

WHITE BAY POWER STATION

Robert Street Rozelle NSW 2039

CONSERVATION MANAGEMENT PLAN 2026

VOLUME 2 : HERITAGE INVENTORY – STRUCTURES, SPACES & ELEMENTS

Prepared for




Placemaking NSW

Prepared by



Design 5 Architects Pty Ltd

| | |
|--|------------------------------------|
| ADOPTED CONSERVATION MANAGEMENT PLAN  PLACE MANAGEMENT NSW | Date Adopted 18 May 2026 |
| | Volume No. 2 of 3 |
| | File No. DOC26/036929 |



**WHITE BAY POWER STATION CONSERVATION
MANAGEMENT PLAN 3RD EDITION**

Client



Placemaking NSW

Prepared by



Design 5 – Architects Pty Ltd

In collaboration with



Coast History



Wadjiid Pty Ltd



Placemaking NSW

Photography



Evolving Picture

TOBY PEET

Toby Peet

ACKNOWLEDGEMENT OF COUNTRY

As the custodians of this White Bay precinct, Placemaking NSW recognises that it stands on Aboriginal land, the area we know as Rozelle.

We acknowledge Gadigal and Wanngal Country, her lands, sea and sky, we acknowledge the custodians and their kin, the Bidjigal, Cabrogal and Cammeraygal who often visited this Country to connect and share.

We advise this resource may contain images, or names of deceased persons in photographs or historical content.

It should be noted that the precinct names selected and applied for this document are known as from The Sydney Language, named so for the purposes of Placemaking NSW's Reconciliation Action Plan. We acknowledge that there are numerous Aboriginal language place names, including Gadigal, Wanngal, Cammeraygal and Dharawal, connected with the place.

REPORT REGISTER

This register documents the progress of this document and its issue to Placemaking NSW for discussions over the period of engagement of Design 5 – Architects:

| Issue | Issue Date | Version |
|-------|----------------|---------------|
| 1 | October 2024 | Working Draft |
| 2 | November 2024 | Working Draft |
| 3 | July 2025 | Working Draft |
| 4 | September 2025 | Final Draft |
| 5 | October 2025 | Final Draft |
| 6 | November 2025 | Final Draft |
| 7 | January 2026 | Final Draft |
| 8 | March 2026 | Final Version |

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Documents, reports and other sources utilised for the preparation of this work have been acknowledged within this report and are mentioned within each section, and referenced within the endnotes.

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Cover Photo: *North Elevation of the White Bay Power Station, 2024 (courtesy of Toby Peet).*

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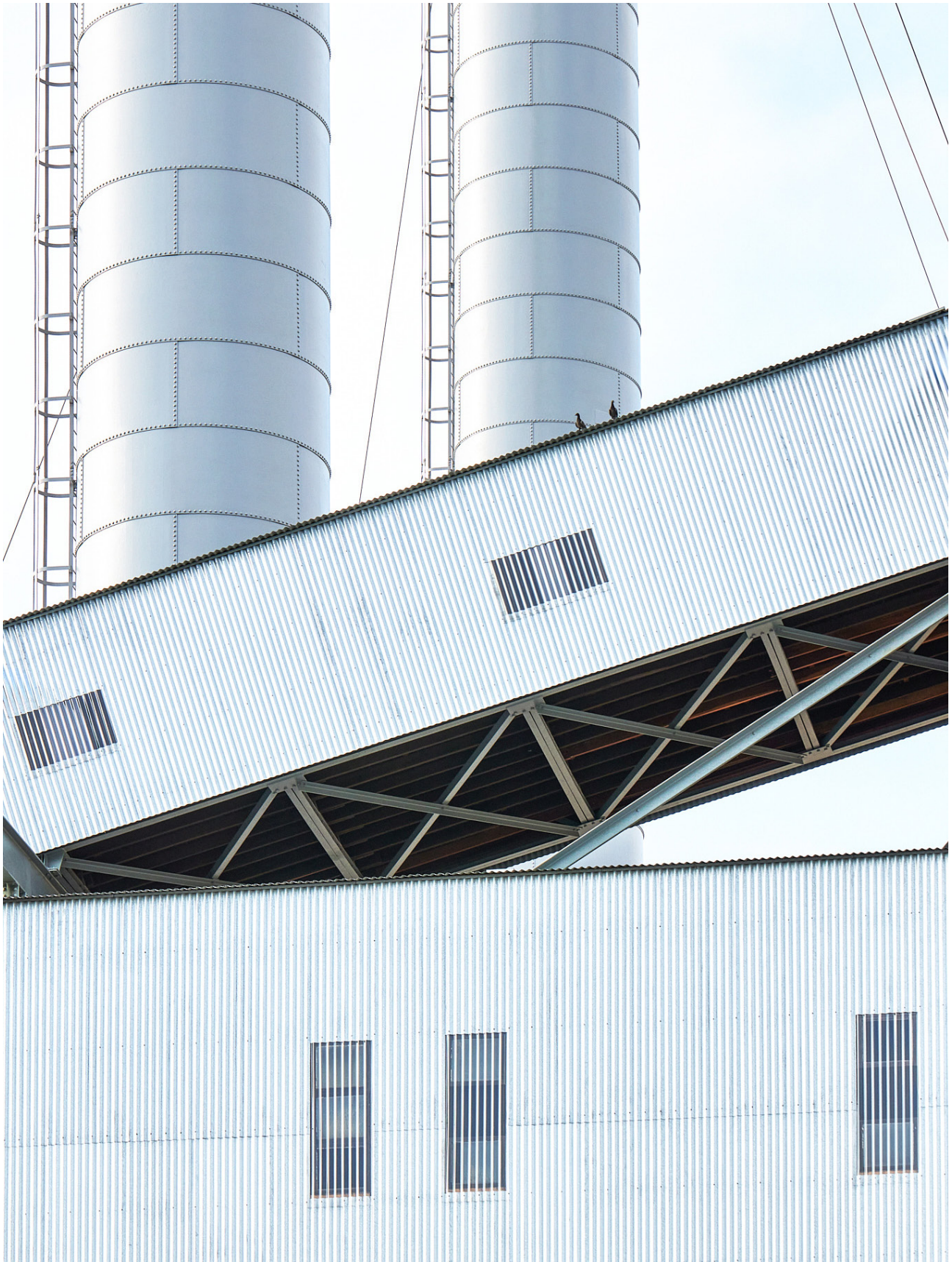


Figure 1.1 Ash Handling Tower/External Conveyor with Chimneys at the back, 2024 (courtesy of Toby Peet)

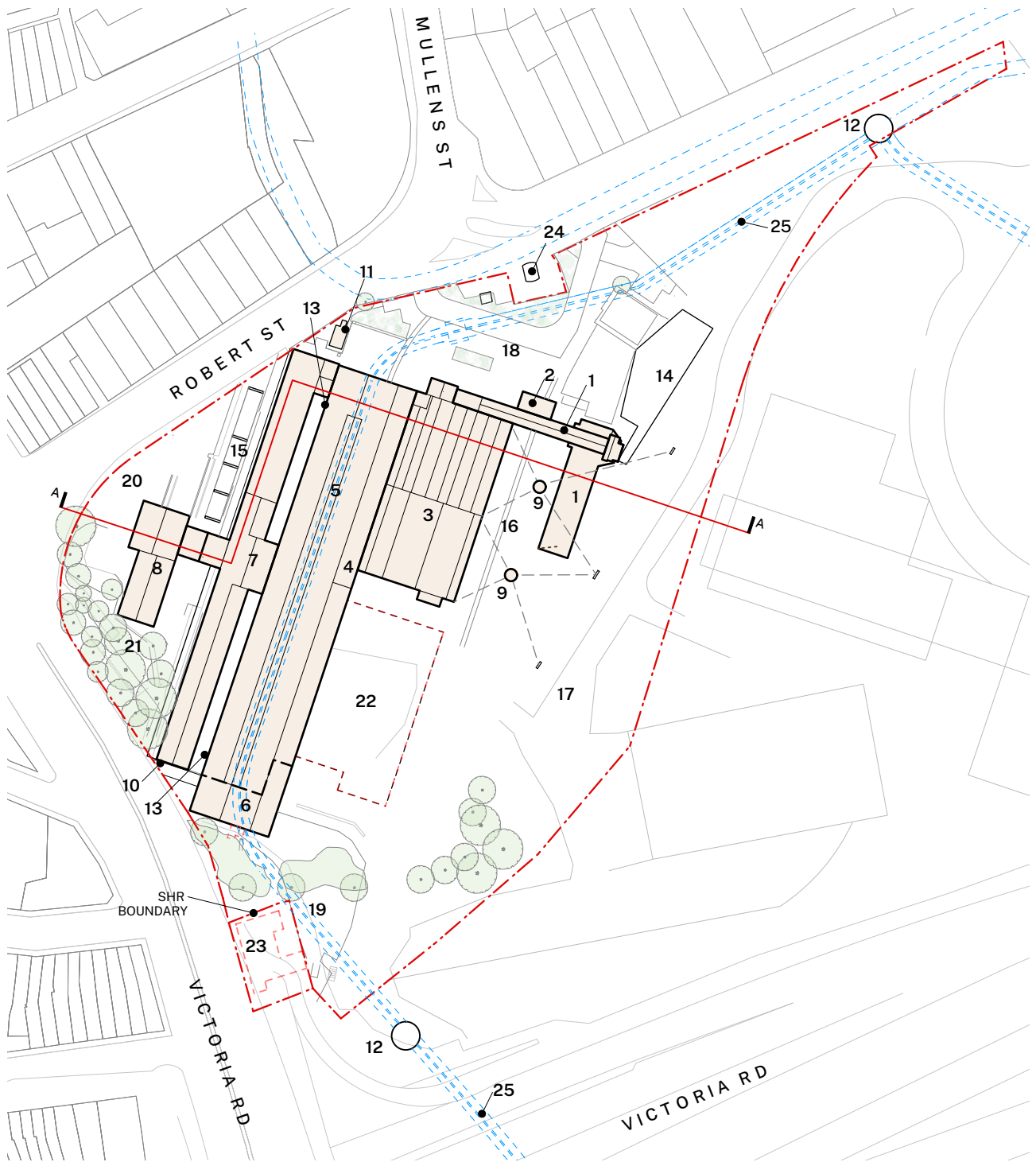
INTRODUCTION

PURPOSE OF THIS VOLUME

Volume 2 of the White Bay Power Station Conservation Management Plan 2025 is a Heritage Inventory. It comprises a comprehensive record of the structures, individual spaces, and elements of the White Bay Power Station, and is to be used alongside Volume 1 of the CMP as both a record and a tool to guide future conservation, change, and management of the place. The individual buildings and external spaces recorded in this volume are shown in Figure 0.1.

Chapters 1–8 present inventories for the buildings and their respective spaces in the White Bay Power Station complex. Each chapter begins with a series of sections on the function, history, spatial references, descriptions, alterations and condition, significance of the space, and reference to the conservation policies in Volume 1 of the CMP. This is then followed by inventory sheets for each of the individual spaces within the respective buildings, which provide descriptions of the fabric, any moveable heritage, and general condition, which is then followed by an inventory of the machinery located within the building.

Chapter 9 presents inventories for the external spaces and components, which includes descriptions, alterations and condition, significance of the space, reference to specific policies, and an inventory sheet for the space.



KEY

- | | | | |
|--|---|-------------------------------|---|
|  REPORT BOUNDARY | 1. COAL HANDLING SHED AND EXTERNAL CONVEYOR | 9. CHIMNEY STACKS | 18. NORTH FORECOURT |
|  STRUCTURES ON SITE | 2. ASH HANDLING TOWER | 10. VICTORIA RD ACCESS BRIDGE | 19. MID AND UPPER SOUTH YARDS |
|  FORMER STRUCTURES | 3. BOILER HOUSE | 11. AMENITIES BLOCK | 20. WEST YARD |
|  UNDERGROUND CANAL | 4. PUMP HOUSE | 12. NORTH AND SOUTH PENSTOCKS | 21. SOUTH WEST YARD |
|  | 5. TURBINE HALL | 13. TRANSFORMER ALLEY | 22. FORMER BOILER HOUSE NO. 2 |
| | 6. ADMINISTRATION AND STAFF ACCOMMODATION | 14. COAL WASH PIT | 23. FORMER WHITE BAY HOTEL |
| | 7. SWITCH HOUSE | 15. TRANSFORMER YARD | 24. SEWAGE PUMPING STATION NO.7 (OUTSIDE) |
| | 8. CONTROL ROOM BUILDING | 16. ASH HANDLING YARD | 25. UNDERGROUND WATER COOLING WATER CHANNEL |
| | | 17. SOUTH AND EAST YARDS | |

Figure 0.1: White Bay Power Station site map.

THE EIGHT OPERATIONAL SYSTEMS

The buildings and machinery presented in Volume 2 collectively represent and demonstrate the White Bay Power Station's operations, which can be defined by eight key operational systems and their associated machinery, as shown in Figure 0.2 below.

These systems are interdependent and encompass the full process of coal-fired steam raising power generation. They are each an integral part of the power station, and are listed as follows:

- The Coal Handling System
- The Steam Raising System
- The Power Generation System
- The Feedwater System
- The Circulating Water System
- The Power Reticulation System
- The Ash Handling System
- House Electrical and Auxiliary Power Supply System

The following summary of the eight operational systems is extracted from Section 3 and 4 of Volume V of the 2013 CMP – Machinery Survey Inventory (& Conservation Strategy), which comprises the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report by Godden Mackay Logan (May 2003).

Refer to Volume 3, Appendix D of this CMP for the full GML Report.

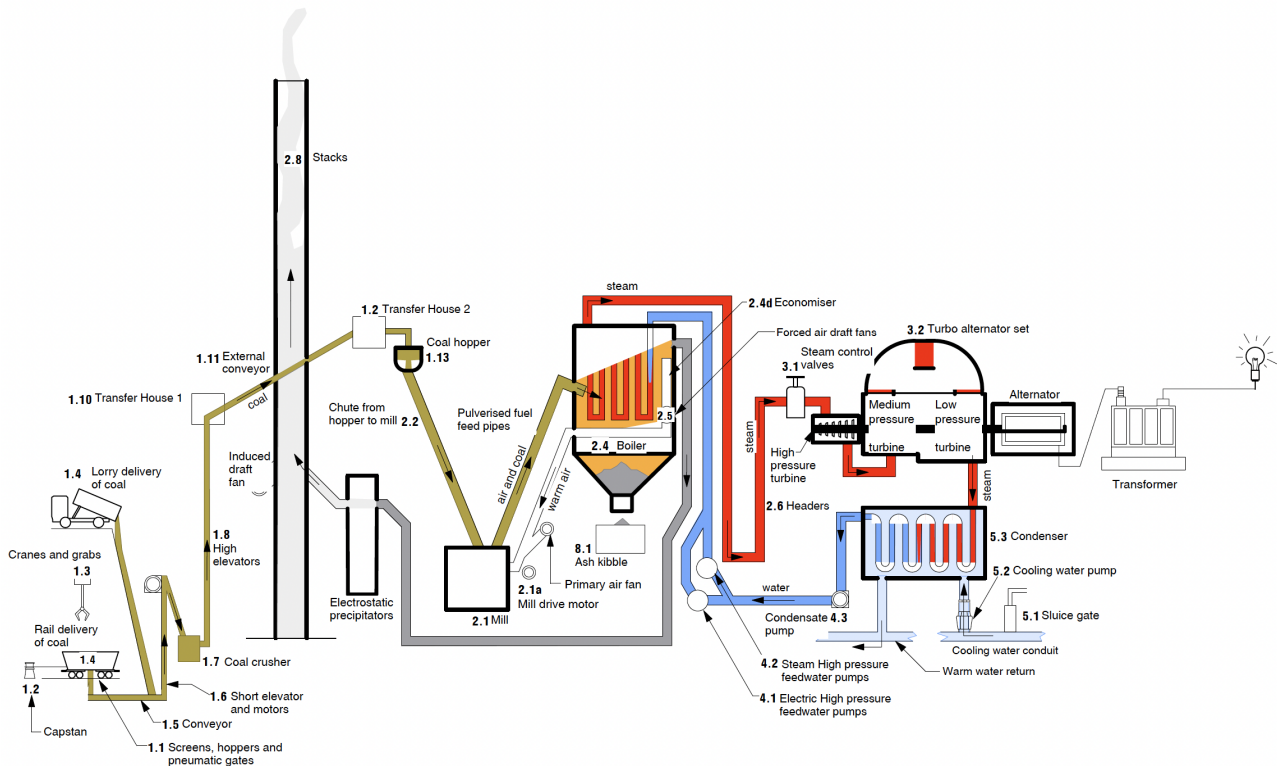


Figure 0.2: Diagram of the process of electricity generation from coal (courtesy of Godden Mackay Logan, Historic Machinery Inventory & Conservation Strategies, 2003, p.17).

