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# **Submission to the Minister (Major Projects)**

## **The Refurbishment of the Chimpanzee Exhibit at Taronga Zoo, Mosman**



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# 1. INTRODUCTION

This submission to the Minister is seeking approval to proceed on the preparation of a project application for the refurbishment of the Chimpanzee exhibit at Taronga Zoo.

This project is subject to the provisions of State Planning Policy (Major Projects) 2005, part 3A of the Environmental Planning & Assessment Act 1979. Within part 3A of the act, Schedule 2 nominates – specified sites (clause 6) which lists Taronga Zoo as a specified site. (No 11) - Criteria under which the provisions of this major project are assessed are of State or regional environmental planning significance (75B(2) (a)). In addition to these criteria the estimated capital investment value of the project is more than \$5million.

## 1.1 BACKGROUND

The existing Chimpanzee enclosure at Taronga Zoo was constructed in 1980. The exhibit is dated and modern husbandry techniques require the facilities to be upgraded. The African Precinct Master Plan has also identified this exhibit to be aesthetically improved.

The Taronga Zoo facility is world renowned and one of the most successful breeding groups of its kind. The Zoological Parks Board NSW plays a significant role in the conservation and management of the species both locally and internationally. With pressure in their native habitat including climate change, habitat destruction and poaching, organisations like ZPB play a critical role in the survival of such species.

The Taronga Zoo Chimpanzee Facility has seen little capital investment since its construction in the late 1970's and does not meet local and international tourism expectations. The design proposed replaces aging infrastructure that requires upgrade and refurbishment to address OHS issues and facilitate the management and breeding of the chimpanzee group.

The upgrade to the facility would provide a greater level of interpretation and facilitate increased education opportunities to enable school groups, local and international visitors to appreciate and understand the vulnerability of this species.

Taronga Zoos' Chimpanzee troop is one of the largest captive groups in the world with recognised wild behavioural patterns. Taronga now houses amongst its 20 strong Chimpanzee population 4 maturing sub-adult males. As these males jockey and promote themselves within the troop the need for a separation paddock is essential, part of modern animal husbandry and the management strategy for such a large Chimpanzee troop. In addition to the re-introductory role of the separation paddock this proposed facility will:

- facilitate introductions of new Chimpanzee females. The Regional Zoos, including ARAZPA (Australasian Regional Association of Zoological Parks and Aquaria), both locally and internationally have agreed and identified the need to import new chimps in the near future into the region to maintain a genetic pool as part of species management.
- provide the necessary infrastructure for the current troop management strategy and management philosophies.
- allow the redevelopment within the site constraints during construction with out the need to relocate the chimpanzees. Relocation of the Chimpanzees has been dismissed as being too disruptive and costly and is not possible for the redevelopment.
- permit the troop to remain outside at night in summer unsupervised in the separation paddock portion of the exhibit. Currently this not possible because of the openness of the existing exhibit paddock and the fear of possible wall or moat breach from tree fall in a storm event. The proposed separation paddock is designed as an 'aviary' structure providing a full 3 dimensional climbing enclosure.

- Address OHS compliance issues

Refurbishment of the existing Night house is proposed simultaneously to bring this facility up to world standards for the care and husbandry of Chimpanzees. The night house refurbishment is planned after the completion of the Separation Paddock and is scheduled to occur in the summer months.

## **2. OUTLINE OF THE PROPOSAL**

The project site is the existing Chimpanzee exhibit and immediate surrounds at Taronga Zoo, Bradley's Head Road, Mosman, NSW. The site encompasses the existing exhibit paddock & moat; perimeter wall; night house building; wet weather den & wet weather viewing area; site services, roads and associated infrastructure; pathways, gardens and visitor viewing areas within and immediately surrounding the exhibit, approximately 3600m<sup>2</sup>.

