation for all employees, contractors, and subcontractors engaged by the tenant.
- Public risk for injuries to persons and damage to the property of others, to the value as prescribed by law.
- Contractors insurance for all risk for damages to fixtures, fittings, plant and equipment installed or being used during installation.

Storage

Do not store any materials/equipment outside the tenancy during construction. Any materials left outside of this area will be removed at the tenant's expense.

Hoardings

If hoarding is required, provide a structural certificate that verifies the structural stability of the installation. Make sure public access areas are protected from possible objects being dislodged during the planned tenancy works and does not impede or reduce the means of egress for the precinct.

Working hours

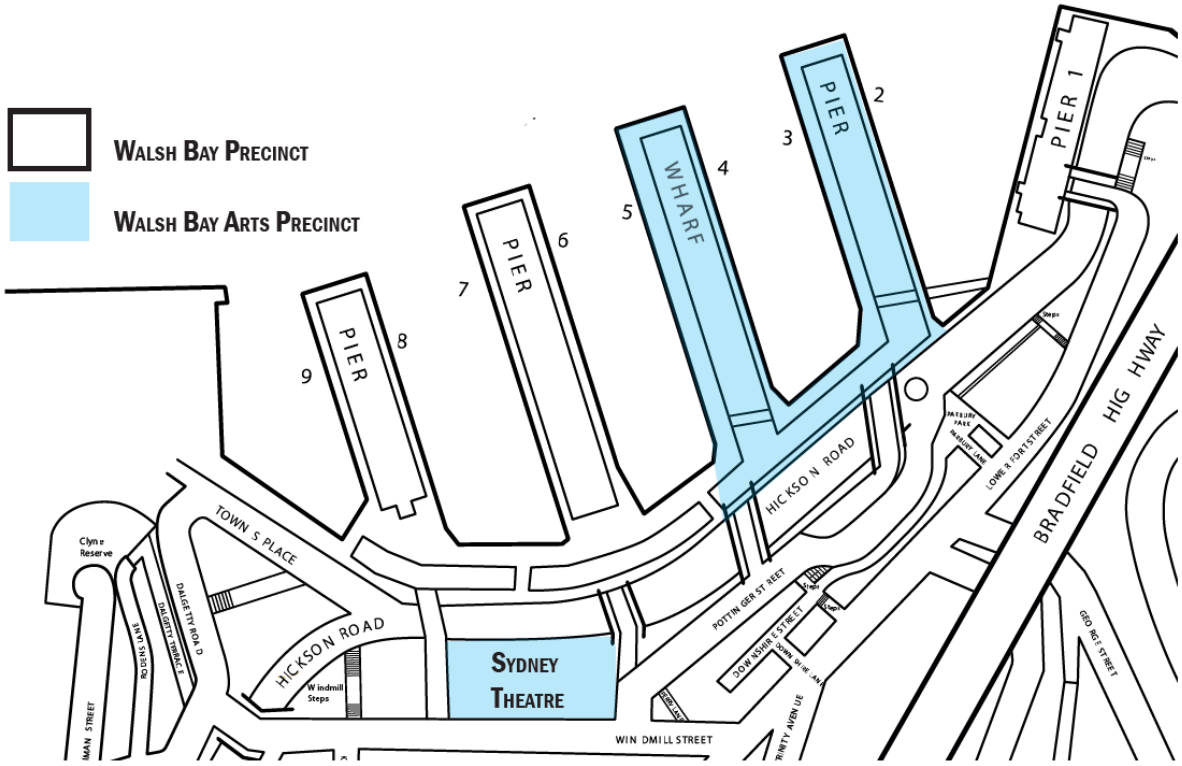
Create NSW will nominate construction hours in line with precinct operations and confirm this at the initial briefing. Works creating excessive noise and vibration will only be permitted outside of operational hours.

5 TENANCY INFORMATION

Project overview

Site details

Site name: Walsh Bay Arts Precinct.
Site address: Hickson Road, Walsh Bay.



Building provisions

Area and configuration

Net lettable area: Upon completion of the redevelopment, the lettable area will be as follows:

- **Pier 2/3**: Approximately 9,690 sq.m. (subject to survey).
- **Wharf 4/5**: Approximately 16,000 sq.m. (including the Shore Sheds, subject to survey).

Facilities

Pier 2/3: This building includes the following facilities:

- New arts facilities and performance venues for the Australian Chamber Orchestra, Bell Shakespeare and Australian Theatre for Young People. This will include new performance venues, rehearsal rooms, production workshops, offices and the like.
- Commercial/art space for events such as Sydney Writers' Festival, Biennale of Sydney and a wide range of commercial and artistic events. A larger proportion of the Ground Level retains its existing 'raw' heritage state for cultural events, as well as for venue hire.
- Function spaces, bars and foyer spaces.

Wharf 4/5: This building includes the following facilities:

- Refurbished arts facilities at Ground Floor, including Bangarra Dance Theatre, the Choirs, Sydney Dance Company, and the Sydney Theatre Company.
- New commercial retail shopfronts at Ground and Mezzanine Level.
- Pier/wharf aprons for arts activities, functions and community events.

Commercial tenancies

Commercial Tenancy 1: Situated at the end of Pier 2/3 and comprises a large open plan heritage area with interspersed columns throughout.

- Provides 1,793 square metres of proposed function space.
- The tenancy is required to be used for up to two weeks annually for the Sydney Writers' Festival and for up to three months every two years for the Biennale of Sydney.

Commercial Tenancy 2: Situated on the Ground Level of the Shore sheds at the base of Wharf 4/5.

- Provides 41 square metres of accommodation.
- The tenancy is wharf facing with no exposure to Hickson Road and is also adjacent the vehicular driveway at Wharf 5.

Commercial Tenancy 3: Located along the Shore Sheds at the base of Wharf 4/5 and Pier 2/3.

- Provides 221 square metres at the Ground and 175 square meters at Mezzanine Level.
- The proposed tenancy will provide dual frontages towards the wharf and Hickson Road.

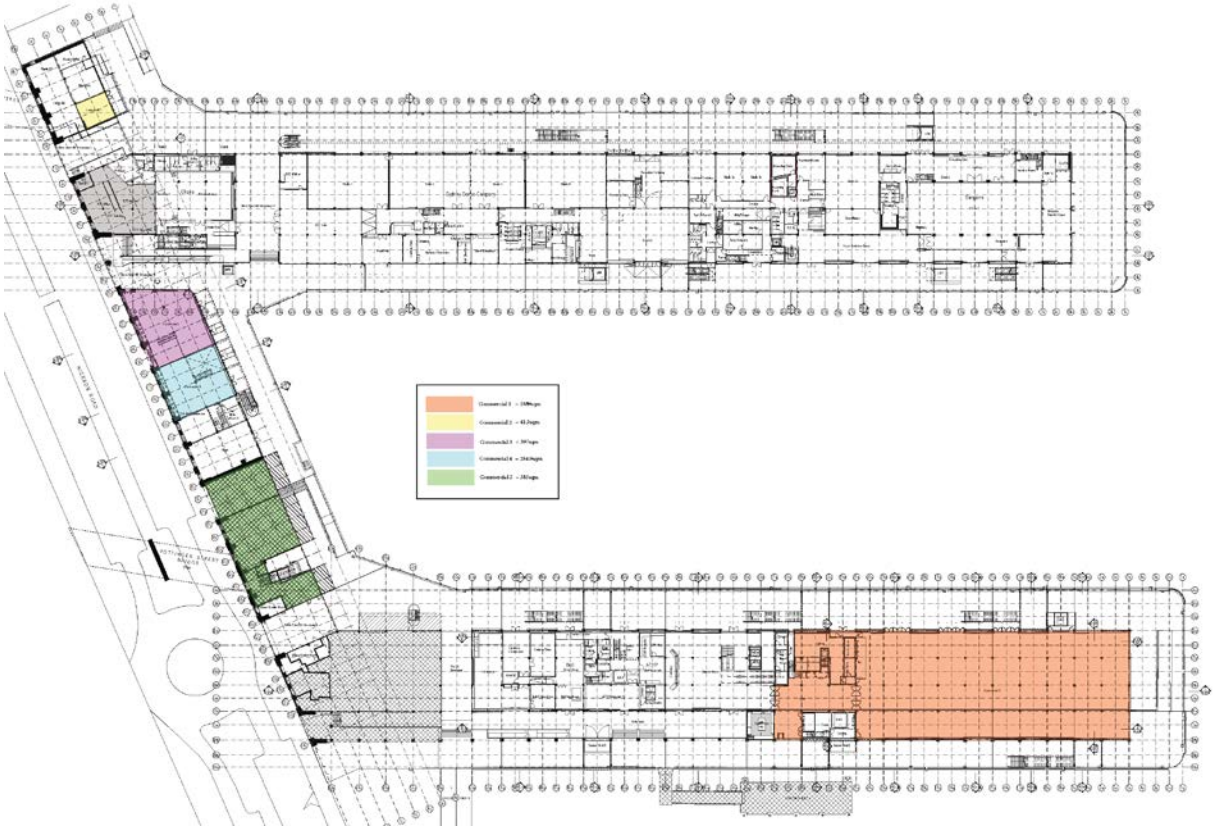
Commercial Tenancy 4: Located along the Shore Sheds at the base of Wharf 4/5 and Pier 2/3.

- Provides 173 square metres at the Ground and 119 square meters at Mezzanine Level.
- The proposed tenancy will provide dual frontages towards the wharf and Hickson Road.

Commercial Tenancy 5: Located along the Shore Sheds at the base of Wharf 4/5 and Pier 2/3.

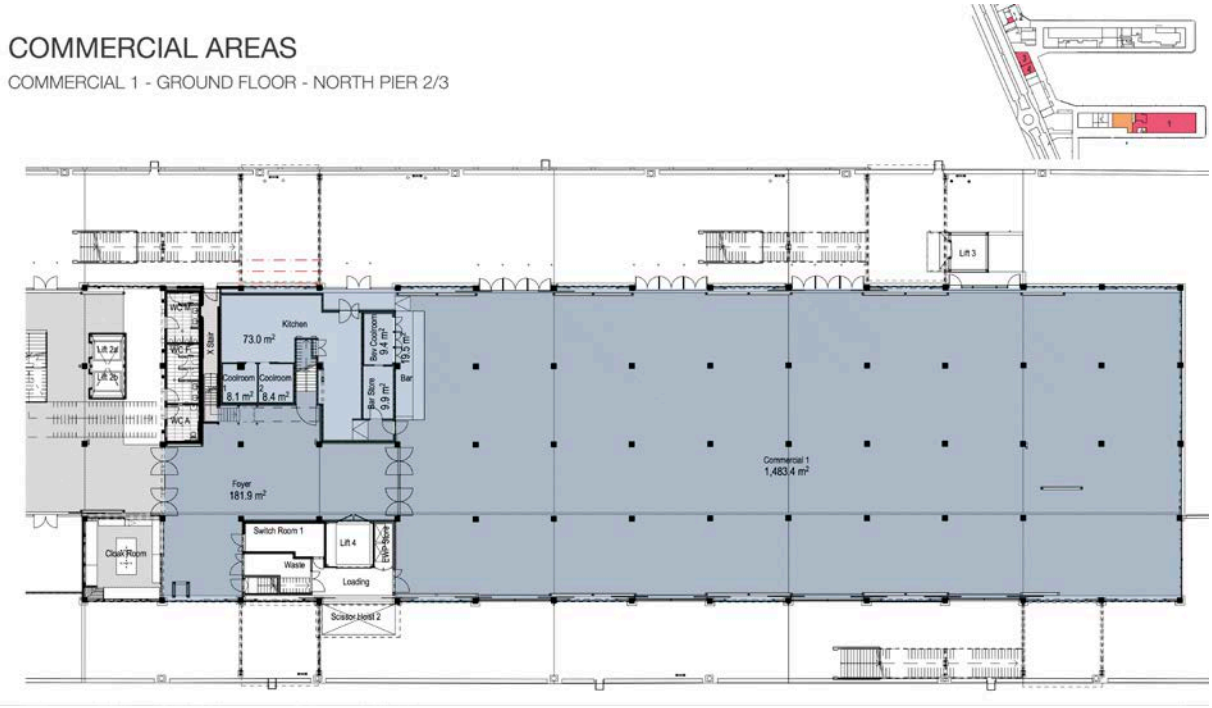
- Provides 383 square metres over the Ground and Mezzanine Level.
- Previously occupied by 'Simmer on the Bay', the tenancy provides dual frontages towards the wharf and Hickson Road.
- The tenancy may be split into three separate areas. However, due to the multi-level configuration and location of the kitchen services to the eastern end of the tenancy, it is likely the premises will be leased as a single tenancy.