THE COAL HANDLING SYSTEM

The Coal Handling System functions to receive coal deliveries from railway or road transport, grade, clean and store the coal, then transfer the coal into the overhead coal bunkers in the Boiler House. At White Bay, the receiving coal stores comprised a large open area on the east side of the present Coal Handling Shed. An open-sided shelter attached to the eastern side of the Coal Handling Shed provided covered storage for a reserve of dry coal.

The following individual items have been identified and inventory forms have been prepared:

- 1.1 – Hoppers and Pneumatic Feed Gates
- 1.2 – The Capstan
- 1.3 – The Cranes and Associated Grabs
- 1.4 – Screens
- 1.5 – Conveyors
- 1.6 – Short Elevators and Motors
- 1.7 – Coal Crushers
- 1.8 – The 90-Foot Elevators
- 1.9 – Transfer Houses and Equipment
- 1.10 – External Conveyor
- 1.11 – Coal Weigher
- 1.12 – Coal Hoppers
- 1.13 – Coal Handling Control Room

THE STEAM RAISING SYSTEM

The Steam Raising System was centred in the Boiler House and functioned to provide steam at specified temperature and pressure to the turbines in the Turbine Hall, where it was utilised to produce electricity by the Power Generation System. Steam was raised in boilers which burned coal and produced ash. The steam was manufactured from water provided by the Feedwater System. Steam was condensed back into water in condensers, located below the turbines, which were cooled by the Circulating water System. Ash was disposed of by the Ash Handling System.

The following individual items have been identified and inventory forms have been prepared:

- 2.1 Pulverising Mill
 - a) Drive Motor
 - b) Fan Motor
- 2.2 Chutes from Hopper to Mill
- 2.3 The Pulverised Fuel Feed Pipes
- 2.4 The Boiler
 - a) The Furnace
 - b) Superheaters
 - c) Attemperator
 - d) Economisers
 - e) Air Heaters
 - f) Air Ducts
- 2.5 Forced Draft Fans
- 2.6 The Headers
- 2.7 Oil Heater Pumps and Valves
- 2.8 The Stacks
- 2.9 Soot Blower Cabinet
- 2.10 The Boiler Control Room

THE POWER GENERATION SYSTEM

The steam produced by the Steam Generation System is fed into the steam headers located on the west wall of the Boiler House, from where it is distributed to the turbines in the Turbine Hall. The steam flows through the turbines, producing rotational motion which is transferred to the alternators attached to the turbines. The alternators produce electrical current which is tapped off and delivered through the Power Reticulation System.

The steam exhausts from the turbines into the Condensers located below each turbo-alternator in the Turbine Hall Basement, where it becomes water again. This water is recycled through the Feedwater System back to the Boilers. The Condensers are cooled by the Circulating Water System.

Within the Turbine Hall are three Overhead Cranes, two installed at the time of construction of the building and a third which is contemporary with the post-World War II turbo-alternators.

The cranes were essential for the installation and maintenance of the turbo-alternators and other associated equipment in the Turbine Hall.

The following individual items have been identified and inventory forms have been prepared:

- 3.1 – Steam Control Valves
- 3.2 – Turbo Alternator Set
- 3.3 – Cooling Fans
- 3.4 – Overhead Cranes

THE FEEDWATER SYSTEM

The Feedwater System is concerned with the supply of water to the Boilers, where it is converted to steam, and it commences with the extraction of Condensate from the condensers. Condensate is delivered from the Condensers to the De-aerator, which removes any dissolved oxygen, after which it is termed “feedwater”. The feedwater is then pumped by the Feedwater Pumps, both steam and electric, to the Feed Heaters then to the Economiser, which raise the temperature to a level close to boiling. The feedwater leaves the Feedwater Pumps at high pressure, allowing considerable temperature rise before the water boils to steam. From the Economiser, the feedwater is led into the main tubes of the boiler. The feedwater system included, in operation, a raw water storage tank, a demineralisation plant and a reserve condensate tank, located within the upper level of the pump gallery between the Boiler house and Turbine Hall.

The following individual items have been identified and inventory forms have been prepared:

- 4.1 – Electric High Pressure Feedwater Pumps
- 4.2 – Steam High Pressure Feedwater Pumps
- 4.3 – The Condensate Pumps
- 4.4 – The De-aerators
- 4.5 – Monitor and Metering Cabinets
- 4.6 – Feedwater and Condensate Tanks

THE CIRCULATING WATER SYSTEM

Power stations have two distinct water systems: circulating (cooling) water and feedwater. Steam exhausted from the turbines is cooled in the pipes within the condenser by water which flows around the pipes. The steam is converted to liquid water (Condensate) and, after treatment, is sent back into the boilers by the Feedwater System. The Circulating Water System circulates cooling water through the Condensers.

At White Bay Power Station, saltwater from Rozelle Bay was the circulating water and twin circulating water conduits run in a loop from Rozelle Bay to White Bay, passing under the basement of the Turbine Hall. The inlet was in Rozelle Bay and the exit for warm water was beneath the coal wharf in White Bay, although provision was made for the system to operate in the reverse direction by the installation of fixed grill screens and revolving screens on the White Bay side as well. The paired conduits to the Power House are each 1.9 metres (6ft) by 1.9 metres (6ft) reinforced concrete box sections running 221.5 metres (720 ft) from Rozelle Bay screens and 190.8 metres (620 ft) towards White Bay, with the final 111.7 metres (363 ft) to White Bay in open channel. Beneath the Turbine Hall, the conduits are 5.4 metres by 2.2 metres (17 ft 7 inches by 7 ft) dimension.

Water entered the inlet conduit through a fixed grill screen, to exclude large trash, then through a set of revolving screens to eliminate any other material. The conduits included silt wells and control valves. In the Turbine Hall, a Circulating Water Pump for each condenser drew water from individual pump suction wells fed from the Inlet Conduit and pumped it through the body of the condenser, the outflow dropping into the Outlet Conduit. Sluice gates of mild steel and timber could exclude water from passing into the suction wells for maintenance of the well or the pump.

The following individual items have been identified and inventory forms have been prepared:

- 5.1 – Sluice Gates and Motors
- 5.2 – Circulating Water Pumps
- 5.3 – Condensers
- 5.4 – Circulating Water Penstocks (northern set only)

THE POWER RETICULATION SYSTEM

The Power Reticulation System controls the electrical current produced by the alternators in the Turbine Hall and delivers it to the consumers of the current, which in the latter half of the operation of White Bay Power Station, was into the Interconnected State Grid. Prior to this, the electrical power was primarily delivered directly to the electric railway and tramways systems. At White Bay, the Power Reticulation System comprises the transformers, reactors, cables, busbars and switches in the Switchhouse, as well as the Main Control Room. The Main Control Room houses all the control and monitoring gear associated with the distribution of the electrical power generated at White Bay.

The majority of the individual elements of the Power Reticulation System, especially the transformers, reactors and switches, have been removed from the White Bay Switchhouse as part of the decontamination and make-safe process, owing to the potential health hazards associated with the fluids utilised in this equipment.

The following individual items have been identified and inventory forms have been prepared:

- 6.1 – Main Control Room
- 6.2 – Rheostats
- 6.3 – Cables and Chasers
- 6.4 – Motor-Driven Oil-bath Switches
- 6.5 – Oil Circuit Breakers

THE ASH HANDLING SYSTEM

The Ash Handling System takes ash from the base of the boiler furnaces and from the fly ash collectors, including the Precipitators, and collects and stores it for removal off site. Ash was collected at the base of the Boiler Furnaces in a water trough through which ran a drag-link conveyor and the resulting slurry was deposited in an Ash Hopper, where it was thickened and then trucked off site. Fly ash in the exhaust gases was largely removed by electrostatic precipitators (completely removed installed at the base of the chimney stacks. Ash collected by the precipitators was united with the furnace ash for disposal.

The Ash Kibbles and associated trucks were a contingency system, available if there was any trouble with the water trough system. Ash could be dumped straight from the ash collector at the bottom of the furnace into the Kibbles and carried outside.

There is little of the ash handling equipment directly associated with the only boiler still in existence at White Bay, with the most notable item being the external Ash Tower containing the Ash Storage Hoppers and Ash Kibble Crane. There is little information about the Ash Handling System which was attached to the Phase Three boilers, however, it appears that certain components of the Ash Handling System surviving at White Bay may relate to the Phase Two boilers which continued to operate until the 1970s but which have been subsequently removed. The Ash Kibbles and Battery-powered Ash Trucks were associated with the earlier boilers but their use as part of the more modern Phase Three boilers is not presently known.

The following individual items have been identified and inventory forms have been prepared:

- 7.1 – Ash Kibble Sets
- 7.2 – Ash Trucks
- 7.3 – Ash Tower

THE HOUSE ELECTRICAL AND AUXILIARY POWER SUPPLY SYSTEM

White Bay Power Station, as well as supplying high-voltage electricity to the Interconnected State Grid, utilised electricity within the building to power lights, motors and miscellaneous equipment. As well, an emergency system was installed to provide light and power to the building in the event of a major disruption to the usual supply methods.

The primary systems were the 240 volt AC normal domestic supply, reticulated around the building to various distribution boards, the 120 volt DC house lighting and control supply, the 600 volt DC supply for the original heavy-duty electric motors installed in the building, such as the overhead cranes, and the 415 volt AC supply for the more modern heavy-duty electric motors and supply to the rectifiers.

Many of these systems are no longer intact or able to be traced owing to the level of removal of equipment in the last decade. Evidence of the various systems is retained in various components, especially Switchboards, located in various places throughout the power station buildings.

The house electricity supply was 120-volt DC, delivered from at least two banks of wet cell batteries housed on the top floor of the switch house. These batteries were constantly trickle-charged by a charging unit fitted with a mercury-arc rectifier receiving a permanent supply of 415 volts AC. This supply was utilised for most lighting and most of the control systems throughout the building. In the event of a major power failure, the batteries could maintain this supply for a number of hours.

The following individual items have been identified and inventory forms have been prepared:

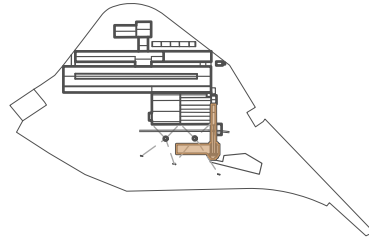
- 8.1 – Disused No. 1 Battery Booster
- 8.2 –
 - a) Motor-Generator Set 2
 - b) No. 2 Motor-Generator Switchboard
- 8.3 – Motor-Generator No. 3
- 8.4 – Motor-Generator No. 4
- 8.5 – Battery Charger Unit (Mercury Arc Rectifier)
- 8.6 – No. 1 Booster
- 8.7 – Rectifier Sets 1 and 2
- 8.8 – Switchboard (marble) in Motor-Generator Room
- 8.9 – Batteries
- 8.10 – Pedestal Drill
- 8.11 – Selenium Rectifier for charging Ash Carts

- 8.12 – Switch House Lighting Board
- 8.13 – Switchboard in Motor-Generator Room
- 8.14 – Battery Charging Switchboard
- 8.15 – Air Compressor
- 8.16 – 25 Cycle Switches

1 COAL HANDLING SHED & EXTERNAL CONVEYOR



Figure 1.1 The Coal Handling Shed, 2024 (Chris Bennett: Evolving Picture).



The Coal Handling Shed and External Conveyor is located at the northeast corner of the site, as shown in the following diagrams.

1.1 FUNCTION

The Coal Handling Shed's function was to receive coal deliveries from railway or road transport, grade, clean, and store the coal, and then transfer the coal into the overhead coal bunkers in the Boiler House.

1.2 HISTORY

The Coal Handling Shed and External Conveyor was constructed as part of the third phase of construction and completed in 1953. The Coal Handling Shed facilitated the Coal Handling System aspect of the power station's operations.

Based on drawings by the Department of Railways, New South Wales, dated 10 April, 1947, the Coal Handling Shed was designed to be extended south by another eight hoppers and explains the half structural bay at the south end of the shed. A Dry Coal Storage area was formerly located on the east side of the building and consisted of a steel truss lean-to roof supported from the east columns of the Coal Handling Shed and spanned to a row of nine columns further east which has since been removed. Based on photographs, the Dry Coal Store was roofed and was opened on the north, south, and east sides. Based on early plans, the size of the Dry Coal Store is shown as 160' long and extends east by 50' (48.7m x 15.2m). The date for demolition of the Dry Coal Store is unknown, but the building is visible on the 1975 aerial and removed on the 1986 aerial which

places its removal within the period when the power station was decommissioned in 1984.

The last use of the Coal Handling Shed was in 1983 before it was decommissioned. Major restoration works were carried out in 2022–24 to address corroded cladding, structural and safety issues and are discussed further in this section.

1.3 SPATIAL REFERENCES

The Coal Handling Shed comprises the following spaces:

| Spaces | Ref. |
|--|--------|
| Basement 3 (lower) | CH B.3 |
| Basement 2 (mid) | CH B.2 |
| Basement 1 (conveyor) | CH B.1 |
| Basement Mezzanine (walkway) | CH BM |
| Ground Floor – South | CH G.1 |
| Ground Floor – North | CH G.2 |
| Ground Floor – Coal Crushers and Elevators | CH G.3 |
| Ground Floor – Control Room | CH G.4 |
| Level 1 – Short Elevator Motor Platform | CH 1.1 |
| Level 2 | CH 2.1 |
| Level 3 – Transfer House | CH 3.1 |
| Level 4 – Tower Level | CH 4.1 |

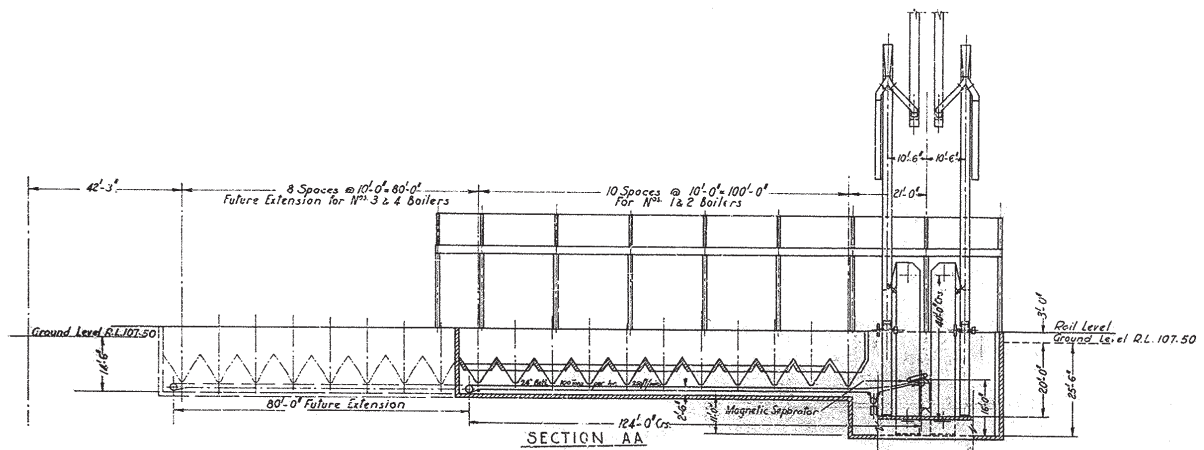
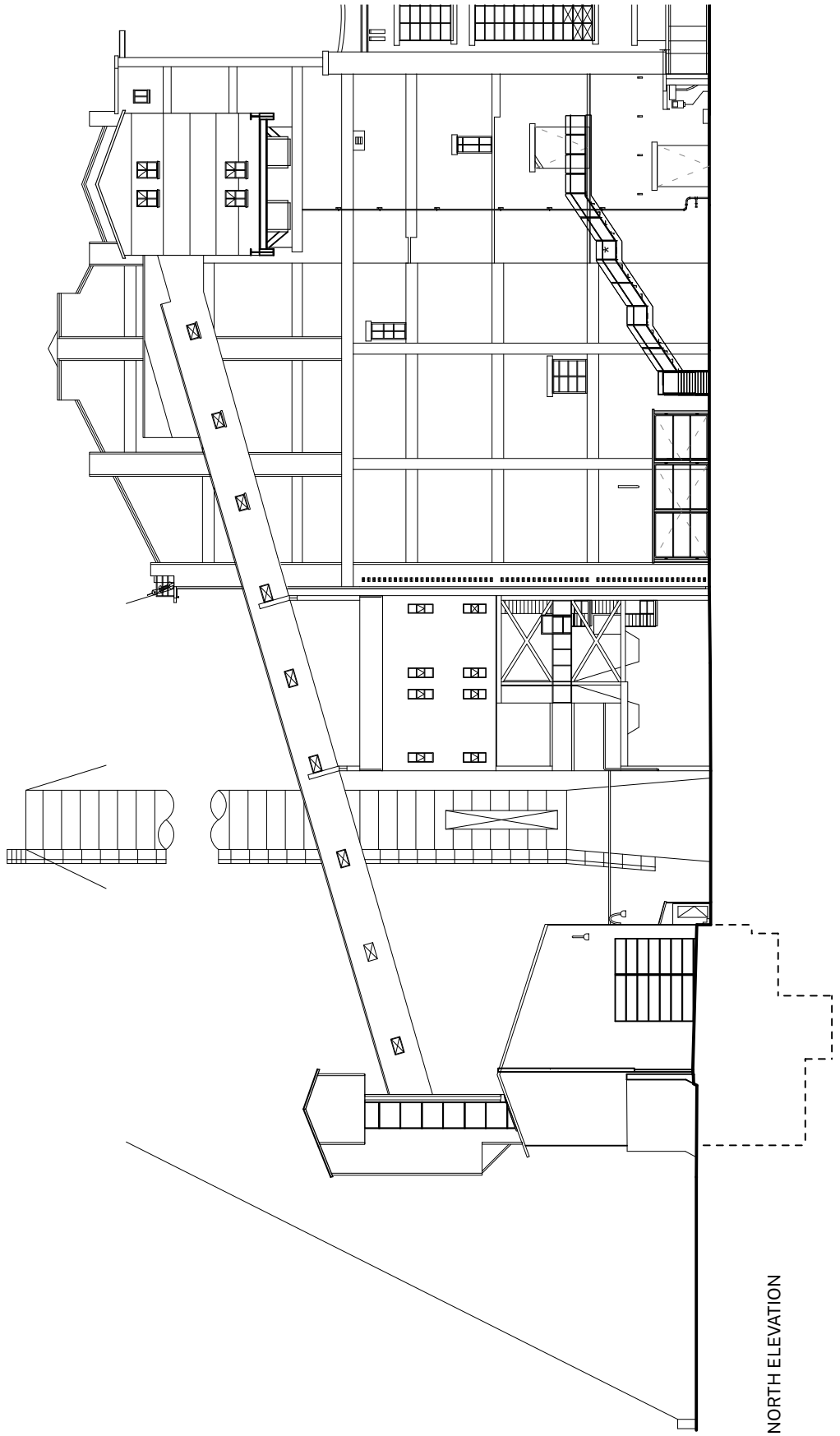
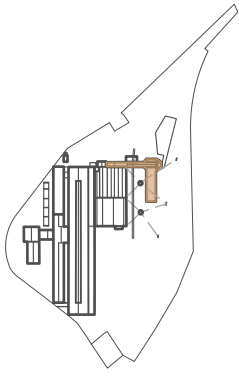