### **2.1 SCOPE OF THE PROJECT**

The Separation Paddock (470m<sup>2</sup>):

- 'Aviary' type mesh structure over the Separation Paddock
- Climbing structures and platforms
- Separation and non climb barrier between Separation Paddock and main (eastern) Open Paddock
- Wet weather chimpanzee shelter

The refurbishment of the Nighthouse (290m<sup>2</sup>) will address OHS compliance issues and is to include:

- New gates to keeper access area
- Demolition of central brickwork holding areas
- Addition of new central caged holding area
- Addition of 2 new vertical slide to chimpanzee races
- Addition of 1 new exit with vertical slide from central chimpanzee race into the Separation Paddock
- Addition of 1 new manual fire exit from each chimpanzee den
- Replacement of all existing mesh with new steel mesh
- Replacement of existing mechanical ventilation
- Replacement of existing roofing and skylights
- Upgrading of existing electrical and lighting

Refurbishment of the remaining Open Paddock (1440m<sup>2</sup>) is to include:

- New climbing structures
- Additional trees
- Relocation of 3 palms (moved out of chimp jump range)
- New tree protection devices
- New bushes

Remodelling of the Western Viewing Shelter (140m<sup>2</sup>)

- New walls and Roof
- Improved glazed viewing
- New Interpretives & Thematic Immersion
- Parallel play facilities
- Improved wet weather viewing

Refurbishment of the Viewing Deck (140m<sup>2</sup>)

- Rebuilding of the deck
- Removal of the pergola
- New shade trees

- New sunken deck for keeper presentations, improved viewing and seating.

Refurbishment of the Moat (275m<sup>2</sup>) is to include:

- New pump to generate greater water movement

## 2.2 LOCATION

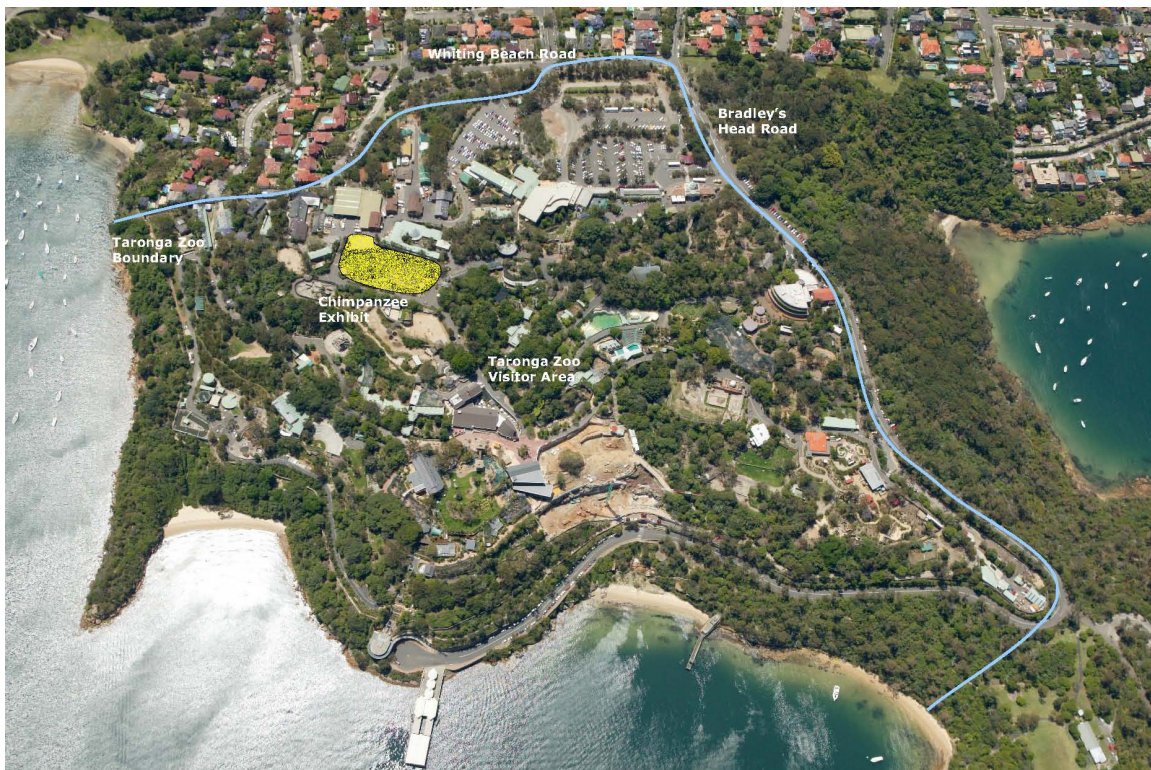
### 2.2.1 THE SITE

Taronga Zoo is located on the northern foreshore of Sydney Harbour on Athol Bay within the electorate of Mosman.

