

# WHITE BAY POWER STATION

Robert Street, ROZELLE, NSW 2039

## CONSERVATION MANAGEMENT PLAN VOLUME I EXECUTIVE SUMMARY




prepared for  
The Sydney Harbour Foreshore Authority

by a team led by

Design 5 Architects Pty Ltd  
5 Queen Street, Chippendale, NSW 2008  
Phone: (02) 9319 1855

FINAL REPORT  
SECOND EDITION JULY 2011  
(Revised March 2013)

  
**ENDORSED**  
CONSERVATION MANAGEMENT PLAN

Heritage Council  
  
of New South Wales

Date endorsed

03/09/2013

Date expires

03/09/2023

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This report has been produced at Design 5 – Architects and is the compilation of work by the following team:

**First Edition**

**Lead Consultant**

Design 5 Architects

Primary areas of input:

Conservation planning co-ordination,  
conservation analysis, conservation policy  
and maintenance

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Sydney Harbour Foreshore  
Authority

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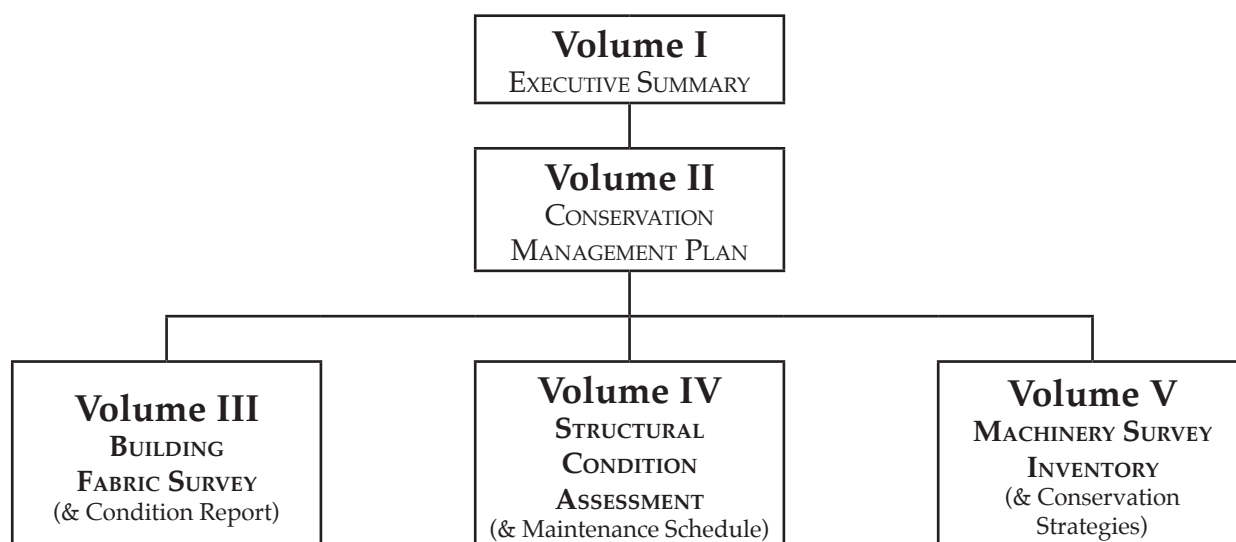
# Structure of the Report

The White Bay Power Station Conservation Management Plan is arranged in Five Volumes in a hierarchy as demonstrated by the following diagram. The results of the investigations of the building fabric survey, structural condition assessment and machinery survey inventory and conservation strategy are contained in three Volumes (III - V).

The information in these three Volumes is summarised in Volume II and informs the Assessment of Cultural (Heritage) Significance and the Management Policies which result from these Assessments.

Volume I is the Executive Summary which gives a broad overview of the whole report and summarises the most important Policies for the conservation of the White Bay Power Station.

No strategies should be devised nor any work carried out relying solely on the information contained in Volume I. Reference must be made firstly to Volume II and then the volume containing the relevant detail. That reference should also be noted against any such strategy or work instruction.



The following table shows each volume that has been amended/ revised as part of each issue. Some volumes may not have been amended but are identified on the cover as belonging to an amended set.

| CMP amendment date (issue):                                                     | Volumes amended as part of an amendment set |           |            |           |          |            |
|---------------------------------------------------------------------------------|---------------------------------------------|-----------|------------|-----------|----------|------------|
|                                                                                 | Volume I                                    | Volume II | Volume III | Volume IV | Volume V | Appendices |
| <b>January 2004</b><br><i>Original Report</i>                                   | ✓                                           | ✓         | ✓          | ✓         | ✓        | ✓          |
| <b>Second Edition July 2011</b><br><i>Revision and update</i>                   | ✓                                           | ✓         | ✓          | ✓         |          |            |
| <b>Second Edition July 2011 (Revised March 2013)</b><br><i>Minor amendments</i> | ✓                                           | ✓         |            |           |          | ✓          |

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### **VOLUME I**

#### **EXECUTIVE SUMMARY**

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Cultural Significance

Issues, Opportunities & Policies arising

Conservation Policy

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#### **THE CONSERVATION MANAGEMENT PLAN**

Introduction

Investigation of cultural significance

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D Supplementary Illustrations

E Social Significance Report by Context Pty Ltd - Nov 2002

F Standard Exemptions under the Heritage Act 1977 (NSW)

G Report: The Significance of White Bay and Balmain Power Stations to Sydney's Industrial Heritage, a report to the Electricity Commission of NSW (Don Godden and Associates & Heritage Consultants, 1989)

# EXECUTIVE SUMMARY

## The Brief

The subject of this report is the White Bay Power Station and the former White Bay Hotel which is situated at the head of White Bay in Rozelle, NSW 2039 as shown in the Location Plan below.

White Bay Power Station has been the subject of several reports and assessments in the mid-1990s, including the White Bay Power Station Asset Management Plan prepared by Pacific Power in May 1995. A number of these reports addressed various heritage issues and aspects of significance.

The management and ownership of the place was transferred to the Sydney Harbour Foreshore Authority (SHFA) in the year 2000. In 2002 SHFA engaged a team of consultants lead by Design – 5 Architects to prepare a Conservation Management Plan (CMP) to establish the exact nature of the cultural significance of the place and to put in place policies to safeguard that significance and guide future development and changes to the place. Earlier reports and documentation were reviewed as part of the preparation for the CMP. The final CMP, dated January 2004, was adopted by SHFA and endorsed by the NSW Heritage Council on 28 January 2004. This endorsement expired on 28 January 2009. In early 2010, SHFA acquired the site of the former White Bay Hotel (destroyed by fire on 5 September, 2008). In June 2010 SHFA commissioned Design - 5 to review and revise the CMP for the site.

White Bay Power Station is listed on the Register of the National Estate (019512), the NSW State Heritage Register (01025), Sydney Regional Environment Plan Number 26 (Item 11 on the Heritage Register), the Sydney Harbour Foreshore Authority S.170 Register (Draft) and the Register of the National Trust of Australia (NSW). There has been no development or major changes on the site since the 2004 report.

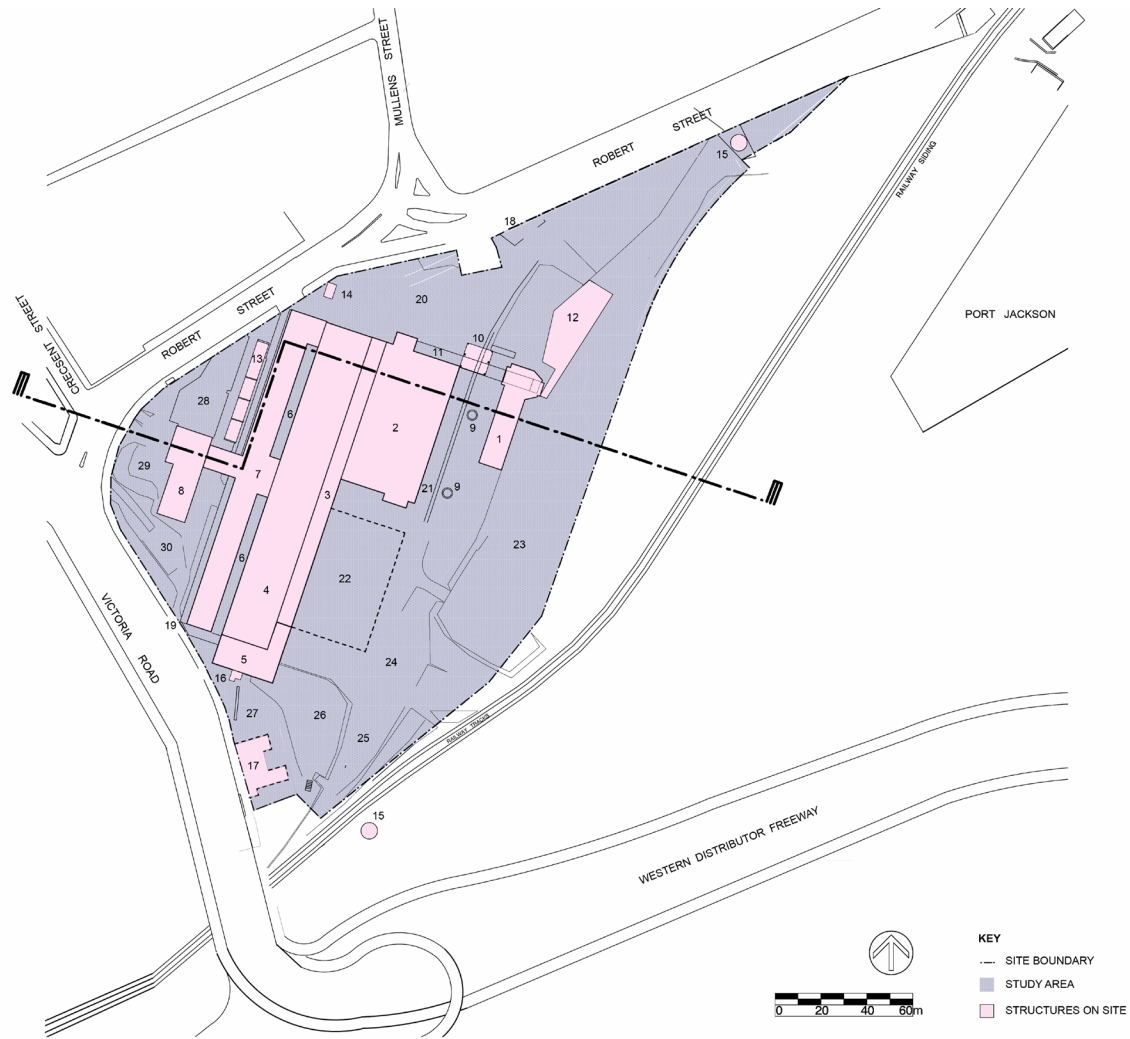
This revised Conservation Management Plan will form a key component for a process of calling for Expressions of Interest for the future use and redevelopment of the place.

This revised CMP is to meet the standards set down by the Australia ICOMOS Burra Charter and the NSW Heritage Office CMP Guidelines so that endorsement of the Heritage Council may be obtained for the report.



White Bay Power Station  
LOCATION PLAN





**STRUCTURES ON SITE**

- 1 COAL HANDLING SHED
- 2 BOILER HOUSE
- 3 PUMP HOUSE
- 4 TURBINE HALL
- 5 ADMINISTRATION AND STAFF ACCOMMODATION
- 6 TRANSFORMER ALLEY

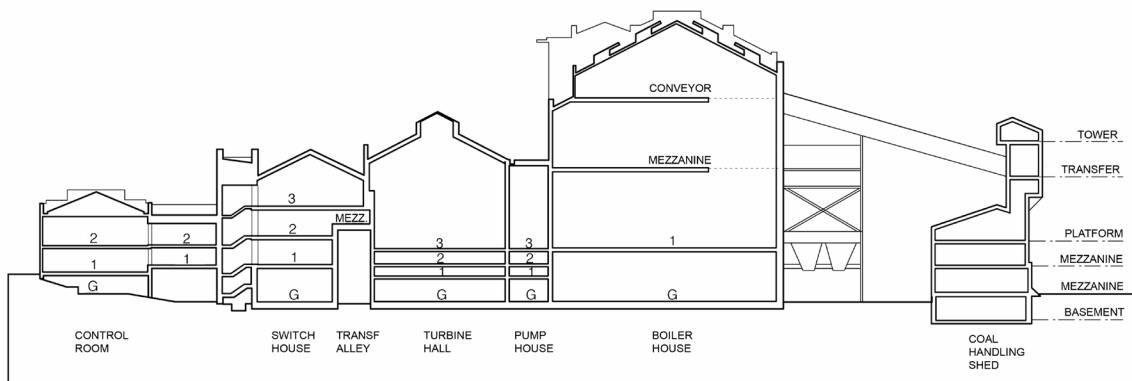
- 7 SWITCH HOUSE
- 8 CONTROL ROOM
- 9 CHIMNEYS
- 10 ASH HANDLING TOWER
- 11 COAL CONVEYOR
- 12 COAL WASH PIT

- 13 TRANSFORMER YARD
- 14 AMNITIES BLOCK
- 15 NORTHERN AND SOUTHERN PENSTOCKS
- 16 KITCHEN CANTEEN
- 17 FORMER WHITE BAY HOTEL - ARCHAEOLOGY

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- 18 ROBERT STREET ENTRY
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- 23 COAL YARD

- 24 ASH HANDLING YARD
- 25 RAILWAY CUTTING
- 26 MID SOUTH YARD
- 27 UPPER SOUTH YARD
- 28 NORTH WEST YARD
- 29 WEST YARD
- 30 SOUTH WEST YARD



**White Bay Power Station  
SITE PLAN + CROSS SECTION**

NB: This shows the legal boundary (curtilage) for the site. For visual curtilage refer to page 12.

# History

## White Bay Power Station

Before the arrival of the British in 1788, the area around the subject part of the harbour was occupied by the Cadigal band of the Eora nation. The British occupation of the area coupled with the decimating effects of small pox and other diseases, forced Aboriginal people to abandon most of these areas.

In 1800 William Balmain was granted by the Crown 550 acres on Rozelle Bay, north of Glebe and across Johnston's Bay thus giving his name to that area. With the spread of industry along the shoreline in the middle years of the 19th Century, there was considerable pressure to subdivide the land for workers housing and related facilities to service such industries as the Abattoirs on Glebe Island, W. Bell Allen's boiling down works, timber milling in Rozelle Bay and Cowan & Israel's Soap and Candle factory on the Annandale foreshores.

By 1855, subdivision was well established around the head of White Bay which was still a mud flat. In 1890 a dyke was built from Balmain across the mud flat to Glebe Island and the land at the head of the bay reclaimed. Mullens Street was extended and housing built. The future site of the White Bay Power Station was subdivided for housing during these years. Some time after 1910 the site was progressively resumed for the purposes of building the power station. It was cleared and construction of the power station began in 1912.

White Bay Power Station was built by the NSW Rail Commissioners originally to provide power for the growing rail network. As demand for power increased across the city, it gradually produced more and more electricity for general use along with the other Power Stations at Ultimo, Pyrmont and Balmain until the more efficient power stations built on the coal fields outside Sydney took over supply in the latter half of the 20th century. This allowed the city power stations to be closed down. Pollution from these had always been a problem.

The Power Station was built in two stages. The first part was built between 1912 and 1917 and consisted of a Boiler House (standing roughly where the present one stands) and part of the Turbine Hall and Switch House behind it. This first phase comprised the northern half of the total design. The second phase saw the completion of the Turbine Hall and Switch House to the present length and the building of the second Boiler House. After the Second World War the first boiler house was demolished and it was replaced in two stages between 1950 and 1958 with the present Boiler House.

By the 1970s, demand for power from White Bay had diminished to such an extent that the second boiler house was



(Courtesy of PowerHouse Museum archive)

1912



(Courtesy of PowerHouse Museum archive)

1913



(Courtesy of PowerHouse Museum archive)

c. 1920



(Courtesy of PowerHouse Museum archive)

c. 1920



(Courtesy of PowerHouse Museum archive)

c. 1930



pulled down and the turbines sold off. The power station ceased generating power on Christmas Day 1983. It was decommissioned and remained static after it closed, although it was still used as an electricity sub-station for a number of years.

Difficulties with public safety and ongoing maintenance meant that in the late 1980s and early 1990s the power station was stripped of everything except those elements specifically identified for heritage conservation. This included a complete 'slice' of the power generation operational systems. Even these items were themselves heavily affected by the removal of all asbestos insulation and lagging, especially the surviving boiler.

In August 2000, White Bay Power Station was sold by Pacific Power to the Sydney Harbour Foreshore Authority who are now seeking to preserve the cultural significance of the place and find a viable future for it.

## White Bay Hotel

The former White Bay Hotel on Victoria Road and located adjacent to the south boundary of the power station, was constructed in 1916 by Tooth and Co. Brewers. This hotel was the second hotel built near the site following resumption of land and demolition of the first hotel in 1915 to build the Power Station.

The first White Bay Hotel was constructed in the mid to late 1860s and was originally located approximately 100m south along Victoria Road on the corner of Lilyfield Road (then known as Western Road and Abattoir Road respectively). In 1910, the site was resumed by the Commissioner of Railways and in 1915, the hotel was demolished to build new rail lines servicing the Power Station. As compensation, a parcel of land along Victoria Road was provided for a new hotel.

Coinciding with the closure of the White Bay Power Station in 1982, the decline of the hotel was assured. Road developments around the site, including the busy Victoria Road and City West Link, all but landlocked the Hotel from passing trade. The hotel subsequently closed in 1992. Following years of dereliction, and at least one proposal for the redevelopment into mixed use restaurant, bar and offices, the White Bay Hotel was destroyed by fire in September 2008. The site of the hotel was acquired by SHFA in June 2010 and debris cleared.



(Courtesy of Pacific Power archive)

c. 1960



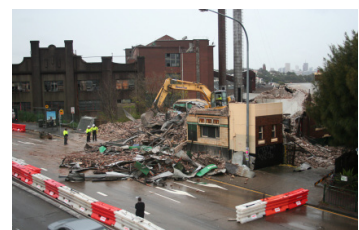
(Design 5 - Architects)

2010



White Bay Power Station & Hotel, 1930

(City of Sydney Archives, Citation no. SRC352, digital file 020/020600)



White Bay Hotel demolition, 2008

(Source: Peter Fletcher Available through Wikimedia Commons, file: White Bay Hotel.jpg)



White Bay Hotel, 2000, billboard advertising.

(National Library of Australia, image no. nla.pic-

# Cultural Significance

White Bay Power Station was the longest serving power station in metropolitan Sydney, generating electricity continuously for more than seventy years. Its extant buildings, structures and machinery provide important and rare tangible evidence of the first phase of large-scale power generation in New South Wales. It made a major contribution to the expansion of Sydney's electric tram and rail network and to the daily lives of millions.

It is the only surviving power station in New South Wales from the early and mid twentieth century to retain a substantially intact and representative set of buildings, structures and in-situ machinery that demonstrate the complete operating systems and processes of coal fired power generation and supply. Its extant machinery elements and associated structures are, both individually and collectively, of exceptional historic, technical and aesthetic significance and include a representative sample of the coal, ash and smoke handling systems, boilers and feed water systems, circulating cooling water, turbines and generators, electrical switch gear, and control systems.