Tenant plans



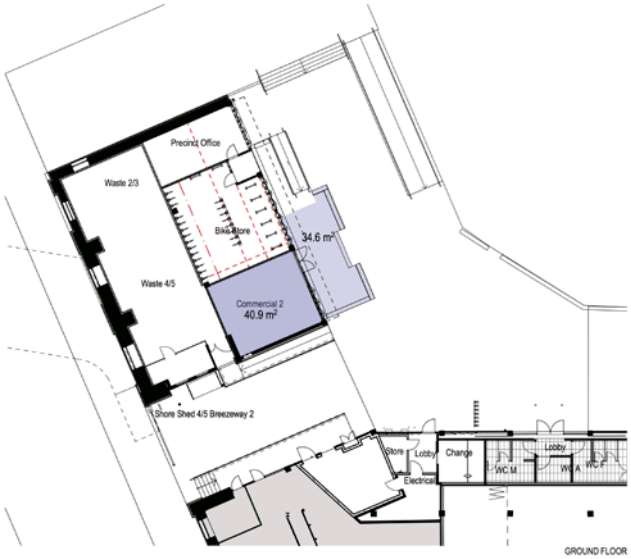
COMMERCIAL AREAS

COMMERCIAL 1 - GROUND FLOOR - NORTH PIER 2/3



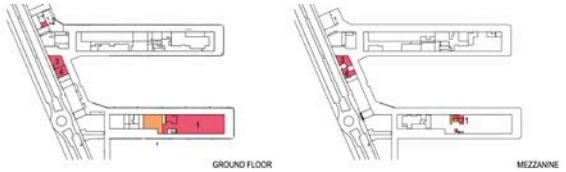
COMMERCIAL AREAS

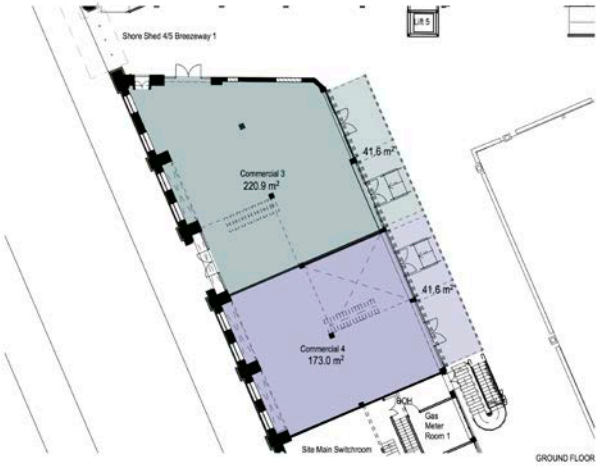
COMMERCIAL 2 - GROUND FLOOR - SHORE SHEDS B

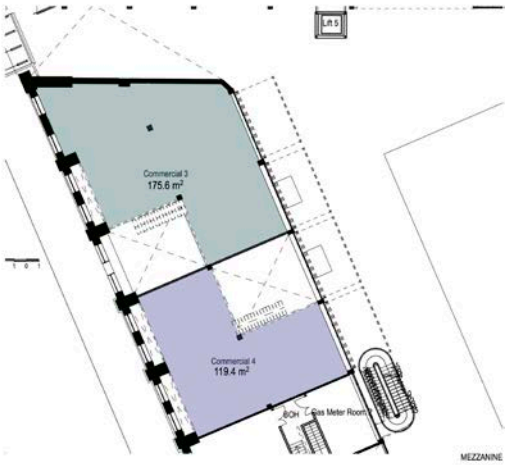


COMMERCIAL AREAS

COMMERCIAL 3 + 4 - GROUND FLOOR + MEZZANINE - SHORE SHEDS A







Associated costs

Fees and other costs: The tenant is responsible for any fees associated with the review and approval of the fitout, as well as costs associated with the preparation, design, purchase of all materials, hoarding, altering of building services, construction and certification for the fitout.

Base building

End of lease agreement: The tenant is required is to ensure the tenancy is returned to the original base building condition (before fitout condition). Conduct a site inspection with the lessor to identify any defects for remediations prior to end of lease agreement to ensure smooth site transition.

Rectification works: Complete as for fitout construction works, including installation of hoarding, engagement of contractor, compliance with operational hours and waste management.

Heritage requirements: Approval from Heritage NSW or NSW Department of Planning, Industry & Environment may be required before undertaking rectification works.

Lessor

Responsibilities of lessor: The lessor is responsible for reviewing the submitted proposed tenancy design and advising the lessee of any concerns associated with the design or its approval.

Lease agreement: The lessor is responsible for any works listed in the agreement.

Lessee

Tenant responsibilities

Lease agreement: The lessee is responsible for any works not listed in the agreement and is required to be carried out to enable the tenancy to commence trading.

Fitout design: The lessee is responsible for ensuring the proposed design is aligned with the overall project philosophy and objectives, and meets all the required design criteria.
Authority approvals: The lessee is responsible for obtaining and providing information required for authority approvals, as appropriate for the tenancy operation. This may include the following:

- Health and Building (Building Permit Application)
- Electricity and connection
- Water and connection
- Natural gas and connection
- Food and/or liquor licences and/or permits

- Liquor Licence

Service of alcohol: If this is proposed for the tenancy, ensure alcohol is served in compliance with the *Liquor Act 2007* (NSW).

Tenant's acknowledgement

Acknowledgement: The tenant acknowledges that:

- Should there be any inconsistency between this Guide and the lease agreement, the terms of the lease will prevail.
- The lessor may not allow the tenant to open for trade from the premises until all pre-trade requirements specified under the lease or this Guide have been fulfilled and provided satisfactorily to the lessor or the lessor's representative.

6 FITOUT DESIGN CRITERIA

Tenancy overview and objective

Building design and character: Make sure the interior design of the tenancy is compatible with the building design and character with a high standard of finish.
Base building: The objective of the fitout is to elevate the existing quality of the base building and enrich the character of the precinct redevelopment, collectively enhancing the Walsh Bay Arts Precinct community.
Respecting heritage: It is expected that the tenancy interior design is respectful of the existing volume and character of the building that preserves the visible layers of the existing buildings.

Existing architecture

Building structure

Framed structure: The piers and shore sheds are constructed of hardwood timber columns and beams reinforced with steel or iron 'strongbacks'.[1]
Loading: Water pipe strainers on brackets or steel rod with threaded nuts were tightened to increase the pressure and transfer the loads from above through the unique structural framing design.
Existing floors: Generally, consist of large timber planks often in two layers at an angle. Below the floor is a complex matrix of timbers that sit on timber or steel piling.
Alterations to structure: Do not alter, remove or mark the structural materials in anyway.
Adding internal floors: Do not add internal floors without authority approval, as this will have a major impact on the heritage building volumes and special context.


Strongbacks in Pier 2/3


Floor layers in Wharf 4/5

The significant building fabric

Protection: When carrying out fitout works, make sure protections systems are in place to safeguard significant building fabric elements. Ensure there is no damage to any surface or structural element, including damage that may be considered minor.
Layers and history: Ensure the design respects the nature of the existing buildings and preserves the visible layers of history of the precinct. Leave existing structure and materials exposed and in their natural state, where possible.
New elements: Endeavour to treat these as another layer, being respectful to the existing building fabric, including their form, material, texture and rhythm.

Partitions and panelling

Panelling materials: Rough sawn softwood timber is used as partitions and panels to enclose spaces within the building. These areas can easily be identified.
Alterations to panelling: Do not alter, remove, paint or mark the timber panelling.

[1] **Strongback**: A steel rod or plate fixed below a large timber beam to increase the strength of the beam by creating a truss.

Removing and installing partitions: New office layouts or minor works may require NSW Department of Planning, Industry & Environment, Heritage NSW and other planning authority approvals. Do not carry out without advising the landlord.

Staircases handrails and doors

Stairs and doorways: Throughout the buildings there are several timber stairs and doorways, some with doors.
Alterations: Do not remove, paint or mark the staircases handrails and doors.
Adding new staircases: Do not additional stairs without authority approval.


Staircase in Wharf 4/5

External doors, sliding doors and windows

Existing openings: The building has high-level windows with glass panes and large sliding doors with iron tracks and rollers.
Alterations: Do not remove, paint or mark the external doors sliding doors and windows.

Example of cargo door and windows

Hardware bolts and nails and light fittings

Existing fittings: Existing metal, hardware bolts straps and fillings are considered to be heritage fabric and cannot be altered sawn-drilled or damaged in anyway. This includes bracing steel tie strapping and strongback elements in trusses, bolts nails and green-cowled enamel light fittings where they have been installed.

Example of enamel light and strongback at Pier 2/3

Industrial heritage items

Location: Industrial heritage items have been found in the buildings listed in the State Heritage Register. Some individual heritage items are listed individually in the CMP.
Treatment: For any replanning of layout or furnishing of the buildings, leave the identified significant individual heritage items intact. Do not move, relocate, adjust or tamper with the items. Identify heritage listed or significant items with a tag that may not be removed.

Souveniring

Relics: Removal or souveniring of any relic is considered a breach of the *Heritage Act 1977*. Relics include timber metal, bolts, screw, brackets, signage, switches and the like.

Services reticulation and associated elements

Redundant fittings: Original switches, conduits, piping, tapware and similar have been found in and around the buildings. Although these items are non-functional, they are historic items.
Alterations to existing or installing new services: Approvals from the lessor, City of Sydney Council, and potentially Heritage NSW and the NSW Department of Planning, Industry & Environment may be required, including regarding the number being installed and their locations. Do not install cable trays and fixings that have not been approved by the lessor.

Patina

Timber surfaces: In the Walsh Bay Buildings, the floors have markings scrapped into their surfaces that are a result of the activities of the working docks. These markings are a heritage item. The timber surfaces have painted numbers.
Original surfaces: The original surfaces have their own particular patina, therefore, it is not permitted for the original surfaces to be cleaned or washed. These include rust marks on metalwork, scratches and dents in timber floors, beams, and structural steel.

Existing open spaces

Enclosing open spaces: Enclosing of spaces to facilitate new functions within tenancies is discourage and unlikely to be approved by the authorities. Any alterations to the currently designed volumes will have a significant and adverse impact on the heritage significance of the building.

National Construction Code compliance

Fire safety: As buildings within the precinct may be designed and constructed using the ‘Alternate solutions’ approach and not the ‘Deemed-to-satisfy’ approach, the impact of any proposed changes needs to be carefully considered and verified by a qualified fire engineer.
Lessor’s approval: All proposed changes to space layout or additional partitions require the lessor’s approval.

Storage

Within tenancy spaces: Ensure sufficient storage is designed inside the tenancy space. Do not house any boxes, deliveries, waste, or excess stock in the public/common areas.

Visibility: Make sure the back-of-house or storage zones are not visible through the shopfronts, seating area, or serveries. Position service/storage fixtures and counters at a distance from the shopfront so that it is not intrusive.

Architectural detailing

New detailing to match existing: Design new significant fitout works, taking into consideration the detailed design of the fitouts prepared by TZG and Hassell Architects.

Temporary works, installations and exhibitions

Lessor's approval: If proposed for installation internally and externally, including for any temporary installation in public areas, foyers and lobbies; seek approval from the lessor.

Adding wet areas

Location: If new amenities or wet areas are required, locate in existing enclosed spaces so that minimal alterations are required.
New services: The reticulation of new services will require approvals from the Heritage NSW and the City of Sydney Council.
Waterproofing details: Make sure it does not impinge on any fabric considered of heritage significance and that no removal of floor structure or building fabric is required.

Universal design (and DDA)

Generally: Make sure the tenancy fitout complies with the DDA, the National Construction Code, AS 1428.1, AS 1428.2, AS 1428.1 and AS 1428.4.2. Make sure the spatial layout does not hinder circulation/mobility and accessible for all, make sure the space is equitable in use.
Standalone columns: Make sure the surface finish of the column has minimum 30% luminance contrast with the surrounding surface finishes. Seek approval from Heritage NSW for proposals affecting or proposed changes to building fabric classified as significant such as column finishes.
Floor finishes: Generally, allow for slip-resistant floors and ground surfaces within the tenancy, having an effective level of contrast with adjoining surfaces and is traversable by people with disabilities. Comply with AS 1428.1, AS 1428.2, AS 1428.1 and AS 1428.4.2 and aligns with the intent of the DDA. Seek approval from Heritage NSW for proposals affecting or proposed changes to building fabric classified as significant such as timber flooring.
Dimensions and sizing: Make sure the design is appropriately sized and accommodates a diverse range of users and people with different mobility capability.
Colour and texture: The use of colour and texture to distinguish features and wayfinding is highly recommended.
Entrance door widths: Allow for doors with minimum 850 mm clear width that are light operating or automated.
Frameless glazed doors: Have a contrasting band of decals not less than 75 mm wide.
Counters: Make sure those available to the public are accessible or have a section that is accessible.
Seating and desks: Where appropriate, use height adjustable desks or chairs. Provision of a variety of accessible seating with backrests and side arms is encouraged.
Sensory qualities: Consider the intrinsic acoustic and lighting qualities within each space to create an ambient environment, regardless of people's sensory abilities.