Address: Bradley's Head Road Mosman NSW 2088

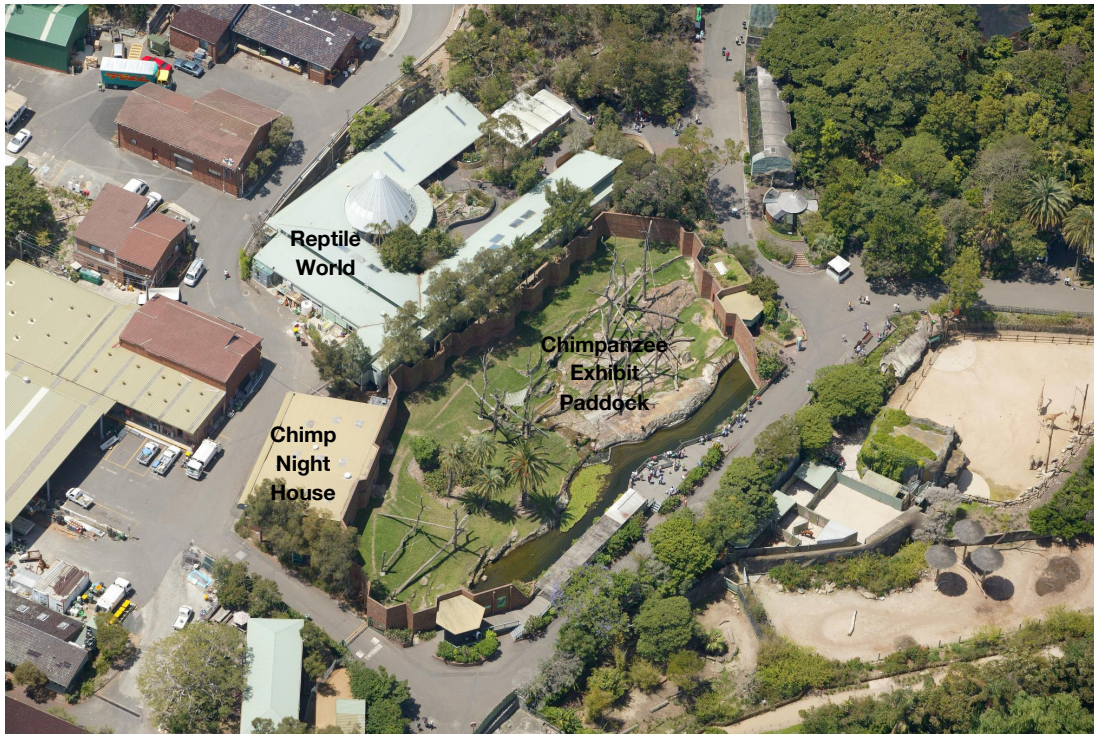
Nearest Intersection: Whiting Beach Road

Boundaries: Boundaries are irregular and are generally formed by Whiting Beach Road, Rickard Avenue & Steps, Bradley's Head Road, Athol Wharf Road and the harbour foreshore to mean high water mark around Athol bay, Whiting beach and Little Sirius Cove.



Photograph of Taronga Zoo.

The Chimpanzee exhibit is located at the top of the African precinct north-west of the Zoo centre. The site is bordered to the north by Reptile World and overlooks the Giraffe, Bongo and Zebra exhibits to the south. A service road the back of house facilities runs along the southern boundary of the site, providing service vehicle access to the site and internal zoo.



Photograph of the existing Chimpanzee Exhibit and Night House.

### **2.2.2 OWNERSHIP**

Taronga Zoo is Crown Land managed by the Zoological Parks Board of New South Wales.

### **2.2.3 TOPOGRAPHY**

Taronga Zoo is located at the head of Athol Bay on the northern shore of Sydney Harbour and is comprised of steeply sloping land that predominantly faces south. The site although generally southerly in aspect comprises three small ridges which offer variations in aspect, microclimate and views. These ridges run north-east and fan out from the Zoos upper car park. Most of the natural landforms within the Zoo have been extensively modified since the Zoos inception on this site in 1916 with many areas having been levelled and filled. The Taronga site is typical of Hawkesbury sandstone foreshores with natural soils comprised of poor sandy loams deficient in phosphorous and organic matter.

The site of the Chimpanzee exhibit slopes from north to south and consists of several large sandstone outcrops.