White Bay Power Station contains buildings structures, and internal and external spaces of exceptional historic, aesthetic, technical and social significance. They include raw industrial spaces of a scale, quality and configuration which are increasingly rare and which inspire visitors and users alike. The significance of these structures and spaces is greatly enhanced by, and in most cases dependant on their associated, extant, in-situ machinery elements.

White Bay Power Station is of exceptional aesthetic and social significance to Sydney residents as a prominent and widely recognised harbourside industrial landmark, signalling the entry point to the Balmain peninsular from the south and east, and is highly visible

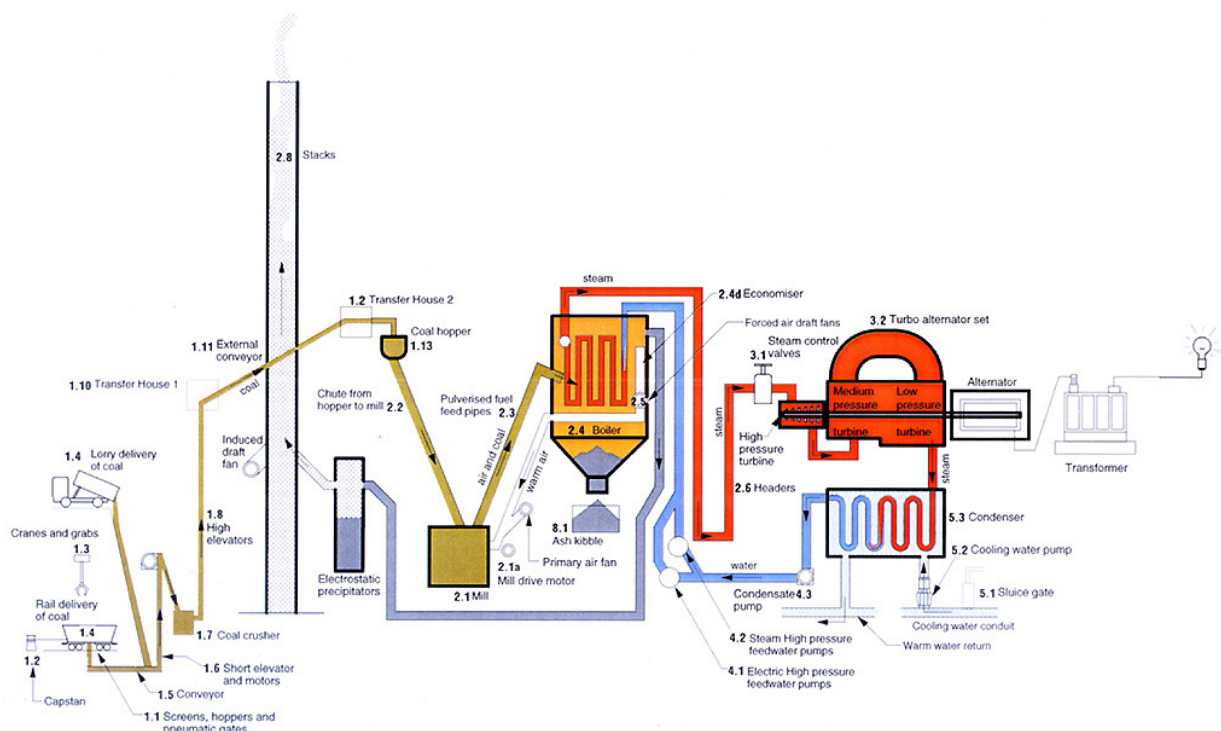


Diagram of Operation  
(from vol.V of this CMP)

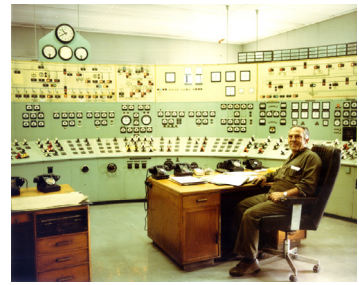
from major approach roads, streets and surrounding areas. The form and arrangement of the buildings, and in particular the two chimney stacks, are visible from many parts of the inner west and are a constant reference point. The power station, including the site of the former White Bay Hotel, defines a major entry point to the city from the west. It also forms part of a closely related group of industrial and large scale structures and spaces on this western edge of the city (former White Bay container terminal, Glebe Island silos and the former container terminal, and the Anzac Bridge).

White Bay Power Station is of exceptional social significance for both local residents and former employees as an important landmark, one of few surviving industrial structures that were once the signature of this locality. It is a potent symbol of the area's industrial origins and working traditions which have influenced domestic and community life, and is associated with a 'working class' character. It is of exceptional social significance for those who worked in the power station for its ability to demonstrate technological systems and processes that were a feature of their working lives in this era of power stations and that create for them an important and highly valued connection between the past and the present.

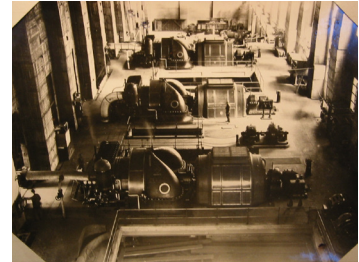
The body of archives, reports and oral history recordings associated with the White Bay Power Station, provides evidence for the development of technology and work practices at the station and are an integral part of the exceptional significance of the place.

The former White Bay Hotel had strong associations with the recreation activities and the workers at White Bay Power Station and was an important part of the Station's public identity. Its location and elevation made it a prominent landmark in the western approach to the city.

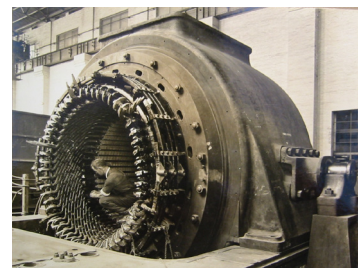
The Hotel was built in 1916, replacing an earlier hotel of the same name, located approximately 100m further south and built in the 1860s. Following its destruction by fire, the remaining fabric of the White Bay Hotel contains little significance.



1948 Control Room  
(Courtesy of Eitel Camilleri (former employee) private collection)



Turbine Hall c.1930  
(Courtesy of PowerHouse Museum archive)



Winding of Turbine c. 1930  
(Courtesy of PowerHouse Museum archive)



Entertainment Hall  
(Courtesy of Pacific Power archive)



Entertainment Hall  
(Courtesy of Pacific Power archive)



# Issues, Opportunities and Policies Arising

## GENERALLY

The issues and opportunities presented by the place, its location, condition, statutory controls and its cultural significance, and the policies and guidelines which arise from these, are discussed in full in Section 5 of Volume II of this report.

The White Bay Power Station is of exceptional significance to New South Wales and the Sydney region as a remarkably intact surviving urban power station from the 20<sup>th</sup> century. This intactness is dependent upon the retention of the full suite of structures, spaces and machinery which comprise the complete “slice” of the power generation process from coal handling to power reticulation.



No. 1 Turbine and former  
Employees  
(Design 5 - Architects)

It is a significant landmark in the area and to local communities, marking the border between the industrial waterfront areas to its east and the suburbs to its west and north. It contains structures, machinery and spaces of exceptional significance, both internally and externally and has strong contextual associations with other former and current industrial and infrastructure sites in the area.

It is therefore essential that in order to retain and respect this cultural significance those elements which embody and or support this significance are retained and conserved. For these to survive in the long term, the place must be adapted for an appropriate new use or uses. Such uses must retain and respect the significant elements and attributes of the place.

Most importantly, the integrity of those structures, spaces, elements and machinery which comprise the complete representative ‘slice’ of the power generation process from coal handling to power reticulation must be retained and respected in any future use or development on the site.

The site must retain a use or uses, which allow reasonable public access to, and interpretation of, those significant spaces, elements and machinery that represent the component parts of the power generation process. Such access should not place significant fabric or qualities of these areas at risk of alteration, damage or removal.

The aesthetic (including the sensory aspects of visual, aural & tactile) qualities of the internal and external spaces and elements of exceptional and high significance must be retained and respected, viz. the visual & spatial qualities of the Turbine Hall.

The significant historic, technical and contextual associations between the White Bay Power Station and other places must be retained and respected, viz. its relationship to the port and railways.

The principal and exceptional spaces of the building should house a use or uses which are preferably inspired by and respond to the character and quality of the spaces and their significant elements. All uses should respect the qualities, character and significance of those spaces and elements in their fitout and presentation.

Any new interventions, alterations and additions to significant areas must be exceptionally well designed by architects with proven experience of working in architecturally sensitive environments.

Any proposal for change to the place must be considered with regard to its impact on the significance of the place, its spaces and elements. As changes will be necessary in order to adapt the place for a new use or uses, these must be assessed in the broadest sense to determine whether the proposed changes respond to and support the significance of the place and whether or not they are reversible. In principle, those changes which are minimal, with least impact, are preferred to those with greater impact on the significance of the place, its spaces and elements.

## CONTEXT AND SETTING

In order to retain the visibility and prominence of the White Bay Power Station as a harbourside landmark, it should not be substantially obscured by any development on nearby sites.

Any development being proposed in the vicinity of the White Bay Power Station must carefully consider its bulk, scale and placement in order to respect the visibility and prominence of the power station as a harbourside landmark.



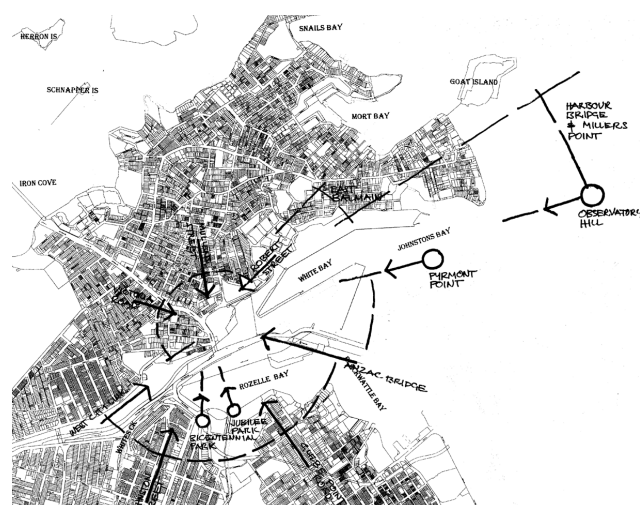
Anzac Bridge  
(Design 5 - Architects)

Those views from major axial approaches such as Anzac Bridge, Glebe Point Road, Johnston Street Annandale, City West Link, Victoria Road (from north west), Mullens Street and Robert Street must be maintained as substantially unobstructed views. Any new structures in the vicinity of the White Bay Power Station must not substantially mask the visibility of the power station or threaten its landmark qualities as the major focal element in these views.

General and changing views towards White Bay Power Station from the harbour, major parks and public areas of the southern edge of Balmain and Rozelle, Glebe Point, Pyrmont Point, Observatory Hill and Darling Harbour, as well as from the Harbour Bridge, Anzac Bridge, City West Link road, The Crescent and Victoria Road, should be retained substantially unobstructed by other large elements, existing or future. Such elements should be sited so as to be seen as part of its industrial context, framing the power station and strengthening its maritime related industrial character.

Neighbouring Councils and authorities should be informed of the need to respect these views and negotiations should be undertaken with them to ensure that relevant planning legislation is put in place to ensure this preservation.

The most visible components of White Bay Power Station are the 2 chimney stacks. These are visible above other buildings even when the other parts of the power station are not seen. They are seen on axis from a number of important approaches and are a powerful marker of place. They should both be retained as they are a crucial element in the identity and landmark qualities of the place.



Visual curtilage formed by major axial and general views to White Bay Power Station (Refer Figure 5.1.2.1 in Volume II)

The long pitched roofs to the 1953

section of the Boiler House, the Turbine Hall and Switch House, with vented ridges and gabled ends should also be retained as elements visible from afar.

The coal handling unit, specifically the elevator tower, inclined shaft conveyor and the motor room and transfer house at its top end attached to the Boiler House are prominent and distinctive, and clearly identify the industrial nature of the building and should be retained. The rusted finish has also been identified as significant.

Since the 2004 assessment, the extent of rust is now threatening the integrity and weather tightness of some buildings. While treatment of existing material with rust converters, stabilizing treatments or patch repairs is preferred, in many cases full or partial replacement of metal cladding is now the only practical option. The extent of complete re-sheeting or isolated patch replacements should be considered on a case-by-case basis in accordance with the relevant policies contained in this CMP.



Victoria Road  
(Design 5 - Architects)

Each elevation of the power station complex presents a different characteristic of the place and relates in a different way to its context. The east and north elevations are massive and dramatic in their scale and their relationship to the surrounding areas. These are visible and appreciated from some distance and this aspect of the place should be retained and respected.

The west and south elevations are seen as less dramatic but equally as important in the identity of the place. Their overall massing, configuration and visibility should be retained and respected.

The remnant landscaped elements and associated structures from the power station use should also be retained and conserved.

## HERITAGE MACHINERY GENERALLY

White Bay Power Station retains extant components of eight operational systems which are a representative sample only of the original machinery at White Bay Power Station. These systems are described in Section 3.4 of Volume II of this report. In most instances there is a single extant item where once there were multiple examples. These now rare items are integral to, and enhance the overall significance of White Bay Power Station. No item may be removed without depleting the integrity of the power station. They must be retained in situ and conserved in accordance with the guidelines set out in the Inventory sheets in Volume V of this report. They cannot, and must not, be adapted for a new function.



No. 1 Turbine  
(Design 5 - Architects)

The opportunities available at White Bay for these operational systems and their associated component elements are in their interpretability and educative ability to contribute to an understanding of the historical development and function of the White Bay Power Station as an industrial site which played a significant role in the generation of electrical power in Sydney and in the expansion of Sydney's electric rail network. This must be interpreted to future users of the place and also to the visiting public.

Various disparate items outside these major pieces of machinery (for which inventory sheets have been prepared), which have the ability to contribute to the interpretability of

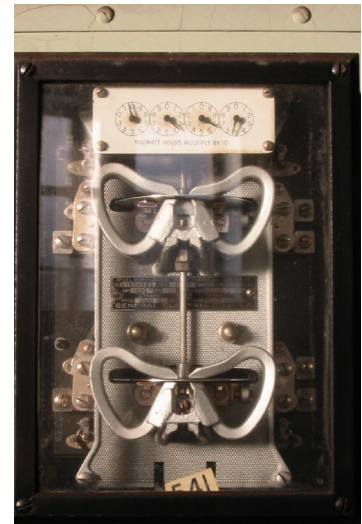


the machinery at White Bay Power Station, are those smaller movable elements which may not have been specifically identified as having an association with a particular operational system. Such items as are to be found in the Boiler House, the Turbine House and the Switch House and especially in the old Control Room and the Battery Room include:

- all signage, including labels and tags;
- switch boards and associated switches etc;
- power points and associated electrical equipment;
- meters and dials;
- cabling;
- valving; and
- tables, tanks and sinks associated with the Battery Rooms.

These small and, in some cases apparently nondescript, items contribute to an understanding of the significance and operational role of the eight operational systems at White Bay Power Station.

The extant machinery, that is the single representative sample of the complexes retained at White Bay Power Station generally, except for parts of the Switch House, occupies the northern section of the buildings in which they are housed. Hence the machinery associated with coal handling is located at the northern end of the Coal Handling Shed, the boiler, pulverising mills and associated machinery and equipment is housed in the northern section of the Boiler House. The turbo-alternator set, the condensers and associated machinery and equipment are in the northern section of the Turbine Hall. The equipment associated with the in-house electrical supply and the power reticulation system are not, generally, so conveniently located.



Equipment in Control Room  
(Design 5 - Architects)

Although it may be possible that an item or piece of machinery may be relocated, this should not be undertaken without consideration of its total environment. In the majority of instances an item will not be able to be moved, or relocated. If an item must be moved this may not be done without the associated machinery and equipment that comprise its total environment.

Some items of the machinery and elements associated with the power reticulation and electrical supply systems, may be moved to facilitate interpretation but only if really necessary and only after full assessment of the impact has been made.

All machinery elements are in need of cleaning and conservation. This should be carried out by suitable professionally qualified persons.

## GRADING OF SIGNIFICANCE

The general principle underpinning the guidelines and policies in this Conservation Management Plan is that spaces, elements and items within areas of significance are to be conserved in a manner which retains and respects their significance. Generally this also means that they should be conserved in their current state and, when applying this principle to objects and items, they are to remain in their present position unless removal to another location is covered by a separate policy for that element.

The machinery elements in each space are assessed separately and their grading of significance can be found in Volume V of this report.

The following general statements taken from Section 5 of the report summarize more detailed policies which have been formulated to guide works on the place. They have been formulated to ensure that the integrity and significance of the space or element is not compromised and that any negative impact is minimised. The significance of each machinery element must be respected and considered in its own right, regardless of the grading of its enclosing space. These policies have been further refined for specific elements by specific policies later in Section 5 of Volume II of this report. Reference should be made to the relevant drawings which follow this text showing the Gradings of Significance for all structures and spaces on the site.

### Grade 1: Exceptional Significance

**These spaces, structures or elements are of exceptional cultural significance. They play a crucial role in supporting the significance of the place and should be retained in their existing configuration.** They are essential to an understanding of the significance of the place and demonstrate the process of power generation. Surviving original machinery, fabric and finishes should be conserved in situ and the integrity of the spaces or elements retained and respected. They should not be obscured nor their significance diminished. The appreciation of the spatial quality and detail of these spaces should not be obscured or diminished. The design intent and integrity of the original work should also be respected and not obscured. **Any proposed use must focus on in situ preservation and interpretation as the primary objective.**

Examples:



Coal Handling  
Tower



Boiler No. 1



Turbine Hall – space  
and machinery



Control Room – total  
environment

All images (Design 5 - Architects)

### Grade 2: High Significance

**These spaces, structures or elements are of high cultural significance and retain a high degree of significant fabric. They play an important role in strengthening and supporting the significance of the place, but less than that for Grade 1.** In some cases their reduced significance may result from the absence of significant machinery. Where these spaces or elements form part of a space of higher significance or contain machinery or equipment elements of higher significance, any action must respect

that higher significance. Retention of surviving significant fabric in situ is preferred to relocation or removal. **Adaptation and alteration of these spaces and elements is possible and new elements may be introduced which alter them as long as the integrity of the spaces and fabric and their original design intent is respected and, if possible, strengthened.** Evidence of removed significant machinery should be retained in situ. Relocation or removal of these elements may be considered but only if it is necessary in order to achieve retention and conservation of qualities and aspects of space and elements of higher significance.

Examples:



1948 Switch House  
top level



Boiler House  
– spaces formerly  
occupied by Boilers  
2, 3 and 4



Boiler House floor  
- spaces formerly  
occupied by Boilers  
2, 3 and 4



Turbine Hall –  
platform areas where  
turbine generators  
have been removed

All images (Design 5 - Architects)

### Grade 3: Moderate Significance

**These spaces, structures or elements retain some integrity but are of lesser cultural significance. They play a moderate role in supporting the significance of the place.** Significant fabric may have been altered or obscured. Where these spaces or elements form part of a space of higher significance, any action must respect that higher significance. **These spaces and elements can be adapted and changed for other uses, and new openings made, but fabric or machinery of higher significance should be retained in situ in accordance with their ranking.** The qualities and integrity of the spaces or elements should, if possible, be respected. **Adaptation of these spaces or elements would be preferred to their loss or removal.** Relocation or removal of evidence of removed machinery may be considered to allow adaptive reuse of the space however retention and adaptation would always be the preferred option.