Codes and regulations

Statutory compliance: The tenant and the tenant's designer are responsible for ensuring the proposed tenancy use, materials of construction and signage comply with statutory codes, standards and regulations. These include:

- National Construction Code
- *Environmental Planning and Assessment Act 1979* (NSW)
- *Disability and Discrimination Act 1992* (Aus.)
- *Heritage Act 1977* (NSW)
- City of Sydney Council requirements
- Australian Standards appropriate to the fitout

- Fire and Rescue NSW requirements

Signage and branding

External signage: For all external signage, comply with the **Walsh Bay Precinct Architectural Code** requirements. Make sure signs do not detract from the heritage significance or setting of the buildings or place or interfere with its interpretation.
Council approval: Seek City of Sydney Council approval for all proposed signage. Refer to the City of Sydney LEP 2012 and DCP 2012.
Signage installation: Do not damage the building fabric. Make sure the signage is removable and any installation is reversable.

Finishes, fixtures and fittings

Supply and installation: The tenant will supply and install all finishes, fixtures and furniture in compliance with the conditions of the lease agreement.
Operating conditions: Make sure the finishes are suitable with the operating conditions and in keeping with the character of the precinct architecture.
Finishes: Comply with the **Walsh Bay Precinct Architectural Code**.

Acoustics

Refer to **Section 13: Noise and vibration** of the Operational Plan of Management.

Kitchen and food operations

Standards compliance: If merchandising food, comply with the Food Standards Code and Food Safety Standards (Chapter 3). In the design submission, demonstrate compliance with the following:

- *Food Act 2003* (NSW)
- *Food Regulations 2015* (NSW)
- National Construction Code
- Food Safety Standards, particularly Standard 3.2.1, 3.2.2 and 3.2.3

Liquor licencing: For food operators that include the service of alcohol, show in the tenancy plan liquor licence boundary line.
Document reference: Comply also with **Section 8: Food and beverage** of this Operational Plan of Management.

Ecologically sustainable design (ESD)

Environmental performance: Make sure the tenancy design and completed fitout complies with the **Sustainability Tenancy Fitout Guide** by LCI. Refer to **Appendix A** of this document.

Security

Security system: The tenant is required to provide security systems installed within the tenancy. Do not install the proposed system without the lessor's approval of the specification and drawings.
Visibility: Ensure all security devices and alarms are concealed and located within the tenancy area.

7 CONSTRUCTION GUIDELINES

General

Statutory compliance

The fitout contractor is required to comply with Commonwealth and NSW regulations and industrial awards, including the following:

- *Work Health and Safety Regulation 2017* (NSW)
- *Work Health and Safety Act 2011* (NSW)
- National Construction Code
- 'Code of practice: Construction work' and other WHS codes of practice, 'Code of practice: Demolition works', by SafeWork NSW

Operational hours and completion date

Comply with the hours as allowed in the conditions of consent and complete fitout works by the date shown in the approved fitout program or that agreed with the lessor.

Construction zone

The fitout contractor is not permitted to undertake any work outside the tenanted area, unless approved by the lessor.

Contractor qualifications and associated requirements

Building licence: Submit a copy of the current commercial NSW building licence, company registration details, trade registration certificate or similar for all employees working on-site.
Current insurance: Submit a copy of all current insurance certificates (including for subcontractors) for public liability, professional indemnity, work cover and contractor's risks.
White card: Ensure all employees working on-site have a construction industry WHS 'white card'.

Work, health and safety

Arising issues: Advise the lessor of any industrial issue or dispute that may or does arise during the fitout, and may adversely affect:

- The progress of the fitout
- The surrounding/other tenanted areas
- The works of other contractors
- The operation of the precinct

Site induction: The tenant, their contractor and their consultant are required to complete a site induction conducted by the lessor and comply with the lessee's site conditions for the fitout works.
Site security and safety: Adhere to all precinct security requirements, including delivery of all site inductions for all visitors to the construction site. The contractor is expected to provide all security measures and implement safety measure, as required, including provision of personal protective equipment, for the construction to ensure it is secure and safe. This includes maintaining security personnel (if required) to ensure only those with appropriate security clearance are permitted to enter the site.
Accidents and injuries: All injuries and near misses are to be reported immediately to SafeWork NSW and the lessor, as appropriate.
Emergency procedures: Make sure the site induction includes emergency procedures in event of an accident/incident.
Contractor personnel: The contractor is responsible for the behaviour of its employees, including ensuring their safety and making sure they adhere to the any precinct requirement.

Temporary services

Provision by the contractor

Provide and maintain (and remove on completion) the following temporary services for the fitout works:

- Supply and distribution systems for power, water, and gas, as appropriate

- Adequate firefighting facilities that cover the whole tenanted areas
- Cleaning services to ensure the construction site is regularly swept and surplus material and waste materials are removed from the tenanted area
- Security services to prevent unauthorised access to the tenanted areas, theft or damage to the temporary works (this may include hoardings)
- Lighting systems, as required, to facilitate works to suit operational hours

Hoardings

Install hoardings, as approved by the lessor, to the tenanted areas during the fitout period. The cost of the hoarding will be borne by the tenant and will be removed immediately on completion. Rectify any damages caused by the hoarding.

Materials and equipment handling/delivery

Generally

The fitout contractor is responsible for all lifting, loading and unloading equipment required for handling equipment, building materials, fixtures and fittings to and from the construction site. This includes hoists, lifts, scaffolds and other equipment as appropriate. Remove upon completion.

Equipment inside the building

Ensure any equipment used does not damage the existing building fabric.

Lessor's approval

Seek the approval of the lessor before using any equipment within the precinct, including for all hoists, scissor lifts, gantries, etc.

Equipment loading

When applying for approval from the lessor, demonstrate that loading conditions will not be exceeded for the floor structure. Submit loading calculations and verification from a structural engineer.

Damage

Immediately repair/rectify any damage caused by the equipment used for the fitout.

On-site parking

There is no on-site parking. Parking for contractors is available adjacent to the Roslyn Packer Theatre on Hickson Road. Vehicles are permitted to deliver tools and equipment at the loading docks/zones during allowed operation hours specified in **Section 1: Operational Plan of Management** but is then required to move on after unloading.

Contractor's supervision

Supervisor

Provide an appropriate experienced, competent site supervisor (with first aid qualifications) at all times when personnel are working in the tenanted areas.

Communication

Make sure the supervisor is contactable 24 hours, 7 days a week and fluent in English with the authority to carry out instructions from the lessor.

Work progress and site safety

The supervisor will maintain satisfactory work progress and ensure safe work practices are adhered to.

Storage

Spatial requirements

Provide sufficient storage space within the tenanted area for the duration of the fitout for holding building materials, equipment and construction waste.

Waste management

Comply with consent conditions for waste management for the duration of the fitout. Hold recyclables, compostable and other waste in separate containers. Cleaning and waste removal are to be managed by the tenant at the tenant's cost.

Amenities

Unless approved otherwise by the lessor, provide staff amenities for construction site personnel, including sanitary and meal room facilities, so that the precinct's common area or shared amenities are not adversely impacted. Maintain these facilities for the whole fitout period.

Services

Fire safety and protection system isolation

Before beginning construction, provide details of system isolation and programming to the Precinct Manager. Apply for a Hot Works Permit, as appropriate.

Penetrations

Do not make penetrations through floor structure/slab such as chases or sawcuts. If any penetrations that modify or affect the base building are proposed, seek the lessor's approval, including for floor penetrations. In some cases, it may be required that penetrations be carried out by the landlord and the cost be charged to the tenant.

Water supply

Metering: Water supply to individual tenancies will be metered to the lessor's approval. Connect meters to the precinct's utilities monitoring system.
Meter locations: Accessible for servicing and manual reading, if required.
Cold water supply: The lessor will provide one cold water supply only, any hot/heated water supply system requirements will be the tenant's responsibilities.
Food and beverage: Provide grease arrest systems, as appropriate. Comply also with **Section 8: Food and beverage** of the Operational Plan of Management.

Connection of electrical supply and ICT

Power supply: Make sure all power is sourced from the distribution board within the tenancy, the supply is provided directly by the lessor.
Cabling: The fitout contractor and/or their electrical subcontractor is required to apply for a cabling permit (with the lessor) for isolation from and connection to electrical, mechanical and essential services.
Power usage during fitout: Electricity consumption during the fitout period will be metered and the tenant will be required to reimburse the lessor the cost of electricity consumed.
Completion: Before final completion of fitout, the contractor is required to arrange for an independent electrical inspector to check and sign off the mains electrical supply cabling and provide certification of the ICT cabling.

Inter-tenancy junctions

Make sure junctions between tenancies are without gaps and recesses to prevent accumulation of debris and concealment of goods or equipment. Where possible, allow for metal mullions installed on each side of the tenancy aligned to the easement. Extend mullion from the finished floor level to the underside of the ceiling/roof/bulkhead, as appropriate. Make sure there are no visible fixings to the external face.

Dusty and noisy works

Generally

Avoid the creation of excessive and dusty works where possible. Where not possible, seek approval from the lessor.

Noisy works

Limit to out of operation hours where possible. If construction tools or works exceed 70 dB, undertake the specific works at the times approved by the lessor. If requested by the lessor, immediately arrange for noise testing of activities to confirm allowed noise level is not exceeded.

Dusty works

If dust is likely, provide dust curtains or dustproof hoardings to minimise dust distributing to areas outside the construction zone.

Defects

Assessment and rectification

Prior to completion of fitout works, the tenant and their fitout contractor is required to notify the lessor and schedule the final defects inspection. If any defects are identified, the tenant will need to rectify the defect before opening for trade. After completing rectification, the tenant is required to notify the lessor for a further inspection to verify rectification has been completed to satisfaction.

Authority to trade

Acceptance of works

Generally: The tenant is only authorised to trade if the lessor has accepted the fitout works completed and all identified defects have been rectified to satisfaction.
Certification: Submit certificates for relevant services and test certificates to verify material compliance. These may include certificates as evidence of fire-resistance levels, fire hazard properties, slip ratings, VOC emissions and Green Star/GECA certification, etc.

Other requirements

Submit or transfer the following documents or moneys to the lessor to allow authorisation:

- Security deposit or bank guarantee (if required in the lease agreement)
- Public liability insurance certificate
- The rent in advance
- Occupancy certificate
- Other authority certificate (environment/health/food and alcohol licencing)

8 APPENDIX A – SUSTAINABILITY TENANT FITOUT GUIDE

Walsh Bay Arts Precinct

21st Spetember 2020

Sustainability Tenant Fitout Guide

Revision D

Melbourne
L1/80-88 Greville Street
Prahran, VIC 3181
P (03) 9230 5600

Sydney
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North Sydney, NSW 2060
P (02) 9157 0570

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L10/490 Upper Edward Street
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Revision Information

Project	Walsh Bay Arts Precinct
Title	Sustainability Tenant Fitout Guide
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Revision Schedule

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Contents

1. Introduction

1.1 Overview

This Tenant Fitout Guide has been prepared to allow tenants of the Walsh Bay Arts Precinct development to understand and implement the environmental performances requirements envisaged for the project. It outlines the initiatives the development has undertaken and explains their benefits. The guide is a requirement stipulated within the Walsh Bay Arts Precinct Sustainability Framework.

It is recommended the tenant implement these within the fitout in order to successfully utilise the building's environmental, social and economic benefits available. It is also expected this will improve the occupant experience and connection to the built environment.

1.2 Environmental Objectives

The project has been designed to meet the Ecologically Sustainable Development (ESD) initiatives outlined in the Walsh Bay Arts Precinct Sustainability Framework. The Sustainability Framework was developed as part of the Walsh Bay Arts and Cultural Precinct State Significant Development Application (SSDA) and is based upon the key drivers identified by the relevant stakeholders. The Sustainability Framework is a requirement under the Secretary's Environmental Assessment Requirements (SEARs) and Environmental Planning Assessment Regulation.