Figure 1.2 Excerpt of Archival Drawing, 10 April, 1947, showing the plans to extend the Coal Handling Shed (Department of Railways, NSW).

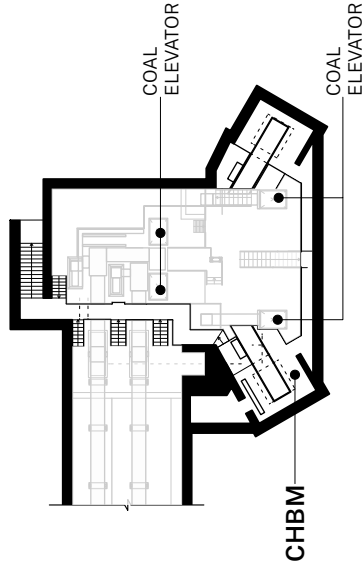
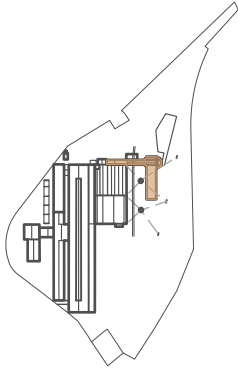
COAL HANDLING SHED



NORTH ELEVATION

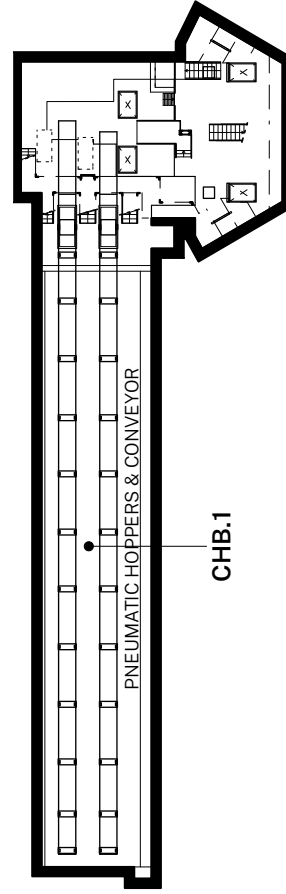
Figure 1.3 Coal Handling Shed north elevation.

COAL HANDLING SHED

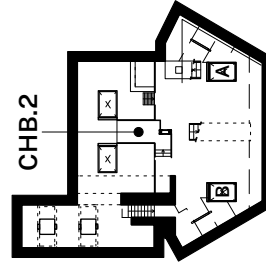


**COAL HANDLING SHED
BASEMENT MEZZANINE PLAN (-0.5)**

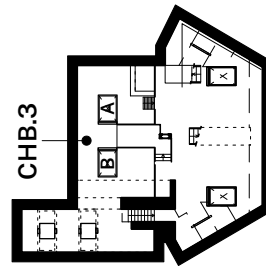
**COAL HANDLING SHED
BASEMENT MEZZANINE PLAN (-0.5)**



**COAL HANDLING SHED
BASEMENT 1 LEVEL PLAN (-2)**



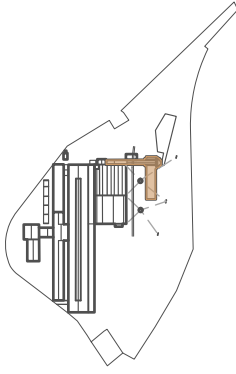
**COAL HANDLING SHED
BASEMENT 2 LEVEL PLAN (-4)**



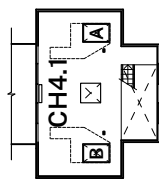
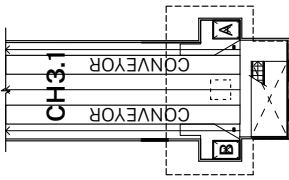
**COAL HANDLING SHED
BASEMENT 3 LEVEL PLAN (-6)**

Figure 1.4 Coal Handling Shed Basement plans.

COAL HANDLING SHED



CONT. TO BOILER HOUSE



COAL HANDLING SHED
LEVEL 4 PLAN (+25)

COAL HANDLING SHED
LEVEL 3 PLAN (+19)

COAL HANDLING SHED
LEVEL 2 PLAN (+10)

COAL HANDLING SHED
LEVEL 1 PLAN (+7)

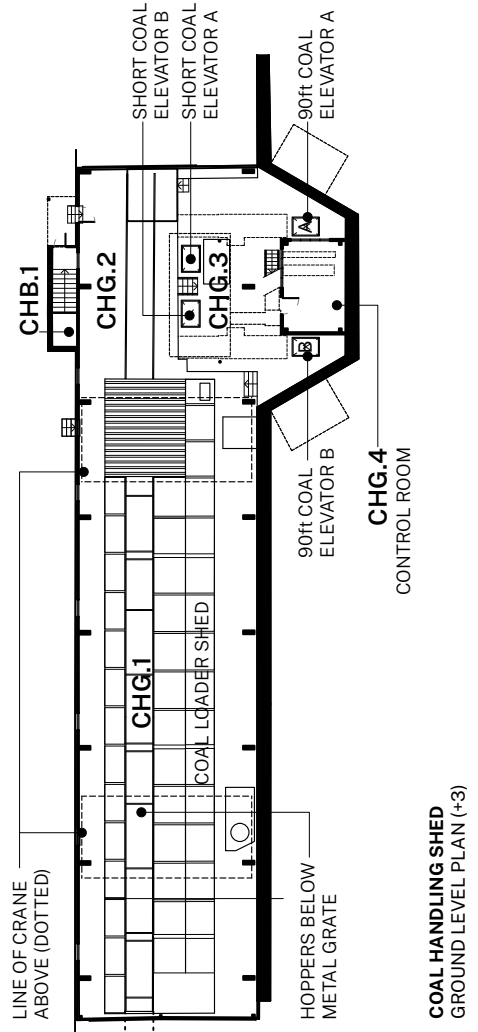
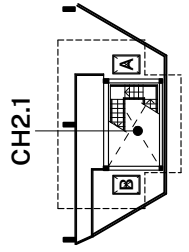
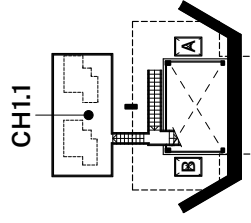


Figure 1.5 Coal Handling Shed Ground Floor, Levels 1, 2, 3, and 4 plans.

1.4 DESCRIPTION

1.4.1 General

The Coal Handling Shed and External Conveyor is located at the eastern edge of the White Bay Power Station complex. The building is approximately 45 metres long and 10 metres wide, steel-framed and clad with corrugated galvanised steel and a concrete wall along its east elevation. The building comprises a basement, a large ground floor space for the receiving of coal, railway tracks, coal crushers, elevators, and overhead cranes. At a high level, the building contains intermediate levels and a Transfer House which connects with the Boiler House by a steel-framed and corrugated galvanised steel-clad External Conveyor. Evidence of the now demolished Dry Coal Store still exists on the east elevation of the Coal Handling Shed.

1.4.2 Basement Level (Coal Bunker)

The basement is accessed by a stair adjacent to the northwest corner of the coal loader plaza and is about the same area footprint as the ground floor spaces. The walls and floors are off-form concrete while the ceilings are a combination of off-form concrete and steel riveted beams. The basement contains two main spaces, including the conveyor space (CH B.1) containing two longitudinal conveyors, the underside of the hoppers and pneumatic feed gates. The second space is the north end and contains the north end of the conveyors, conveyor motors, elevator bases (Short Elevator and 90-Foot Elevator), coal chutes, and pump-out pit (CH B.1, B.2, and B.3). The basement is around eight metres (8m or 25'6") in depth (measured from outside ground level to B.3) and contains three levels plus a mezzanine level (CH BM).

The space containing the Conveyors is a long rectangular room with limited head height and contains two conveyors running longitudinally. The Conveyors are the fabric belt type and about 800mm wide supported on steel rollers and powered by electric motors at the north end. Over the top of each conveyor is a line of eleven steel pneumatic feed gates which are bolted to the underside of the concrete Hoppers (a total of twenty-two pneumatic gates). The Pneumatic Gates are hand-operated by a lever and would control the flow of coal onto the long Conveyors from the Hoppers above. They are accessed by walkways that run longitudinally along the length of the conveyor (two walkways on each side and one in the middle), which are in turn accessed by three stairs from the entry mezzanine level at the north end. At the south end of

CH B.1 is a vertical ladder that connects with the south forecourt.

The north end of the Basement contains three levels plus a mezzanine including machinery and equipment described above. The B.1 space includes the northern end of the two conveyors, each consisting of conveyor motors and transfer conveyors which feed into two Short Elevators. The short elevators extend to ground level where the coal is crushed and transferred to two chutes that transfer the coal to the base of the 90-Foot Elevators at the east end of Basement 2. At the north and south ends of the eastern mezzanine space are two additional hoppers that connect to their own set of pneumatic feed gates and conveyors. Both Conveyors connect direct to the north and south 90-Foot Elevators and would accept coal direct via truck from the Dry Coal Store which was located east of the building.

1.4.3 Ground Level

The ground level contains the main coal-receiving machinery at the south end including the top of the hoppers, screens, cranes, and associated grabs while the north end includes the elevators, coal crusher and control room.

The north and south walls were originally open to allow the entry and exit of railway coal wagons. As part of the 2022-24 works, the south wall was modified to accommodate a pair of steel gates with clear polycarbonate cladding while the north wall is clad with clear polycarbonate. The east wall is off-form concrete which separated the shed from the dry coal store,

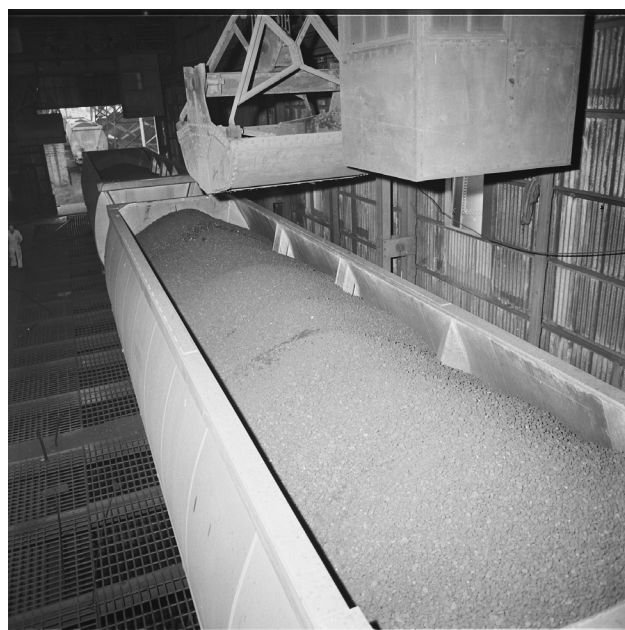


Figure 1.6 Coal wagons in the Coal Handling Shed, 1967 (courtesy of NSW State Archives, NRS-20347-1-21-7285_J).

formerly located to the east of the building. The west wall is clad with corrugated steel with three entry doors along the length.

A single set of railway tracks enter the building from the south end and would have originally run through the building but at some stage, a series of heavy rails were laid transversely across the rail tracks preventing travel through. They are supported by massive steel plate girders which run the length of the building below ground level. On either side of the tracks are large mesh screens that form a continuous floor at ground level and are bordered by concrete hardstand on the east and west sides. Beneath the screens are the concrete coal Hoppers which are connected to the conveyors in the basement. Approximately two-thirds way along the eastern side of the space is the Capstan, which is a large round bollard approximately 800mm in diameter at the base and contains a motor and gearbox beneath the floor level accessed by a chequer plate.

A feature of the main space is the two overhead Cranes and associated Grabs. These are supported by twin I-beam columns with longitudinal I-beams supporting continuous rail tracks for the travelling cranes. The cranes themselves consist of four wheels, which run on the rails and two large plate-web girders supporting the structure. A control cabin is slung underneath and accessed by a small hatch and ladder from the top. Each crane contains grabs which are large clam buckets connected by a series of cables and pulleys for operation.

The north end of the ground floor space contains the top portion of the Short Elevators (CH G.3) extending from the basement level which contains motors and gears at the top accessed by stairs and platform (CH 1.1). East of the Short Elevators is the Control Room (CH G.4) and part of the 90-Foot Elevators extending from the basement to the Transfer House. The Control Room is a small shed clad with corrugated steel and contains control equipment for the building.

As detailed in the History section, the receiving coal stores comprised a large open area on the east side of the present Coal Handling Shed. Now demolished, it was an open-sided shelter attached to the eastern side of the Coal Handling Shed, provided covered storage for a reserve of dry coal. Physical evidence for the Dry Coal Shed structure includes:

- The top chord of the steel trusses is cut at the top of the east columns.
- Steel skeletal frame (columns and rails) extending from the east side of the north elevation.

- High-level door opening on the east elevation and removed walkway (struts clad with steel).
- The concrete wall on the lower section of the east elevation, two external coal hoppers at the base of the east wall and a concrete slab.
- Remnant external coal chutes on the underside of the Coal Handling Shed Tower.

1.4.4 Transfer House

The Transfer House is accessed by stairs from CH G.3 and accesses intermediate platforms CH 1.1 and CH 2.1. The Transfer House is steel-framed and clad with corrugated galvanised steel and served to transfer coal from the 90-Foot Elevators to the External Conveyor connecting to the Boiler House. The stair is made up of steel stringers with solid steel treads, open risers, and steel pipe handrail and mid-rail. Above Level 2, the stairs cantilever over the east elevation to make room for a vertical hoist that extends from CH 1.1 to the top level (CH 4.1). The top level of the Transfer House is



Figure 1.7 The Dry Coal Store, 1958 (courtesy of NSW State Archives, NRS-20347-1-42-1656).



Figure 1.8 Crane and control cabin in operation, 1957 (courtesy of NSW State Archives, NRS-20347-1_001324).

a steel plate floor and contains the motors and gears for the 90-Foot Elevators and the hoist beam over the hoist void. The east and west elevations of the Transfer Tower contain window openings that were previously timber framed with timber pivot sashes. In 2022–24, the timber windows were removed due to poor condition and the openings are now clad with clear polycarbonate sheeting.