Examples:



South-west  
Transformer Yard



Coal Wash tank



1948 Switch House  
ground level



White Bay Hotel site, 2010  
(plinth and archaeology)

All images (Design 5 - Architects)



## Grade 4: Little/Neutral Significance

**These spaces, structures or elements retain only minor or neutral significance and may be retained or adapted substantially.** Elements or fabric of higher significance should be retained if possible. Adaptation is preferred to complete removal.

Examples:



Pump House  
south end



Former locker room  
level 2, Admin  
Building



1948 Switch House  
corridor top level

All images (Design 5 - Architects)

## Grade 5: Intrusive

**These spaces, structures or elements are of no significant value. They may be either removed or altered substantially.**

Examples:



Added raised  
concrete plinth in  
1958 Boiler House

All images (Design 5 - Architects)

In all cases elements shared between these spaces and other spaces of higher significance should be treated in accordance with the higher ranking as it affects that higher ranked space or element. Likewise, spaces which contain machinery or equipment of higher significance, should be treated in accordance with the higher ranking.

For example in the Boiler House, overall listed as a Grade 1 building, new fabric and floors may be introduced into the Grade 2 areas for, say, an office or retail use so long as the surviving boiler (Grade 1) is kept and interpreted.

NOTE:

The following drawings which show grades of significance for all the components of the site and spaces, appear in Section 3 of Volume II. Their figure numbers are as they appear in this Volume.

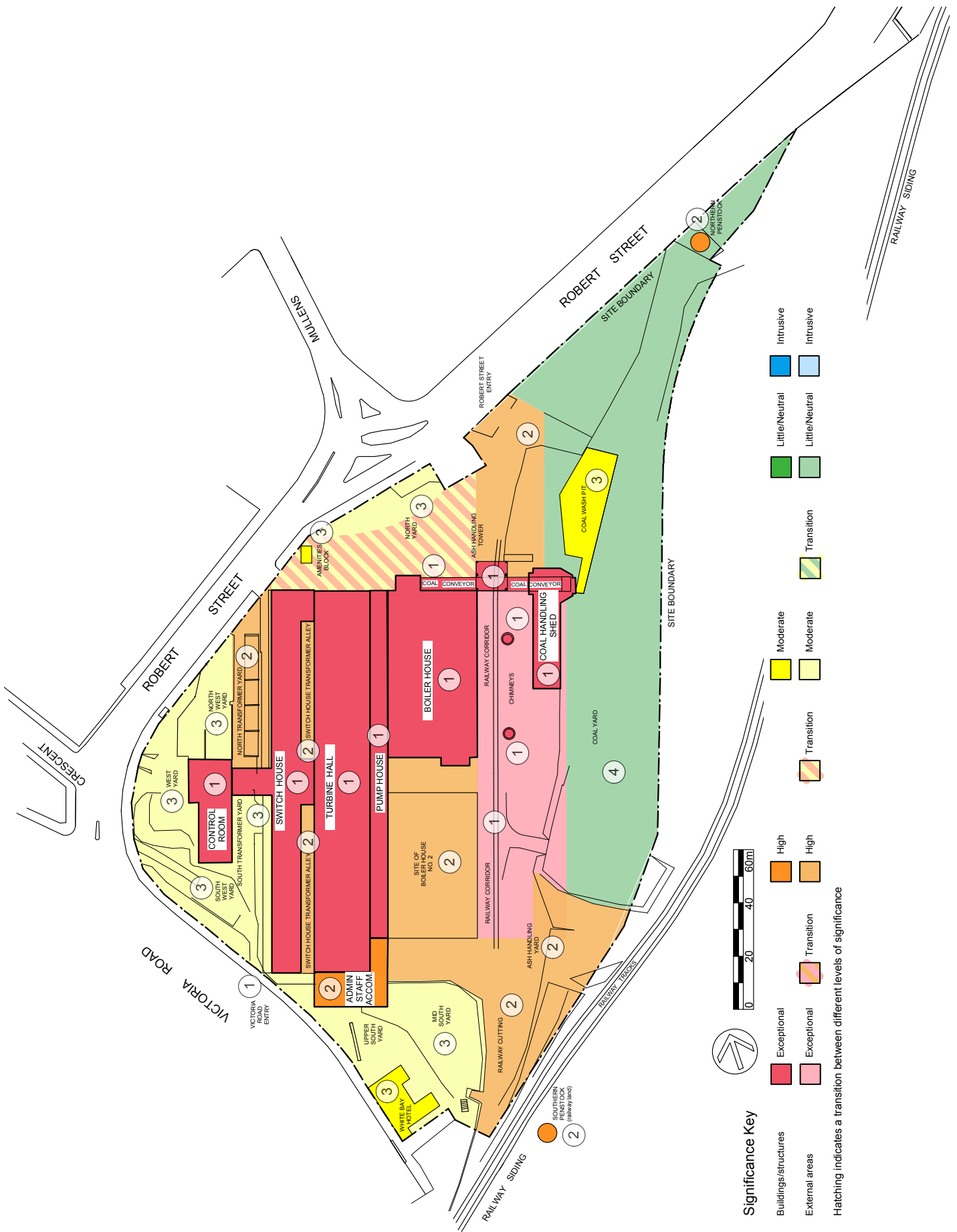


Figure 3.8.2.1  
Site Plan significance gradings

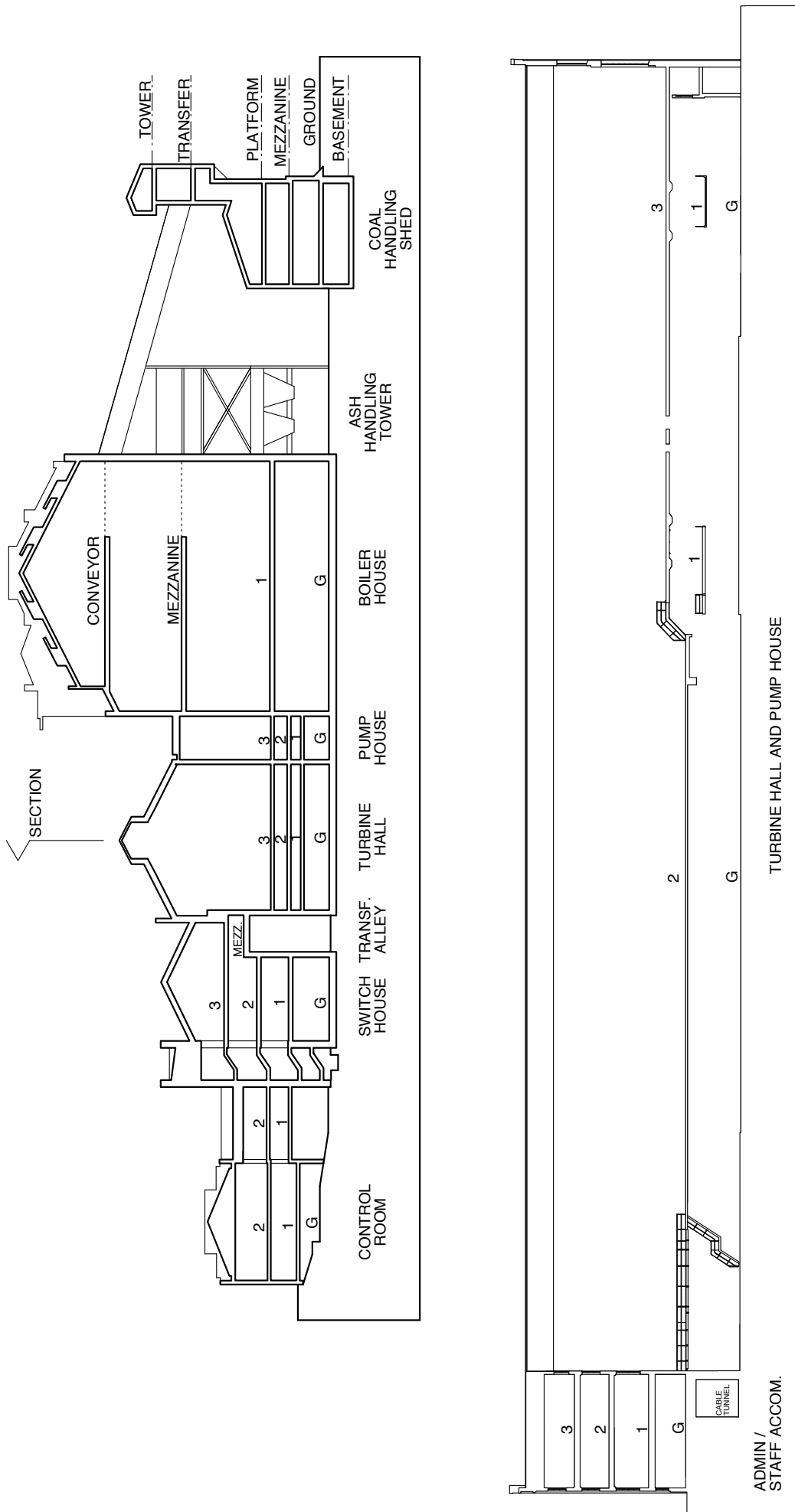
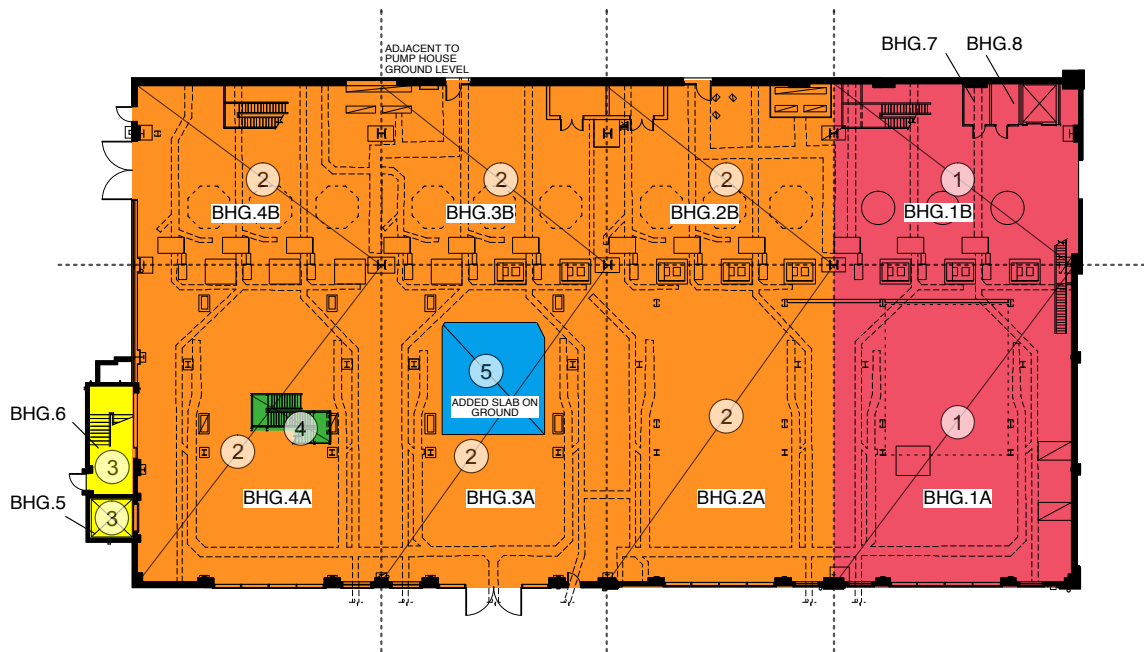
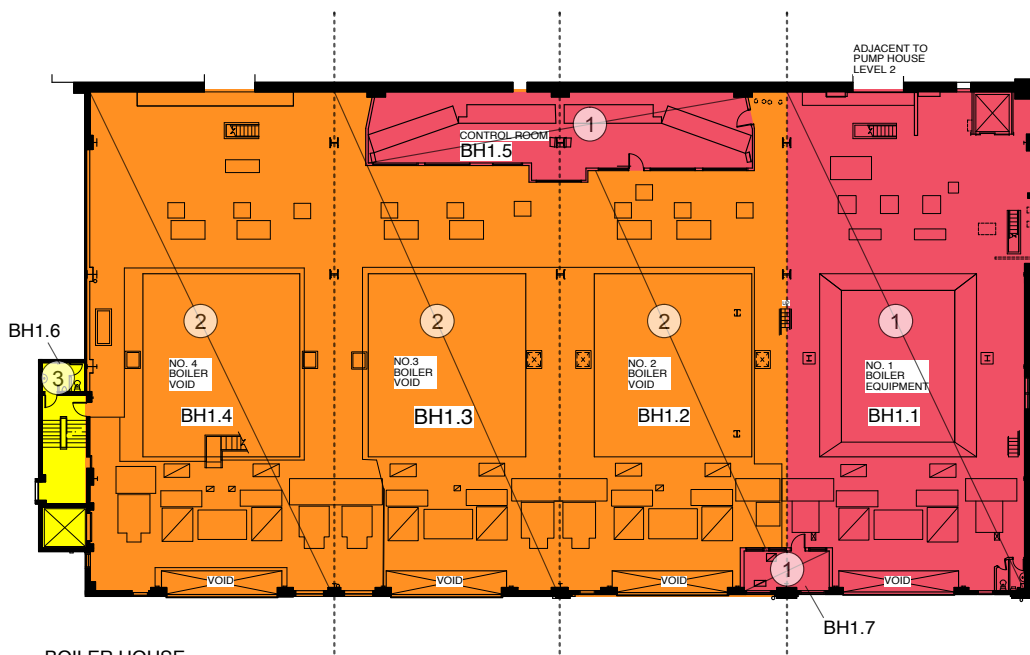


Figure 3.8.2.2  
Key Sectional Diagrams.





BOILER HOUSE  
GROUND LEVEL PLAN



BOILER HOUSE  
LEVEL 1 PLAN

Significance Key

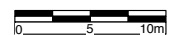
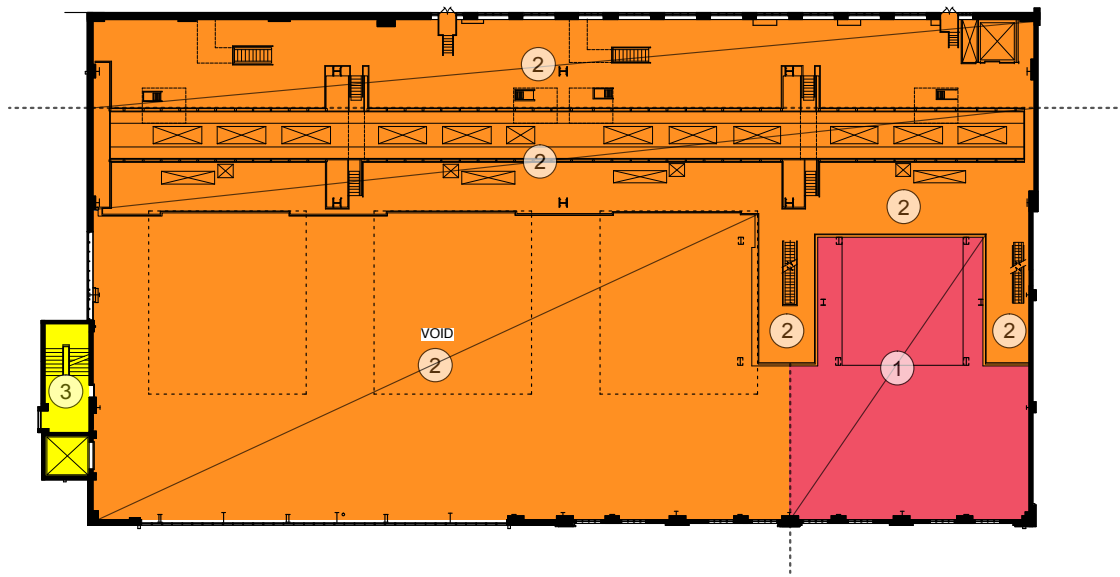
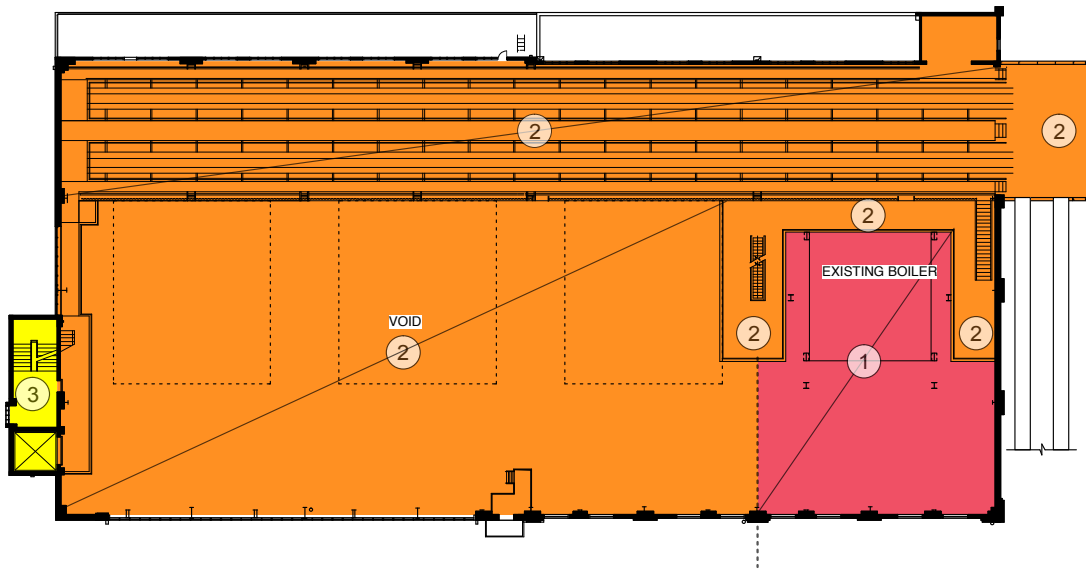