The Sustainability Framework responds to the following seven key environmental sustainability principles:

- Energy Efficiency and Carbon Emission Reduction
- Reduction of Potable Water Usage
- Sustainable Materials
- User Comfort and Well-being
- Sustainable Transport
- Sustainable in Operation
- Social Sustainability and Community

A full copy of the Sustainability Framework is shown in Appendix A.

1.3 Use of this guide

The intent of this guide is to provide an overview of the development's environmental initiatives. The tenant is ultimately held to meeting the specific requirements of their lease terms, outlined in the leasing agreement. This guide holds recommendations and considerations for designers and tenants.

2. Sustainability Initiatives

A number of sustainability initiatives have been incorporated into the design of the development including:

2.1 Energy Efficiency & Carbon Emission Reduction

- Incorporation of natural ventilation design strategies to non-performance / thermally critical spaces in the development where applicable
- Provision of mixed-mode ventilation strategies to offices and other appropriate locations where applicable
- Provision of equipment with high energy efficiency which meets Building Code of Australia (BCA) Section J requirements and Minimum Energy Performance Standards (MEPS) requirements
- New external glazing to meet Section J thermal performance requirements to reduce solar heat gain into the development
- Sub-metering of major electrical loads throughout the building
- Monitoring of energy consumption via the Building Management Control System (BMCS)
- Provision of photovoltaic system to offset building energy usage
- Use of LED lighting where possible to extend lamp life and reduce lighting energy
- Provision of motion sensors and dimmable lighting controls where appropriate to reduce lighting energy
- Solar hot water array with gas boost for the domestic hot water services
- Extensive Commissioning works are to be undertaken to streamline operation;
- A program of ongoing Building Tuning is to be implemented to ensure correct operation of mechanical and electrical systems.

2.2 Reduction of Potable Water Usage

- Provision of water efficient fixtures with Water Efficiency Labelling Scheme (WELS) rating as shown below:
    - WCs – 3 Stars 3L/half flush, 4.5L/full flush
    - Urinals – 5 Stars 1L/flush
    - Taps – 5 Stars 4.5L/min
    - Showers – 3 Stars 7.5L/min
- Metering of all major water uses is incorporated into and monitored via the Building Management Control System.
- Provision of a rainwater capture and reuse system on Pier 2/3

2.3 Sustainable Materials

- Maintained as much of the existing structure, façade and form as possible to reduce the embodied carbon emission of materials
- Procurement of paints, sealants, fitout items and floor coverings with low levels of Volatile Organic Compounds (VOC)
- Procurement of engineered timber with low or no formaldehyde
- Procurement of materials with no PVC or best practice PVC
- Procurement of timber that are from recycled or FSC/PEFC certified sources
- Reuse of materials where possible
- Procurement of locally sourced materials

2.4 User Comfort and Well-being

- Maximise area of workspace with access to natural daylight and views
- Provision of natural and mixed mode ventilation strategy where possible to increase outdoor air
- Provision of glazing with high visual light transmission (VLT) where possible whilst maintaining the required thermal performance

2.5 Sustainable Transport

- Encouragement of public transportation
- Promote the use of Sydney's cycle ways
- Bike parking facilities for tenants, visitors and community

2.6 Sustainable Operation

- Dedicated waste storage area for general waste and recyclable wastes
- Development of an ongoing tuning / commissioning strategy to provide an efficient running building
- Development of a Waste management Plan to manage demolition and construction waste and to divert waste from landfill as much as possible
- Development of a Building User Guide to inform new users of the sustainability initiatives

2.7 Social Sustainability and Community

- Provision of space to engage the local community through open gathering spaces, cafes, theatres and public domain areas
- Design of outdoor space lighting to provide a safe and secure location for the community
- Display sustainability achievement to the local community through display of monthly energy and water usage (See Item 30 in Sustainability Framework)

3. Tenancy Guidelines

The following table highlights the initiatives incorporated by the development to maximize the amenity and environmental performance of the building. The following Walsh Bay Arts Precinct Sustainability Framework initiatives are to be incorporated into the tenancy fitout by the design team in order to take advantage of the economic and indoor environment benefits associated with these strategies:

DEVELOPMENT INITIATIVE CREDIT	SUSTAINABILITY FRAMEWORK - TENANCY INITIATIVE
2 | Efficient HVAC Systems / Passive Design	Where tenants will install their own tenant supplementary HVAC system, the installed systems will exceed the Minimum Energy Performance Standards (MEPS) and BCA Section J requirements. It is recommended that the fitout systems are designed efficiently and interface appropriately with base building systems. There is additional 160kW of cooling and 40kW of heating capacity within the central HVAC system to support expansion within future Shore Shed Commercial tenancies.
4 | Light Strategies (Non-Performance Lighting)	LED light fixtures is recommended where possible and lighting power density to comply with BCA Section J requirements for all areas except performance spaces. Appropriate lighting control based on space type is recommended such as dimming and occupancy sensors.
6 | Potable Water Efficiency	The fitout fixtures are to meet the WELS rating shown in Section 2.2 of this report.
10 | Sustainable Materials –Internal Materials	Exposure to VOCs has been associated with eye, nose and skin irritation, headache and lethargy. It is suggested that any paints, adhesives, sealants, flooring and carpets be chosen with these maximum VOC contents in mind to minimise the levels of harmful air pollutants to which occupants are exposed. All fitout paints, adhesives, sealants, carpets and flooring installed are to comply with the maximum VOC limits as outlined in section 5.1 and 5.2 below. Formaldehyde has been reported to be an irritant at low levels to eyes, mucous membranes, nose and throat, sensitive skin and an increased risk of cancer. To minimise the levels of harmful air pollutants occupants are exposed to, it is suggested that any engineered wood products be chosen with these formaldehyde contents in mind. All engineered wood products installed as part of the fitout works are to comply with the formaldehyde emissions levels as outlined in the section 5.3 below. All fitout furniture's VOC levels shall be in accordance with the Good Environmental Choice Australia (GECA) standard GECA-28-2010 v2 for Furnitures and Fittings.

DEVELOPMENT INITIATIVE CREDIT	SUSTAINABILITY FRAMEWORK - TENANCY INITIATIVE
14 | Timber	All timber used in permanent fitout items is recommended to be sourced from a reused source or from a certified scheme accredited by FSC or PEFC with full Chain of Custody. Timber used for performance elements is excluded.
15 | PVC	Use of PVC in the fitout works to meet the Best Practice Guidelines for PVC in the built environment. Guidelines can be viewed here: https://new.gbca.org.au/pvc/.
16 | Zero Ozone Depletion Potential	All fitout / tenant mechanical system to be installed with refrigerant with an ozone depleting potential of zero.
23 | Recycling Waste Storage	Tenants are to provide separate bins for recycling and general waste. Bins shall accommodate the following waste streams as a minimum; landfill, paper & cardboard, glass & plastic (yellow bins), organics. Disposal of waste streams from site will be outlined within the building's Operational Waste Management Plan (OWMP).
24 | Construction Waste	The fitout works are encouraged to also meet a 80% waste diversion from landfill target in order to improve the overall project waste generation rate.

4. Expansion / Re-fit Considerations

In the event of expansion or refurbishment, the following should be considered:

Management

- Engagement of a Sustainability Consultant to advise on potential environmentally sustainable practices, produces and procedures;
- Commissioning should occur after any refurbishment works in order to ensure the building is operating at its maximum efficiency within refurbished areas;
- This Tenant Fitout Guide should be updated to account for any changes in the building due to expansion / refurbishment;
- A Waste Management Plan should be implemented to ensure a minimum of 80% of waste is reused or recycled during refurbishment.

Indoor Environment Quality

- Fresh air supply is maximized to provide high quality indoor environments;
- Engage an acoustic consultant to design refurbished areas to meet acoustic requirements for the building;
- Consider using low-VOC paints, carpets, flooring, adhesives and sealants to minimize health impacts caused by VOCs;
- Consider using engineered wood products with low formaldehyde emissions to minimize formaldehyde levels.

Energy

- Any refurbishment should consider impacts on energy efficiency;
- All services should be fitted with separate sub-meters and linked to the BMCS.
  Services include:
  - Tenant Power
  - Tenant Lighting
  - Any equipment with a load above 100kVA
- Lighting is designed to meet existing lighting levels and high efficiency luminaires are to be used;
- Renewable energy options should be considered.

Water

- Water Rating (WELS) should be considered when selecting fixture and fittings;
- Water meters should be installed on any significant water uses and linked to the BMCS

Materials

- Recycling and general waste storage areas should be updated to account for potential increases in building population;
- Reuse of existing materials, structure and façade elements should be considered during the design of the refurbishment in order to reduce greenhouse gas emissions associated with product manufacture;
- Materials with a high recycled content and /or environmental certification should be specified ahead of other alternatives.
- Any identified embodied hazardous materials, such as asbestos, lead or PCBs are to be stabilised or removed & disposed of in accordance with NSW EPA guidelines

Emissions

- Refrigerants and insulation products with a low or zero ozone depletion potential should be investigated for use within the expansion or refurbishment;

Hazardous Materials

- Refer to the building's Hazardous Materials Survey before any changes are made to the original building structure to identify any hazardous materials (including asbestos, lead or PCBs) that may require disposal or stabilization

5. Materials & Emissions

5.1 Maximum TVOC limits for Paints, Adhesives and Sealants

PRODUCT CATEGORY	MAX TVOC CONTENT (G/L OF READY-TO-USE PRODUCT)
General purpose adhesives	50
Interior wall and ceiling paint, all sheen levels	16
Trim, varnishes and wood stains	75
Primers, sealers and prep coats	65
One and two pack performance coatings for floors	140
Acoustic sealants, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives	250
Structural glazing adhesive, wood flooring and laminate adhesives and sealants	100

5.2 Carpet Test standards and TVOC emissions limits

TEST PROTOCOL	LIMIT
ASTM D5116 - Total VOC limit	0.5mg/m^2 per hour
ASTM D5116 - 4-PC (4-Phenylcyclohexene)	0.05mg/m^2 per hour
ISO 16000 / EN 13419 - TVOC at three days	0.5mg/m^2 per hour
ISO 10580 / ISO/TC 219 (Document N238) - TVOC at 24 hours	0.5mg/m^2 per hour

5.3 Formaldehyde emission limit values for Engineered Wood Products

TEST PROTOCOL	EMISSION LIMIT/ UNIT OF MEASUREMENT
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11:2005 method 10 for Plywood	≤1mg/L
AS/NZS 1859.1:2004 - Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1.5 mg/L
AS/NZS 1859.2:2004 - MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1mg/L
AS/NZS 4357.4 - Laminated Veneer Lumber (LVL)	≤1mg/L
Japanese Agricultural Standard MAFF Notification No.701 Appendix Clause 3 (11) - LVL	≤1mg/L
JIS A 5908:2003- Particle Board and Plywood, with use of testing procedure JIS A 1460	≤1mg/L
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	≤1mg/L

JIS A1901 (not applicable to Plywood, applicable to high pressure laminates and compact laminates)	≤0.1mg/m²hr
ASTM D5116 (applicable to high pressure laminates and compact laminates)	≤0.1mg/m²hr
ISO 16000 part 9, 10 and 11 (also known as EN 13419), applicable to high pressure laminates and compact laminates	≤0.1mg/m²hr (at 3 days)
ASTM D6007	≤0.12mg/m³
ASTM E1333	≤0.12mg/m³
EN 717-1 (also known as DIN EN 717-1)	≤0.12mg/m³
EN 717-2 (also known as DIN EN 717-2)	≤3.5mg/m²hr

5.4 GBCA Recognized Product Certification Schemes

The following schemes and relevant standards have been assessed as compliant with the requirements of the GBCA's Assessment Framework for Product Certification Schemes. It is recommended that fitout materials and furniture be chosen with these schemes in mind.

- Carpet Institute of Australia Limited, Environmental Certification Scheme (ECS) v1.2
  - ECS Level 2 - Level C recognition;
  - ECS Level 3 - Level B recognition; and
  - ECS Level 4 (two options) - Level A recognition.

- Ecospecifier GreenTag GreenRate v3.2
  - GreenTag GreenRate Level C - Level C recognition;
  - GreenTag GreenRate Level B - Level B recognition; and
  - GreenTag GreenRate Level A - Level A recognition.

- Australasian Furnishing Research and Development Institute, Sustainability Standard for Commercial Furniture - AFRDI Standard 150
  - AFRDI Green Tick Level C/Silver - Level B recognition;
  - AFRDI Green Tick Level B/Gold - Level A recognition; and
  - AFRDI Green Tick Level A/Platinum - Level A recognition.