1.4.5 External Conveyor

The External Conveyor is a steel-framed structure clad with corrugated galvanised steel that connects the Transfer House of the Coal Handling Shed to the Transfer House on the north elevation of the Boiler House. The structure is supported midway by steel beams and columns at the Ash Handling Shed. The floor of the structure is timber floorboards supported

on timber joists that span approximately four metres between structural steel bays. The north and south elevations contain a series of equally spaced window openings which were originally timber framed but these frames were removed in 2022–24 due to poor condition and the openings clad with clear polycarbonate.

The actual conveyors are rubber and fabric belts supported on steel rollers and beams spanning the structural bays of the External Conveyor. The conveyor motors, gears, and tension roller are housed at the top of the External Conveyor inside the second Transfer House attached to the east side of the Boiler House. Along both sides of each conveyor and through the middle is a timber walkway with battened footholds due to the inclined slope. In 2022–24, an aluminium metal walkway, handrail, and lights were installed along the middle walkway for safe access and regular inspections.



Figure 1.9 Coal Handling Shed connecting to Transfer House with External Conveyor, 2024 (courtesy of Toby Peet)

1.5 ALTERATIONS & CONDITION

Following the decommissioning of White Bay Power Station in 1983, the Coal Handling Shed's corrugated galvanised steel cladding became heavily corroded and was no longer serving as a weatherproof enclosure. The building's structure and equipment suffered from water ingress and associated corrosion damage and loss of structural integrity in some areas. The coal bunker (basement) was gradually filled with water due to ground water seepage and up until May 2022, was fully submerged to the height of approximately two metres below ground level. Other threats to the space include pigeon and pest entry and to a lesser extent, vandalism.

The 2022–24 remediation works for the Coal Handling Shed have focussed on essential maintenance, restoration, and preservation. This includes re-cladding, structural remediation, bird proofing, draining water from the basement, and stabilising and treating for corrosion. Other works have included safety, security, and lighting. These are discussed in general terms below:

| Element / Room | Reference |
|---|---|
| Columns CH G.1, CH G.2, CH G.4 | Where required due to corrosion and section loss, column bases have been replaced including some double columns along the west wall and two columns inside the Control Room (base of the Transfer House). Evidence of replacements includes splice welds and bolted plate connections using hexagonal bolts as opposed to the domed riveted connections for the original. |
| Steel cladding External | All of the original steel cladding has been replaced with corrugated galvanised steel in 3m lengths. Due to the use and function of the building, the original cladding was not intended to provide full weather protection, and some detail modifications were required: <ul style="list-style-type: none"> • Weathering and flashing details at corners, connections, and penetrations were modified. • All cladding rails were labelled, removed, cleaned to bare metal and painted. They were then reinstalled with additional hardwood battens for fixing of cladding. • Original fixing used threaded rods that were pre-drilled direct to the steel cladding rails and fixed off using a nut and a lead washer. Recladding used modern hexagonal roofing screws (self-drill) with neoprene washers. • Where required, some additional structural supports have been added. |
| Roof replacement All areas | The roofs of the Coal Handling Shed and the Transfer House were replaced using corrugated Colorbond roofing in continuous lengths. The original detail was modified by adding new C-Section purlins bolted to existing roof purlins so that modern self-drilling roof fixings can be used. Blanket insulation and sarking were also installed for condensation and acoustic reasons. It is noted that the roof was not original and likely previously replaced in the 1980s or 1990s. For the External Conveyor, the roof was replaced in 2015 and was therefore retained in 2022–24. |
| Basement CH B.3 | The basement was drained of water and cleaned of sediment debris using high-pressure washing. Following washing, the area was assessed and in situ structural steel repairs and patching were carried out to the coal elevators, overhead beams, and additional supports added for the coal chutes. The exposed steel elements were treated and stabilised by the application of tannic acid and Penetrol. Lighting has been installed and a system to pump out water from the ground was planned at the time of preparing this inventory. |
| The 90-Foot Elevators CH B.3 and Transfer House | The bottom two-thirds of the north and south ninety-foot elevators are internal to the building but are exposed between the roof of the Coal Handling Shed and the top floor of the Transfer House. As a result, the elevators, particularly the south, have undergone severe corrosion and section loss. |

| Element / Room | Reference |
|--|---|
| <p>The 90-Foot Elevators (cont.)</p> <p>CH B.3 and Transfer House</p> | <p>The external part of the south elevator has been dismantled and removed but retained below the roof level. The north elevator is fully retained but the exposed portion between the roof and the top level of the Transfer House is fully clad using corrugated galvanised steel sheets set in the horizontal direction. The cladding is repeated for the former south elevator for interpretation and to retain symmetry.</p> <p>The coal handling buckets to the south elevator were removed and are currently stored.</p> |
| Windows | <p>Timber-framed windows on the Transfer House and External Conveyor were removed and the openings were replaced with clear corrugated polycarbonate cladding due to condition safety. Before the 2022–24 works, the windows were original and covered using clear acrylic sheets.</p> |
| South Elevation | <p>The north and south elevations were originally open to allow the passage of coal rail cars to pass through. Sometime before the 2004 CMP, both these walls were closed using temporary framing and ad-hoc corrugated sheets. In 2022–24 works, new steel-framed and polycarbonate-clad gates were installed on the south elevation (using evidence of the previous opening). The north wall is clad using clear polycarbonate sheets.</p> |
| External Conveyor | <p>Works include:</p> <ul style="list-style-type: none"> • Painting of external steelwork to encapsulate lead paint and to provide a protective barrier. • Timber floor repairs due to rot and termite damage. Works included replacement or reinforcement of timber joists (by bolting new joists to existing ones) and replacement of floorboards where required. • Recladding external corrugated metal sheets and windows (refer to steel cladding external). • Minor bird proofing using mesh barriers. • Installation of internal lights and a safe walkway. |

1.6 SIGNIFICANCE

The Coal Handling Shed is an integral part of the White Bay Power Station and has historical associations with the electrification of the Sydney rail and tramways systems. It is a technological feat and rare demonstration of the changing patterns of materials handling that can yield information on the development of the less labour-intensive practices of the post-war period. The Coal Handling Shed demonstrates the fuel requirements of power stations in metropolitan areas and illustrates the necessity for the placement of the early power station system close to consumers rather than on the coalfields as was later practice.

The building and its associated machinery are demonstrative of engineering design principles and is physical evidence of the generation of electricity from

the mid-twentieth century. The Coal Handling Shed is a core facilitator of the Coal Handling System and is also an evocative series of structures whose external features are representative of the industrial milieu.

Internally, the Coal Handling Shed demonstrates an industrial aesthetic through the various extant equipment and machinery, most of which remains in place and offers strong interpretability. As a prominent building at the northeast corner of the site, connected to the main complex by the External Conveyor, it has an important and iconic role in the visual identification of the White Bay Power Station. It is symbolic of the industrial history of Sydney Harbour, and together with the neighbouring chimney stacks, the Coal Handling Shed contributes to the landmark qualities of the place, and contributes to the social significance of the White Bay Power Station as a building valued by many in the locality.

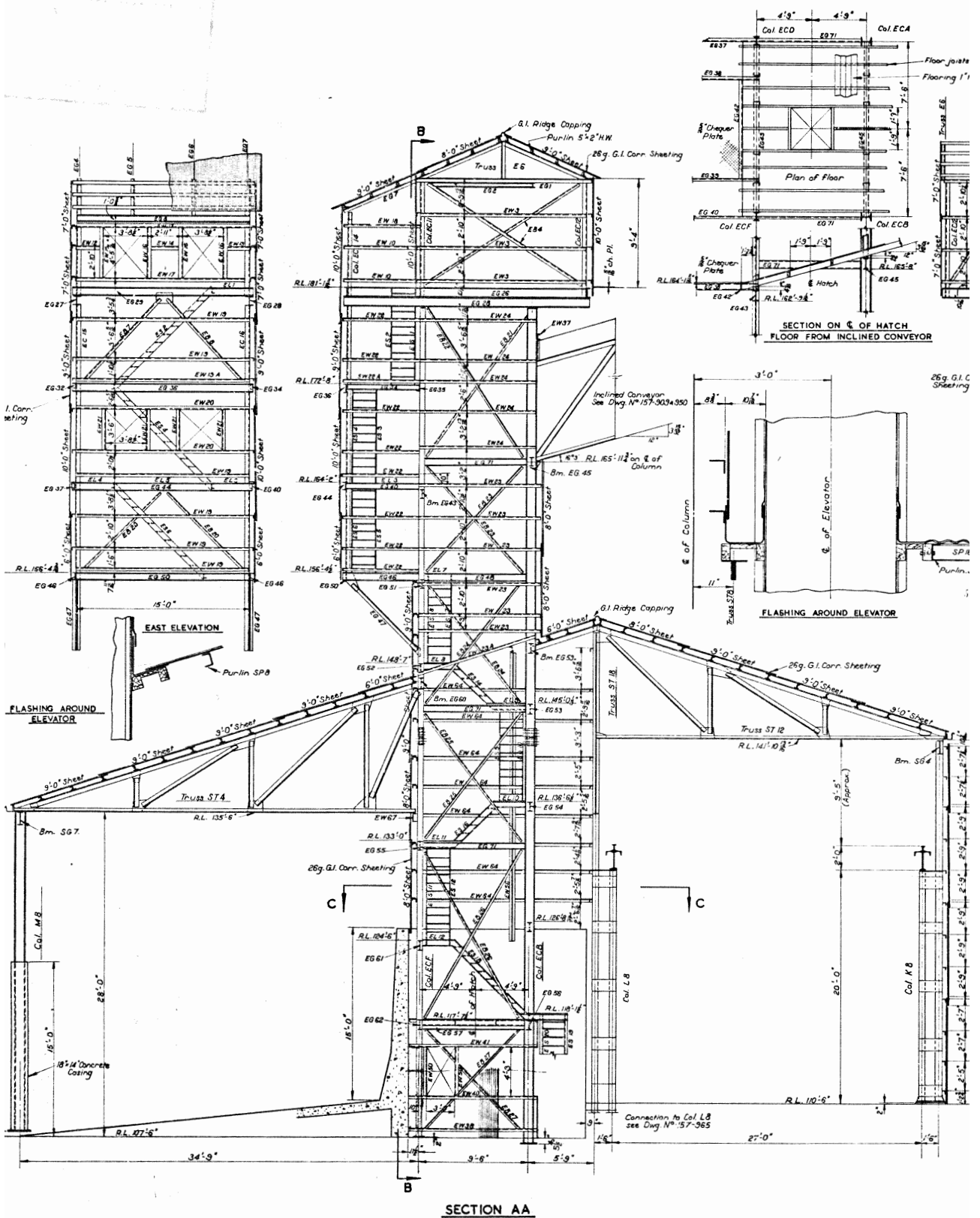


Figure 1.10 Excerpt of archival drawing, showing section of Coal Handling Shed, 1950 (courtesy of PMNSW Archive, 12020)

1.7 REFERENCE TO POLICIES


The Coal Handling Shed (and External Conveyor) is an integral part of the White Bay Power Station. The following policies from the CMP are relevant to the Coal Handling Shed and should guide its ongoing care and management, including decisions about conservation, future use, and development.



Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.


| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.13 | Coal Handling Shed and External Conveyor |
| 6.14 | Coal Handling Shed Basement |
| 6.15 | Coal Handling Shed cladding |
| 6.16 | Dry Coal Store |
| Tolerance for Change Table 6.6.5.1 and Opportunities for Change Table 6.6.5.2 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 11.3 | New Structure – Dry Coal Store |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |

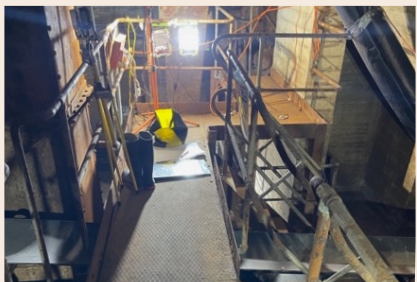


1.8 INVENTORY OF SPACES

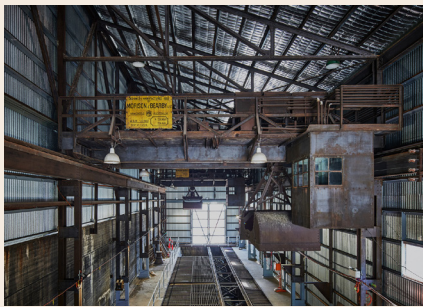
This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.

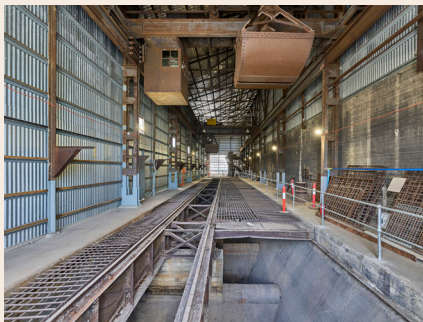
| Room / Item | Basement 3 (lower) | |
|--------------|--|--|
| Building | Coal Handling Shed | |
| Room No. | CH B.3 | |
| Significance | 1-Exceptional | |
| Description | <p>Bottom level of Coal Handling Shed basement accessed by concrete stairs from B.2 level. The space is fully enclosed in concrete walls and contains the base of the short elevators the Coal Handling Shed's pump out pit for water. It also contains the tension rollers for the long conveyors.</p> <p>The space was fully submerged until May 2022 when water was drained, the space was cleaned, and the equipment was repaired and treated with a rust converter.</p> | |
| |  | |
| | (courtesy of Toby Peet, 2024) | |
| Elements | General Description | |
| Floor | Concrete floor and concrete stair to B.2. A dish drain is located along the east wall with sediment pit and pump out pit in the northeast corner. | |
| Walls | Off-form concrete | |
| Ceiling | Refer to B.1 | |
| Lighting | Wall lighting remains with surface-mounted steel conduits, but is non-operable. | |
| Machinery | Tension roller for Conveyors (1.5) Base of the Short Elevators (1.6) | |


| | | |
|---------------------|--|---|
| Room / Item | Basement 2 (mid) | |
| Building | Coal Handling Shed | |
| Room No. | CH B.2 | |
| Significance | 1-Exceptional | |
| Description | <p>This is the base of the 90-Foot Elevators and includes off-form concrete walls and floor. The space is accessed by steel stairs from the B.1 to the west or from the mezzanine to the east. Access to B.3 is by steel stair or concrete stair in the southwest corner.</p> <p>The space was fully submerged until May 2022 when water was drained, the space was cleaned, and the equipment was repaired and treated with a rust converter.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>(Design 5 - Architects, 2023)</p> |
| Elements | General Description | |
| Floor | Concrete floor and concrete stair to B.3. | |
| Walls | Off-form concrete | |
| Ceiling | Refer to B.1 | |
| Lighting | Wall lighting remains with surface-mounted steel conduits. | |
| Machinery | Tension roller for Conveyors (1.5) Base of the 90-Foot Elevators (1.8) | |