Figure 3.8.2.3  
Boiler House lower levels significance gradings



BOILER HOUSE  
MEZZANINE LEVEL PLAN



BOILER HOUSE  
CONVEYOR LEVEL PLAN

Significance Key



Figure 3.8.2.4  
Boiler House upper levels significance gradings

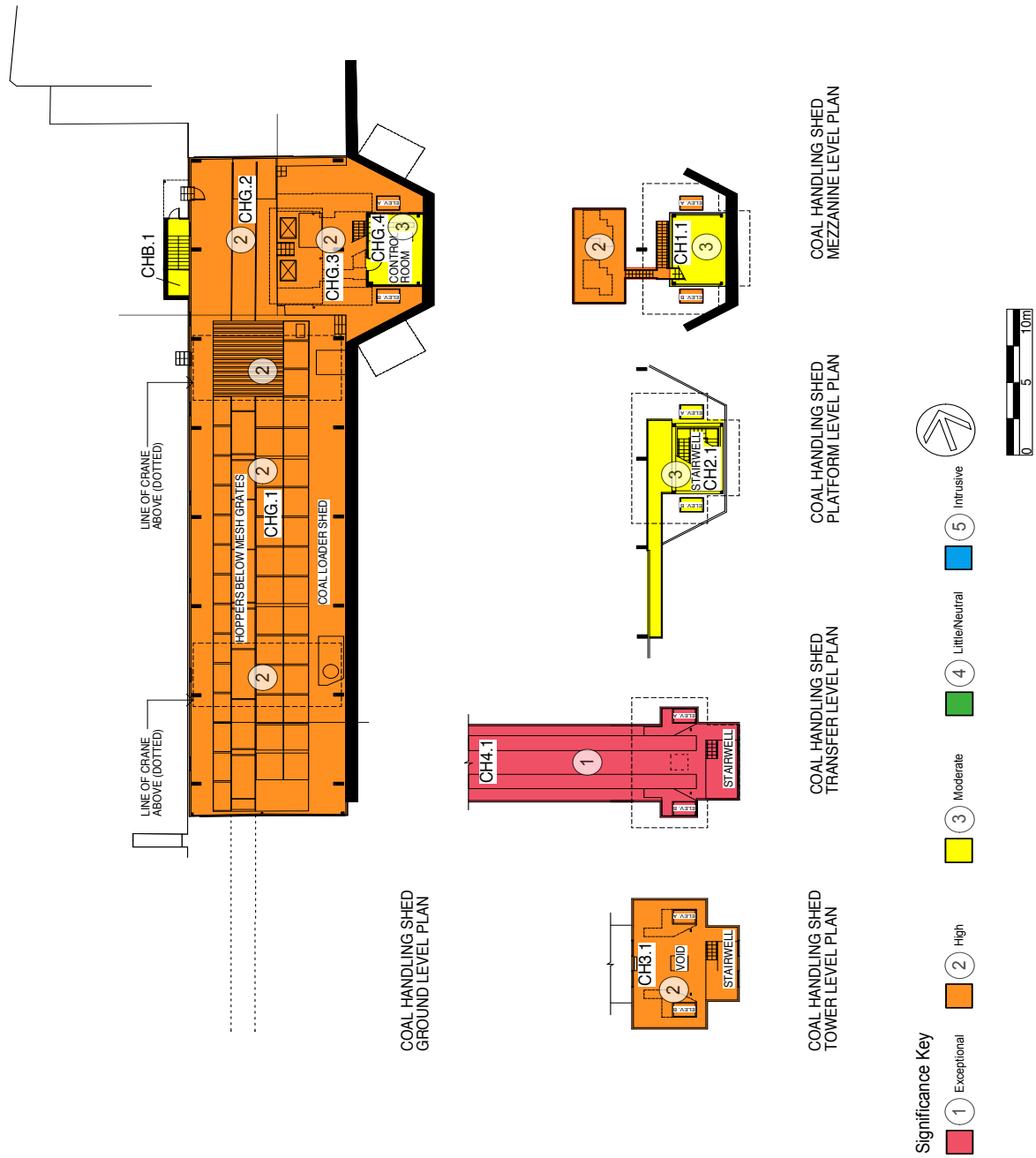


Figure 3.8.2.5  
Coal Handling Shed significance gradings



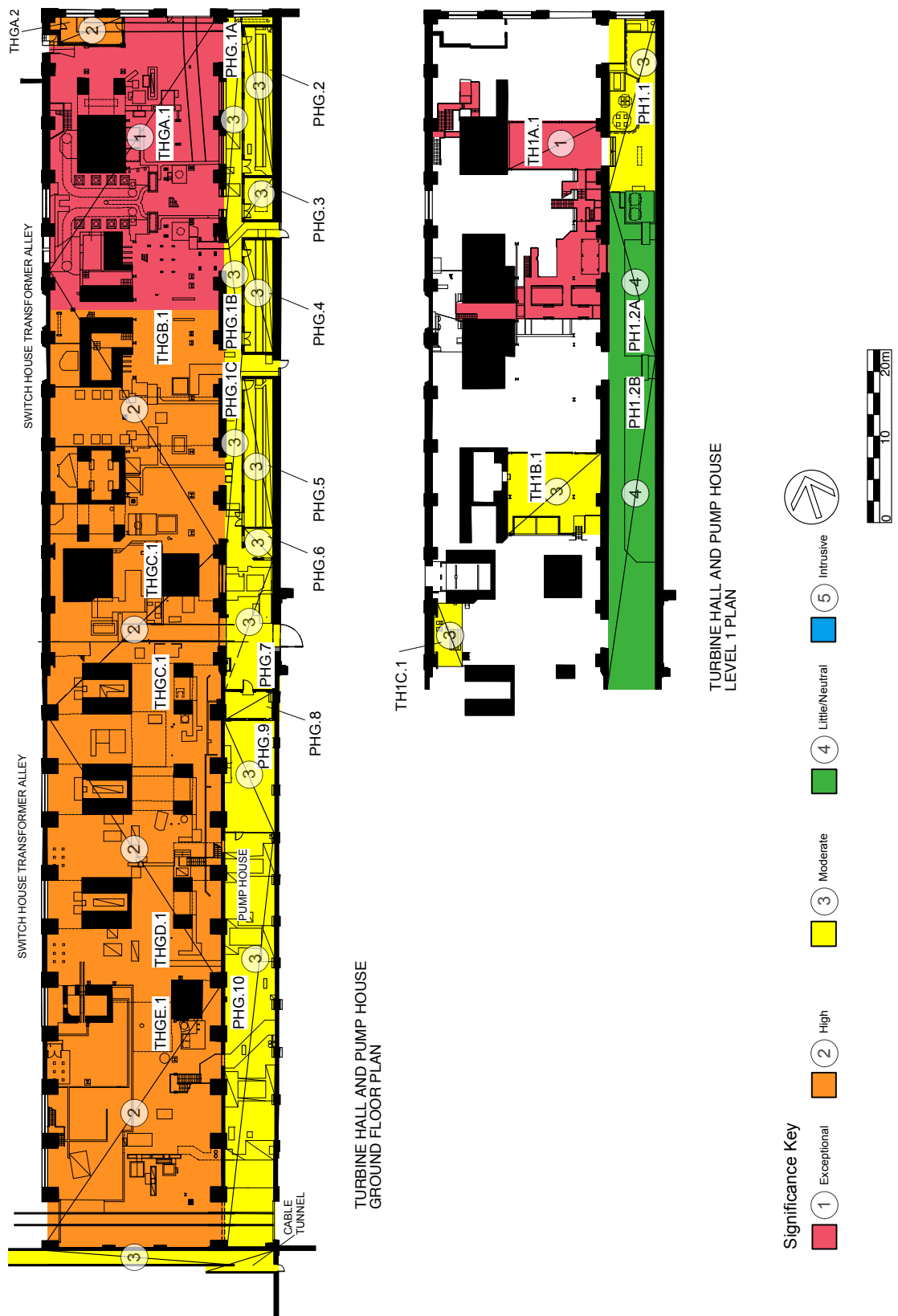


Figure 3.8.2.6  
Turbine Hall and Pump House Ground and Level 1 significance gradings

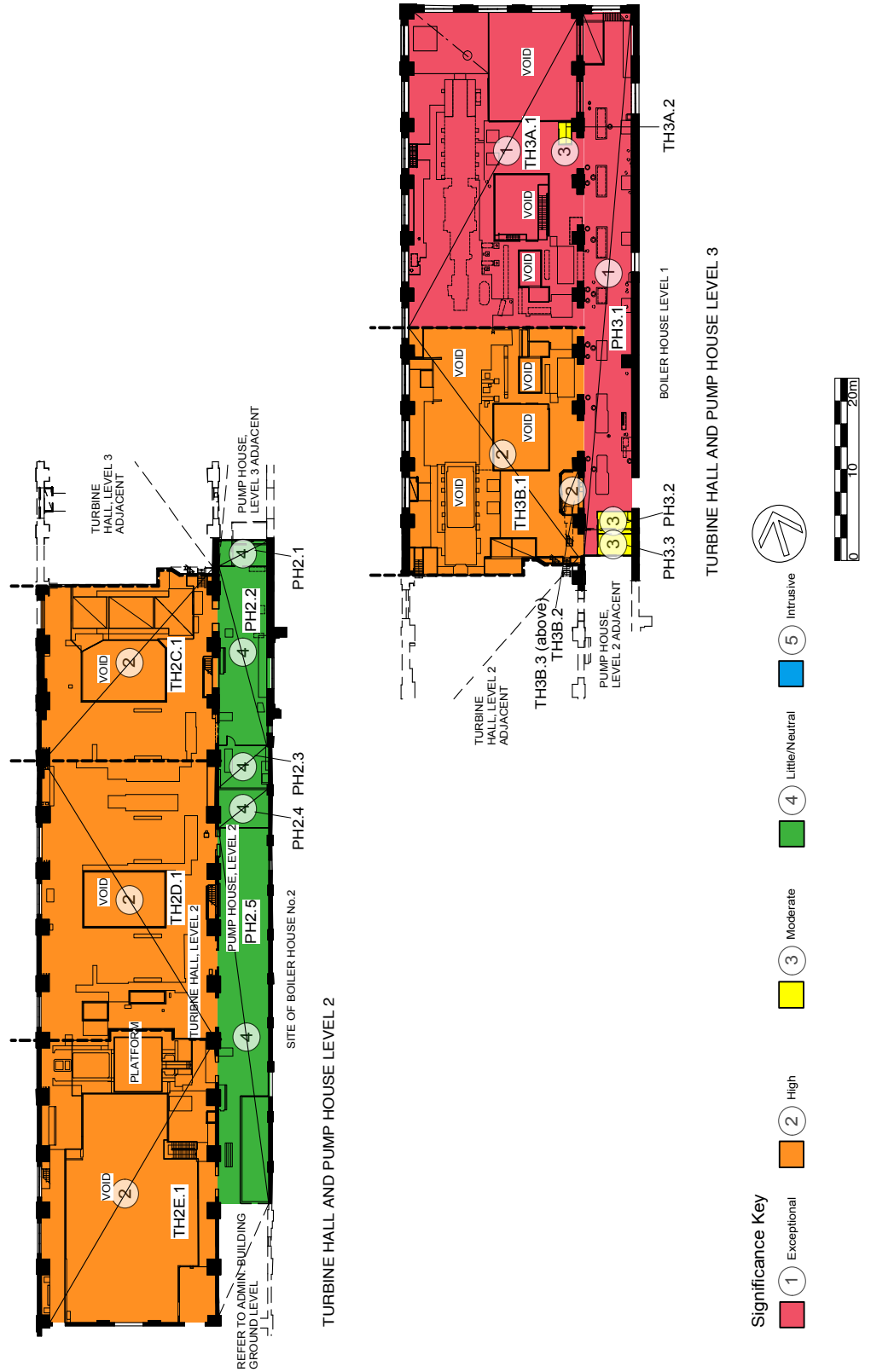


Figure 3.8.2.7  
Turbine Hall and Pump House Levels 2 and 3 significance gradings



Figure 3.8.2.8  
Administration and Staff Accommodation Ground and Level 1 significance gradings



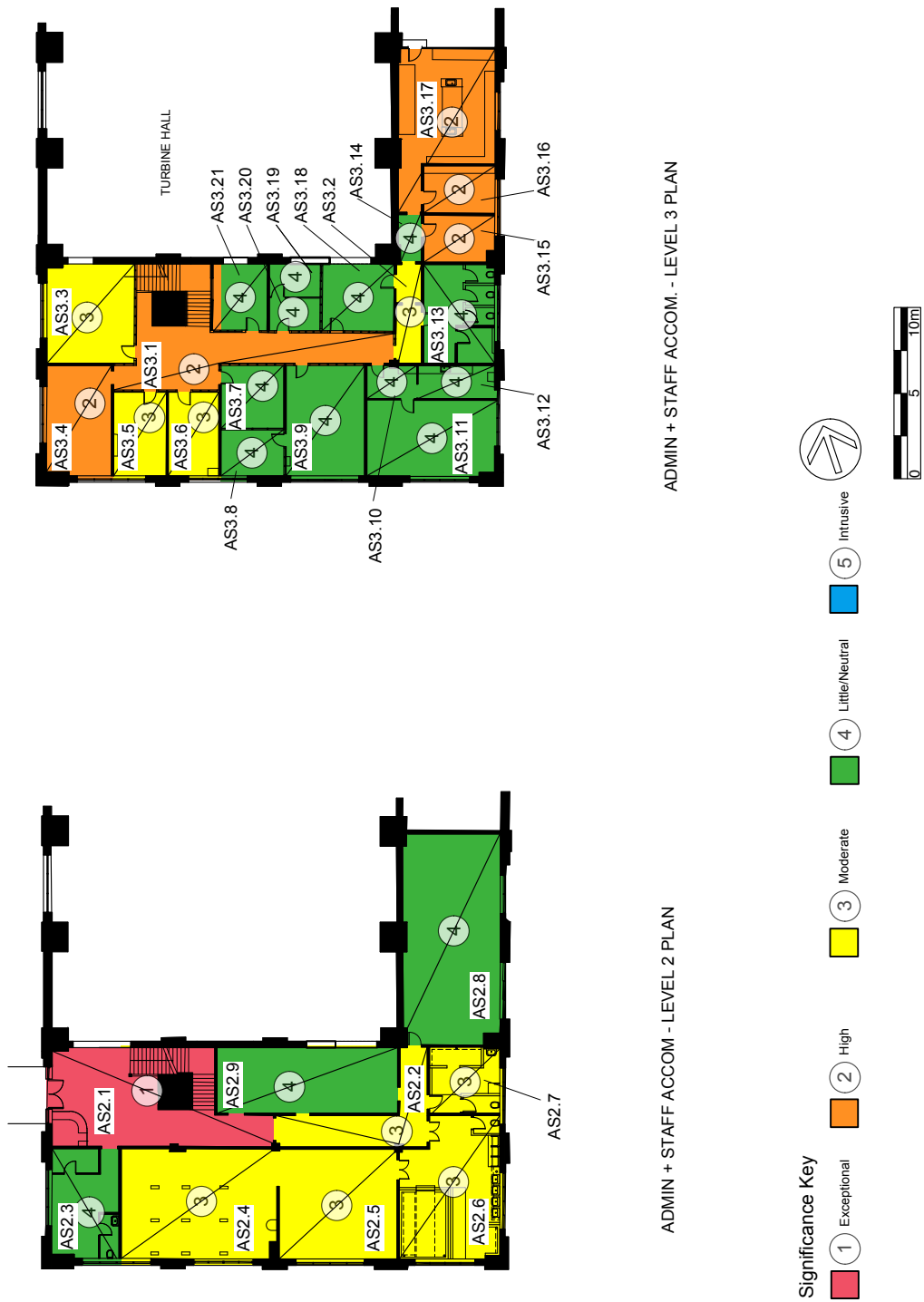


Figure 3.8.2.9  
Administration and Staff Accommodation Levels 2 and 3 significance gradings