- Good Environmental Choice Australia (GECA), including six standards
  - GECA 28-2010 v2 - 'Furniture and Fittings' - Level A recognition;
  - GECA 50-2011 v2 - 'Carpets' - Level A recognition;
  - GECA 25-2011 v2 - 'Floor Coverings' - Level A recognition;
  - GECA 04-2011 v2 - 'Panel Boards' - Level A recognition;
  - GECA 40-2008 V1 - 'Hard Surfacing' - Level A recognition;

- GECA 28-2006 Modified 2010 v2 - 'Furniture and Fittings' - Level B recognition.

- The Institute for Market Transformation to Sustainability (MTS) Sustainable Materials Rating Technology standard version 4.0 - SMaRT 4.0
  - SMaRT 4.0 Sustainable Platinum - Level A recognition; and
  - SMaRT 4.0 Sustainable Gold - Level A recognition.

See GBCA Website for more information.

6. References and Further Information

The following links provide useful reference material:

- Green Building Council of Australia
  www.gbca.org.au
- City of Sydney Waste and Recycling Information
  https://www.cityofsydney.nsw.gov.au/live/waste-and-recycling
- National Built Environment Rating Scheme
  www.nabers.com.au
- EcoSpecifier
  www.ecospecifier.com.au
- Transport NSW
  www.transportnsw.info
- Energy Rating
  www.energyrating.gov.au
- Water Efficiency Labelling and Standards (WELS) scheme
  www.waterrating.gov.au
- Department of Environment and Energy
  www.environment.gov.au
- Bicycle Network
  www.bicyclenetwork.com.au
- Best Practice Guidelines for PVC
  https://new.gbca.org.au/pvc/

7. Appendix A – Sustainability Framework

Walsh Bay Arts and Cultural Precinct Sustainability Framework

Wharf 4/5

Documentation Roles & Responsibilites Matrix

Credit #	Category	Initiative	Intention		Design Response / Contractor Requirements	Targeting	Required Evidence
1	Energy & Carbon	Greenhouse Gas Emissions	Reduce Greenhouse Gas Emissions through passive design approach, vernacular architecture and energy efficiency of buildings in operation	1.1	Any new opaque façade shall be upgraded to meet Section J Part J1 Building Fabric in all spaces where cooling is delivered.	Y	Arch/Façade: As built drawings demonstrating opaque fabric performance requirements are met. ESD: JV3 / Section J Report
				1.2	Any new glazing in spaces where cooling is delivered shall meet Section J Part J2 Glazing i.e. comply with NCC Glazing Calculator OR Meet the requirements nominated as part of a compliant JV3 assessment.	Y	Arch:As built drawing Façade: As Built drawings / Façade Thermal Report / Façade schedule
					JV3 report	Y	ESD: Provision of the JV3 Report
				1.3	Where practically possible, within the constraints of the heritage context, sealing of existing facade shall be improved to minimise air leakage / infiltration. This shall occur to any spaces where heating or cooling is delivered. New fabric elements to meet Section J Part J3 Building Sealing requirements.	Y	Arch: As built drawing demonstrating sealing treatments to door frames, window frames. Head Contractor: Copy of building air infiltration tests carried out for the building showing test specification and results.
				2.1	Overall installed systems will exceed Minimum Energy Performance Standards (MEPS) or NCC Section J target for services. Target 5% exceedance where spatials allow. Refer to Mechanical Specification for nominated systems. Response to CoS: Risks associated with tenants can also be addressed with a Tenant Fitout Guide which nominates expectations in terms of system energy efficiencies.	Y	Mech: As built equipment schedules demonstrating minimum performance standards for equipment is nominated and develop a short report including calculations demonstrating exceedance on NCC for all equipment. ESD: Development a Tenant Fitout Guide nominating expectation in terms of tenant system performance, including lighting, equipment, supplementary HVAC and material selections and advice regarding operation and impact on energy / water use.
				2.2	Natural ventilation to be adopted in the following spaces: Wharf 4/5 - Studios adjacent to facade (heating only) Opening area of window or the like to be 5% of floor area served.	Y	Mech: Mechanical as built drawing showing absence of ventilation systems. Arch: As built drawings (plans and elevations) showing operable window location with opennable area indicated for each window / louvre or the like.

2	Energy & Carbon	Efficient HVAC Systems / Passive Design	Provide passive systems wherever possible, and simple, decentralised systems where not	2.3	Mixed mode systems to be installed in the following spaces: Wharf 4/5 - all areas below now predominantly operate in AC mode. - Green Room adjacent to façade (now AC) - Any office / admin adjacent to facade (now AC) Any external windows or doors to e.g. green room / boardroom will need reed switch or the like to turn AC off when opened. Recommended min. 2% opening area to floor area served to facilitate natural ventilation mode. To be coordinated with any acoustic requirements.	Y	Mech: Mechanical as built drawings mechanical systems to mixed mode areas. Mech: Extract from commissioning report showing AC zones correctly switch off when doors or windows are opened. Arch: As built drawings (plans and elevations) showing operable window location with opennable area indicated for each window / louvre or the like.
				2.4	Harbour Heat Rejection to be installed. Minimum system efficiency as per Mechanical Tender Specification.	Y	Mechanical as built drawings nominating harbour heat rejection system and equipment schedule detailing performance criteria of system.
3	Energy & Carbon	Peak Energy Demand Reduction	Reduce peak demand on energy infrastructure	3.1	Peak load to be reduced by 15-30% through use of passive design, efficient fittings and onsite generation via PV array. Response to CoS: Current architectural drawings reflect the work that was completed for sizing - the system maximises available roof space within heritage visual constraints. This is minimum PV array required. Contractor to offer price option for increased array size. Battery storage has been explored to assess the feasibility based on life cycle costs. It has been found that the projected precinct demand for energy is such that the proposed new array on Wharf 4/5/ is likely to be of optimal size for precinct demand, making storage less feasible.	Y	Mech: Mechanical as built equipment schedules nominating system performance for chiller, AHUs, fans, pumps, miscellaneous fans Elec: Electrical as built drawing showing PV infrastructure, array size, location. Elec: Lighting as built drawing and luminaire schedule showing lighting fixtures, quantities and annotated with lighting power density calculations to show compliance with initiative 4.4 of this framework (reduction of artificial lighting consumption compared to NCC) Mech/Elec/Lighting: Extract from commissioning report showing mech & elec system and PV array operating correctly.
				4.1	LED light fixtures to be used throughout where possible, as a minimum in back of house, front of house spaces, external lighting / precinct. May be exceptions where not cost effective in specialised spaces such as theatre performance spaces.	Y	Electrical / lighting as built drawing showing lighting layout. As built lighting schedule showing LEDs are nominated throughout.

4	Energy & Carbon	Lighting Strategies	Reduce artifical lighting energy consumption	4.2	Dimmable controls to be included for all areas except specialist theatres.	Y	Electrical / lighting as built drawing showing location of dimmers. As built lighting schedule showing fixtures for which dimming is possible.
				4.3	All spaces except where required for safety reasons (workshops) & except specialist theatres to have occupancy sensors. External lighting to have sensors and time clocks to manage operating hours.	Y	Electrical / lighting as built drawing showing location of motion sensors.
				4.4	Reduce max NCC Section J lighting power density by min. of 30- 40% in areas such as office, corridors, back of house. Sydney Theatre Company space named "the walk" (eastern corridor) is in fact a gallery space. Therefore considered "specialist function" and excluded as are specialist theatres.	Y	Electrical / lighting as built drawing and schedule showing number and type of fixtures in each space and lighting power for each fixture & calculations demonstrating that the lighting power density on average is reduced by 40% across the project
5	Energy & Carbon	Energy Sub-Metering	Facilitate ongoing management of energy consumption	5.1	Energy (electricity, gas, thermal) sub-metering to be installed to allow for tracking of the following where installed: - chiller - boiler - AHUs - separate lighting & power, performance power - thermal meters for individual tenancies	Y	Mechanical and hydraulic As Built drawing showing where energy sub-meters have been installed. Electrical as built drawing showing where energy sub-meters have been installed. Commissioning report extract demonstrating the meters have been installed and commissioned in accordance with correct standards.
				5.2	A system is to be installed that it is connected to the energy sub-metering network and is capable of monitoring and displaying the building's energy performance on at least a monthly basis. This could be a BMS or the like, depending on appropriateness for scale and type of building. Each tenant to have access to they system such that they can monitor their consumption. The system must be capable of monitoring in at least 15 minute increments.	Y	Commissioning report extract demonstrating the system installed and connected to the sub-metering network and is capable of monitoring and displaying the building's performance on at least a monthly basis and is operating correctly
6	Water	Potable Water Efficiency	To reduce potable water consumption by building occupants	6.1	The following fixtures will be installed to all areas to meet WELS rating requirements: All Toilet flush - 3 L/ half flush, 4.5 L/ full flush All Urinals - 1 L/flush All Indoor taps - 4.5 L/min All Showerheads- 7.5 L/min	Y	Hydraulic or architectural as built drawings highlighting location of all fixtures and fittings Architectural as built fixtures / fittings schedule nominating the products that have been installed
				6.2	Harbour Heat Rejection to be installed.	Y	Mechanical as built drawings nominating harbour heat rejection system and equipment schedule detailing performance criteria of system.

7	Water	Water Metering	To monitor and manage water consumption	7.1	Water sub-metering to be installed for the following: - Bathrooms - Showers (where separate from bathrooms) - Evaporative rejection system (if installed) - Rainwater tank (if installed) Response to CoS: The water conservation strategy reduces potable water consumption via efficient appliances and the innovative application of using the harbour water as a source of heat rejection. Wharf 4/5 has an existing rainwater storage system that was installed as part of the Greening of the Wharf project. A non-potable water tap is to be installed on the side of Wharf 4/5 to draw from this existing tank for e.g. watering of any landscaped areas or washdowns. One of the main typical large water uses in a building are cooling towers which have been replaced with a harbour heat rejection system therefore eliminating water make up and cooling towers.	Y	Hydraulic as built drawings showing where water sub-meters have been installed and showing external hose tap connected to Wharf 4/5 rainwater tank for use in irrigating or wash downs in public areas.
				7.2	A system is to be installed that it is connected to the water sub-metering network and is capable of monitoring and displaying the building's water performance on at least a monthly basis. This could be a BMS or the like, depending on appropriateness for scale and type of building. Each tenant to have access to they system such that they can monitor their consumption. The system must be capable of monitoring in at least 15 minute increments.	Y	Commissioning report extract demonstrating the system installed and connected to the sub-metering network and is capable of monitoring and displaying the building's performance on at least a monthly basis and is operating correctly.
8	Water	Stormwater and Landscape Irrigation	Improve quality of site stormwater runoff and reduce potable water consumed by landscape irrigation	8.1	Currently not targeted. Contractor to explore if landscaping increases in size:-Explore potential for edge swales or the like (e.g. planting) to treat water runoff from site before it enters the harbour. Subject to any installation of landscape areas.	N	As built site drawings showing the landscaping that has been incorporated to treat water before runoff.
				8.2	Currently not targeted. Contractor to explore if landscaping increases in size:-Landscaping, if present on site, to be xeriscape (drought tolerant plant species that do not require irrigation to survive).	N	As built planting schedule showing the planting selection around site Hydraulic as built drawing showing no irrigation is provided
9	Water	Domestic Hot Water	Reduce carbon and energy associated with the heating of water for domestic uses	9.1	Provide solar thermal array on roof if hot water heating demand is great enough. Response to CoS: The project will include solar hot water with gas boost for the domestic hot water services. The solar hot water panels will be coordinated next to the PV panels. Refer to Hydraulic Specification.	Y	Hydraulic as built drawings showing size and location of the solar thermal array Extract from commissioning report showing solar thermal array operating correctly.
				10.1	For all paints applied as internal finishes, VOC limits shall be in accordance with the Good Environmental Choice Australia (GECA) standard GECA-23-2005	Y	Product certificates that demonstrate certification under the correct scheme / standard. Certificates must be in date.