## 2.2.4 BUILT FORM

<b>Design Issues / Responses</b>	
<b>Factors influencing the built form of the Separation Paddock Structure and Viewing Building</b>	
<b>Issue</b>	<b>Design response</b>
Views from the Harbour	<ul style="list-style-type: none"> <li>Refer to the photo montages in the appendix. The photo montages show a standard camera angle of view and include an enlarged portion of the proposed exhibit photomontage</li> <li>The view from the Harbour approximately 500m off the foreshore shows the highest new built element, the 'aviary' structure, below or within the horizon escarpment vegetation zone. <ul style="list-style-type: none"> <li>Closer view positions – the exhibit disappears behind foreground vegetation and existing zoo buildings.</li> <li>More distant view positions - the exhibit drops down from the horizon and blends in with existing vegetation and zoo buildings.</li> </ul> </li> <li>The view from the end of Raglan Street shows the new 'aviary' structure, the highest proposed element, below the horizon line and is viewed with a backdrop of existing vegetation.</li> </ul>
Built Form	<p>Separation Paddock 'Aviary' Type Structure</p> <ul style="list-style-type: none"> <li>The form and height of the mesh structure is to provide a 3 dimensional space sufficient for chimp well being, climbing poles and platforms compliant with the EAPA.</li> <li>The 'aviary' mesh structure's form is irregular, more natural not rectangular or box like, to bend in with the surrounding natural tree patterns.</li> <li>To be multi faceted to add to the non box like form resulting in multi levels and degrees of mesh transparency.</li> <li>To minimize or eliminate horizontal and vertical forms.</li> </ul> <p>Viewing Building</p> <ul style="list-style-type: none"> <li>The form is non domestic, uses forms and materials used in the exhibit paddock to build on the public immersion into the exhibit and zoo landscape.</li> <li>Minimizes or eliminates horizontal and vertical forms where possible.</li> <li>Draws, where appropriate, on the palette of materials used in the existing exhibit</li> </ul>
Building Height Kept to minimum	<ul style="list-style-type: none"> <li>The Separation Paddock 'aviary' mesh structure's highest point is proposed 12m above finished ground.</li> <li>The highest existing climbing structure is 17m high</li> <li>No change to the height of the Night House</li> <li>Minimal height change to the remodelled Western Viewing</li> </ul>
Impact on adjacent Exhibits	<ul style="list-style-type: none"> <li>None. The site is surrounded on 3 sides by service and access roads with the northern boundary formed by a service access path behind the Reptile World building.</li> </ul>
Materials	<p>The whole exhibit is not being refurbished therefore the predominant existing material, the clay brick, is proposed to be used in the remodelled western viewing building to integrate this new work with the existing exhibit as a whole.</p> <ul style="list-style-type: none"> <li>The Separation Paddock 'aviary' structure's mesh is to be black coloured mesh with areas of non climb perforated metal coloured to match the mesh. Both mesh and perforated metal are semi transparent. <ul style="list-style-type: none"> <li>Structural masts are steel and natural timber composite Integrated</li> </ul> </li> </ul>

	<p>with the new climbing frames and platforms</p> <ul style="list-style-type: none"> <li>- Steel painted grey or 'corten' steel</li> <li>• Decks - timber or similar with irregular 'corten' steel and natural timber balustrades</li> <li>• Viewing building <ul style="list-style-type: none"> <li>- The glass to be non reflective to improve exhibit viewing. The glass is not visible from outside the exhibit.</li> <li>- Roof folded concrete</li> <li>- Feature wall off form concrete in with plant forms.</li> <li>- Columns steel and natural timber composite</li> <li>- Steel painted grey or 'corten' steel</li> <li>- Salt washed concrete</li> </ul> </li> <li>• Night House <ul style="list-style-type: none"> <li>- New roof (same height) Colorbond</li> <li>- Replace existing stud external cladding panels with painted fibre cement.</li> </ul> </li> </ul> <p>Refer to the drawings in the appendix for more details.</p>
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### 2.2.5 ADJACENT FACILITIES

The site is located northwest of the centre of the zoo. There are no physical boundaries to adjoining property owners.