Figure 3.8.2.10  
Switch House Ground and Level 1 significance gradings

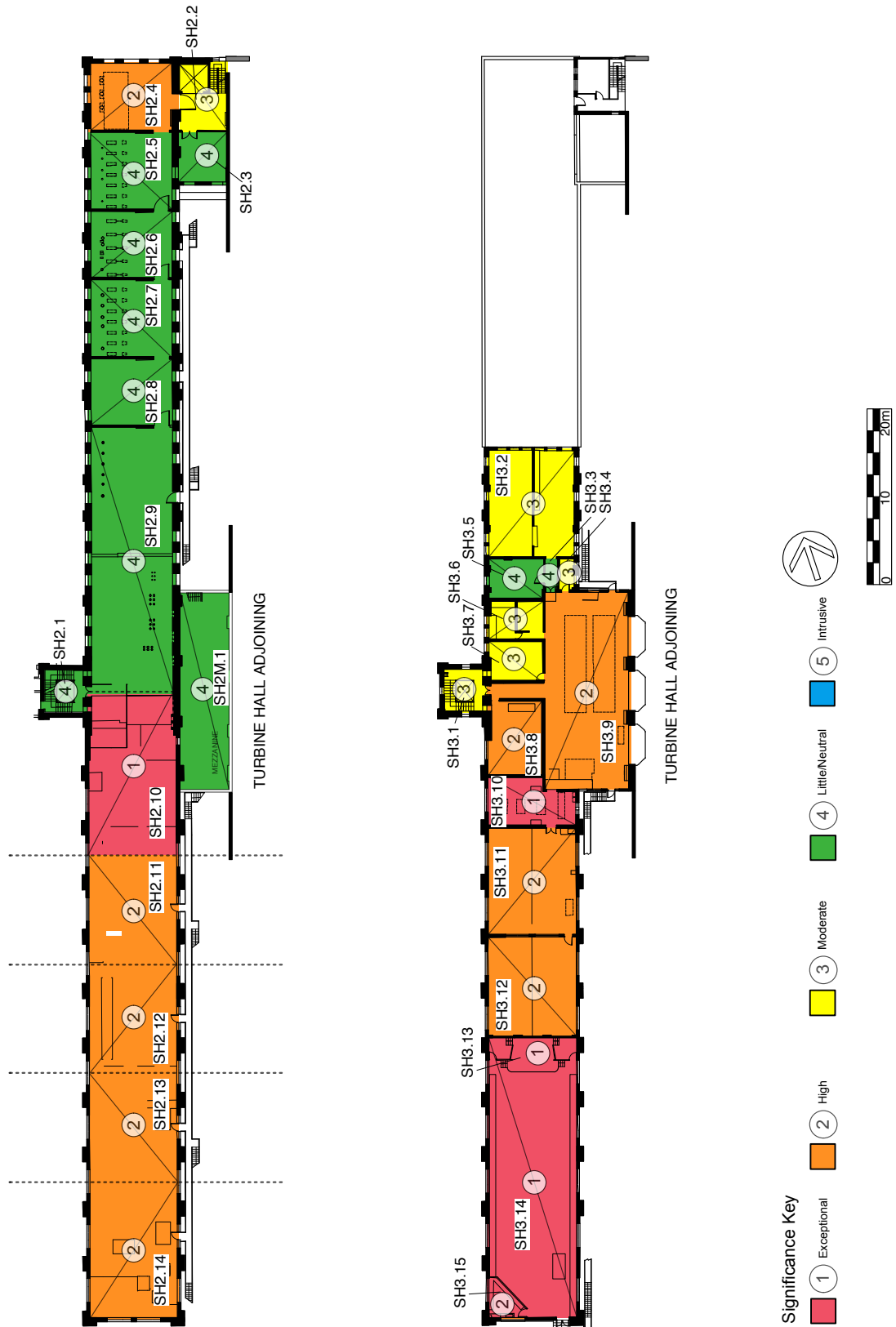


Figure 3.8.2.11  
Switch House Levels 2 and 3 significance gradings



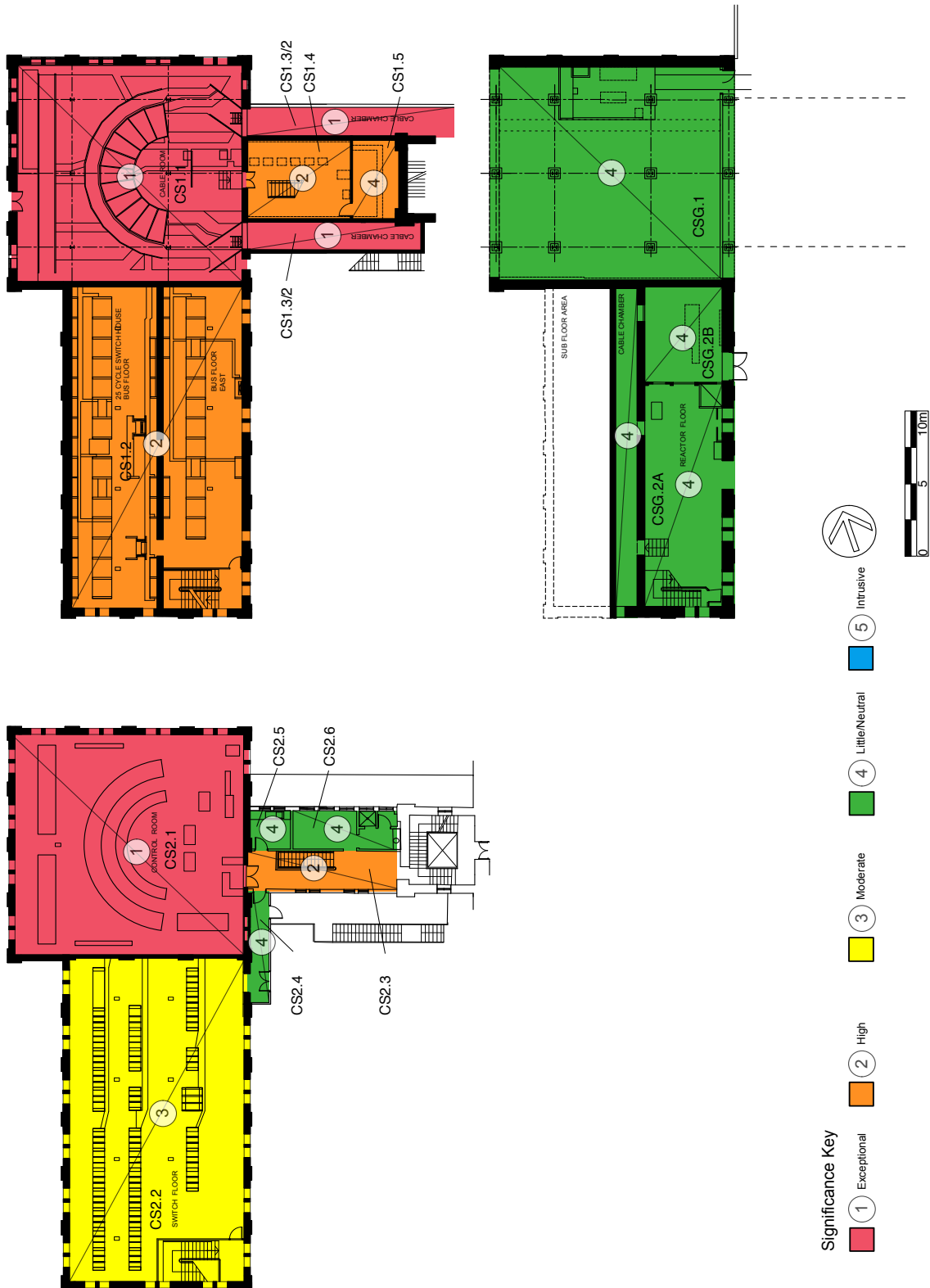


Figure 3.8.2.12  
Control Room significance gradings

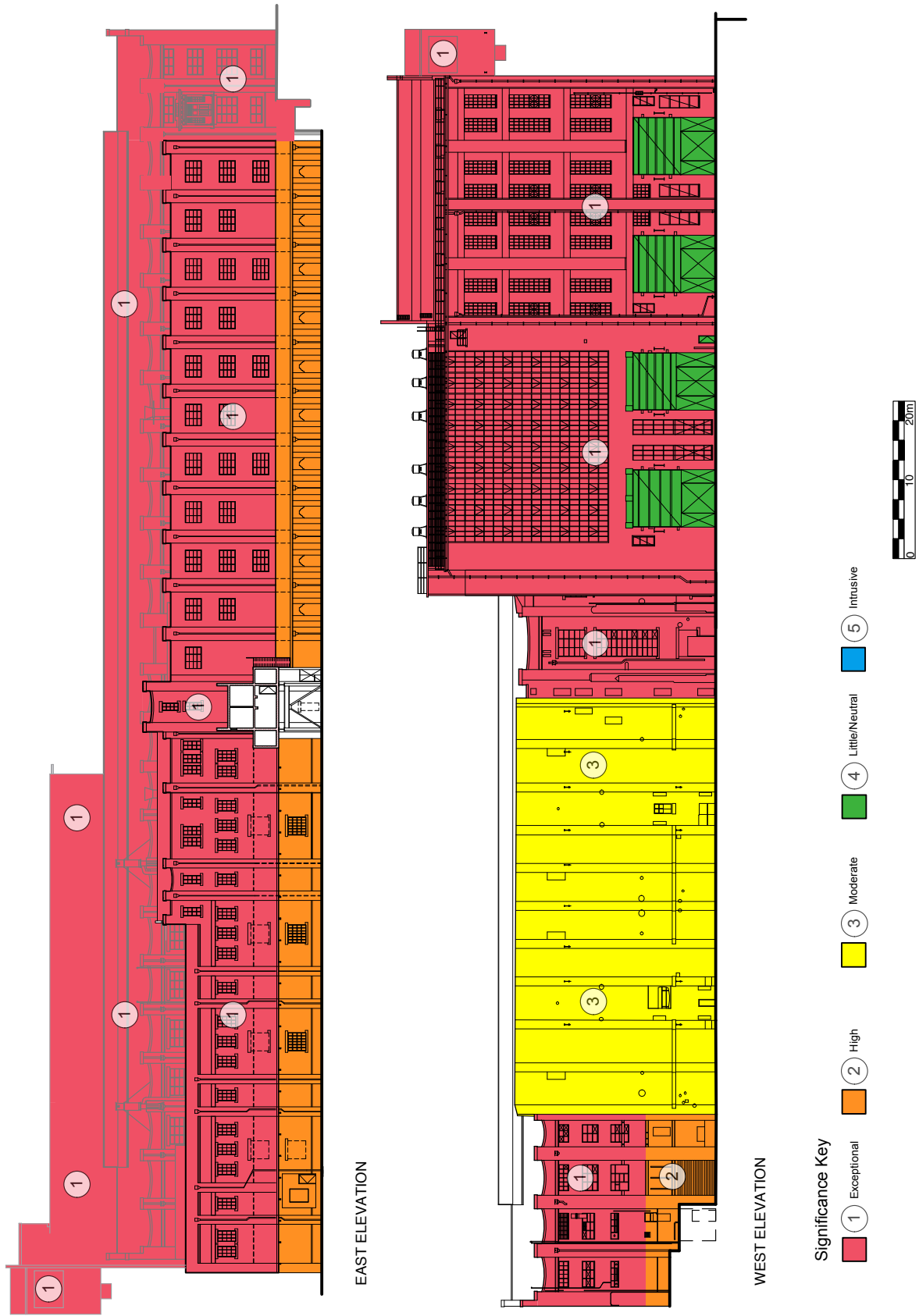


Figure 3.8.2.13  
East and West Elevations significance gradings

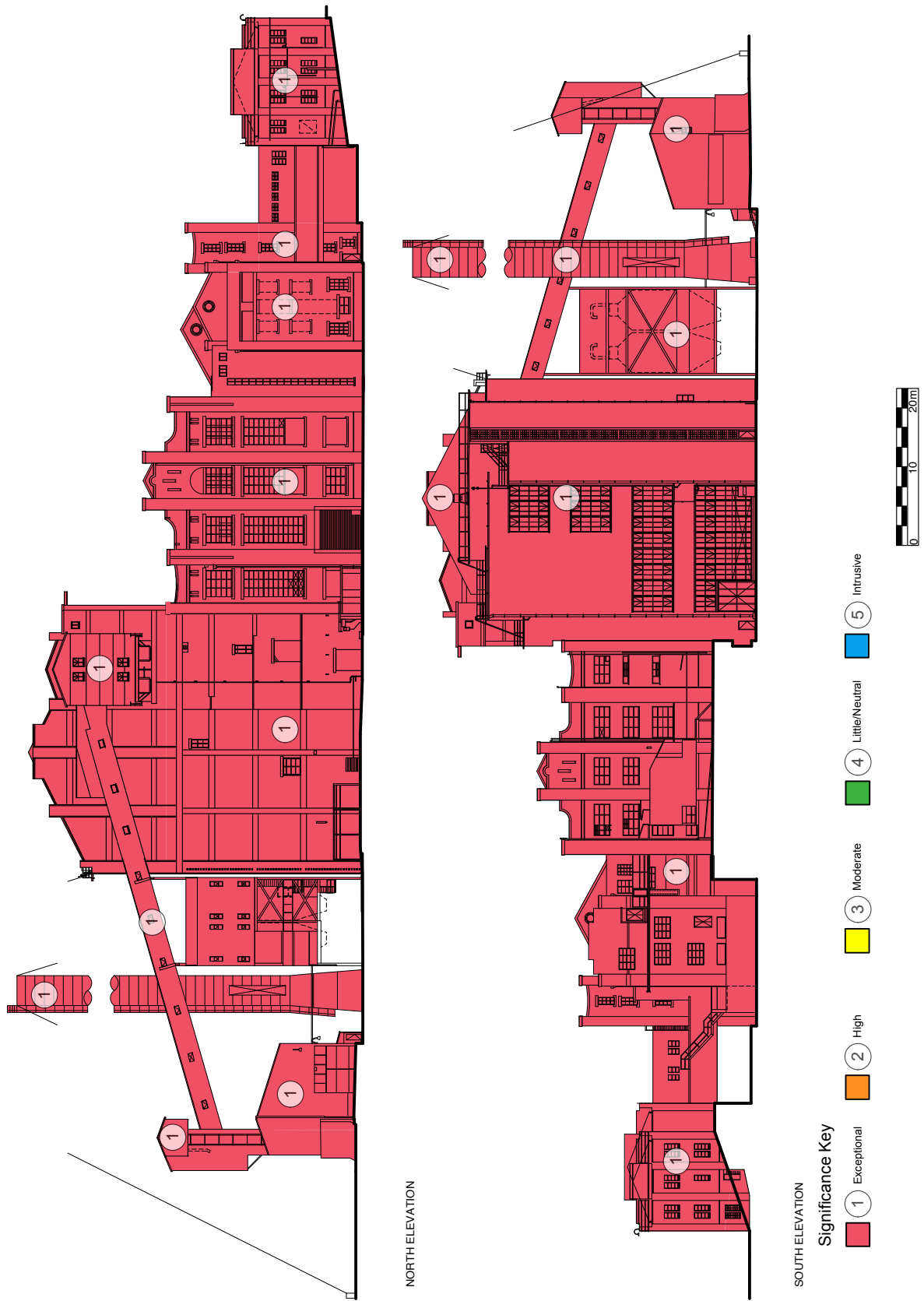


Figure 3.8.2.14  
North and South Elevations significance gradings



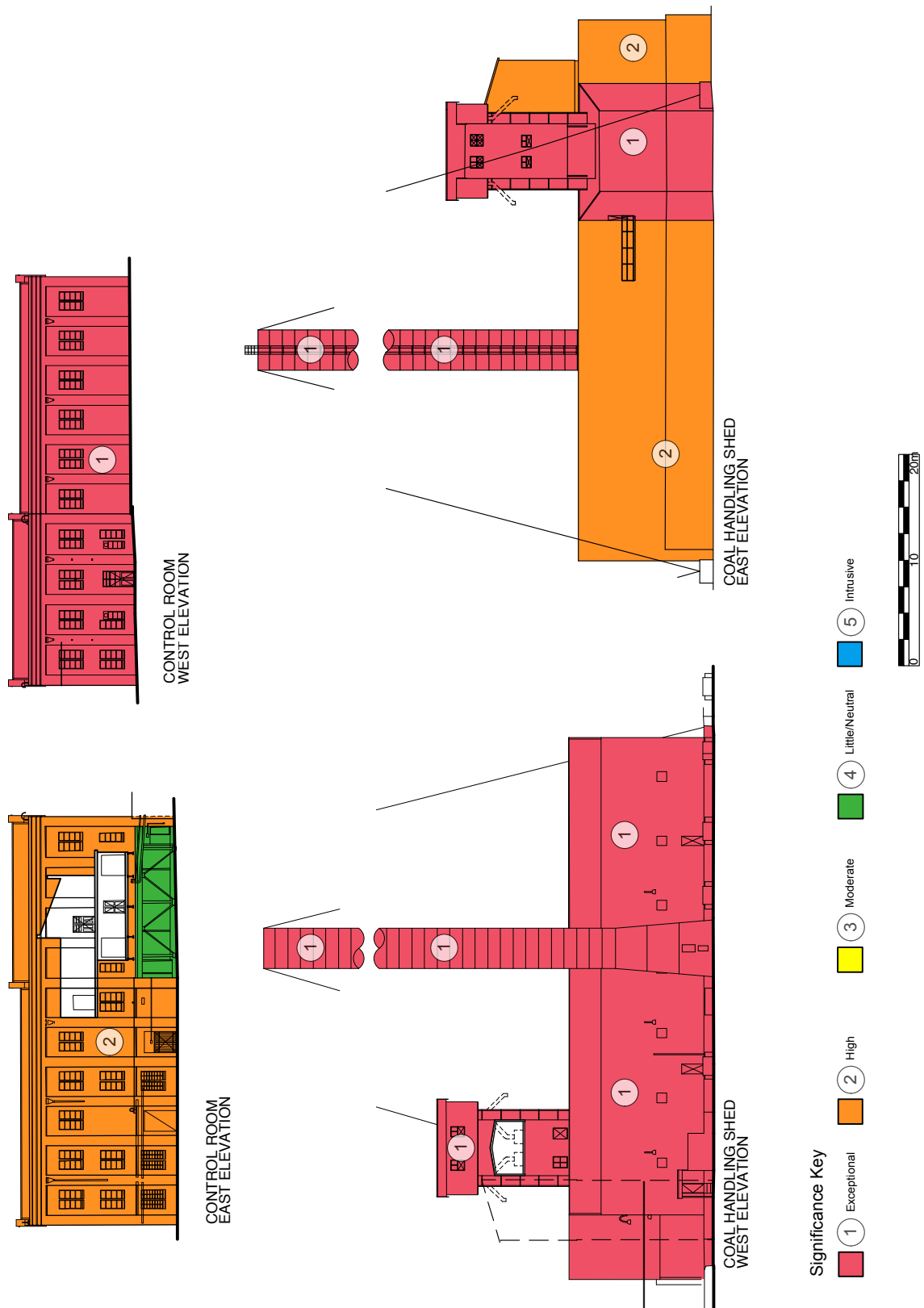


Figure 3.8.2.15  
Control Room and Coal Handling Shed Elevations significance gradings

## SPECIFIC ELEMENTS

### The Coal Handling Shed and External Conveyor

The Coal Handling Shed and its associated elevators and overhead conveyor have an iconic quality in the visual identification of the function of the White Bay Power Station. The overhead conveyor provides a visual and physical connection to the Boiler House. Their configuration, form, texture and, if possible, their rusting steel surfaces, should all be conserved. These elements should be conserved and adapted in accordance with Policies in Section 5 of Volume II.

This shed and its attached structures are almost entirely in corrugated steel, much of which is in various stages of decay and some is approaching failure.



Coal Elevator  
(Design 5 - Architects)

The present rusted finish has also been identified as significant, however its unchecked deterioration is allowing water to enter and threaten the internal structure. In many cases, rusted cladding (and in some areas roofing) is now beyond repair and will require full or partial replacement so as not to risk the further deterioration of structure and interiors. Re-sheeting with new material should be considered on a case by case basis, where existing sheets are beyond repair. Consideration of new material for replacement sheets (galvanised or zincalume) should be based on analysis of location, visibility and the compatibility of the area being replaced.

The Coal Handling Shed should be retained as evidence of one of the site's principal operational systems and conserved as such. The machinery and equipment should be retained in the northern part of the shed and an overhead crane is to be moved to define the space and to enhance the understanding and processes of coal handling for interpretation. The machinery and equipment is to be retained and conserved in situ to enhance an understanding of the operation of the power station in its entirety.

The north 5 bays should be retained as existing for interpretation purposes.

A new light industrial use could be accommodated at the south end which retains rail tracks, grating and does not require partitions or linings to existing structure. The crude 'shed' character must be maintained.

Both the north and south ends remain open as a rail corridor and this should be retained to respect and not confuse the significance of the structure. If these openings are to be blocked to provide weather protection, they should remain clearly as openable and preferably not solid or opaque panels.

As part of the structural repair of the building the large basement areas now filled with water should be permanently drained and all structures and fabric conserved and repaired.

### The Chimney Stacks and Ash Handling System

The two extant chimney stacks, with the ash tower, are the reminders of the end process of the generation of electrical power through coal firing and steam raising. The intactness of this process has been significantly depleted by the removal of the precipitators and the induction fans as part of the site decontamination process.

The two chimney stacks are a major contributing element to the visual identity of the White Bay Power Station and should be retained in situ and conserved and interpreted as an integral part of the significance of the power station.

The ash tower is a strong visual element in the identity of the power station and should be retained and conserved in situ and interpreted as part of the operational system of the place.



Ash Tower  
(Design 5 - Architects)

## Boiler House

The Boiler House is a large masonry structure, the first floor of which is essentially a void broken up by walkways. The voids identify the location of the other three original boilers, while the upper floors, which had originally consisted of metal open-grid flooring, have been removed except where these are associated with the extant boiler and the coal hoppers. The magnitude of the internal space is such that there is enormous potential for adaptive re-use of this structure.

The Boiler House should be conserved and adapted in accordance with Policies in section 5 of Volume II.

The Boiler House is an exceptionally significant structure and space with exceptionally significant machinery, and it can be adapted for a new use or uses as shown on Figures 5.1.7/1, 2, 3 & 4.

Key issues regarding adaptation and re-use include:

retain full height space at least in part and particularly within 2.5m of glass curtain wall.

retain full height view of Number 1 Boiler by retaining void of Number 2 Boiler.

retain existing void between 1st level and underside of coal hoppers along west side in the positions of Numbers 1 and 2 Boilers.

retain all walls (especially original 1914 Boiler House wall) as unpainted masonry. Retain all evidence of fixings and signage.

opportunities for adaptive re-use are available through the insertion of distinctive fabric in the voids in the floors, and for additional floors to be added that respect and enhance the spaces around the extant boiler and associated equipment.