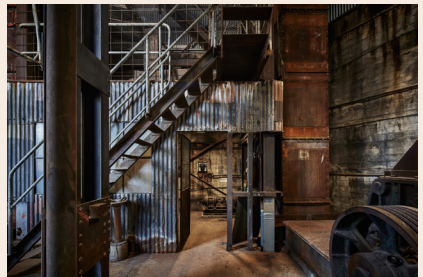

| | | |
|---------------------|---|--|
| Room / Item | Basement 1 (conveyor) | |
| Building | Coal Handling Shed | |
| Room No. | CH B.1 | |
| Significance | 1-Exceptional | |
| Description | <p>The basement floor of the Coal Handling Shed was used for receiving sorted coal for transport to the Short Elevators via the Conveyors. The space contains the Pneumatic Feed Gates to the underside of the Hoppers, the Conveyors, and conveyor motors at the north end.</p> <p>The space was fully submerged until May 2022 when water was drained, the space was cleaned, and the equipment was repaired and treated with a rust converter.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete sloping from south to north. Access by steel stairs and platforms. Concrete drain along the east wall. | |
| Skirting | No skirtings | |
| Walls | Off-form concrete | |
| Ceiling | The underside of hoppers and steel pneumatic gates. The north end is off-form concrete with steel riveted plated beams. | |
| Lighting | Former dish lighting and wall lighting remain with surface-mounted steel conduits. New lighting installed in 2022. | |
| Machinery | Hoppers and Pneumatic Feed Gates (1.1) Conveyors (1.5) Short Elevators and Motors (1.6) | |


| | | |
|---------------------|---|---|
| Room / Item | Basement Mezzanine | |
| Building | Coal Handling Shed | |
| Room No. | CH BM | |
| Significance | 1-Exceptional | |
| Description | <p>Entry level to the basement accessed by concrete stair at the northeast corner. Steel walkways and stairs provide access to the B.1 level. Walkways on the eastern side of the space overlook lower levels. At the north and south ends of the east mezzanine space are two additional hoppers that connect to their own set of pneumatic feed gates and conveyors. Both conveyors connect direct to the north and south 90-Foot Elevators and would accept coal direct via truck from the Dry Coal Store which was located east of the building.</p> <p>The space was fully submerged until May 2022 when water was drained, the space was cleaned, and the equipment was repaired and treated with a rust converter.</p> |  <p>(Design 5 – Architects, 2023)</p>  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>(courtesy of Toby Peet, 2024)</p> |
| Elements | General Description | |
| Floor | Metal check plate flooring with handrails and stairs accessing B.1 level. The east side of includes concrete walkways with drainage channels. | |
| Walls | Off-form concrete | |
| Ceiling | Off-form concrete with steel riveted plated beams. Underside of hoppers and pneumatic feed gates at the north and south sides. | |
| Lighting | Former dish lighting and wall lighting remain with surface-mounted steel conduits. New lighting installed in 2022. | |
| Machinery | Machinery associated with coal from the former Dry Coal Store: Hoppers and Pneumatic Feed Gates (1.1) Conveyors (1.5) | |


| | | |
|--------------------------|---|---|
| Room / Item | Ground Floor Coal Handling Shed (south) | |
| Building | Coal Handling Shed |  <p>Looking south from Mezzanine (courtesy of Toby Peet, 2024)</p> |
| Room No. | CH G.1 | |
| Significance | 1-Exceptional | |
| Description | <p>The ground floor of the Coal Handling Shed was used for receiving coal from lorries and delivery wagons and sorting / grading the coal with the Screens and Hoppers before sending it along the Conveyors to the Elevators in the basement.</p> <p>The extant machinery and equipment here highlight the ground floor space as containing the beginning and intermediate stages of coal handling at the power station.</p> | |
| Elements | General Description | |
| Floor | Concrete along east and west walls surrounding mesh screens with rail line. | |
| Walls | <p>Concrete wall on east side to 4m (approx.) height; corrugated steel extending above to roof level. Steel lattice columns along the east and west walls supporting gantry cranes and external wall cladding.</p> <p>External wall cladding on all sides consist of galvanised steel fixed to hardwood battens over original steel cladding rails. Some column bases on west wall were replaced in 2022-24.</p> | |
| Ceiling | <p>Roof replaced in 2022-24.</p> <p>Steel trusses with metal sheet roofing and sarking. Pendant dish lights.</p> | |
| Doors and Windows | <p>Original doors repaired and painted in 2022-24.</p> <p>New steel-framed and polycarbonate clad gate on south elevation.</p> <p>Two steel-framed and steel sheeted doors on the west elevation.</p> <p>South wall contains a large steel-framed double gate and clad externally with polycarbonate (2022).</p> <p>High level windows on the west elevation with square mesh and polycarbonate cladding external.</p> | |
| Lighting | <p>Former pendant dish lights from ceiling.</p> <p>New temporary lighting and catenary wires installed 2022-24.</p> | |
| Other | Handrails around screens and safety walkway at south end installed in 2022-24. | |
| Machinery | <p>The Capstan (1.2)</p> <p>Two Cranes and Grabs (1.3)</p> <p>The Screens (1.4)</p> | |


| | | |
|--------------------------|---|---|
| Room / Item | Ground Floor Coal Handling Shed (north) | |
| Building | Coal Handling Shed | |
| Room No. | CH G.2 | |
| Significance | 1-Exceptional | |
| Description | <p>The ground floor of the Coal Handling Shed was used for receiving coal from lorries and delivery wagons and sorting / grading the coal with the Screens and Hoppers before sending it along the Conveyors to the Elevators in the basement.</p> <p>The north end of this space is continuous with the south main hall and contains the entrance door (northwest corner) concrete floor and north-south rail tracks.</p> |  <p>Looking north, (courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with rail line set in running north-south. | |
| Walls | <p>Some column bases on west wall replaced 2022-24. Steel cladding replaced and cladding rails treated and painted. No walls on east and south as these are shared with adjacent spaces G.2 and G.3. Section of concrete wall on west side part of stair to the basement. Steel lattice columns along the west wall supporting gantry cranes and external wall cladding. External wall cladding consists of galvanised steel fixed to hardwood battens over original steel cladding rails.</p> | |
| Ceiling | <p>Roof replaced in 2022-24. Steel trusses with metal sheet roofing and sarking. Pendant dish lights.</p> | |
| Doors and Windows | <p>Original door repaired and painted in 2022-24. One steel-framed and steel sheeted door on the west elevation. High level windows on the west elevation with square mesh and polycarbonate cladding external.</p> | |
| Lighting | <p>Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed 2022-24.</p> | |
| Other | Handrails to G.1 and G.3 added in 2022-24. | |


| | | |
|---------------------|--|--|
| Room / Item | Coal Crushers and Elevators | |
| Building | Coal Handling Shed | |
| Room No. | CH G.3 | |
| Significance | 1-Exceptional | |
| Description | <p>The space contains the first stage Coal Crushers and Coal Elevators. The space is set approximately 1m lower than the adjacent ground floor spaces G.1 and G.2. The space is accessed via concrete stairs from the G.2 to the west and G.1 to the north,</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Suspended concrete floor with steel check plate in some sections covering penetrations for machinery and basement beneath. | |
| Walls | <p>Some column bases on west wall replaced 2022-24. Steel cladding replaced and cladding rails treated and painted. No walls on south and west these are shared with adjacent spaces G.1 and G.2. Concrete wall on east side to 4m (approx.) height; corrugated steel extending above to roof level. External wall cladding consists of galvanised steel fixed to hardwood battens over original steel cladding rails.</p> | |
| Ceiling | <p>Roof replaced in 2022-24 Steel trusses with metal sheet roofing and sarking. Pendant dish lights</p> | |
| Lighting | <p>Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022-24.</p> | |
| Machinery | <p>The Short Elevators and Motors (1.6) Coal Crushers (1.7) The 90-Foot Elevators (1.8)</p> | |

| | | |
|--------------------------|--|---|
| Room / Item | Control Room | |
| Building | Coal Handling Shed |  <p>(courtesy of Toby Peet, 2024)</p>  <p>(Design 5 - Architects, 2023)</p> |
| Room No. | CH G.4 | |
| Significance | 1-Exceptional | |
| Description | The Coal Handling Control Room is located between the 90-Foot Elevators and behind the Coal Crushers on the ground floor level. The room is a steel and timber framed and corrugated steel-clad shed located inside the Coal Handling Shed and accessed by a door from the G.3. The space contains the control panels and cabinet for the coal handling operations (refer to machinery inventory). | |
| Elements | General Description | |
| Floor | Concrete floor | |
| Walls | Steel and timber frame with corrugated steel cladding on the north, south, and west. East wall is the external concrete wall. | |
| Ceiling | Steel plate | |
| Doors and Windows | Steel-framed door. Steel window and glass on south and west elevation. | |
| Lighting | Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed 2022-24. | |
| Other | Control equipment and switch boards. | |
| Machinery | The Short Elevators and Motors (1.6) Coal Crushers (1.7) The 90-Foot Elevators (1.8) The Coal Handling Control Room (1.13) | |
| Movable heritage | Plastic boxes contain movable heritage. | |

| | | |
|---------------------|---|---|
| Room / Item | Level 1 – Short Elevator Motor Platform | |
| Building | Coal Handling Shed |  |
| Room No. | CH 1.1 | |
| Significance | 2 – High | |
| Description | Steel-framed and steel check plate floor with pipe handrails accessed by stair to Transfer House. | |
| | | (Design 5 – Architects, 2023) |
| Elements | General Description | |
| Floor | Steel check plate floor | |
| Walls | Steel pipe handrails with mid-rail. | |
| Ceiling | Refer to CH G.3 | |
| Lighting | Refer to CH G.3 | |
| Machinery | The Short Elevators and Motors (1.6), top shroud removed. | |

| | |
|--------------------------|---|
| Room / Item | Level 2 |
| Building | Coal Handling Shed |
| Room No. | CH 2.1 |
| Significance | 3 – Moderate |
| Description | <p>Steel-framed and steel check plate floor with pipe handrails accessed by stair to Transfer House. The space has a penetration in the middle for a hoist and two motors. A steel-framed and steel check plate walkway provides access to an opening on the southeast wall which would have overlooked the Dry Coal Store.</p> |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description |
| Floor | Steel check plate floor |
| Walls | Cladding replaced in 2022–24. Steel pipe handrails with mid-rail. External steel cladding on east wall. |
| Ceiling | No ceiling – stair to Transfer Tower. |
| Doors and Windows | At higher level, two windows on the west elevation removed and clad externally with polycarbonate sheets. Former timber windows were central pivot sash with two panes frosted wire glass. |
| Lighting | Original lights fixed from beams remain with surface-mounted steel conduits. New light fittings installed in 2022–24. |

| | | | |
|--------------------------|--|---|---|
| Room / Item | Level 3 – Transfer House | | |
| Building | Coal Handling Shed |  | |
| Room No. | CH 3.1 | | |
| Significance | 3 – Moderate | | |
| Description | Steel-framed and steel check plate floor with pipe handrails accessed by stair. The space contains the External Conveyor which leads to the Boiler House's Transfer House. | | |
| | | | (courtesy of Chris Bennett: Evolving Picture, 2024) |
| Elements | General Description | | |
| Floor | Steel check plate floor | | |
| Walls | External steel cladding on east wall. Cladding replaced in 2022–24. | | |
| Ceiling | No ceiling – stair to Tower Level (CH 4.1) | | |
| Doors and Windows | At higher level, two windows removed. Formerly timber window with centrally pivot sash with two panes frosted wire glass. | | |
| Lighting | Original lights fixed from beams remain with surface-mounted steel conduits. New light fittings installed in 2022–24. | | |
| Machinery | External Conveyor (1.10) | | |

| | | |
|--------------------------|--|--|
| Room / Item | Level 4 – Tower Level | |
| Building | Coal Handling Shed |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | CH 4.1 | |
| Significance | 3 – Moderate | |
| Description | Steel-framed and steel check plate floor with pipe handrails accessed by stair. The space contains the motors for the top of the 90-Foot Elevators. | |
| Elements | General Description | |
| Floor | Steel check plate floor Central penetration for hoist | |
| Walls | Steel and timber frame with corrugated steel cladding on the north, south, and west. East wall is the external concrete wall. Cladding replaced in 2022–24. | |
| Ceiling | Steel roof sheeting was replaced 2022–24. Corrugated Colorbond roof on original timber battens and rafters. | |
| Doors and Windows | Two windows on the east and two windows on the west elevation removed and sheeted over with polycarbonate sheet. Former timber windows were central pivot sash with two panes frosted wire glass. | |
| Lighting | New light fittings installed in 2022–24. Retained original dish lights on the ceiling. Lights fixed from beams remain with surface-mounted steel conduits. | |
| Machinery | Top of the 90-Foot Elevators (1.8), shrouds removed. | |
| Movable heritage | Shrouds from elevators Some removed timber window sashes are stored. | |

1.9 INVENTORY OF MACHINERY

This section aims to provide an overarching understanding of the extant machinery concerning the buildings and spaces, as well as their role in the operational systems at the White Bay Power Station. The information below is based on the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report prepared by Godden Mackay Logan (May 2003) for the first edition of the Conservation Management Plan. Refer to Volume 3, Appendix D for the full GML report.

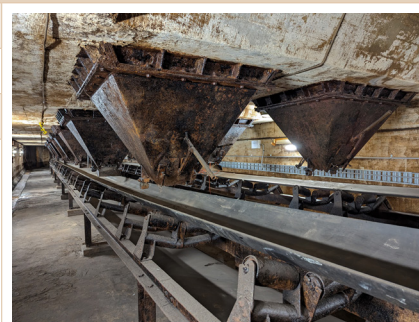
The machinery located within the Coal Handling Shed (and External Conveyor) is listed below:

Summary of Machinery




| Machinery | Location | System | Vol. 3 Ref. |
|----------------------------------|--|----------------------|-------------|
| Hoppers and Pneumatic Feed Gates | Basement 1 (CH B.1) | Coal Handling System | 1.1 |
| The Capstan | Ground Floor (CH G.1) | Coal Handling System | 1.2 |
| Two Cranes and Grabs | Ground Floor (over) (CH G.1) | Coal Handling System | 1.3 |
| The Screens | Ground Floor (CH G.1) | Coal Handling System | 1.4 |
| Conveyors | Basement 1 (CH B.1) | Coal Handling System | 1.5 |
| Short Elevators and Motors | Basement 1 (CH B.1) Ground Floor (CH G.3) | Coal Handling System | 1.6 |
| Coal Crushers | Ground Floor (CH G.3) | Coal Handling System | 1.7 |
| The 90-Foot Elevators | All Levels at the North End | Coal Handling System | 1.8 |
| Transfer Houses and Equipment | Level 3 (CH 3.1) | Coal Handling System | 1.9 |
| External Conveyor | Level 3 (CH 3.2) | Coal Handling System | 1.10 |
| Coal Handling Control Room | Ground Floor (CH G.4) | Coal Handling System | 1.13 |

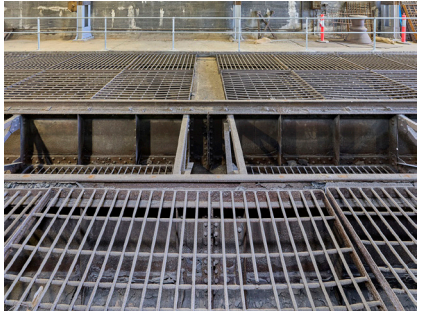

Machinery Descriptions and Significance



| Machine / Ref. | Hoppers and Pneumatic Feed Gates – 1.1 | |
|----------------|---|--|
| Location | Basement 1 (CH B.1) | |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>Coal would be lifted from the tracks and dropped onto the Screens, through which smaller pieces fell into a series of underground Hoppers, onto the Conveyors. The Hoppers are inverted square concrete pyramids with steel-clad lips and are each equipped with pneumatic feed gates which controlled the flow of coal onto the Conveyors.</p> <p>Significance</p> <p>The Hoppers and Pneumatic Feed Gates are an integral part of the Coal Handling System and are now rare examples of pre-war coal-handling technology. They are representative of screens and hoppers found in many metropolitan power stations and illustrate the processes and approaches typical of large coal-handling facilities.</p> | |







(Design 5 – Architects, 2023)

| | | |
|-----------------------|--|---|
| Machine / Ref. | The Capstan – 1.2 | |
| Location | Ground Floor (CH G.1) |  <p>(Design 5 – Architects, 2023)</p> |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>Located towards the east side of the shed, the Capstan is a massive cast iron post mounted on a central shaft coupled to a motor and gearbox located beneath the floor level accessed by the steel plate. The Capstan was used with a cable and pulley which is located at the north end near the Short Elevators. It would move the rail trucks filled with coal into the shed for unloading.</p> <p>Significance</p> <p>The Capstan, with its associated motor and gearbox, is now a rare item formerly used in many rail goods sidings. It is indicative of the traditional techniques of moving rail trucks short distances within confined areas without the use of locomotives. The Capstan is a relic of early, more time-consuming work practices.</p> | |
| | | |
| Machine / Ref. | Two Cranes and Grabs – 1.3 | |
| Location | Ground Floor (CH G.1) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>Two high-level travelling gantry cranes with clamshell grabs and associated pulleys and a control cabin. The cranes can travel north-south over the Coal Handling Shed via a continuous rail supported by steel runway girders which are in turn supported by steel lattice columns equally spaced along the east and west walls. A control cabin is slung underneath and accessed by a small hatch and ladder from the top. Each crane is manufactured in 1950 by Morison and Bearby Ltd in Newcastle, Australia and is rated at five tonnes maximum load. They were used to retrieve coal from the rail trucks for sorting and grading.</p> <p>Significance</p> <p>The Cranes and Grabs are an integral part of the Coal Handling System. The Cranes were designed and made in Sydney specifically for this location and through their size and configuration, are representative of mid-twentieth century crane technology.</p> | |
| | | |

| | | |
|-----------------------|---|---|
| Machine / Ref. | Two Screens – 1.4 | |
| Location | Ground Floor (CH G.1) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Coal Handling System | |
| Significance | 2 –High | |
| Description | <p>The Screens are located along the ground level of the Coal Handling Shed, and were used to separate large rocks or debris from the coal stream deposited from the rail trucks and lorries. The screened coal fell through through to the Hoppers in the basement below. The screens are framed from a steel flat bar on which 25mm rods are welded perpendicular to one another. They are removable, and several sections are stored on the northern side of the tracks. Several screens at the south end are stored on the east side of the tracks.</p> <p>In 2022–24, a balustrade was installed around the screens for safety.</p> <p>Significance</p> <p>The screens for the rail and lorry delivery of coal evidence the change from rail delivery to delivery by motor lorry. The grates are an integral part of the Coal Handling System and, although simple in construction and detail, are dominant features of the coal terminal and indicate its mode of operation.</p> | |
| Machine / Ref. | Conveyors – 1.5 | |
| Location | Basement 1 (CH B.1) |  <p>(courtesy of Toby Peet, 2024)</p> <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Coal Handling System | |
| Significance | 2 –High | |
| Description | <p>Two long conveyors are located in the basement (CH B.1) at the base of the Hoppers and are used to transport coal to the elevators. The two conveyors extend the full length of the basement while a second pair of smaller conveyors are located at the north end, perpendicular to the main conveyors. The conveyors are rubber belts supported on steel rollers and are powered by electric motors.</p> <p>Two further small conveyors are located on the mezzanine level located underneath the hoppers from the Dry Coal Store.</p> <p>Significance</p> <p>The Conveyors throughout the coal terminal are integral elements of the Coal Handling System and form part of the original components of the Coal Handling Shed. They evidence the means by which coal flow was regulated and directed to processing and storage points. They are representative examples of mid-twentieth century conveyor technology.</p> | |