10	Sustainable Materials	Internal Materials	Reduce health impacts associated with material finishes and assemblies across the precinct	10.2	For all adhesives and sealants used in the project, VOC limits shall be in accordance with the limits adopted by the South Coast Air Quality Management District (California, USA) Rule 1168.	Y	Product certificates that nominate emissions levels or Material Safety Data Sheets demonstrating compliant emission levels. Certificates / Data Sheets must be in date.
				10.3	All carpets installed in the project shall have VOC limits in accordance with the Good Environmental Choice Australia (GECA) standard GECA-50-2010 v2 for Carpets. Other floor coverings shall be in accordance with GECA 25-2010 v2 for Floor Coverings.	Y	Product certificates that demonstrate certification under the correct scheme / standard. Certificates must be in date.
				10.4	All Fitout items VOC levels shall be in accordance with the Good Environmental Choice Australia (GECA) standard GECA-28-2010 v2 for Furniture & Fittings	Y	Product certificates that demonstrate certification under the correct scheme / standard. Certificates must be in date.
				10.5	All specified internal engineered wood products shall be in accordance with the Green Star Design & As Built v1.1 limits for Formaldehyde	Y	Product certificates that demonstrate certification under the correct scheme / standard. Certificates must be in date. Confirmation that 100% by cost of internally applied paints, adhesives, sealants, carpets, floor coverings, fitout items and engineered wood products comply with requirements. Invoices / proof of purchase or dockets for all applicable products demonstrating that the nominated products have been procured and delivered to site. Short report that references all products, their certificates and cost such that it can readily demonstrated that the requirements have been met for all items 10.1 through to 10.5.
11	Sustainable Materials	Resource Efficiency	Reduce embodied energy and resource depletion associated with the project	11.1	A site wide strategy for resource efficiency is to be implemented. - Any existing timber will be reused where possible onsite. - Timber piles to be salvaged where possible. - Precinct wide services strategy to be implemented which shares main plant between Wharf 4/5. - Tenant Fitout Guide to be used to outline and encourage tenants to reduce, reuse, recycle their existing furniture / appliances etc.	Y	HC: Short report outlining approach to resource efficiency adopted for the project, highlighting building elements that have been dematerialised, serve multiple purposes, are reused or recycled. Contractor to include details on reuse and recycle rate which should be monitored throughout demolition and construction. ESD: Tenant Fitout Guide extract to be issued as part of this short report demonstrating how tenants have been encourage to adopt resource efficient policies.

12	Sustainable Materials	Recycled Material Content	Prolong the useful life of existing products and materials and encourage the uptake of products with recycled content	12.1	Site wide, the project shall target: - 5% by cost of fitout items within the base building scope (e.g. furniture within reception areas) to have at least 20% recycled content or are reused. e.g. re-use timber piles for reception desk.	Y	Short report by Quantity Surveyor with summary table demonstrating compliance with requirements. All fitout items that have been procured must be included with those that are reused or contain >20% recycled content highlighted. Cost of reused items can be estimated by selecting equivalent product as new.
							Material data sheets for any items used to claim >20% recycled content must be submitted where percentage of recycled content is clearly nominated. Alternatively a letter from the supplier confirming the recycled content can be submitted.
13	Sustainable Materials	Local Material Sourcing	To reduce embodied energy associated with transportation of materials	13.1	20% by cost of all construction materials, including fitout items, within base building scope to be sourced from the local area (within 1500Km of site, if feasible). For example, new piles to be NSW turpentine timber.	Y	Short report by Quantity Surveyor with summary table demonstrating compliance with requirements. All construction materials and fitout items that have been procured must be included with their site of origin nominated. Cost of any reused items sourced locally can be estimated by selecting equivalent product as new.
							Letter from the supplier confirming the site of origin of product to be submitted
14	Sustainable Materials	Timber	To encourage the use of reused timber and timber sourced from forests whose conservation values are not degraded	14.1	95% (by cost) of all timber used shall be from a reused source or is certified by a scheme accredited by FSC International or PEFC and has a full Chain of Custody (CoC) Timber pile replacements to be FSC certified if possible - heritage requirements may prevent this. Response to CoS: The matrix within the framework provided in the ESD report from the EIS states "95% by cost to be FSC with CoC". 100% is not nominated given that there is a concern over meeting the heritage requirements for replacement structural timber piles. Recommended timber pile replacements to be FSC certified if possible - heritage requirements may prevent this.	Y	Short report by Quantity Surveyor with summary table demonstrating compliance with requirements. All timber items that have been procured must be included with those that are reused or certified highlighted. Cost of reused items can be estimated by selecting equivalent product as new.
							Timber Certificates
							Invoices confirming types of timber product and quoting chain of custody code.
							Short report by Quantity Surveyor with summary table demonstrating compliance with requirements. All PVC items that have been procured must be included with those that meet Best Practice highlighted. Costs shall be the entire cost of the product (excluding installation costs), irrelevant of the percentage of PVC in the product.

15	Sustainable Materials	PVC	Reduce the environmental and health impacts of PVC by encouraging the use of PVC that adheres to Best Practice Guidelines	15.1	90% (by cost) of PVC products & PVC containing products that meet the Best Practice Guidelines for PVC in the Built Environment, Products include: permanent formwork, pipes, flooring, blinds and cables.	Y	PVC certificates Invoices confirming types of PVC products.
16	Sustainable Materials	Zero Ozone Depletion Potential	To encourage practices that minimise the environmental impacts of refrigeration equipment	16.1	All refrigerants will have an ozone-depleting potential of zero	Y	Short report by mechanical contractor describing all mechanical systems within the building, nominating those that contain refrigerant and the type of refrigerant used in each piece of equipment. The report is to include the ODP and volume of each refrigerant demonstrating all have ODP of zero. Any existing systems that are not refurbished or replaced can be excluded.
17	Sustainable Materials	Hazardous Material Survey	Reuse previously developed land and remediate contaminated land / buildings	17.1	A comprehensive hazardous materials survey is to be carried out in accordance with the relevant Environmental and Occupational Health and Safety (OH&S) legislation. Any identified asbestos, lead or PCBs are to be stabilized, or removed and disposed of in accordance with best practice guidelines.	Y	Copy of HazMat report by qualified professional that demonstrates the survey was conducted in accordance with recognised standards and guidelines. Confirmation that HazMat survey was conducted and any remediation works completed before construction began.
18	User Comfort & Wellbeing	External Views and Visual Comfort	To provide occupants with a visual connection to the external environment	18.1	Glazed elements are being introducing in a few areas where previously opaque. E.g. Doorways to East, West elevations shall be replaced with glazing. Note - glass selection to encourage natural light but constrained to within heritage and Section J requirements. Where no thermal requirements for glazing, introduce higher VLT glass.	Y	As built drawings highlighted to show areas of new glazing that have been introduced and any supporting receipts / dockets showing glazing VLT.
19	User Comfort & Wellbeing	Environmental Conditions (Wider Temperature Range)	To provide a range of spaces with a mix of environmental conditions to maintain thermal comfort with reduced energy consumption	19.1	The spaces are controlled to meet the user needs as follows: - Naturally ventilated spaces - as per outdoor air temperatures. Where heating only provided, heating to >16 deg C. - Mixed mode rehearsal / office spaces - 21-24 degrees C when A/C operating, outdoor air temp in NV mode. - Performance spaces (ATYP, ACO auditorium) - fully AC to 21-24 deg C. Instrumental areas to have humidity control.	Y	Extract from commissioning clause nominating the setpoints each space type has been set to.
20	User Comfort & Wellbeing	Daylight (Internal)	To maximise daylight penetration into the floor plate, improving indoor visual quality and reducing tenant lighting energy consumption	20.1	Spaces below lanterns shall receive 2.5% daylight factor at floor level OR A significant improvement in daylight to be shown compared to existing conditions through e.g. replacement of opaque	Y	Short report nominating the daylight factor at floor level within the space below lanterns or describing the new glazing that has been introduced, its size and orientation and the improvement compared to existing conditions.

			consumption.		to existing conditions through e.g. replacement of opaque skylight elements with new glazed elements.		As built drawings highlighted to show areas of new glazing that have been introduced and any supporting receipts / dockets showing glazing VLT.
21	Sustainable Transport	Public Transport	To encourage responsible and carbon-minimal forms of transport for users to the site	21.1	Signs shall be provided indicating connection to Sydney bike routes - Wayfinding plan to address this.	Y	As built drawings showing location and size of signposts to Sydney CBD cycle route. If digital, supporting report to be submitted from contractor that confirms the signs will indicate bike routes.
				21.2	No car parking will be provided	Y	As built drawings showing absence of car parking.
22	Sustainable Transport	Cyclist Facilities	To facilitate the use of bicycles by occupants and visitors	22.1	Bike parking spaces to be in line with Green Travel Plan recommendations. Adequate showers, change facilities and locker storage to be provided.	Y	Short report highlighting requirements of Green Travel Plan and demonstrating the precinct provides facilities as required by the plan, including numbers of showers, lockers and bike spaces (staff and visitors) that are provided. As drawings highlighted to show location of facilities, including: showers, change facilities, bike storage and lockers. Extract from Green Travel Plan where bike facilities and end of trip facilities requirements are nominated.
23	Operation	Recycling Waste Storage	To provide facilities that encourage and facilitate the recycling of waste	23.1	A waste storage area shall be provided that is readily accessible for council waste collection. The area shall have a separate, designated space for the separation and collection of recyclables including: - paper & cardboard - glass - plastic - organics - cooking oil (for retail tenancy use) Refer to waste consultant report / Waste Management Plan for required area for accommodating separate waste streams and location.	Y	As built drawings showing location and size of waste storage facilities where separation of waste streams is demonstrated Copy of the Waste Management Plan
				23.2	Separate bins for recycling and general waste shall be provided in each separate tenancy. Bins shall accommodate these waste streams as a minimum: - landfill - paper & cardboard - glass - plastic - organics - any other specific waste stream as required by tenant In addition, refer to Waste Management Plan for recommended external bin allowance based on footfall. Refer to separate Event Management Plan for waste requirements related to precinct wide events.	Y	As drawings showing location of bins for the precinct and within tenancies where known.
				24.1	Both Demolition and Main Works Tender to include requirement that the Contractor develops and complies with WMP and retains quarterly reports for demonstrating that the targets are being met.	Y	Tender Phase - Copy of tender documentation nominating the requirements the Contractor must meet.

24	Operation	Construction Waste Management	Minimise the amount of construction waste going to disposal	24.2	A WMP shall be developed that addresses: -Construction waste management -Outlines how to achieve recycling rate for demolition / construction waste as nominated within the Tender WMP (refer to Arup WMP).	Y	Construction Phase - Copy of the Waste Management Plan addressing the criteria. Construction Phase - quarterly waste reports demonstrating the project is on track to meet the nominated targets.
25	Operation	Environmental Management Plan	Minimise environmental impacts of all sources during construction stage.	25.1	Tender to include requirement that the Contractor develops and complies with EMP requirements and issues reports for demonstrating that the EMP is being successfully implemented.	Y	Tender Phase - Copy of tender documentation nominating the requirements the Contractor must meet.
				25.2	An EMP shall be developed by the Contractor that complies with Section 3 of the NSW Environmental Management System guidelines 2009. In addition, the plan is to address erosion / sedimentation of construction works to avoid polluting the surrounds.	Y	Construction Phase - Copy of the Environmental Management Plan and short report outlining how the EMP has been addressed during construction including a compliance matrix of how the criteria is fulfilled.
26	Operation	Commissioning and Building Tuning Plan	Ensure all building services operate to optimal design potential	26.1	Contractor to fully commission the project within one year of operation. A Commissioning Plan should be in place that outlines pre-commissioning and commissioning activities to be performed based on approved standards and guidelines (refer to GBCA Green Star Design & As Built v1.1 Credit 2.2 Building Commissioning. The requirements of this credit must be met in full.)	Y	Contractor to provide record of commissioning that takes place for all systems within the project within one year of operation. This includes extracts from the commissioning report demonstrating that comprehensive pre-commissioning and commissioning activities have been performed in accordance with the Green Star Credit 2.2.
				26.2	There is to be a Building Tuning Commitment in place with the Contractor, including a commitment to perform quarterly adjustments and measurement for the first 12 months after occupation. (Refer to GBCA Green Star Design & As Built v1.1 Credit 2.3 Building Tuning. The requirements of this credit must be met in full.)	Y	Copy of Building Tuning Commitment demonstrating building tuning will take place in accordance with Green Star Credit 2.3. Contractor to provide record of building tuning that takes place for all systems within the project within one year of operation. This includes extracts from the quarterly building tuning reports demonstrating that comprehensive measurements and adjustments have been performed.
27	Operation	Efficient Equipment Selection	Ensure any new equipment to be installed is energy efficient	27.1	Any installed fridges, freezers, washers, dryers, microwaves within base building scope are to be within 1 star of the highest available on the market under the Energy Rating Labelling Scheme (refer to energyrating.gov.au).Tenant Fitout Guide to recommend tenancies install the same.	Y	Short report nominating all appliances procured as part of base build scope. The report is to reference Energy Rating Label certificates. As built schedule or docket showing appliances that have been procured. Contract documentation or Tenant Fitout Guide showing tenants must install appliances within 1 star of the highest available on the market.