### 2.2.6 LANDSCAPE SETTING AND CHARACTER

The proposal intends to maintain the existing landscape setting in its entirety with the exception of 3 existing Phoenix palm trees within the existing exhibit. These 3 palms will be replanted within the open paddock positions within the 6m non jump zone established for climbing platforms. The existing paddock and public domain located around to the south and south east of the exhibit will be substantially enhanced through the planting of super advanced trees and palms. The super advanced plantings are provided to give immediate shade amenity to the visitors as well as providing the public with an immersive shaded environment in which to view the animals. (Refer to Plan DA-03 and 08565-LWD-101 attached).

The separation paddock and open paddock will be also planted with additional new palm trees and ground planting complimented with chimpanzee enrichment devices such as climbing platforms, tree pole structures, ropes and netting

The remodelled viewing building and separation mesh structure building itself will also form an integral part of the landscape setting through the use of natural forms and the limiting of horizontal and vertical forms where possible. This form of landscape treatment along with the natural forms and finishes will assist the building to blend into the landscape setting of the site.

### 2.2.7 HERITAGE AND ARCHAEOLOGICAL SIGNIFICANCE

This section has been prepared by Jannene Smith, ZPB Heritage Specialist and reviewed by Alex Halliburton, General Manager, Capital Works & Infrastructure Division. The discussion of significance and relevant conservation policies for the Chimpanzee Exhibit is based on site knowledge; the Taronga Conservation Strategy, July 2002, prepared by Godden Mackay Logan; the Taronga Zoo African Precinct Strategic Heritage Advice Report, February, 2006, prepared by Godden Mackay Logan; the Taronga Zoo Archaeological Management Plan (AMP), 2004, prepared by Godden Mackay Logan; and The Taronga Zoo Landscape Management Plan, November 2006, prepared by Design 5 Architects, Geoffrey Britton and Dr Ben Wallace.

### Heritage and Conservation Planning

The Taronga Zoo site as a whole has been identified as an item of State heritage significance. A number of items within the zoo have been identified as individual heritage items and are included on the Heritage and Conservation Register for Taronga Zoo under Section 170 of the *Heritage Act 1977* (NSW), including the subject Chimpanzee Park Exhibit, identified as Item 100B.

The Chimpanzee Park Exhibit is ranked in the Conservation Strategy as having Some significance.

The Taronga Zoo Conservation Strategy, endorsed by the NSW Heritage Office, provides the policy framework for the conservation, interpretation, management and use of the Zoo's site as part of the implementation of the endorsed Masterplan.

A number of S170 Heritage and Conservation Register landscape heritage items are in the vicinity of the subject exhibit, comprising;

- The original Zoo pathway layout (Item 99L), identified as Exceptional significance;
- Lobelia Gibberoa (Giant Lobelia), located along the front of the exhibit (Item 181L), identified as High significance;
- Eucalyptus botryoides (Bangalay), a mature tree to the N-E of the Chimp Exhibit at the entrance to the Reptile World exhibit (Item 187L), identified as High significance;
- The natural rock and concrete terraces and early stone retaining wall along the northern boundary of the Barbary Sheep Exhibit (Item 75L), identified as Exceptional significance;
- A group of five rustic stone seats to the west of the Chimp Exhibit (Item 76L), identified as Exceptional significance; and
- Steel pipe post and rail balustrade (Item 128L), contemporary with original paths, identified as Exceptional significance.

#### **Views**

The Chimp Exhibit is within the catchment for View 19, which is a framed view offering the first view of the city and harbour bridge after entering the zoo.

#### **Archaeology**

The Chimpanzee Exhibit has been heavily modified by European development, including previous excavation to bedrock and therefore is recorded in the AMP as within a Zone 5 category, having no potential to contain Aboriginal archaeological evidence.

The area within the Chimpanzee Exhibit is also recorded as having no potential to contain evidence of nineteenth century land use activities or features associated with the twentieth century development of the Zoo.

#### **Mosman Local Environmental Plan**

The Zoo, as a whole, is identified in the Mosman Heritage Study as a place of State significance. Only a small number of individual heritage items are listed on Schedule 2 (Heritage Items) of the Mosman Local Environmental Plan (LEP) 1998, and do not include the subject Chimpanzee Exhibit.

#### **Historical and Physical Context**

The Chimpanzee Park opened to critical and public acclaim in 1980. It demonstrated a new direction in exhibit design at Taronga under the Zoo's Director, Ronald Strahan which attempted to provide a more natural experience for both animals and visitors and reflected a new focus on the Zoo as an educational institution.