| | | |
|-----------------------|--|--|
| Machine / Ref. | Short Elevators and Motors – 1.6 | |
| Location | Basement 3 (CH B.3), Ground Floor (CH G.1) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>Two short elevators designated “A” (north elevator) and “B” (south elevator) are located at the north end of the Coal Handling Shed and extend from B.3 to the ground level. The elevators are used to lift coal from the Conveyors and into the chutes to the Coal Crushers.</p> <p>They consist of a square shaft made up of steel plates and bolted angled connections. Internally, the shaft guides a continuous link of connected buckets, approximately 600mm wide, 300mm deep and 300mm high. The buckets contain two wheels running on a rail or guide that pass a massive cog at the top which is in turn powered by electric motors.</p> <p>Significance</p> <p>The Short Elevators and Motors are integral parts of the Coal Handling System. They evidence the use of predominantly English technology in all aspects of the power station. The items are sturdy and functional and are representative examples of post-World War II coal-elevating equipment.</p> | |
| | | |
| Machine / Ref. | Coal Crushers – 1.7 | |
| Location | Ground Floor (CH G.3) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>The Coal Crushers are located at the north end of the ground floor and east of the Short Elevators. The crushers are motorised and contain massive rotating teeth that would force the coal through cast iron fingers reducing it to approximately 25mm.</p> <p>Significance</p> <p>The Coal Crushers are an integral part of the Coal Handling System. They evidence the use of predominantly English technology in all parts of the power station. They are large and impressive items, with massive cast iron components which are representative of pre-World War I design for industrial machines. The Crushers evidence an intermediate stage in the handling of coal at the power station.</p> | |
| | | |

| | | |
|-----------------------|--|--|
| Machine / Ref. | The 90-Foot Elevators – 1.8 | |
| Location | All Levels at the North End (CH B.3 to CH G.1) | |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>Two 90-foot elevators designated “A” (north elevator) and “B” (south elevator) are located at the north end of the Coal Handling Shed, near the east wall, and extend from Basement B.2 to the top level of the Transfer House (CH 4.1). The elevators are used to lift coal from the basement to the Transfer House to the External Conveyor.</p> <p>Similar to the Short Elevators, they consist of a square shaft made up of steel plates and bolted angled connections. Internally, the shaft guides a continuous link of connected buckets, approximately 600mm wide, 300mm deep and 300mm high. The buckets contain two wheels running on a rail or guide that pass a massive cog at the top which is in turn powered by electric motors.</p> <p>In 2022–24, a section of the south elevator, between the Coal Handling Shed roof and the top floor (CH 4.1), was partially dismantled due to corrosion. At the time of writing, the coal buckets are stored in Switch House Ground Level.</p> <p>Significance</p> <p>The 90-Foot Elevators are an integral part of the Coal Handling System. They evidence the use of predominantly English technology throughout the power station. They are sturdy and functional industrial items and are representative of coal-elevating equipment of the period immediately after World War II.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Machine / Ref. | Transfer Houses and Equipment – 1.9 | |
| Location | Level 3 – Transfer House | |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>They are steel and timber framed corrugated iron structures located at the top of the coal shed and attached to the exterior of the north wall of the Boiler House. They contain the motors and gearboxes for several of the machines operating in the Coal Handling Shed. Here, coal is dropped from the 90-Foot Elevators onto the External Conveyor for transporting to the Boiler House.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |

| | | |
|-----------------------|--|--|
| Machine / Ref. | Transfer Houses and Equipment – 1.9 (cont.) | |
| Description | <p>Significance</p> <p>The Transfer Houses are an integral part of the Coal Handling System. They have aesthetic qualities as framing elements to the overhead conveyor. The Transfer Houses evidence the methods used to control the transfer of coal from the coal store via Crushers and Elevators to the Hoppers within the Boiler House. The Transfer Houses evidence the predominantly English technology used throughout the power station.</p> | |
| Machine / Ref. | External Conveyor – 1.10 | |
| Location | Level 3 (CH 3.2) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>The External Conveyor is a steel and timber framed corrugated ironclad structure that runs from the lower coal shed Transfer House to the upper Boiler House Transfer House and is key to the industrial aesthetic of the White Bay Power Station.</p> <p>Significance</p> <p>The External Conveyor is an integral part of the Coal Handling System. It evidences the method by which coal is transferred from the coal shed to the upper Transfer House and, ultimately, the Coal Hoppers. The Conveyor is a prominent feature on the northern side of the Boiler House and illustrates the industrial architectural approaches of the period following World War I. It is a representative example of mid-twentieth century conveyor technology.</p> | |
| | | |
| Machine / Ref. | Coal Handling Control Room – 1.13 | |
| Location | Ground Floor (CH G.4) |  <p>(Design 5 – Architects, 2023)</p> |
| System | Coal Handling System | |
| Significance | 1–Exceptional | |
| Description | <p>The Coal Handling Control Room is located between the 90-foot elevators and behind the Coal Crushers on the ground floor level. The Control Room comprised the control panels and cabinets that controlled the motorised operations of the Coal Handling System, separate from the rest of the control panels throughout the power station.</p> <p>Significance</p> <p>The Coal Handling Control Room is an integral part of the Coal Handling System. The Control Room illustrates the way in which the coal was delivered as</p> | |


| Machine / Ref. | Coal Handling Control Room – 1.13 (cont.) | |
|----------------|--|--|
| Description | <p>regulated quantities via the Conveyors and Elevators to the coal store and the Crushers and, via the External Conveyor system, to the Boiler Hoppers. The Control Room switchboard demonstrates the power distribution arrangements within the power station and the decentralised nature of certain operations within the power station.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |



Figure 1.11 Coal Handling Shed from South, 2024 (courtesy of Toby Peet)

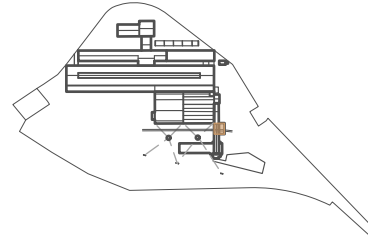
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2 ASH HANDLING TOWER



Figure 2.1 Ash Handling Tower from North, 2024 (courtesy of Chris Bennett: Evolving Picture)

The Ash Handling Tower is located at the north end of the site under the External Conveyor and is shown in the following diagrams.



2.1 FUNCTION

The Ash Handling Tower functions to efficiently handle, store and transport waste ash from the Boiler House following fuel combustion. This waste ash is extracted from flue gas from the precipitators.

2.2 HISTORY

The Ash Handling Tower and its associated equipment and machinery were installed in 1952 and 1953 by the Department of Railways, together with the construction of the third Boiler House and the Coal Handling Shed. It facilitated the Ash Handling System aspect of the power station's operations, and its key functions and operations were to efficiently handle and transport waste ash from the Boiler House following fuel combustion. Ash would be collected at the base of the boiler furnaces in a water trough, which ran a drag-link conveyor. The resulting slurry was deposited into the pair of Ash Storage Tanks, where it was thickened and then trucked off-site. When there were issues with the water trough system, the ash would instead be collected in Ash Kibbles that were taken to the Ash Handling Tower, where they were lifted by the Ash Kibble Crane and the ash deposited into motor lorries for transport off-site. The tower is

an example of early ash-handling procedures, as ash was transported off-site and disposed of in various ways, including as landfill. It is the main element of the Ash Handling System that remains today. However, the system involved more extensive structures and equipment during the active years of the White Bay Power Station, such as the electrostatic precipitators once connected to the east wall of the Boiler House.

The last use of the Ash Handling Tower was in 1983 before it was decommissioned. Major restoration works were carried out in 2022–24 to address corroded cladding, structural, and safety issues and are discussed further in this section.

2.3 SPATIAL REFERENCES

The Ash Handling Tower comprises the following spaces:

| Spaces | Ref. |
|---------|------|
| Level 1 | AH 1 |
| Level 2 | AH 2 |
| Level 3 | AH 3 |
| Level 4 | AH 4 |

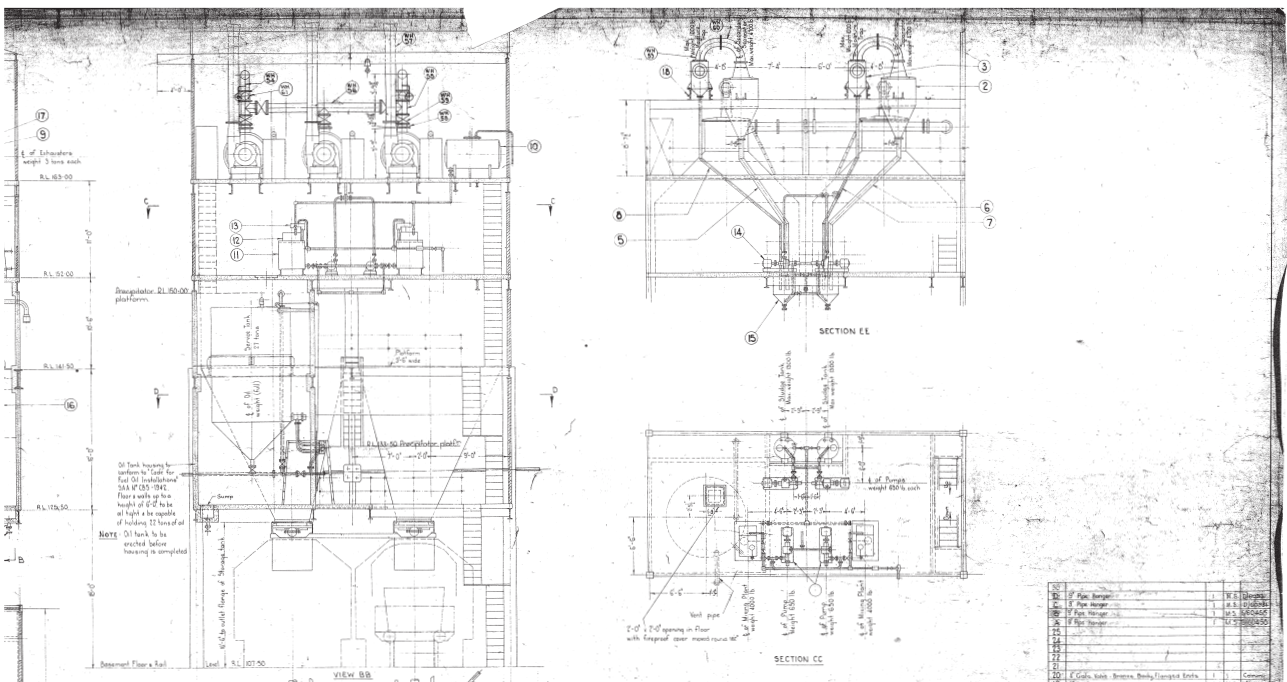
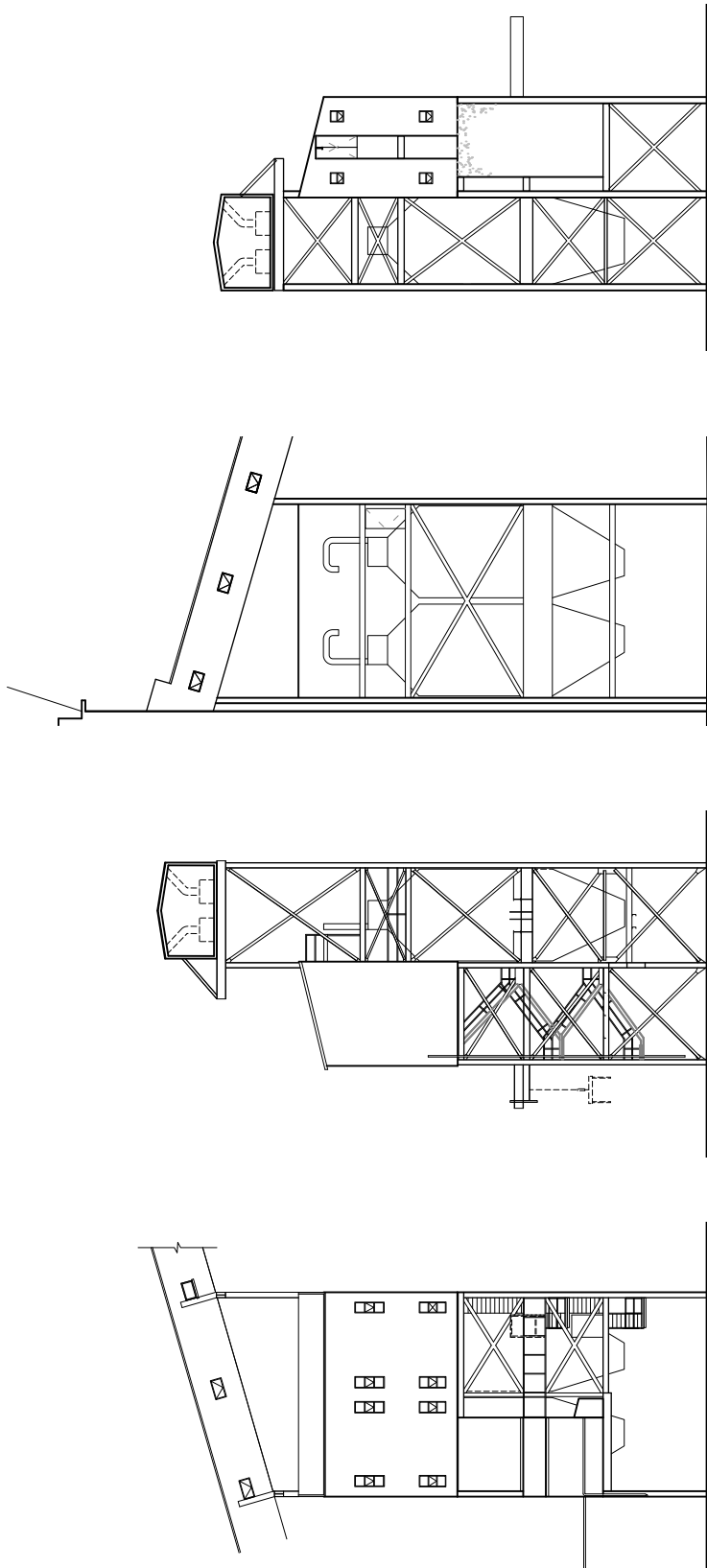
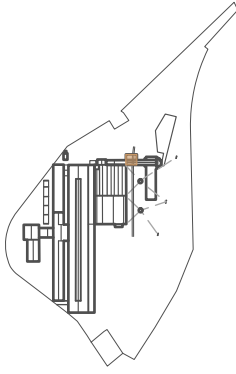


Figure 2.2 Extract from archival drawing showing machinery in Ash Handling Tower, 1954 (courtesy of PMNSW Archive, K58293_G).

ASH HANDLING TOWER



**ASH HANDLING TOWER
NORTH ELEVATION**

**ASH HANDLING TOWER
WEST ELEVATION**

**ASH HANDLING TOWER
SOUTH ELEVATION**

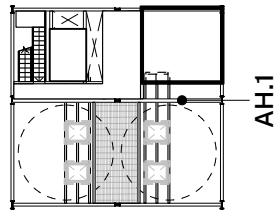
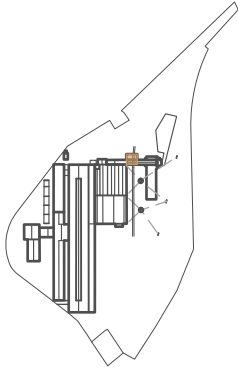
**ASH HANDLING TOWER
EAST ELEVATION**

Figure 2.3 Ash Handling Tower elevation.