28	Operation	Building Services Procurement	Ensure services are procured based on considering the life cycle cost and environmental impact associated with operation, replacement and maintenance	28.1	Select systems based on LCC analysis looking at the NPV (Net Present Value) over a maximum 3 year period. Consideration to include capital, operational, maintenance, churn and replacement over the systems period assessed. Mechanical Engineers report (Precinct Cooling Options Study) issued during detailed design addressed this requirement, with Tender Mechanical design reflecting outcome. Refer to Mechanical Tender documentation for recommended cooling design.	Y	Evidence that the systems installed are as per those recommended in the Arup Precinct Cooling Options Study. Alternatively, issue a summary report and calculations demonstrating an LCC has been performed and how the outcome informed the specification of equipment for the project.
29	Operation	Green Orientation and Ongoing Education	Encourage transfer of information to new and ongoing users to optimise the sustainable performance of the precinct	29.1	Issue a Building Users Guide to inform all new users of the building commitment to sustainability. Guide is to highlights the sustainability aspects of the project and nominates initiatives relevant to the user e.g. bike facilities, recycling bins, mixed mode and/or natural ventilation operation etc. (Refer to GBCA Green Star Design & As Built v1.1 Credit 4.2 Building User Information. The requirements of this credit must be met in full.) It should include how the Guide will be made accessible to tenants and suited to the target audience. Digital Building Users Guide is acceptable.	Y	Copy of the Building Users Guide Confirmation from the Building Owner that it has been made available to occupants by project completion.
30	Social and Community	Public Performance Feedback System / Informatics	Monitor and communicate resources use	30.1	Install display screen in public areas that shows monthly / annual water & energy consumption. An example location is Visitor Portal space. Waste recycling rates to be considered for display here too.	Y	As built drawings showing location of display screens. Commissioning extract demonstrating the screens are operating correctly. Confirmation from the Building Owner that the screens display water and energy consumption (and waste recycling rates as an option).
31	Social and Community	Out of Hours Use	Maximise building use and provide additional facility to local community	31.1	The buildings shall accommodate public festivals (Vivid, Writers Festival) during non-typical working hours, in which the facilities & amenities will be operational.	Y	Operational profiles / leasing profiles or the like demonstrating the accessibility of the facilities during out of hours.
32	Social and Community	Community Space	Contribute to community wellbeing	32.1	10% of the waterside precinct NLA shall be dedicated to the community for e.g. public art installation, public events. Fishing access at aprons is an example of contributing area.	Y	As built drawing highlighted to show location and size of community space.
33	Benchmarks and targets	Sustainability Framework	Facilitate ongoing management and monitoring of sustainability drivers	33.1	An energy, water and waste target for the precinct shall be developed	Y	A Benchmarking & Target Plan is to be developed. Within this Plan, the strategy for establishing the environmental targets is to be outlined e.g. the baseline should be set using first 6 months operation (or after full commissioning and tuning has taken place). The roles and responsibilities of parties involved in tracking the environmental performance is to be outlined in the Plan. The Plan is to include recommendations on remedial actions that should be implemented when targets are not being met. The Plan should include monitoring and reporting requirements including frequency & stakeholders to be informed.

				33.2	Quarterly reports by the Facilities Management team during operation shall be issued to determine if the building is operating in line with the targets	Y	A letter of commitment from the Building Owner that the Facilities Management Team is following the Benchmarking & Target Plan, is responsible for issuing quarterly reports that note the waste, energy and water consumption of the building, how it compares to the targets and remediation actions that should be taken.

9 APPENDIX B – WALSH BAY PRECINCT ARCHITECTURAL CODE

WALSH BAY

SYDNEY HARBOUR

PRECINCT ARCHITECTURAL CODE

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Table of Contents

Part 1 - Introduction

1. About this Architectural Code

This Architectural Code:

(a) sets out the standard of architectural elements, such as landscaping, signage, walls and fences, lighting and furniture, and their respective colours and surfaces for the Precinct.

(b) aims to preserve the existing detail, scale, materials, building methods, and topography of the elements of the Precinct to maintain the Precinct's cohesive character;

(c) binds everyone who is bound by the PMA;

(d) is made pursuant to clause 15 of the PMA and is to be overseen by the Association.

2. External Works

If you:

(a) carry out any External Works within the Precinct you must comply with this Architectural Code;

(b) are doing External Works and comply with this Architectural Code, you still need to comply with all applicable Laws and the rules of your own building.

3. Architectural Codes for buildings in the Precinct

If you make architectural standards for your individual building in the Precinct they must reflect the general standards contained in this Architectural Code.

No alterations to the exterior of any building or other work within the precinct that can be seen from the exterior of any building may be carried out until written consent is received from the Precinct Management Committee.

4. Character of the Precinct

The Precinct has a marine industrial character. The character of its architecture must be strong and robust and must also reflect its use as a place for people rather than its historical use for the transport and storage of goods.

A variety of spaces, activities and amenities is to be encouraged.

The Precinct must retain links to established historic areas including The Rocks, Millers Point, Dawes Point, Circular Quay and Sydney Harbour.

All External Works must compliment the character of the Precinct.

5. Some laws applicable to the Precinct

The Precinct is:

(a) on the State Heritage Register;

(b) the subject of Sydney Regional Environmental Plan No 16;

(c) the subject of the Walsh Bay Development (Special Provisions) Act 1999 No 3.

Part 2 - Colours and Materials

6. Colour

6.1 All external colours in the Precinct must be within the Walsh Bay Colour Palette. All external surfaces are part of the colour palette.

6.2 In selecting external colours and surfaces, the following aims should be considered:

(a) glare from surfaces should be limited;

(b) new fabrics should be integrated with the existing fabric; and

(c) a unified colour palette should be promoted in the Precinct, which links the spaces and buildings surrounding the Precinct with it.

7. Materials

7.1 Certain materials have consistently been used in the Precinct. The use of these materials should be maintained, though their application may be varied.

7.2 The character of the Precinct should be maintained by the use of materials including:

(a) Stone (Trachyte and sandstone);

(b) face brickwork;

(c) render;

(d) cast iron;

(e) galvanised and painted steel;

(f) heavy section timbers;

(g) stainless steel (polished or chemically brightened);

(h) bitumen.

(i) Painted timber

(j) Concrete

(k) Aluminium - painted and anodised

7.3 Preference should be given to maintaining a material or element bearing the "noble scars of age" rather than replacing an element.

8. Heritage Structures

8.1 The Precinct area is a valuable link with the historic evolution of the Sydney region. Any External Works affecting Heritage Structures in the Precinct must respect this and comply with the Interpretation Plan (November 99) and the Conservation Management Plan for Heritage Technology (May 99).

Part 3 - Specific Policies on external elements

The following are in alphabetical order.

9. Bollards

9.1 In the Precinct, bollards may be used to:

(a) define zones where a shared zone becomes a pedestrian only zone;

(b) protect particular pedestrian areas from vehicular access;

(c) protect structures from vehicular damage; and

(d) provide safety barriers for vehicles adjacent to level changes.

9.2 New bollards constructed in the Precinct should:

(a) if on land match the existing bollards at the steps from Windmill Street down to Kent Street, but other profiles may be acceptable depending on the location;

(b) if on the Promenade or pier aprons be simple in design and reflect the cylindrical shape of the piles.

9.3 New bollards constructed in the Precinct should be constructed from materials including:

(a) cast iron;

(b) galvanised steel;

(c) heavy section timbers;

(d) stainless steel; and

(e) combinations of these materials.

10. Doors and Windows

10.1 Doors and windows must:

(a) compliment the character of the Precinct;

(b) Comply with Part 2.

10.2 New window and door proportions must acknowledge the surrounding openings either in new or heritage buildings, should be rectangular and vertical in form. Windows and doors should not attempt to match historic profiles or sections but be simply detailed and modern.

11. Handrails

11.1 External handrails must:

(a) compliment the character of the Precinct;

(b) Comply with Part 2.

11.2 New handrails must be simple in form and generally in polished or chemically brightened stainless steel. Handrails may include spandrels in anodised elliptical louvres or 10mm toughened glass supported on patch fittings.

11.3 Handrails must conform to all relevant Australian Standards and the BCA and be so supported as to take into account crowd loading for all fixings

11.4 Handrails must be durable and suitably finished for marine environments.

12. Landscaping

12.1 All new landscaping in the Precinct should:

(a) respect the industrial maritime character of the Precinct.

(b) delineate public and private areas;

(c) project a contemporary contribution to the landscape character rather than aiming to be retrospective;

(d) be an adaptive evolution of the existing landscape character; and

(e) respect existing site conditions and correspond to the Precinct's geological context on fill and partly on sandstone escarpment.

12.2 Plant species selection for any landscaping in the Precinct should be based on the following criteria:

(a) ability to perform intended functions, including shading, spatial definition, framing views, screening and wildlife (especially bird) habitat;

(b) ability to withstand existing saline soil and high water tables;

(c) ability to withstand pruning;

(d) contribution to the character and visual softening of select areas;

(e) ecologically sustainable development;

(f) robust, salt and pollution tolerant species; and

(g) use of native species indigenous to the ecology of Sydney Harbour.

12.3 Where planting is to take place over structures, attempts should be made to reduce the visual suggestion of structure beneath.

12.4 Feature trees should be used at key locations only where they do not threaten quality views towards prominent facades or Sydney Harbour.

12.5 All street trees must conform to the Sydney City Council Street Tree policy current at the time of the proposal.

12.6 Trees in parkland and other open spaces not under the control of the Sydney City Council must be similar to the Pottinger Park species whose common names are Waterhousia Floribunda, Chinese Elm and Manchurian Pear.

13. Lighting

13.1 All new external lighting in the Precinct should:

(a) provide a safe and atmospheric illuminated environment;

(b) relate to the context of the Precinct within the surrounding environs;

(c) emphasise the heritage, cultural and topographical characteristics of the Precinct; and

(d) contribute positively to the night-time image of Sydney.

13.2 In installing new external lighting in the Precinct, the following must be considered:

(a) analysis of where the night-time image of the Precinct can be seen and identification of the unique elements which make up the character of the Precinct;

(b) identification of the key public areas within the Precinct;

(c) review of the lighting source, strength and colour rendering;

(d) identification of the type, character and spacing of light fittings for the area to be lit and the Precinct as a whole;

(e) the lighting methods of buildings, roads and public spaces, including recommendations regarding the method of lighting relevant buildings;

(f) review of the most suitable levels for the conditions without causing a nuisance to occupiers of adjoining or adjacent properties, and in particular to residential occupiers;

(g) safety issues;

(h) integration with the suite of street furniture in the Precinct; and

(i) the character of the Precinct.

13.3 External elements that help to define the character, purpose and history of the Precinct may be gently washed with light so as to assist their night-time definition.

13.4 Low level lighting is permissible to light external areas available to be used as outdoor seating.

13.5 Lighting should not adversely impact or detract from the lighting used along the Promenade.

14. Louvres

14.1 Louvres must:

(a) compliment the character of the Precinct;

(b) comply with Part 2.

14.2 The Pier 8/9 Owners Corporation must:

(a) not lodge any development applications which, if consented to, may result in the removal of the louvres or privacy screens or devices attached to the southern facade of Pier 8/9 including the two bays to the west side of the southern end of Pier 8/9 without first notifying the Shore Apartments 8/9 Owners Corporation, and, during the Contractor Control Period, the Contractor, in writing that it intends to lodge such an application; and

(b) use best endeavours to preserve the privacy of the residents of Shore Apartments 8/9 by use of privacy screens or similar privacy treatments on the southern facade of Pier 8/9 including the two bays to the west side of the southern end of Pier 8/9 limiting cross viewing between Pier 8/9 and Shore Apartments 8/9.

14.3 Louvres are generally to be horizontal elliptical aluminium. Surface finish must be either anodised to marine grade or powder coated to marine grade. Louvres may be special profiles similar to the elliptical Pier 6/7 Maisonette sunshades. Louvres must be scaled in size to suite the application and surroundings

15. Outdoor Seating

15.1 External furniture such as tables, chair and stands used in connection with outdoor seating must:

(a) compliment the character of the Precinct;

(b) comply with Part 2; and

(c) only be in metal, timber, cane, high quality plastic or a combination of those materials and must be maintained to a high quality design and finish.

15.2 Lightweight injection moulded furniture is not permitted in retail areas.

16. Privacy Screens

16.1 Privacy screens must:

(a) compliment the character of the Precinct;

(b) comply with Part 2.