The Chimpanzee Park incorporates a long grassed area, moated in front, with viewing areas at either end. The uneven terrain, stream and trees (live and dead) provided the animals with enough room to explore and exercise in. The large area also allows for the development of a social hierarchy, creating an equally compelling atmosphere for the visitor.

#### **Heritage Significance Assessment**

Taronga Zoo is a significant place for the state of New South Wales. The primary significance of Taronga Zoo lies in its unique and powerful cultural landscape; the place's ability to evidence the evolution of zoological approaches throughout the twentieth century at Taronga Zoo and in an

international context; its continuity of use as a zoo of world-standing; its historic associations with earlier zoos in Australia and Carl Hagenbeck's zoo in Germany; and the iconic sense of place it has for the people of NSW and Sydney in particular.

Since the opening of Taronga the focus of animal collections has gone from a menagerie, where the animals were displayed primarily for the amusement of visitors, to a focus on the animals' well-being, to the more recent educational approach.

The Chimpanzee Park Exhibit, ranked as having Some significance, evidences the shift in presentation of exhibits at Taronga since the 1970s to show animals in a more 'natural' environment.

### **Conservation Policies**

Works which have been implemented as part of the current Masterplan have been undertaken within the framework of the conservation principles outlined in the Conservation Strategy.

The conservation policies for items of Some significance, as outlined in the Strategy, are that they should be preserved, restored or reconstructed to an earlier known form based on documentary and physical evidence.

However, the Strategy recognises that meeting Taronga Zoo's objective to be a world-class urban zoo may require removal of some significant elements and alterations to others so as to meet essential operational requirements.

In relation to management actions with the potential to result in a loss of significance the Strategy recommends that the principle of caution, reproduced below, be adopted:

*...where management actions or decisions may result in a loss of cultural significance, these actions should be reversible or, at the very least, adopt a cautious approach involving the minimum amount of change possible and retention of the maximum amount of fabric.*

## **3. CAPITAL INVESTMENT VALUE**

The projects order of capital cost is estimated at \$6 million.

## **4. PLANNING PROVISIONS APPLYING TO THE SITE**

SEPP #56 Reference Schedule 1, Map 13, Taronga Zoological Gardens.

Lot number: 22

Deposited Plan No: DP 843294

Zoning: 5a (Special Uses). Taronga Zoo is a 28 hectare site.

Address: Bradley's Head Road Mosman NSW 2088.

Nearest Intersection: Whiting Beach Road

Boundaries: Boundaries are irregular and are generally formed by Whiting Beach Road, Rickard Avenue & Steps, Bradley's Head Road, Athol Wharf Road and the harbour foreshore to mean high water mark around Athol bay, Whiting beach and Little Sirius Cove.

## **5. LOCAL COUNCIL VIEWS**

Mosman Council has not been consulted at this stage. The project is located to the west of the Zoos centre ridge and continues to be viewed at a distance from local residences in a narrow corridor on at the end of Raglan Street, Curraghbeena Point Mosman.

NSW Heritage Office has been not been consulted at this stage.

## **6. JUSTIFICATION OF WHY THE PROJECT SHOULD BE CONSIDERED A STATE SIGNIFICANT DEVELOPMENT**

This project is considered to be a major project and state significant development as the Taronga Zoo site is listed as a specified site under part 3A provisions of the Environmental Planning and Assessment Act of 1979. Under schedule 2 Major Projects on specified sites, Taronga Zoo is listed as a site that must meet the criteria of major projects based on the state or regional planning objectives of that particular site. Criteria under which the provisions of this major project are assessed are State or regional environmental planning significance (75B(2) (a)). Also under the provisions the project has a capital investment value greater than \$5million.

## 7. APPENDIX (DRAWINGS)

### Development Approval Drawings

DA-00	COVER SHEET
DA-01	LOCATION PLAN
DA-02	EXISTING SITE SURVEY
DA-03	SITE PLAN
DA-04	FLOOR PLANS
DA-05	ROOF PLANS
DA-06	SITE ELEVATIONS
DA-07	VIEWING & SEPARATION Paddock SECTIONS
DA-08	NIGHT HOUSE ELEVATIONS
DA-09	PHOTOS EXISTING SITE
DA-10	PHOTOMONTAGE FROM THE HARBOUR & FROM RAGLAN STREET, CURRAGHBEENA POINT MOSMAN.
LWD-01	LANDSCAPE DRAWING