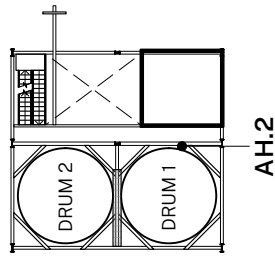
ASH HANDLING TOWER



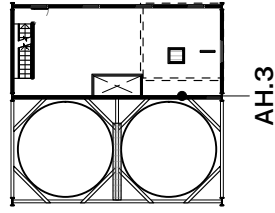
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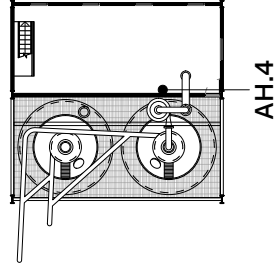
ASH HANDLING TOWER
LEVEL 1 PLAN (+7)



ASH HANDLING TOWER
LEVEL 2 PLAN (+12)



ASH HANDLING TOWER
LEVEL 3 PLAN (+15)



ASH HANDLING TOWER
LEVEL 4 PLAN (+18)

Figure 2.4 Ash Handling Tower plans.

2.4 DESCRIPTION

2.4.1 General

The Ash Handling Tower is located in the northeast section of the White Bay Power Station complex. It is a four-storey tower approximately 10 metres long and 5 metres wide, steel-framed, with a skillion roof, and partially clad on the third and fourth floor with corrugated galvanised steel. The building is situated adjacent to and partly beneath the north side of the External Conveyor connecting the Coal Handling Shed to the Boiler House. It comprises a series of walkways on all four floors connected by steel-framed stairs. The Ash Handling Tower is inaccessible from the ground level and requires a ladder to reach the catwalk on the first level.

The northeast section of the first and second floor contains a building enclosed by off-form concrete walls. A pair of Ash Storage Tanks (labelled “1” and “2”), occupy the southern side of the Tower on Levels 1 to 3, and a Kibble Crane extends from the second floor at the northern end of the Tower’s western side. The Tower has steel framing extending from its southern half that supports the underside of the External Conveyor.

2.4.2 Level 1

This level was once accessed by a ladder that connected it to the ground, which has since been removed to prevent unauthorised access. It is mainly outdoor, surrounded by steel framing and cross bracing. The

level contains a steel-framed and concrete catwalk and connects to a steel grate floor located in the southern half between the Ash Storage Tanks. At the northern end of the Tower’s western side is a crane cabin used to operate the Kibble Crane. The cabin is steel framed with timber floor and contains crane operating controls. In 2022–24, steel mesh and clear acrylic sheets were installed over its window and door openings for bird and weatherproofing. At the northern end of the Tower’s eastern side is a double-height space enclosed by off-form concrete called “Oil Tank Chamber”. While the tank has since been removed, a Department of Railways NSW drawing for the structure, dated October 1949, shows a steel oil tank funnelled at the base (Figure 2.6). There are two large openings on the western wall but no doorways into the space. The ceiling of this space is the underside of the third level’s concrete slab. Attached to



Figure 2.5 Northern Elevation of White Bay Power Station, c.1955 (courtesy of ECNSW Archive), angle adjusted.

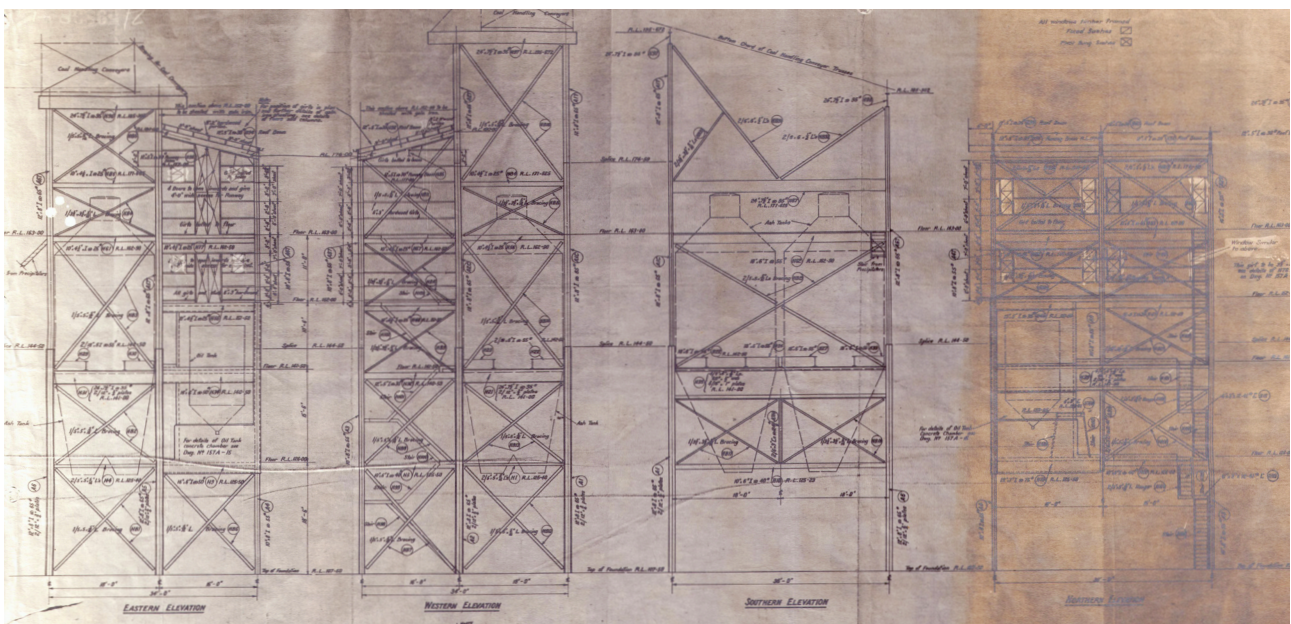


Figure 2.6 Excerpt of archival drawing showing oil tank chamber on Eastern and Northern Elevation, 1949 (courtesy of PMNSW Archive, 12015)

the west wall of the Oil Tank Chamber is a small metal box with a hatch and pipe connecting to the inside of the chamber. On the south side of the level is the bottom section of the pair of Ash Storage Tanks used to store the dry ash and ash-water slurry produced from the electricity generation process. Each Ash Tank is numbered: “Drum 1” for the east tank and “Drum 2” for the west tank.

2.4.3 Level 2

Level 2 comprises a single concrete walkway, running east-west, accessed by steel framed stairs located in the northwest corner. A Kibble Crane is located at the northwest corner, which was used to lift and empty the Ash Kibbles into motor lorries. The Kibble Crane comprises an electric hoist with a rigid lifting beam and twin hooks suspended from the cable. The void for the Oil Tank Chamber continues from Level 1 but has no openings and is not accessible. The Ash Storage Tanks continue the structure’s south side. A narrow chequer plate walkway between the two ash drums was removed in 2022–24 due to corrosion and formerly connected to a set of stairs on the south side of the Tower to the electrostatic precipitators that have since been removed.

2.4.4 Level 3

Level 3 is an internal space accessed by stairs located at the west wall. The floor is concrete slab, and the walls are steel framed (main structure) with timber framing that supports the corrugated galvanised steel cladding. The north wall has four windows, formerly centrally pivoting timber framed and glazed sashes, but they have been clad with clear polycarbonate, and some of the timber sashes have been retained. The east wall has two windows and a doorway, though only one of the timber doors remains. The ceiling is steel I-beams supporting a concrete slab from which hang pendant dish lamps. As part of the 2022–24 works, safety handrails were installed around two penetrations in the floor, and a timber-framed mesh enclosure was installed around the stairwell for bird-proofing. The window and door openings were covered in clear corrugated polycarbonate.

2.4.5 Level 4

Level 4 comprises two main spaces: in the northern half, a corrugated galvanised steel-clad internal space accessed by stairs located at the northwest corner, and

in the southern half, a steel grate platform with the tops of the two Ash Storage Tanks. Near the centre of the outdoor platform is a ladder that accesses a narrow, high-level steel-framed walkway along the north side (south wall of the internal space). The enclosed room is accessed via the stairs on the western side and provides access to the external platform (previously mentioned) via a timber door on the south façade. The floor comprises a concrete slab, and the walls continue from level 3, which is steel framed (main structure) with timber framing that supports the corrugated galvanised steel cladding. Like level 3, the north wall has four windows containing centrally pivoting timber framed and glazed sashes. As part of the 2022–24 works, these were covered in clear corrugated polycarbonate. Like the third level, the eastern wall has a doorway, with a timber ledged and sheeted door that protrudes a hoist beam. The ceiling is steel framed with timber purlins supporting the corrugated roof, replaced in 2022. The ceiling contains a hoist beam, pulley and several pendant dish lamps.



Figure 2.7 Ash Handling Tower under the drums, 2024 (courtesy of Chris Bennett: Evolving Picture)

2.5 ALTERATIONS & CONDITION

Since the decommissioning of White Bay Power Station in 1983, the corrugated steel cladding of Ash Handling Tower has become heavily corroded and pitted. The external spaces and steel structure have also suffered from corrosion, pigeon entry and, to a lesser extent, vandalism. The 2022–24 remediation works have focused on essential maintenance, restoration, and managing hazardous materials. This includes re-cladding and re-roofing, structural repairs and stabilisation, bird-proofing, and repainting in order to treat and protect from corrosion and encapsulate lead paint. Other works have included safety, security, and lighting. These are discussed in general terms below:

| Element / Room | Reference |
|----------------------------|---|
| Steel cladding External | Replacement of all of the original steel cladding with corrugated galvanised steel in 3m lengths. Due to the use and function of the building, the original cladding was not intended to provide complete weather protection, and some detail modifications were required: <ul style="list-style-type: none"> • Weathering and flashing details at corners, connections, and penetrations were modified. • Repair, replacement and strengthening of timber purlins. • The original fixing used threaded rods that were pre-drilled directly into the steel cladding rails, and the fixing was done using a nut and a lead washer. Re-cladding used modern hexagonal roofing screws with neoprene washers. Where required, some additional structural supports have been added. |
| Ash Storage Tanks | Steel repairs due to weather and corrosion, including strengthening the structural steel support brackets and splicing new steel plates. New steel plates were also required to cover openings at the top of the Ash Storage Tanks caused by corrosion. The Ash Storage Tanks contain ash slurry material that has settled and hardened at the bottom of the tanks. |
| Level 4 External Area | Steel splicing and support of suspended pipework. External steel mesh walkways were replaced with new galvanised steel walkways due to corrosion. |
| Kibble Crane Cabin | The cabin was cleaned and painted, and mesh and clear acrylic were added for birdproofing. |
| Windows | Openings of timber-framed windows on the third and fourth levels were replaced with transparent corrugated polycarbonate cladding due to condition safety. Before the 2022–24 works, the windows were covered using transparent acrylic sheets. |
| Concrete | Spalling concrete repaired. |

2.6 SIGNIFICANCE

The Ash Handling Tower is an integral part of the White Bay Power Station. The structure is representative of the Ash Handling System and is a demonstration of mid-twentieth century management of industrial by-product and pollution from coal-fired electricity generation. It has historical associations in representing early attempts to efficiently handle and dispose of waste ash to reduce pollution.

The Ash Handling Tower, located under the iconic External Conveyor, is also a visually prominent industrial structure that contributes to both the industrial character of the place as well as its landmark qualities. In doing so, it also contributes to the social significance of the power station as an industrial icon for both former employees and locals alike.

2.7 REFERENCE TO POLICIES



The Ash Handling Tower is an integral part of the White Bay Power Station. The following policies from the CMP are relevant to the Ash Handling Tower and should guide its ongoing care and management, including decisions about conservation, future use, and development.

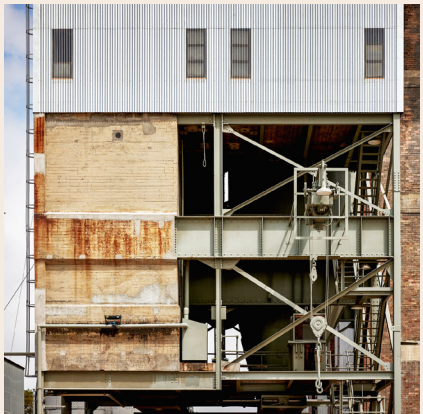
Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.



| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.19 | Ash Handling Tower |
| Tolerance for Change Table 6.6.6.1 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |



2.8 INVENTORY OF SPACES

This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.

| Room / Item | Level 1 / Ash Handling Tower | |
|--------------|--|--|
| Building | Ash Handling Tower | |
| Room No. | Level 1 | |
| Significance | 1-Exceptional | |
| Description | <p>Level 1 is an open space divided into two halves, north and south. The north part contains a steel-framed and concrete catwalk accessed by a set of steel stairs in the northwest corner. Permanent access to ground level has been removed and replaced with ladder access to prevent unauthorised entry. A crane cabin is located adjacent to the stairs which was used to operate the Kibble Crane. The cabin is steel framed with timber floor and contains crane operating controls. It is covered to prevent bird entry by clear acrylic and mesh. The northeast corner is the double-height concrete enclosure called the “Oil Tank Chamber”.</p> <p>The southern half of the level is occupied by the steel Ash Storage Tanks, numbered “1” for the east tank and “2” for the west tank. A galvanised steel walkway grate is located between the ash storage tanks.</p> | |
| |  <p>Northern half of the level, crane cabin (courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>Southern half of the level, prior to 2022-24 works. Storage tanks subsequently painted and steel grate floor replaced. (Design 5-Architects, 2021)</p> | |
| Elements | General Description | |
| Floor | Concrete walkway and concrete hob, and steel pipe handrails. Timber decking inside crane cabin. The galvanised steel grate between the Ash Storage Tanks was replaced in 2022. | |
| Walls | The open area within steel framed structure consists of rivetted and non-riveted steel sections, columns, beams and diagonal bracing. Off-form concrete enclosure in the northeast corner for the former “Oil Tank Chamber.” | |
| Ceiling | Open to level 2 above, containing a concrete walkway | |
| Lighting | Former dishlights. | |
| Machinery | Ash Storage Tanks Ash Kibble Crane | |

| | | |
|---------------------|---|--|
| Room / Item | Level 2 / Ash Handling Tower | |
| Building | Ash Handling Tower | |
| Room No. | Level 2 | |
| Significance | 1-Exceptional | |
| Description | <p>Level 2 comprises a single concrete walkway running east and west, accessed by steel-framed stairs located in the northwest corner. A Kibble Crane is located at the northwest corner, comprising an electric hoist with a rigid lifting beam and twin hooks suspended from the cable. The Oil Tank Chamber continues from Level 1 but has no openings and is not accessible.</p> <p>The Ash Storage Tanks continue in the southern half of the building. A steel-plated walkway between the two tanks was removed in 2022-24 due to corrosion. The walkway was formerly connected to a set of stairs on the south side of the Tower to the now removed electrostatic precipitators.</p> |  <p>(courtesy of Toby Peet, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete walkway and concrete hob, and steel pipe handrails. | |
| Walls | The open area within the steel-framed structure consists of riveted and non-riveted steel sections, columns, beams, and diagonal bracing. Off-form concrete enclosure in the northeast corner for the former "Oil Tank Chamber." | |
| Ceiling | Steel beams with off-form concrete. | |
| Machinery | Ash Storage Tanks Ash Kibble Crane | |

| | | |
|--------------------------|---|---|
| Room / Item | Level 3 / Ash Handling Tower | |
| Building | Ash Handling Tower | |
| Room No. | Level 3 | |
| Significance | 1-Exceptional | |
| Description | <p>Level 3 is an internal space accessed by stairs located on the west wall. The floor is a concrete slab with penetrations and is protected by steel handrails. The walls are steel framed (main structure) with timber framing that supports the corrugated galvanised steel cladding. There are four windows on the north wall and two windows on the east wall clad externally with polycarbonate. The east also contains a doorway, though only one of the timber doors remains. The ceiling is steel I-beams supporting a concrete slab from which hang pendant dish lamps. As part of the 2022-24 works, safety handrails were installed around two penetrations in the floor, and a timber-framed mesh enclosure was installed around the stairwell for bird-proofing</p> |  <p>Level 3 looking west (Design 5 – Architects, 2023)</p>  <p>Level 3 looking east (Design 5 – Architects, 2023)</p> |
| Elements | General Description | |
| Floor | Concrete floor with two penetrations covered by plywood and steel handrails. | |
| Walls | Steel structural columns, timber framed and galvanised steel cladding. | |
| Ceiling | Steel beams with off-form concrete. | |
| Doors and Windows | The north wall contains four timber windows, each window containing three centrally pivoted sashes. The east wall contains two windows containing two sashes. Some of the sashes are missing, and all of the windows are clad externally with transparent polycarbonate. There is a timber door on the east elevation. | |
| Lighting | Pendant dish lamps | |
| Other | Steel stair on the west end. | |
| Movable heritage | Level 3 contains two boxes of loose equipment (pulleys, cables and tools), as well as several lamp shades, a timber window sash and steel frames. | |

| | | |
|--------------------------|--|--|
| Room / Item | Level 4 / Ash Handling Tower | |
| Building | Ash Handling Tower | |
| Room No. | Level 4 | |
| Significance | 1-Exceptional | |
| Description | <p>Level 4 comprises two main spaces: in the northern half, a corrugated galvanised steel-clad internal space, and the southern half, a steel grate platform with the tops of the pair of Ash Storage Tanks. Steel stairs access the level on the western wall. Near the centre of the outdoor platform is a ladder that accesses a narrow, high-level steel-framed walkway along the north side.</p> <p>Like level 3, there are four windows on the north wall and two windows on the east wall and clad externally with polycarbonate. There is a door on the east wall that provides access to the hoist beam and pulley that extends externally. The ceiling is steel framed with timber purlins supporting the corrugated roof, replaced in 2022. The ceiling contains a hoist beam, pulley and several pendant dish lamps.</p> |  <p>Level 4 Northern half section (Design 5 – Architects, 2023)</p>  <p>Level 4 Southern half section (Design 5 – Architects, 2023)</p> |
| Elements | General Description | |
| Floor | The internal space contains a concrete floor. The external space at the southern half contains galvanised steel mesh replaced in 2022. | |
| Walls | Internal spaces contain steel structural columns, timber framed and galvanised steel cladding. External spaces contain steel pipe handrails. | |
| Ceiling | Internal space contains a high ceiling containing a hoist beam, pulley and several pendant dish lamps. | |
| Doors and Windows | The north wall contains four timber windows, each window containing three centrally pivoted sashes. The east wall contains two high-level windows containing two sashes. Some of the sashes are missing, and all of the windows are clad externally with transparent polycarbonate. There is a timber door on the east elevation aligned with the hoist beam. | |
| Lighting | Pendant dish lamps | |
| Other | Steel stair on the west end. | |
| Machinery | Tops of the Ash Storage Tanks and associated pipework | |
| Movable heritage | Pipework and cylindrical tanks are stored internally on level 4 and were removed from the external space due to corrosion. | |

2.9 INVENTORY OF MACHINERY

This section aims to provide an overarching understanding of the extant machinery concerning the buildings and spaces, as well as their role in the operational systems at the White Bay Power Station. The information below is based on the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report prepared by Godden Mackay Logan (May 2003) for the first edition of the Conservation Management Plan. Refer to Volume 3, Appendix D for the full GML report.