16.2 Privacy screens must be marine grade materials and may be in the following materials:

a) Aluminium louvre profiles in a frame

b) Translucent toughened glass in Stainless steel frame or frameless with patch fittings

c) 150 x12 Western Red Cedar shipped boards in dark grey aluminium framing

17. Roof Penetrations and Fixtures

17.1 Roof penetrations and roof fixtures must:

(a) be used at key locations only where they do not threaten quality views towards prominent facades or Sydney Harbour;

(b) compliment the character of the Precinct;

(c) comply with Part 2.

17.2 Roof penetrations should be carefully considered and be as low a profile as possible The appearance of the roof architecture is of high aesthetic importance and care in design and placement must be undertaken to ensure the amenity of those areas which over view the roof scapes. Roof fixtures should be grouped together and concealed in special screened zones using high-grade materials such as stainless steel or coated alluvium sheet (equal to "Alucabond" sheet)

18. Shading Systems for the provision of shade

18.1 Shade systems in the Precinct may include:

(a) steel and fabric awning systems;

(b) timber framed Promenade colonnades; and

(c) tree shading where appropriate.

19. Signage

19.1 At a number of locations in the Precinct special information signage has been erected. as part of the approved Heritage Interpretation Strategy. These signs must:

(a) not be removed or altered;

(b) be replaced with exactly the same graphics information and constructed of substantially the same materials if they become damaged or vandalised.

19.2 Directional signage in the Precinct should appeal to a diverse audience by:

(a) informing of the particular heritage and physical significance of buildings and places in the Precinct; or

(b) provide way finding and general information.

19.3 Signs must not:

(a) be neon or flashing (unless required to be by law or for safety purposes);

(b) be for advertising, other than temporary normal for lease or for sale signage including boards and trolleys, if allowed by the relevant consent authority.

19.4 Illuminated signs must not:

(a) be likely to cause a hazard to traffic or shipping; or

(b) cause or be likely to cause a nuisance to adjoining owners.

19.5 In installing new external signage in the Precinct, the following must be considered:

(a) the character of the Precinct;

(b) the architectural style and use of the buildings in the Precinct, as well as the addition of character to the streetscape in suitable areas;

(j) review of the most suitable size and location without causing a nuisance to occupiers of adjoining or adjacent properties, and in particular to residential occupiers;

(c) considering the affect of any new signage on the visual amenity of the Precinct from all angles ie from the street level, from higher buildings, and against the skyline;

(d) considering the type and total number of existing signs so as to avoid visual and physical clutter;

(e) graphically recognise the difference between traditional (pre-1940) and contemporary (post-1940) buildings eg signage on contemporary buildings should be more up to date in design terms (whilst not being intrusive within the overall context of the area); and

(f) provide a balance between a unity of graphic expression with The Rocks and Millers Point areas and the recognition of the individual character of the Precinct.

19.6 Until the end of the Contractor Control Period the Contractor must have approved any signs prior to submission to a consent authority, such consent not to be unreasonably withheld.

20. Street Furniture

20.1 Street furniture must, subject to the requirements of any Consent Authority:

(a) compliment the character of the Precinct;

(b) comply with Part 2.

20.2 The street furniture must comply in every way with the Sydney City Council standards (where they apply).

21. Tiles

21.1 Tiling must:

(a) compliment the character of the Precinct;

(b) comply with Part 2.

21.2 Tiles must be sized to match the scale and proportion of the area. They must be robust and must be exfoliated or honed for a non-slip finish under all weather conditions to comply with all slip codes, including the Sydney City Council Paving Code. Granite tiles are best suited should have a minimum thickness of 30mm in public areas. Tiles must be bedded in a cement base.

22. Walls and Fences

22.1 Acceptable external wall and fence types in the Precinct include:

(a) closely spaced large section timber balusters (with piers);

(b) corrugated iron on timber post and rail fences;

(c) dressed and rock face sandstone retaining walls;

(d) face brick;

(e) hewn sandstone;

(f) painted steel palisade fences;

(g) timber paling on timber post and rail fences; and

(h) wrought iron, galvanised and/or painted steel balustrades.

22.2 New external wall or fence types should be an extension or have reference to an existing, adjoining or nearby type in the Precinct. Palisade fencing must generally match existing palisade details, including picket spacing and height.

22.3 In constructing external walls and fences in the Precinct:

(a) traditional materials and finishes, including timber, brick and sandstone, should be used;

(b) where sandstone is used, it should be large scale and the stone is to be horizontally bedded and vertically bonded. A rock face with dressed edge should be used;

(c) capping stones must be dressed and have a smooth radius;

(d) contemporary fixing methods are acceptable.

Part 4 - Policies in Relation to Specific Areas within the Precinct

In addition to complying with the Architectural Code, the architectural style of any External Works carried out in the specific areas of the Precinct listed in this Part must comply with the area-specific policies outlined in this Part.

23. Promenade

23.1 In the Precinct, the apron in front of Shore Studios 2/3, Shore Sheds 4/5, and Shore Apartments 6/7 and 8/9 is called the "Promenade".

23.2 The Promenade must reflect the existing character of the wharves at the Precinct, while recognising a continuity in the treatment of the waterfront edge of the Precinct with surrounding waterfront precincts.

23.3 To ensure that the Promenade is a pleasant place for people, the ground floor of Shore Sheds 2/3 and Shore Apartments 6/7 and 8/9 should be reserved for retail and commercial activities, including restaurants and cafes.

23.4 The first two (2) metres of the Promenade from the water edge should be reserved for edge demarcation, seating and lighting.

23.5 A six (6) metre wide Promenade zone should be reserved between the foreshore zone and the four (4) metre wide timber framed colonnade.

23.6 New lighting on the Promenade and pier apron should be designed to enable pedestrians to enjoy what is generally a dark harbour with subtle reflections.

23.7 All new External Works on the Promenade must comply with the following requirements:

(a) new access hatches for services shall be in cast iron and in-filled with the surrounding paving material, and should be kept to a minimum number and size;

(b) new decking shall be of similar scale and dimensions to existing decking;

(c) new timber piles shall be painted white, with painted galvanised steel bands used at the capping of the pile;

(d) original gantry steel rails, cast iron bollards, cleats, timber ladders and other similar hardware shall be refitted to allow the interpretation of the piers;

(e) reinforced concrete surfaces shall be similar to the existing concrete aprons, with trowelled/brushed concrete and tooled smooth edges; and

(f) surface finishes shall be either durable, sawn, natural weathered hardwood decking, or concrete.

24. Public Areas

24.1 The **"Public Areas"** in the Precinct are:

(a) the Pier 2/3 forecourt, acknowledging pedestrian access to the Promenade from Bridge 2/3 and Pier 1 pedestrian link, and the Interpretation Centre;

(b) the Pier 6/7 forecourt, acknowledging the major pedestrian entry point from Pier 6/7 Bridge, Ferry Lane and Pottinger Street;

(c) the Pier 8/9 forecourt, acknowledging the pedestrian access from Kent Street, Hickson Road and Windmill Street to the Promenade (via breezeway/bridge 8/9), and the Interpretation facility relating to lift system and wool processing;

(d) Towns Place, acknowledging western access to the Precinct, the public wharf (Jetty 10) and Windmill Street Steps;

24.2 All new External Works in the Public Areas of the Precinct should:

(a) aim to offer a variety of spaces, activities and amenity for the public;

(b) link the Precinct with the established character of The Rocks, Millers Point, Dawes Point, Circular Quay and Sydney Harbour;

(c) preserve the character of the Precinct;

(d) respect and complement the strength of the existing architecture and engineering of the Precinct.

24.3 New building lighting must be designed to avoid glare in the Public Areas.

24.4 Wherever possible in Public Areas, industrial technology items should preserved or reinstated as part of the Heritage conservation and interpretation of the Precinct. These industrial technology items include:

(a) the accumulator;

(b) the cathead hoist; and

(c) the bale lift.

25. Retail Lots

25.1 New fitouts of retail shops involving a new shop front or works to the exterior of the building must:

(a) maintain a high standard of presentation;

(b) be designed to ensure minimum interference with the structure and heritage fabric of buildings;

(c) use high quality finishes and fittings;

(d) not use dropped panels or bulkheads against the shop front glass or windows.

25.2 Films or window tints should not be used to shop fronts. For any alterations to shopfronts, the glass used must match the colour and thickness of the glass used for all other retail shopfronts in place elsewhere on the promenade.

25.3 Roller shutters of any description or security grilles are not permitted either internally or externally if visible from external areas.

25.5 Half glass servery sections are permitted but the components of such sections must be of frameless glass type and cannot be solid elements. Solid counters made of stainless steel or timber are acceptable. Grey granite similar to that used on the promenade paving is also acceptable for use as a servery top used externally.

25.6 External furniture and equipment associated with Commercial and Retail activities (such as waiter stations, portable gas heaters, umbrellas, menu stands/boards and the like) must be:

a) Of high quality construction, safe (ie not likely to topple over), unobtrusive and in keeping with the up-market standard of the development;

b) Suitable for intended use

25.7 External cooking or barbeques are not permitted. External sound devices such as speakers or stereo's are also not permitted.

25.8 Tables and chairs may be constructed of metal, or metal and timber, or metal and high quality plastic or cane, as long as it is maintained to a high quality finish. Lightweight injection moulded furniture is not permitted.

25.9 Signage must comply with Part 19, and in addition;

a) No signage material is permitted on the Hickson Road window or openings

b) Vinyl or painted logos and signage is permitted to be fixed on the inside of glass shopfronts, provided that it is of professional quality and commensurate with the type of shop and its location. It must be fully removable and no more that 1 square metre of such signage is permitted in any single 6 metre bay. This concession is limited to a description of the retailer.

c) No attachments, painting, surfacing or structures are permitted on the front of glass shop fronts.

d) No external sandwich boards, stands, trolleys, carousels or point of sale advertising of any description is permitted.

e) No product advertising is permitted on outdoor furniture or fixtures or attached internally to glass or windows on any frontage.

f) State Environmental Planning Policy No 64 – Advertising and Signage must be complied with.

25.10 Additional low-level lighting is permissible to light external seating areas however the owner or occupier of a retail lot must ensure that any lighting installed does not spill into a residential lot, or adversely impact or detract from the lighting used along the promenade.

Part 5 - Interpretation

26. Definitions

26.1 In this document, unless the context otherwise requires:

"Architectural Code" means this document;

"Association" means the Walsh Bay Precinct Association Incorporated;

"External Works" means:

(a) any construction, alteration, renewal, refurbishment or change to the exterior of any building or other improvement in the Precinct which may be visible from outside the buildings in the Precinct; and

(b) a material change to any landscaping in the Precinct;

"Law" includes:

(a) the provisions of any statute, rule, regulation, proclamation, ordinance or by-law, present or future, whether State, Federal or otherwise; and

(b) any requirement, notice, order or direction received from or given by any statutory, public or other competent authority, present or future;

"PMA" means the Walsh Bay Precinct Management Agreement;

"Precinct" means the whole of the area known as Walsh Bay, Sydney;

"Retail Lots" means each of lots 46 to 51 inclusive in the Strata Plan;

"Walsh Bay Colour Palette" means the colour palette contained in the appendix of this document.

The word **"including"** and similar are not words of limitation.

Appendix:

Walsh Bay Colour Palette

WALSH BAY COLOUR PALETTE

THE WHARVES

Background Palette

Dulux 50BG 38/011	Rodin Grey
Dulux Colour Solutions	Mauve Grey
Dulux Colour Solutions	Ice Blue
Dulux Colour Solutions	Lime White

Trims

Bristol B012-02	Cotton Canvas
Dulux Colour Solutions	Pale Stone
Dulux Colour Solutions	Native Grey
Bristol B152-11	Gunpowder

Shutters

Dulux Architectural Coatings	Seal Grey 78139

Roof

Dulux 30RB 16/031	Intercoastal

HICKSON ROAD, SHORE SHEDS AND BOND STORES

Background Palette

Existing red brickwork

Existing sandstone

Portland cement render

New face brick

Trims

Dulux Colour Solutions	Royal Blue
Dulux Colour Solutions	Ox Blood

Dulux Colour Solutions	Leaf Brown
Dulux Colour Solutions	Antique Green
Bristol B152-11	**Gunpowder**
Shutters	
Dulux Architectural Coatings	Seal Grey 78139
Roof	
Dulux 30RB 16/031	Intercoastal
Shutters	

POTTINGER STREET

Background Palette

Murobond	Stone
Murobond	Corsica
Murobond	Arezzo
Trims	
Bristol B149-11	Duchess
Dulux Colour Solutions	Antique Green
Bristol B152-11	Gunpowder
Shutters	
Dulux Architectural Coatings	Seal Grey 78139
Roof	
Dulux 30RB 16/031	Intercoastal