As much of the significant machinery and evidence of evolution and use is confined to the north and west and around the perimeter, the huge space they enclose is both an asset and an opportunity. Before the boilers were removed this vast space was full of machinery and open grid walkways. The significance of the space and the machinery could still be retained and respected if some of this void were once again filled with a machine-like structure. To assist interpretation and respect the significant scale and rhythm of the place, these new structures should be of steel and glass with no masonry.

Potential for daylight to penetrate full depth of space where machinery has been removed should be explored, particularly between "solid" areas of former boilers to be retained. Surviving obscure glass should be retained and missing panes replaced by matching new glass. New structures inside this building should have a sense and aesthetic of being a machine-like structure.

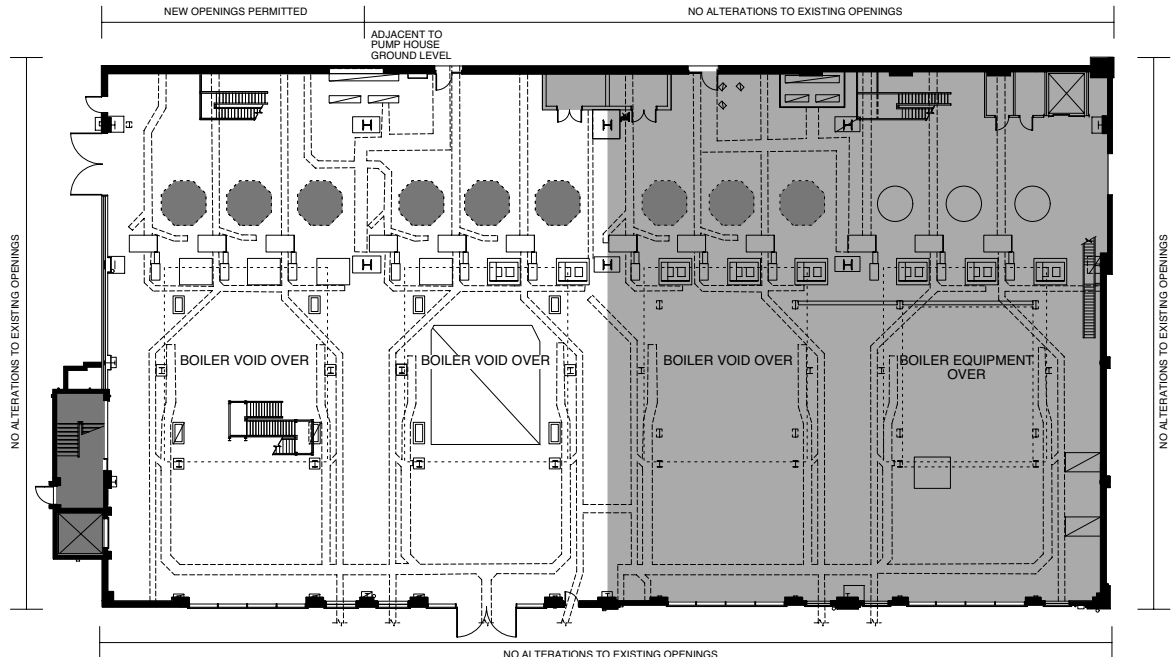


Boiler House  
(Design 5 - Architects)

The intent of any new floor space or structures in these areas should be to interpret the mass and voids of the original boiler machinery and their vertical continuity from floor to roof.

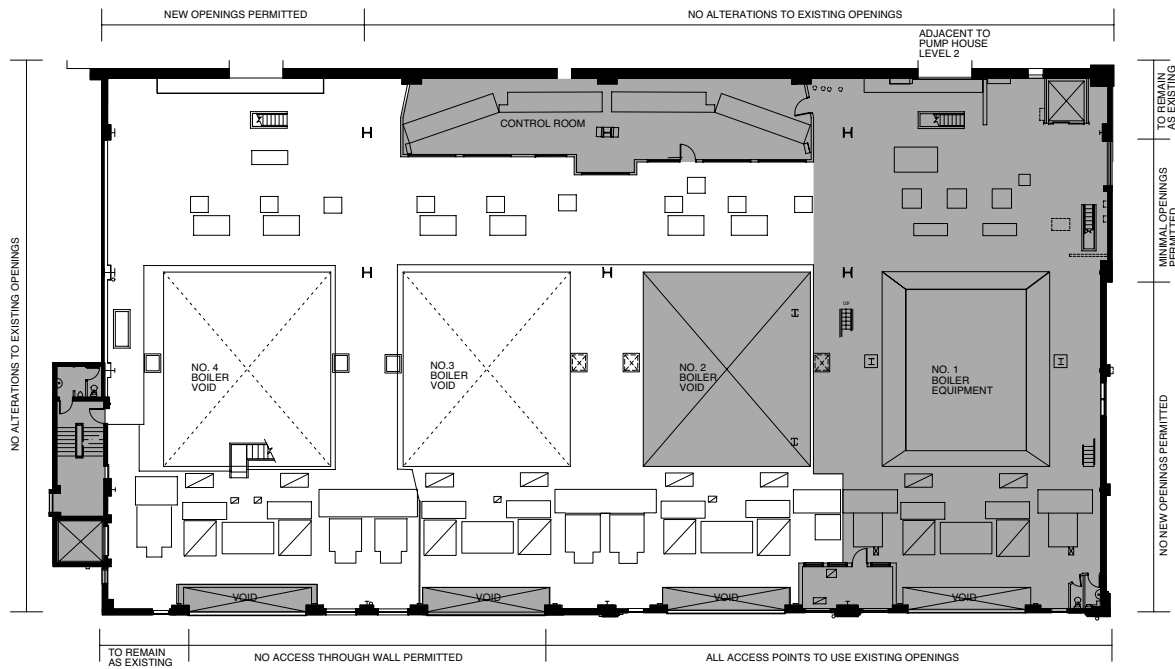
The extant Babcock and Wilcox boiler, the pulverising mills and the various items of machinery and equipment associated with the steam raising and the coal handling systems housed in the Boiler House, occupy the northern section of the building. The boiler house control room, however, is centrally located against the west wall on the first floor where it should be retained as a discrete total environment. The integrity of the Babcock and Wilcox boiler has been compromised by the removal of elements such as the furnace and the iron sheet and asbestos cladding. Although the removal of integral elements detracts from an understanding of the original function and process, it allows for a more vivid interpretation of the boiler operation.

The significance of the extant machinery and equipment housed in the Boiler House is such that no item may be removed without depleting the integrity of the whole. All machinery and associated equipment is to be retained in situ and conserved, maintained and interpreted.



### BOILER HOUSE GROUND LEVEL PLAN

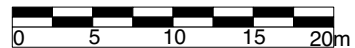
- UNHATCHED AREA
  - > MAINTAIN AS VISUALLY OPEN EXCEPT FOR CLEAR GLAZED SCREENS
  - > MAINTAIN MIN. 50% PLINTHS. REMOVED PLINTHS TO BE INDICATED BY SCRIBED EDGES
  - > BOILER VOIDS MAY BE ENCLOSED (GLAZED OR SOLID WALLS) MIN 75% VOID FOR 1m CLEARANCE WITHIN PERIMETER OF EXISTING VOID
- HATCHED AREA
  - > AREA TO REMAIN AS EXISTING
  - > PLINTHS TO REMAIN AS EXISTING
  - > FILL CABLE TRAYS WITH CONCRETE OR STEEL MAINTAINING SCRIBED EDGES WHERE REQUIRED
  - > PLANT TO BE MAINTAINED
- WHERE NECESSARY RE-FINISH REMOVED PULVERISOR PLINTHS AND INDICATE WITH SCRIBED EDGES



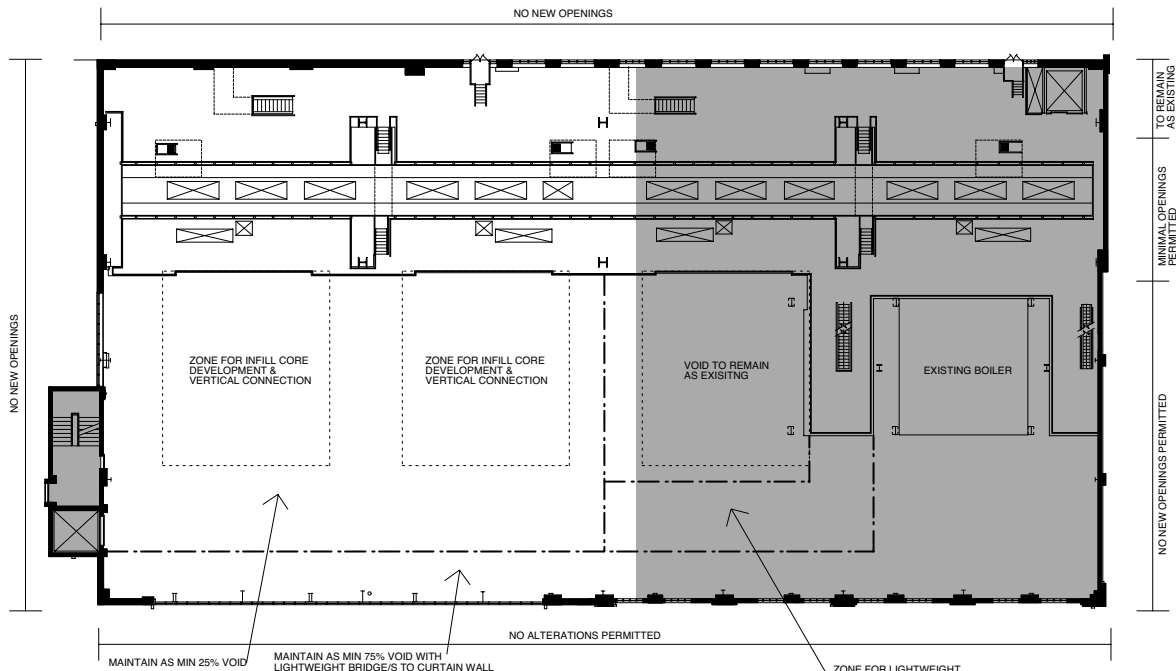
### BOILER HOUSE LEVEL 1 PLAN

- UNHATCHED AREA
  - > PLINTHS MAY BE REMOVED
  - > FILL VOIDS WITH GLASS, STEEL MESH OR SOLID METAL PLATE
  - > BOILER OPENINGS MAY BE ENCLOSED (GLAZED OR SOLID WALLS) MIN 75% VOID FOR 1m CLEARANCE WITHIN PERIMETER OF EXISTING VOID
- HATCHED AREA
  - > AREA TO REMAIN AS EXISTING
  - > PLINTHS TO REMAIN AS EXISTING
  - > FILL CABLE TRAYS WITH CONCRETE OR STEEL MAINTAINING SCRIBED EDGES WHERE REQUIRED
  - > PLANT TO BE MAINTAINED

Taken from Volume II  
 Figure 5.1.7/1  
 Areas of potential development  
 Boiler House  
 Lower Levels

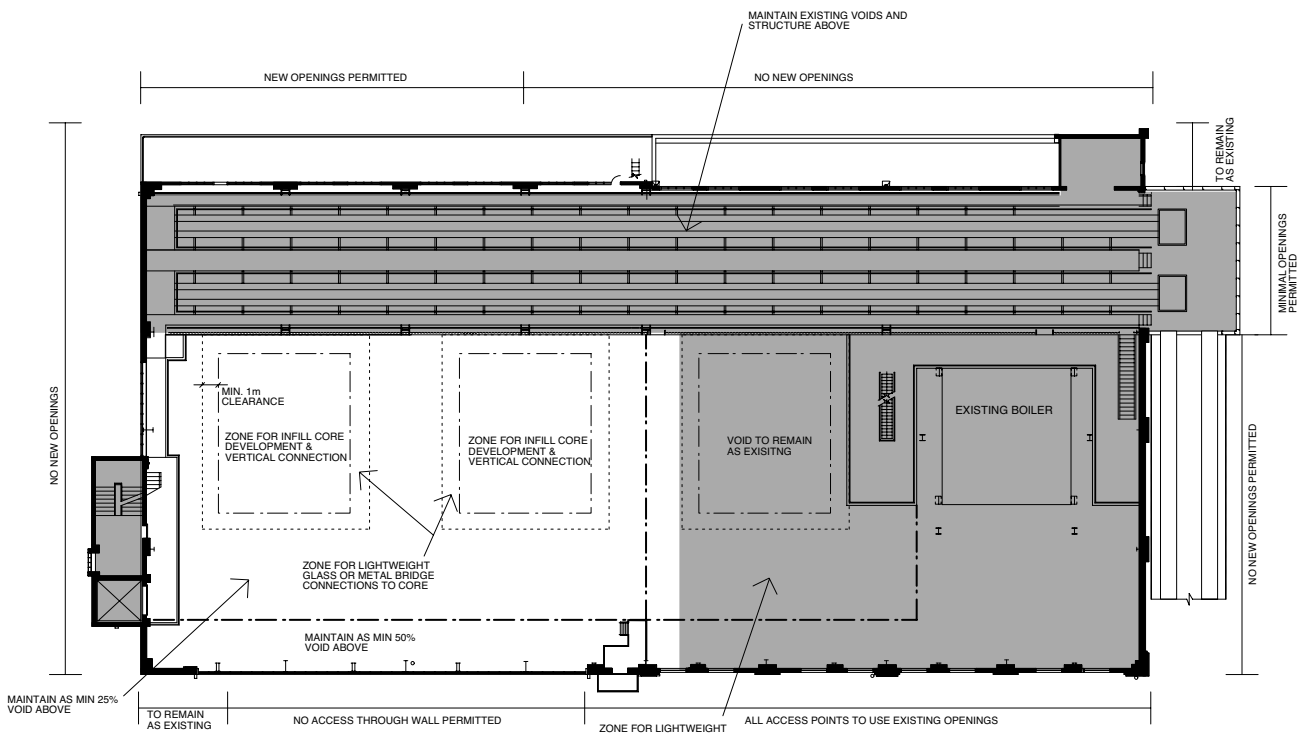






**BOILER HOUSE  
MEZZANINE LEVEL PLAN**

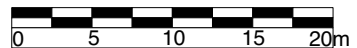
- UNHATCHED AREA
  - MAINTAIN EXISTING VOIDS AND STRUCTURE ABOVE
  - ZONE OF REMOVED BOILERS MAY BE ENCLOSED (GLAZED OR SOLID WALLS) MIN. 75% VOID FOR 1m CLEARANCE
- ▨ HATCHED AREA
  - TO REMAIN AS EXISTING

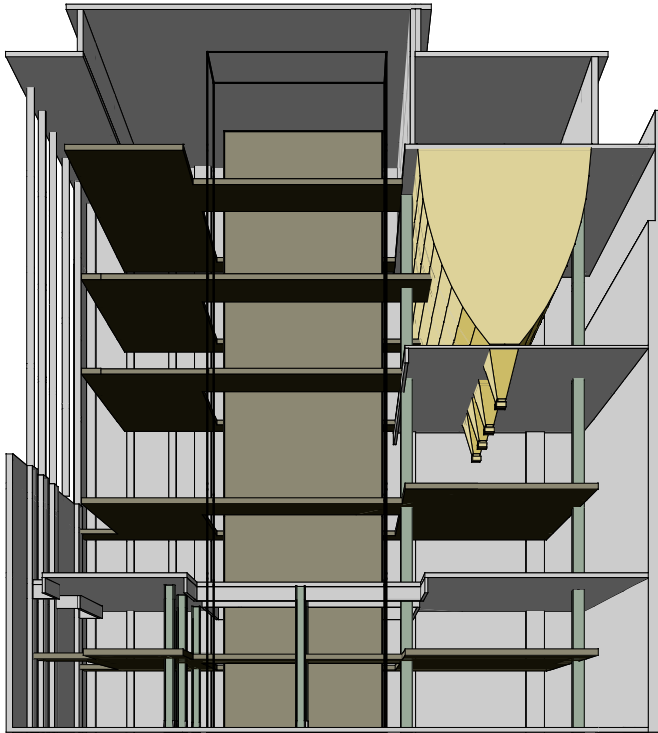


**BOILER HOUSE  
CONVEYOR LEVEL PLAN**

- UNHATCHED AREA
  - BOILER OPENINGS MAY BE ENCLOSED (GLAZED OR SOLID WALLS) MIN. 75% VOID FOR 1m CLEARANCE
- ▨ HATCHED AREA
  - TO REMAIN AS EXISTING

Taken from Volume II  
Figure 5.1.7/2  
Areas of potential  
development  
Boiler House  
Upper Levels





|                                                                      |                       |
|----------------------------------------------------------------------|-----------------------|
| POSSIBLE DEVELOPMENT (SHADED)<br>NOTE: NO. OF FLOORS INDICATIVE ONLY | TO REMAIN AS EXISTING |
|----------------------------------------------------------------------|-----------------------|

Taken from Volume II  
**Figure 5.1.7/3**  
 Areas of potential  
 development  
 Boiler House



|                                                                      |                         |                                                         |
|----------------------------------------------------------------------|-------------------------|---------------------------------------------------------|
| POSSIBLE DEVELOPMENT (SHADED)<br>NOTE: NO. OF FLOORS INDICATIVE ONLY | RETAIN FULL HEIGHT VOID | BOILER EQUIPMENT AND MACHINERY<br>TO REMAIN AS EXISTING |
|----------------------------------------------------------------------|-------------------------|---------------------------------------------------------|

Taken from Volume II  
**Figure 5.1.7/4**  
 Areas of potential  
 development  
 Boiler House

## Turbine Hall & Pump House

The Turbine Hall and Pump House comprise two parallel spaces, each the full height and length of the building. The Pump House is a narrow space between the Boiler House and the Turbine Hall but built contiguously with, and opening directly onto, the latter.

The Turbine Hall and Pump House should be conserved and adapted in accordance with Policies in Section 5 of Volume II.

The northern section of the Pump House with its dense configuration of significant machinery provides little opportunity for a new use other than interpretation. Existing painted finishes should be retained in this section.



Turbine Hall  
(Design 5 - Architects)

The southern section of the Pump House could be either retained as a single space with partial floors added within it, or divided into separate levels and spaces. All finishes may be retained or removed in this section.

The configuration of the Turbine Hall consists of a series of partial, or broken up floor spaces, some of which are mezzanines rather than complete floors, up to the first floor level of the extant turbo-alternator set. The space above the main turbine platform is completely open giving a uniquely large and long space of great aesthetic significance. The ceiling soars above with a series of three overhead gantry cranes.

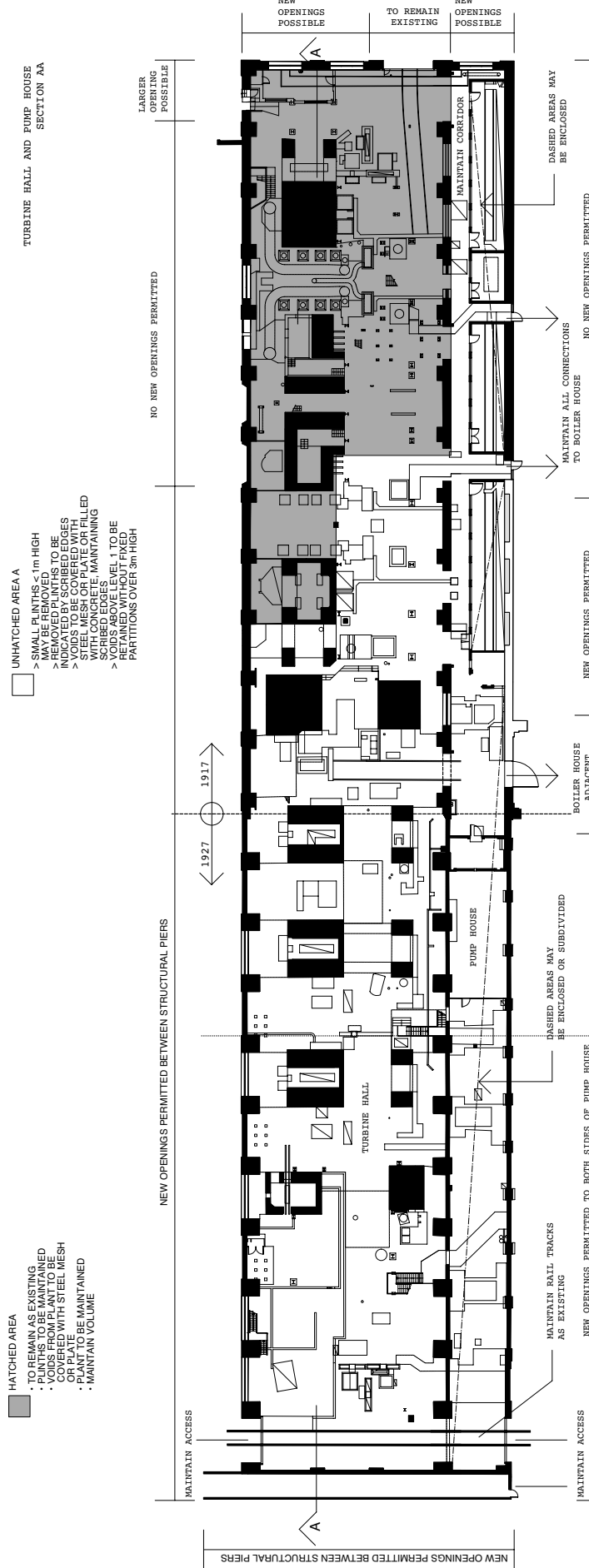
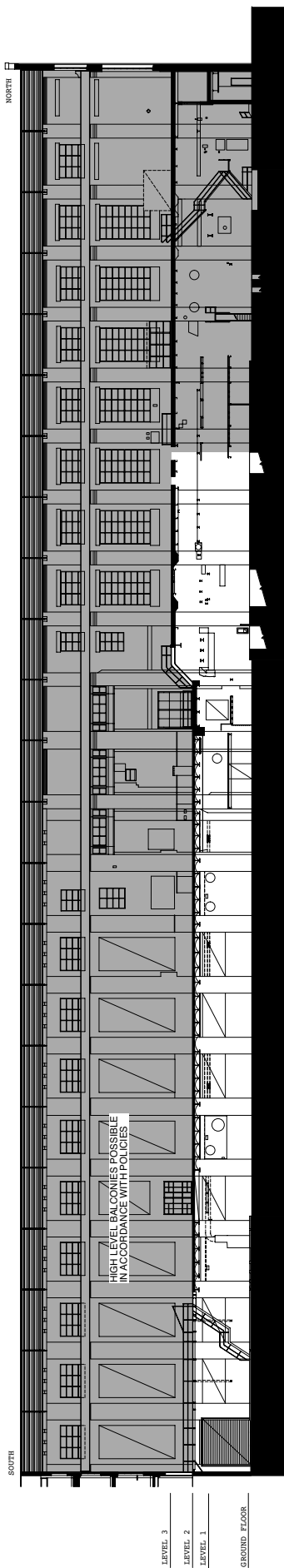
The Parsons turbo-alternator set is a vital component part of the power generating system at White Bay. In addition the Pump House and Turbine Hall retains single representative items and elements associated with the cooling and feedwater systems and includes the condensers, the high pressure feedwater pumps, the condensate pump and sluice gates. Interpretation of the feedwater and cooling water systems would contribute to an understanding of the operation of the steam raising system. All of these extant items and associated elements are located in the northern section of the Turbine Hall.

The significance of the machinery and associated equipment in the Turbine Hall must be maintained by their retention in situ and conservation, maintenance and interpretation.

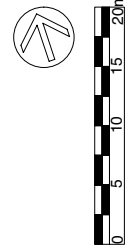
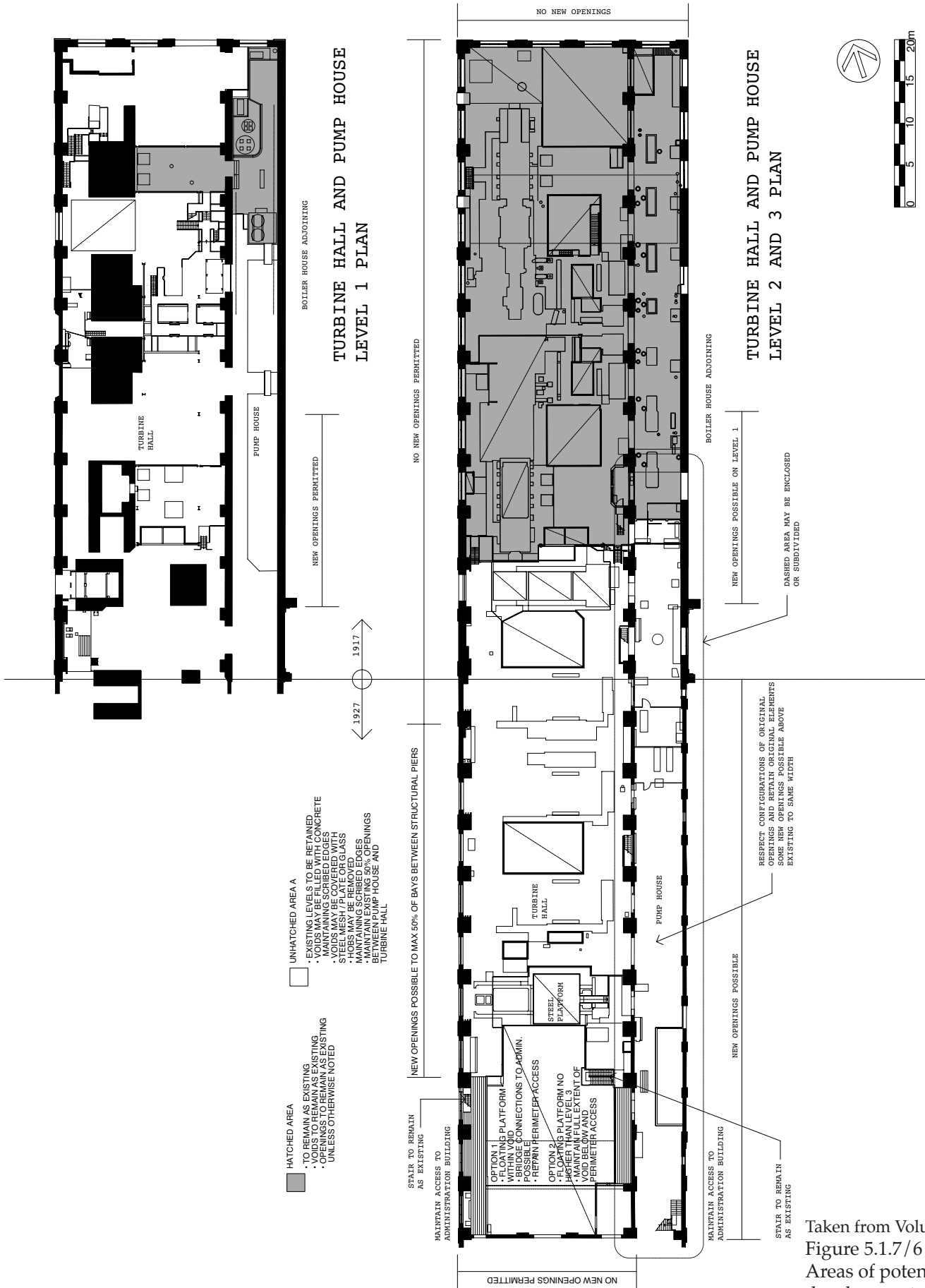
The Turbine Hall is an exceptionally significant structure and space with exceptionally significant machinery, and it can be adapted for a new use or uses as shown on Figures 5.1.7/5 & 6.

Key issues regarding adaptation and re-use include:

- retain void above turbine platform level for full length of the Turbine Hall
- retain 1950 turbine platform. Potential to infill selected sections of voids where #2 unit has been removed with steel sheet to provide additional floor area if required.
- retain remaining sections of earlier (lower) turbine platform (south of 1950 platform). Potential to extend this over void to south end of hall in new and different material, or to construct new at a higher level. Definition/evidence of existing voids to be retained.
- retain ability of at least one and preferably all three gantry cranes to operate along full length of hall for maintenance and adaptive use purposes.
- potential to temporarily divide hall space using curtain type partitions or screens suspended from gantry cranes, installed and removed as required. These may be of flexible or rigid material, transparent or opaque and should remain in place for a total of more than 6 months in a year.



Taken from Volume II  
Figure 5.1.7/5  
Areas of potential  
development  
Turbine Hall/  
Pump House  
Lower Level



Taken from Volume II  
Figure 5.1.7/6  
Areas of potential development  
Turbine Hall/  
Pump House  
Upper Levels



- potential to construct higher level observation platforms along east, south and west walls, as long as these are clearly a discrete new element, attached to the wall, and extend no further than 2m into the void, and are below gantry crane level, to allow their continued operation.
- potential to insert new levels and enclosed spaces below 1920s and 1950s turbine platform levels south of No. 1 turbine machinery.

## Administration Block

From the completion of the 1920s extensions until the closure of White Bay Power Station, this area housed the administration and main staff facilities. Apart from steel lockers, lunch tables, bathrooms and the laboratories, very little significant fitout remains. Some significant spaces remain but in general these can be adapted for new uses. It is important in understanding the whole White Bay Power Station story that evidence for the use of these areas for administration and amenities is retained and respected. However this can coexist with a new use.



Victoria Road Entry  
(Design 5 - Architects)

The damaged and missing elements of the polished joinery in the Main Entry and public areas should be reconstructed to their original detail as this was the public “Front Door” of the whole station. This original entry from Victoria Road should ideally be reinstated as a major entry.

The Administration Block should be conserved and adapted in accordance with Policies in Section 5 of Volume II.

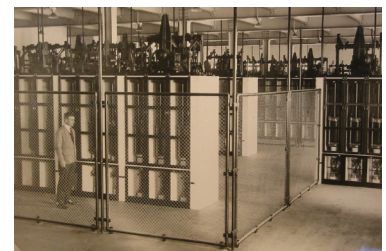
Evidence in the way of fixtures and fittings in the Laboratory should be retained for interpretation and may be available for some new and compatible use.

The relationship between these offices and the Turbine Hall and their large overlooking windows should be retained.

## 1912 - 1927 Switch House

Built in two stages, the first of brick in 1912-1917, and the second of reinforced concrete in 1927, this structure has been much altered and reconfigured over time.

The building’s west and south elevations were, and still remain, one of the most visible elements from Victoria Road. It is the ‘public face’ of the power station.



1920s Switch Gear  
(Courtesy of PowerHouse Museum archive)

It retains a small number of highly significant spaces including the remains of the original 1917 control room. Some highly significant machinery and fittings remain in situ from the power reticulation, electrical supply and auxiliary power supply systems.

The ground level area retains no significant machinery except at the north end. Apart from the areas which house significant machinery, all other spaces on this level may be adaptively reused. The existing workshop area at the north end retains elements from elsewhere on the site as well as much written (on the walls) evidence of the earlier use. These should be

retained in any adaptation.

The 1917 lift and stairwell is a significant element which should be retained, conserved and maintained as an operational element. Although the existing lift cage and enclosure no longer complies with the BCA it should not be removed. It should be brought up to current compliance standards using glass linings or other clearly modern and preferably transparent elements to enable ongoing use. All old door plates, tiles, signs and display boxes in this area should be retained and conserved.

The first floor level presently admits little daylight in some areas due mainly to alterations for later equipment. The northern most of these wire door and concrete enclosures with its circle of support blocks should be retained and the remainder of these enclosures could be removed or reconfigured if they cannot be adapted. Earlier window openings could be re-opened.

This floor retains, in part of the southern section, very early switch gear (from the late 1920s) which should be retained in situ, complete with all its attendant cabling, timber and glass covers etc. The existing chain wire enclosures should also be retained to the south and north of this intact space to retain the sense of limited access. The tiled floor should be retained and conserved.

The other elements in this southern second floor section which have the empty concrete enclosures for this switch gear should, if at all possible, be retained and adapted for a new use in a creative manner which responds to their configuration. Their complete removal should only be considered as a last resort.

The third floor retains the space and remaining evidence of the original control room and its layout. It also retains the more recent platforms used by the workers for carpet bowls. This should remain as a single space and the windows and relationship to the Turbine Hall retained. The timber and glass partitions to the west should also be retained along with the associated fitout where this is possible.

The Motor Generator Room on this floor is of exceptional significance and retains its original machinery.

The Workshop and Battery Room adjacent retain evidence in the floor for both having once been battery rooms however the only remaining batteries are in the southernmost room. While these are somewhat isolated from other significant spaces the batteries close to the motor generator room, situated on the lead floor with its sink and perimeter drainage allows a degree of interpretation which would be diminished if they were moved. Other uses could be introduced into this space as long as the batteries, sink and lead floor were retained and available for interpretation.

The Workshop area retains some significant elements but could be adapted to house more use which preferably allowed the drills etc. to remain in place.

The 1912-1917 and 1927 Switch Houses should be conserved and adapted in accordance with Policies in Section 5 of Volume II.

This building contains some significant spaces, machinery and fitout elements but in general the spaces can be adapted for new uses.

Significant spaces include the following which should be retained in situ and conserved as total environments:

- The second floor (in part of the southern section) retains very early switch gear complete with all its attendant cabling, timber and glass covers etc.

- The Motor Generator Room to the south of the original control room on the top level retains all of its significant machinery and equipment in situ. This space should be retained and conserved without alteration.

The 1917 lift and stair well is a significant element which should be retained, conserved and maintained as an operational element.



1927 Switch House  
(Design 5 - Architects)

The 1927 Entertainment Hall on the top level should be retained and conserved, including its stage, painted murals, fittings and furniture. It may be adapted for use as a social activity space, either for private or preferably public use and kept in its existing configuration with its simple and bare finishes.

The Switch House Transformer Alley should be kept as an open space but could be roofed with a clear material and adapted to house lifts, stairs and other equipment.

## 1948 Control Room & Switch House

This addition was built as part of the major upgrade in 1948-1950 which installed the new boilers and turbines. It is therefore part of the slice of operational systems that survive from this period. The control room survives with its original equipment and cabling room. However, the adjacent switch house has been cleaned out.



Control Room  
(Design 5 - Architects)

The 1948 Control Room & Switch House should be conserved and adapted in accordance with Policies in Section 5 of Volume II.

This building contains spaces and machinery of exceptional significance to White Bay Power Station as well as spaces which can accommodate considerable adaptation.

The 1948 Control Room retains machinery, fittings, furniture, documents, parts and finishes which are all in situ and in context with considerable interpretation ability. Security to this area and the spaces below should be improved and the spaces fully secured against unauthorised entry. This space should be retained and conserved in its existing configuration with all machinery, fittings, furniture, documents, signage and finishes in situ. It should be interpreted along with the cable spaces below, as a significant part of the power reticulation system and not adapted for new uses. No other use or function should be introduced unless it allows all of the existing elements to remain without risk of damage.



Bus Bar Enclosures  
(Design 5 - Architects)

The Cable Room and adjacent Tunnels are an integral part of the Control Room above and retain the original and later cabling which connects it to the rest of the power station. They must be retained and conserved in their entirety except for the possible removal of the recent grey spray painting.

The design and workmanship of the very early pyrotenax type cabling is of extraordinarily fine quality and should be retained with labels, tags and fixings in its entirety in these areas.

While no significant equipment survives in the adjacent switch house, the labyrinth and empty concrete enclosures for the former bus bars creates visually exciting spaces which could and should inspire a very creative approach to adaptive re-use in these areas. The cable trays can be retained and reused, adapted or filled as required. Access may be made to new balconies or adjacent structures as long as the highly significant Control Room fabric

and spaces to the north are respected.

The transformer yard could be adapted to accommodate new uses. This area is traversed by rail tracks for the movement of transformers and equipment. These tracks should be retained as should the blade walls which originally separated the transformers. The spaces between these could be adapted for new uses. The linearity and order of this area should be respected in any new work as well as the relationship of this area to the Switch Houses and Control Room, the distribution tunnels and surviving power poles.

## Landscaping and Site Generally

This is a degraded industrial landscape with numerous remnants of earlier site sheds and other structures. While in operation the only area which would have had any soft landscape elements would have been the area north west of the 1948 Switch House and Control Room and its adjacent Transformer Yards. This area was the 'front garden' of the Power Station and was planted with various fruit trees and shrubs, tended by the workers themselves. All other areas were hard industrial surfaces and service and storage areas.

The Landscaping and Site Generally should be conserved and adapted in accordance with Policies in section 5 of Volume II.

Those areas of the site which originally acted as or housed storage or industry related facilities should remain as hard landscape areas. Soft landscaping should be confined to those areas which were landscaped as such i.e. north and west of the 1948 Control Room and Switch House and their attendant transformer yards.

New landscaping should be inspired by and respond to the place and incorporate interpretation of remnant building elements and removed structures.

Visual and physical links within and through the site should be respected and retained and may be enhanced by new structures and access ways.



SW Transformer Yard  
(Design 5 - Architects)

## Billboards and Signage

It is recommended that one of the existing billboards on Victoria Street be used as an information/interpretation board for the Power Station. The other two could remain in use for general advertising.

A further billboard type of sign may be allowed on Robert Street opposite Mullens Street for interpretation only. No large signage elements should be attached to the building permanently and definitely none should break the existing skyline profile of the buildings.



Victoria Road billboards  
(Design 5 - Architects)

## White Bay Hotel Site

The White Bay Hotel was closely associated with the development of the adjacent White Bay Power Station and other local industries. Any new use for the site should relate to the White Bay Power Station to Victoria Road and not turn its back to it.



There is an opportunity to construct a new structure on the site with a similar landmark quality to the former hotel in a way that interprets its role in the urban approach sequence to the city. Any new structure or use should sit comfortably in relation to the White Bay Power Station site adjacent and not dominate it.

A reuse that is linked to the White Bay Power Station and allows public access to the White Bay Hotel site is preferred. Private uses such as for dwellings is least preferred.

Alteration of the retaining walls may include partial removal of later sections, however, the reading of the surviving “platform” of the White Bay Hotel should be retained and remain identifiable.

The site (including potential for archaeology and the retaining walls) should be fully recorded (photographically and measured drawings) prior to any site disturbance that may involve partial removal or new structures.

## THE BURRA CHARTER

The future conservation, adaptive re-use works, and all other works to White Bay Power Station should be carried out in accordance with the principles and processes set out in the Australia ICOMOS Burra Charter 1999. The conservation and adaptive re-use of the White Bay Power Station must be based on a respect for the existing fabric, its past use, associations and meanings. This requires a cautious approach of changing as much as necessary and as little as possible.

Spaces ranked of exceptional, high and moderate significance at White Bay Power Station must be fully recorded photographically in black and white for archival purposes before any intervention or works commence. Those spaces ranked as having only little significance require a general photograph only in black and white for archival purposes.

A copy of this report and all reports and records, photographic or otherwise, relating to White Bay Power Station should be placed in a permanent archive and be available for public inspection.

All works to White Bay Power Station must be directed, supervised and carried out by persons with appropriate knowledge, skills and experience in the conservation and adaptation of such elements.

## CONDITION OF THE PLACE

An inspection was carried out on the structure by Hughes Trueman in 2002 and a report prepared. The site was again inspected in 2010, and the report was revised. This report is found as Volume IV of this Conservation Management Plan.

The power station was originally designed for industrial use with facility to handle and store large quantities of coal and safely and reliably reticulate water, steam and electricity.

Consequently construction is robust and many components could be expected to have extensive reserve capacity for adaptive re-use.

In addition the facility is likely to have been well built and maintained. Consequently the majority of deterioration noted probably relates to the last twenty years or so since closure.

Much of the damage evident results from ingress of water from failed windows or roofs or from blocked or failed storm water systems or drainage, as well as lack of regular



maintenance. Site security is also an issue and much glass breakage has been due to vandalism.

The load capacity of all floors should be assessed for specific future use proposals. There has been significant deterioration in some areas of timber flooring due to termites and the ingress of water. Such areas include the floor to the inclined conveyor shaft from Coal Loader to the Boiler House and the upper floor of the Administration building.

Loss of cross-sectional area and section strength of steel columns is locally evident at some base connections due to excessive corrosion. This is significant in the Boiler House and Coal Loader. There is much evidence of corrosion to steel connections, roof and wall cladding, steel reinforcement in some concrete elements and steel grate flooring. In addition there are large underground areas which retain both structure and machinery but are now filled with water and suffering corrosion.

Guy ropes for the two chimneys should be immediately investigated to determine if repairs are required. The chimneys themselves could not be inspected as part of this report and will require a specialised assessment with special access equipment.

The issues and works identified in the Hughes Trueman structural report (Volume IV) should form the basis of a prioritised work schedule and this should be progressively implemented to ensure the survival and structural integrity of White Bay Power Station.

Works should be broadly prioritised as follows:

- 1 Weatherproofing of roofs and repair of roof drainage system
- 2 Removal of failed concrete water tank over Administration Section
- 3 Bird proofing of all openings
- 4 Upgrading of site and building security
- 5 Weatherproofing of openings in walls
- 6 Structural repairs

All works should be carried out in accordance with the recommendations in the Hughes Trueman report and also in accordance with other policies in this CMP.

The machinery which remains within the White Bay complex is largely in a stable but deteriorated condition. As much of the fabric of the machinery is steel, corrosion is an on going problem and little maintenance has been carried out for many years. A program of catch up repair and on going maintenance is necessary to conserve these items for the long term.

All significant items of machinery and equipment must be cleaned and conserved in accordance with the findings of a condition assessment for each element, consistent with the recommendations in the Godden Mackay Logan report (Volume V).

Since 2004 to present, there have been several instances of vandalism and attempted theft inside the Administration Building, Switch House and the Control Room. The buildings are particularly vulnerable at ground level and along the southern edges. Perimeter and internal security have been strengthened, however these should be further enhanced to protect this unique and exceptionally significant asset/



Failed water tank over  
Admin. section  
(Design 5 - Architects)



Coal Handling Shed  
(Design 5 - Architects)

property.

The issues and works identified in the Hughes Trueman structural report (Volume IV) should form the basis of a prioritised work schedule and this should be progressively implemented to ensure the survival and structural integrity of White Bay Power Station.

## HERITAGE LISTINGS

White Bay Power Station is listed on the following registers:

- NSW State Heritage Register (SHR) (Item No. 01015)
- Sydney Harbour Foreshore Authority S.170 Register
- Sydney Regional Environment Plan (SREP) No. 26 (Item 11)
- Register of the National Estate (Item No. 019512)
- National Trust Register (classified item)

## STATUTORY CONTROLS

Any changes proposed to the place will require the consent of the NSW Heritage Council and the state planning body, NSW Department of Planning and Infrastructure.

Compliance with the various access, egress and safety requirements and the 'deem to satisfy' clauses of the Building Code of Australia (BCA) may diminish many of the values and qualities of the place by changes to the fabric or by additional compartmentalisation or isolation. A fire engineering assessment of the risk of the building and its proposed uses should be carried out and a solution formulated which retains and respects the significant attributes of the place.



WBPS from Victoria Road  
(Design 5 - Architects)

Any problems or issues with compliance should be referred to the Fire Access and Services Advisory Panel (FASAP) at the Heritage Office for advice and assistance with achieving appropriate solutions to address the various BCA requirements.

## PLANNING ISSUES

The site is a discrete urban 'island', distinct in use from surrounding land uses. To the north of the site across Robert Street is a contained industrial precinct of warehouse and light industrial uses, beyond which is the residential suburb of Balmain. Most of this area is within the Balmain Conservation Area.

Immediately to the west is the former White Bay Hotel site. The white Bay Hotel was formerly identified as a heritage item listed on the Leichhardt Local Environmental Plan 2000. Further west, across Victoria Road, is the predominantly low rise residential suburb of Rozelle part of which is within the Balmain Conservation Area. Immediately to the south of the power station are goods railway lines serving the Bays Precinct and the City West Link Road, both of which are within the Port and Employment Zone under SREP 26. To the immediate east of the site is the Glebe Island and White Bay Master Plan area.

While a master plan has not been prepared for the power station site, the Glebe Island and White Bay Master Plan has been adopted for much of the rest of the White Bay and Glebe Island area.

The master plan provides for the possible continued use of the rail line connection through Rozelle Yard. This rail line has also been identified as a possible addition to the commuter light rail system, should the need arise for an interchange with any future metro station at the White Bay site.

Recent changes to the bays precinct, including ceasing of car imports to Glebe Island, approval of the Sydney metro passing through the site (on hold), the proposal for a cruise passenger terminal and ongoing commercial maritime activities in Rozelle and Blackwattle bays, have been a catalyst for re-evaluating the future of the bays precinct.

A process of local consultation for the future use and planning of the power station began in June 2009 with the establishment of the Community Reference Group (CRG). This was established as the first of two stage process for community consultations. On 1 March 2010, the CRG made their submission to the Minister of Planning, outlining objectives for the Bays Precinct which provide the framework for more detailed principles.

All the objectives provided by the CRG have relevance to the WBPS site, with some having special relevance in regard to form, shape and design for any new use. The principals overwhelmingly endorsed retention of the WBPS site as a significant heritage item and recognized the need for viable and suitable reuse of a public nature and the ability to contribute and engage with overall objectives of any revitalization of the Bays Precinct.

In 2009, the Premier announced a proposal for a new Cruise Passenger Terminal (CPT), located at White Bay no.5, in accordance with recommendations from the Passenger Cruise Terminal Steering Committee, subject to planning approval. The CPT will be constructed and operated by Sydney Ports Corporation. The proposal has received planning approval in accordance with Part 3A of the Environmental and Assessment Act 1979.

The planning application for a CBD metro railway has been approved, however in 2010 the Premier announced that it would be put on indefinite hold (however the approval and protection of corridors for the proposed metro remain in place). As part of this proposal, the White Bay precinct would be used as a major construction site to support tunnel construction, tunnel spoil removal and rail systems installation. It is intended that this metro will form a central spine to which other metros would link or interchange.

Any proposal to adaptively re-use the White Bay Power Station site must be considered with regard to the objectives contained in SREP 26. That is, to encourage a mix of non-residential land uses which generate employment opportunities, particularly in relation to port and maritime uses and the working industrial nature of the Bays Precinct generally, and the place specifically.

Uses could include light industrial commercial, institutional, entertainment and hotel uses. Residential uses as defined in SREP 26 are not permitted. Any proposed use must be consistent with policies in Section 5 of Volume II.

Uses which would result in the creation of a buffer between the residential areas in Balmain and the adjoining industrial, maritime and port related activity and traffic within the Bays precinct would be highly desirable as well as those that utilise the existing railway infrastructure and provide a high degree of public accessibility to the site.

## ACCESS & ACCESSIBILITY

All public access points should preferably utilise historical or significant entry points. New entry points should be located to strengthen and not confuse an understanding of the significance of the place.

The design and configuration of any future access points should be consistent with the former industrial use of the place and be clearly marked without competing with or confusing the character and significance of the place.

Pedestrian access to the site is via the original bridge to the main entry of Victoria Road (this entry is now locked for security) and the single major entry from Robert Street.



NW Transformer Yard  
(Design 5 - Architects)

Pedestrian access to the site should be encouraged but depending on future use should be controlled.

The existing vehicular entry is a significant one, historically and provides a dramatic entry to the site almost on axis with the railway line. If vehicular access is relocated for reasons of safety it must avoid the brick pumping station site and should also retain space on the site to manoeuvre large trucks and heavy equipment.

Rail access could be reinstated along its original route both for interpretation purposes as well as servicing and maintenance which would need to be negotiated with both Sydney Ports and the State Rail Authority. Issues of access security will also require addressing to ensure safety and security of both the power station and neighbouring sites.

White Bay Power Station was located close to the harbour for access to its water for cooling in the condensers and it would be desirable to establish an access to the water if this were possible. This would be dependant on the appropriateness of waterfront access to any future use of the power station.

## INTERPRETATION

An Interpretation Strategy should be commissioned as the first stage of an Interpretation Plan, as an integrated aspect of the development and conservation of White Bay Power Station.

A good deal of additional information is available in the form of plans and early photographs (held at the Power House Museum). More such evidence may come to light in the course of time.

The information and recordings gathered from the recent Oral History project should be incorporated into the interpretation of the place.

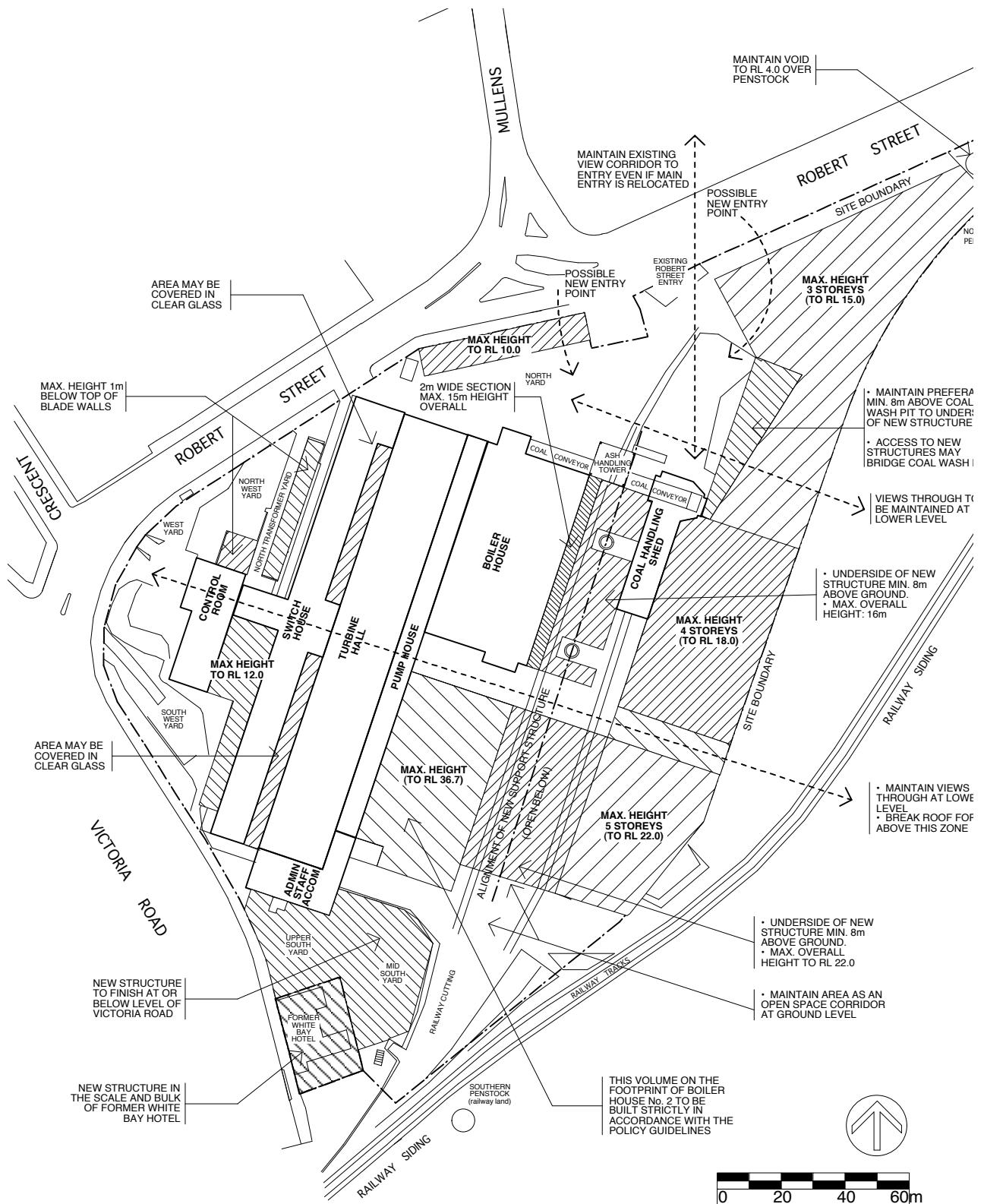
## FUTURE USE AND DEVELOPMENT

A range of future uses may be considered as appropriate for White Bay Power Station and may be considered singly or in combination.

They include:

- Interpretation/Museum use





VARIOUS HATCHES DENOTE SITES FOR POTENTIAL DEVELOPMENT

- ALL RL HEIGHTS TO (A.H.D.) AUSTRALIAN HEIGHT DATUM
- HATCH AREAS TO HAVE MAX. 75% BUILT UPON AREA
- NEW BUILDING MASS TO BE BALANCED WITH OPEN SPACE LANDSCAPE AND RECREATION AREAS

Figure 5.10.2.1  
 WHITE BAY POWER STATION  
 Future Development Options  
 Site Plan



- Industrial/Workshop use
- Bulky goods/retail use
- Venue and film location
- Education use
- Commercial/office use
- Interchange facility for rapid mass transit system



Chimney Stacks  
(Design 5 - Architects)

While the impact of each use will require careful consideration and management, any use must respect the significance of White Bay Power Station and the requirement that its significant machinery and associated spaces must be available for interpretation.

Residential use is considered inappropriate due to both site contamination levels, the significance of the place and the proximity of the port operation. It is also not allowed under the Planning Instruments.

Those uses which have least impact on the significance of the place are preferred to those which have large impact or involve considerable change. Those uses which are inspired by and support the significance of the place are preferred to those which do not.

Redevelopment of the Power Station must take into account all the Policies contained herein. These Policies are designed to allow for maximum flexibility commensurate with retaining, preserving and conserving the Cultural Significance of this quite exceptional site.

New structures may be constructed on the site in accordance with the following principles. These are expressed graphically in Figure 5.10.1.1 and show all structures to their maximum size, however not all should exist at the same time. New building masses must be balanced with open space, landscape and recreation areas to achieve the optimum development.

- respect significant vistas and views to and from WBPS and within site
- respect clarity, form and textures of those elements which define WBPS identity
- respect axially of existing buildings. If using a different alignment for new work, this must respect and retain view and vistas and integrity of existing axes and structure
- retain dominance of chimneys
- retain dominance of Boiler House from and to the east
- new structure(s) may be inserted where precipitators removed, particularly at north end which may connect to chimney stacks and assist in their structural stability. The form of connection should emulate original connections. They should not block the light into the Boiler House
- new structures should leave clear height beneath and no lower than lower steel horizontal on ash handling unit
- a new building to similar height of 1958 Boiler House should be constructed on the site of Boiler House #2. Access to daylight for laboratory in Admin wing must be retained. The new structure may interconnect into Pump House via new openings. This volume should



Boiler House and Stacks  
(Design 5 - Architects)

be reinstated as a major priority as it will restore the formal massing and balance of the whole power station.

- low level structures east of coal handling shed may be built
- low level structures south of Admin Building, no higher than Victoria Road footpath level may be built. Structures should “front” the power station with simple elevations to Robert Street
- view of rear of White Bay Hotel from within site to east should be retained
- original rail corridor from the cutting through to Coal Handling shed should be retained
- links to the Penstocks should be retained if possible (northern one at least)
- new structures should respect the significance and form of WBPS. They should be contemporary in design to distinguish them from the earlier work at the same time as being inspired by and reflecting the industrial character of the place. Preferred materials are steel and glass with minimum masonry elements.

## MANAGEMENT AND MAINTENANCE OF THE PLACE

A Conservation Committee should be appointed by SHFA to provide on-going advice to SHFA on the implementation of the CMP and the protection of the heritage significance of the site.

There should be continuity of relevant and experienced conservation advice for all aspects of changes to WBPS.

Consultant advice and contractual work should be limited to firms or persons with proven expertise in the relevant field and experience on heritage buildings/structures.

Proposals for change should be subject to an established decision-making process that incorporates relevant advice.

## ADOPTION, IMPLEMENTATION AND REVIEW

The policies set out in Section 5 of Volume II of this CMP should be applied irrespective of the use to which the place, or its parts, are put.

All volumes of this CMP should form part of any tender documents prepared for seeking expressions of interest for White Bay Power Station. The CMP should not be used in an abridged format.

The CMP should be endorsed by the Heritage Council of NSW before becoming part of any tender documents.

Master Plans or any plans which set the framework for the future of White Bay Power Station should be developed in response to this CMP and in conjunction with appropriate conservation advice.

The endorsed CMP should be adopted by all authorities and bodies involved in planning and approval processes for White Bay Power Station, and used as a basis for assessment of any proposal for change.

SHFA should ensure that this CMP be made publicly available.

This Conservation Management Plan document should be reviewed every 10 years or sooner if

- the management structure of the place changes,
- adaptive re-use and development has been undertaken in accordance with policies in this CMP
- new physical or documentary evidence changes the known significance of the place.

## FURTHER RESEARCH

The opportunity should be taken for archaeological research around the site before development work is done. Information on the location of earlier structures and on work practices and conditions may be found by such investigation.

The site was occupied by housing before the development of the Power Station and there is potential for information to be gathered about this period in its evolution.

While much of the site was cut and filled for the Power Station, some evidence may survive.

If and when the opportunity arises, research should be carried out on the Aboriginal and early European occupation of the site, to give a more thorough understanding of its historical context.

An Oral History recording experiences of former workers of the Power Station, commissioned by SHFA has been completed. This should be read in conjunction with this Conservation Management Plan and it should be used to inform and be part of an Interpretation Strategy.



Distant View  
(Design 5 - Architects)