The machinery located within the Ash Handling Tower is listed below:

Summary of Machinery

| Machinery | Location | System | Vol. 3 Ref. |
|-------------------|--------------------------|---------------------|-------------|
| Ash Storage Tanks | Level 1, 2, & 3 (AH 1-3) | Ash Handling System | - |
| Ash Kibble Crane | Level 2 (AH 2) | Ash Handling System | - |

Machinery Descriptions Use and Significance



| Machine / Ref. | Ash Storage Tanks | |
|----------------|--|--|
| Location | Level 1, 2, & 3 (AH 1-3) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Ash Handling System | |
| Significance | 1-Exceptional | |
| Description | <p>Located on the south side of the building underneath the External Conveyor, the Ash Storage Tanks comprise large cylindrical steel Hoppers into which the ash was conveyed. They are mounted to the steel framing and make up a large volume of the tower.</p> <p>Significance</p> <p>The Ash Storage Tanks are an integral part of the Ash Handling System and are now rare examples of mid-twentieth century ash-handling and disposal procedures.</p> | |
| | | |
| Machine / Ref. | Ash Kibble Crane | |
| Location | Level 2 (AH 2) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Ash Handling System | |
| Significance | 1-Exceptional | |
| Description | <p>Located on the north side of the Tower, the Ash Kibble Crane comprises an I-beam with an electric hoist and lifting beam. This beam is fitted with a winch and cable with twin hooks that would latch onto the trunnions of the Ash Kibbles. The winch would then lift the Kibbles to empty the ash into the Ash Trucks.</p> <p>Significance</p> <p>The Ash Kibble Crane is an integral part of the Ash Handling System and is now a rare example of mid-twentieth century ash-handling and disposal procedures.</p> | |
| | | |



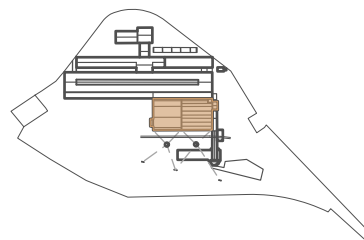
Figure 2.8 Ash Handling Tower Drums, 2024 (courtesy of Toby Peet), cropped

3 BOILER HOUSE



Figure 3.1 South eastern elevation of Boiler House, 2024 (courtesy of Chris Bennett: Evolving Picture)

The Boiler House is located near the centre of the site, as shown in the following diagrams.



3.1 FUNCTION

The Boiler House's function was to receive coal from the Coal Handling Shed and to pulverise it before feeding it into the Boilers for combustion to generate steam that was sent to the Turbine Hall to produce electricity.

3.2 HISTORY

The existing Boiler House at White Bay Power Station is the third Boiler House on the site, constructed in two stages and completed in 1953 and 1958, respectively. The first Boiler House at White Bay Power Station was built from 1912–17 (Nos 1 & 2 battery boilers), while the second Boiler House was constructed from 1923–28. During its operations, the Boiler House primarily facilitated the Steam Raising System but also contained machinery used in the Coal Handling System, the Ash Handling System, and the House Electrical and Auxiliary Supply System.

The Nos. 1 & 2 battery boilers were removed in the years following World War II, and work to replace the first Boiler House with a third steel-framed Boiler House utilising a newer High-Pressure system commenced in two stages—the northern half in 1953 under the Railway Commission and the southern half in 1958 under the Electricity Commission. The Third Boiler House was designed by Hungarian Modernist émigré architect Hugo Stossel. Stossel's European modernist background is evident in the architecture of the Boiler House, particularly with its curtain walls and flat roof. Following the decommissioning of the Low-Pressure system, the second Boiler House was demolished in 1976.

The last use of the third Boiler House was in 1983, before it was decommissioned. Major remediation works were carried out in 2022–24 to address hazardous materials, corrosion, cladding, roofing, structural and safety issues. Activation works for public access and use also took place in 2024, which is discussed further in this section.

3.3 SPATIAL REFERENCES

The Boiler House comprises the following spaces:

| Spaces | Ref. |
|--|---------|
| No. 1 Boiler –Ground (East) | BH G.1A |
| No. 1 Boiler –Ground (West) | BH G.1B |
| No. 2 Boiler –Ground (East) | BH G.2A |
| No. 2 Boiler –Ground (West) | BH G.2B |
| No. 3 Boiler –Ground (East) | BH G.3A |
| No. 3 Boiler –Ground (West) | BH G.3B |
| No. 4 Boiler –Ground (East) | BH G.4A |
| No. 4 Boiler –Ground (West) | BH G.4B |
| Ash Truck Storage | BH G.5 |
| No. 2 Aux Trans Boiler House | BH G.6 |
| No. 1 2.2 DCV / 45V Aux Transformer Room | BH G.7 |
| Ground Floor –Room (South) | BH G.8 |
| Ground Floor –Room (North) | BH G.9 |
| Lift Shaft (North) | BH G.10 |
| Lift Shaft (South) | BH G.11 |
| Stairwell | BH G.12 |
| Ground Floor –W.C. | BH G.13 |
| No. 1 Boiler –Firing Floor | BH 1.1 |
| No. 2 Boiler –Firing Floor | BH 1.2 |
| No. 3 Boiler –Firing Floor | BH 1.3 |
| No. 4 Boiler –Firing Floor | BH 1.4 |
| Control Room | BH 1.5 |
| Level 1 –W.C. (South) | BH 1.6 |
| Sulphite Tank Room | BH 1.7 |
| Level 1 –W.C. (North) | BH 1.8 |
| Mezzanine Below Hoppers –Walkway | BH 2.1 |
| Conveyor Level (South) | BH 3.1 |
| Conveyor Level (North) | BH 3.2 |
| Conveyor Level –Lift Overrun | BH 3.3 |
| Transfer House | BH 3.4 |

BOILER HOUSE

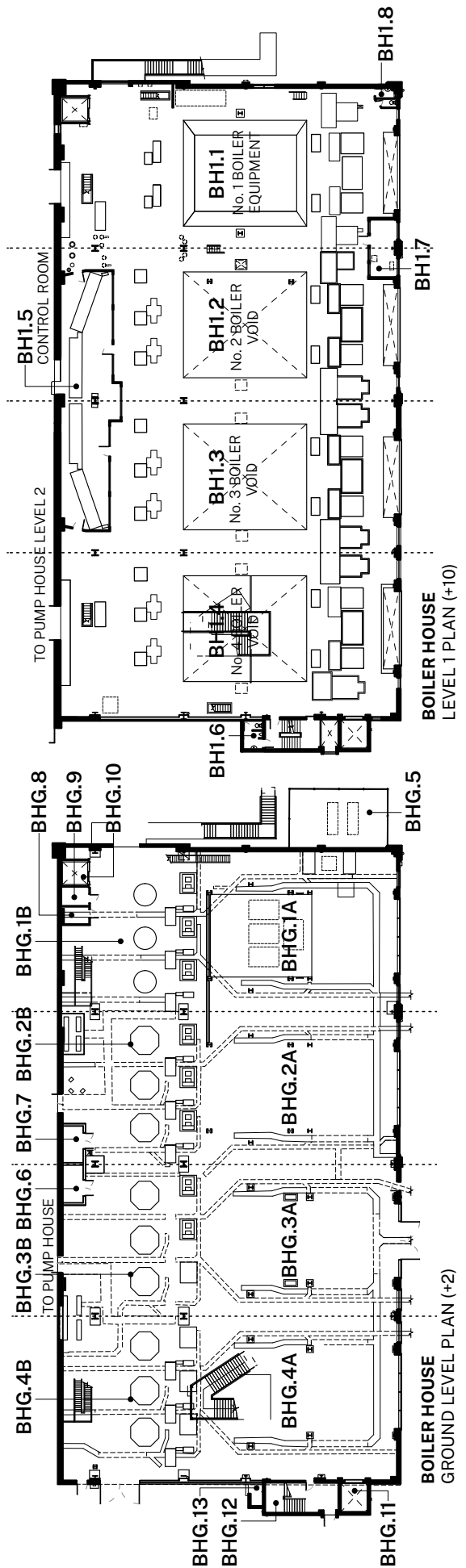
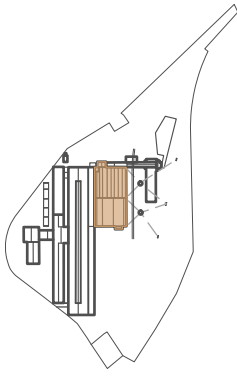


Figure 3.2 Boiler House Ground Floor and Level 1 plans.

BOILER HOUSE

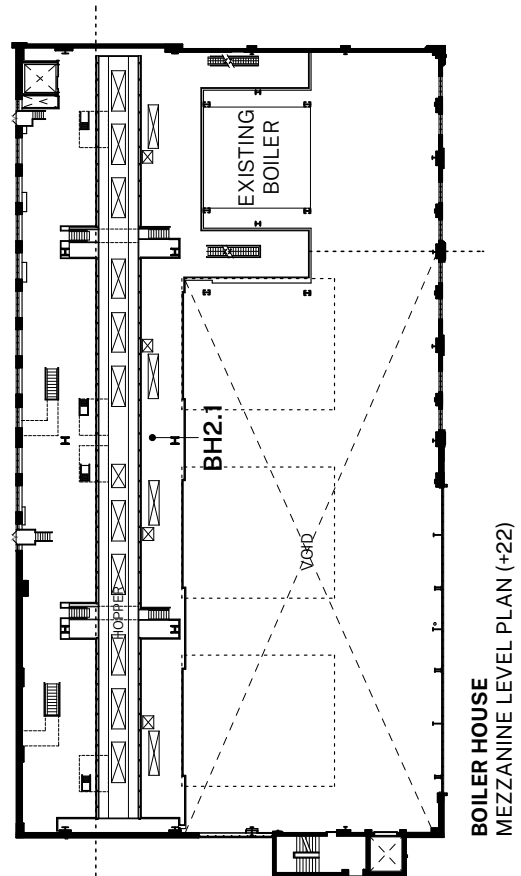
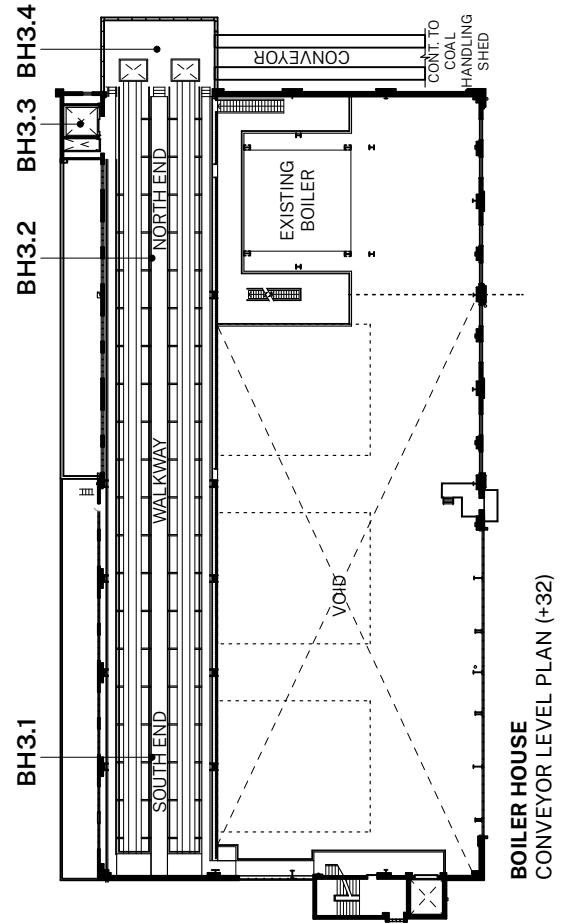
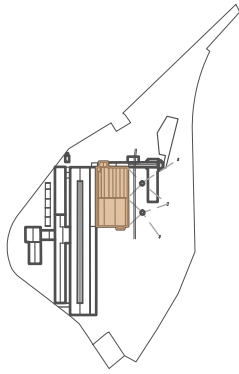


Figure 3.3 Boiler House Mezzanine and Conveyor Level plans.

3.4 DESCRIPTION

3.4.1 General

The Boiler House is located west of the Coal Handling Shed and attached to the east of the Pump House. It is visible from almost all approaches, including the north, south, and east. The building is approximately 57 metres long, 30 metres wide, and 35 metres tall, and is a massive steel-framed and concrete-reinforced structure with brick outer walls and large glazed windows. The roof consists of pitched corrugated galvanised sheeting and steel trusses to the north half (1953) and a flat metal roof with deep steel trusses to the southern half (1958). The Boiler House hosted the High Pressure Boiler operations of the power station. It is the third Boiler House of the power station and the only one that remains standing today – having replaced the first – whilst the second Boiler House, once located to its south, was demolished in 1976. The Boiler House is connected to the Coal Handling Shed (and External Conveyor) and shares its western wall with the Pump House with connecting pipework, machinery and door and window openings. The building comprises two primary levels, including the large ground floor level, which consists of mainly open space from the removed boilers, ash kibble bins, pulverising mills, and plinths from former machinery. The first floor consists of the Boiler House Control Room and a set of large voids that identify the location of the three original boilers (2, 3, and 4). The upper levels include metal mesh cat walks, a mezzanine level, the coal hoppers extending the entire building length, and a Conveyor Level connecting to the Transfer House. Due to the building being constructed in two separate stages, the northern half of the Boiler House has a distinctly different roof structure, window arrangement, and elevations to that of the southern half. The differences also include riveted steel structure in the 1953 phase compared to the welded steel structure in the 1958 phase. The Boiler House retains one of four extant Babcock and Wilcox boilers at its north end and includes the associated pulverising mills, chutes and hoppers, fans, pumps, and valves.

3.4.2 Ground Level

The Ground Level has a concrete floor and is mainly a vast open space with extant machinery at the northern end. The ground floor has a high ceiling, approximately 7.5m to the underside of Level 1, which is made up of steel framed and concrete structure and punctuated by large open spaces where the former boilers have been removed. The Ground Level contains the main steam raising machinery at the north end (BH G.1), including the No. 1 Boiler, the Pulverising Mill, and the

Pulverised Fuel Feed Pipes. During the power station's active years, the coal would be deposited into the Pulverising Mills and ground into powder, then sent through the Pulverised Fuel Feed Pipes to the Boiler. This arrangement of equipment was replicated across the remaining three Boiler spaces, which have since been removed. The Headers and associated pipework located along the western wall, south (BH G.2B) of the Pulverising Mills, form a visual and physical connection to the neighbouring Pump House. They are indicative of the steam produced from the Boiler House travelling to the next operational system.

The north end of the Boiler House Ground Level (BH G.1A) also contains equipment from the Ash Handling System, including the Ash Kibble Sets and the Ash Trucks, as well as the Selenium Rectifier used to charge the trucks. The Ash Trucks were stored in an Ash Truck Shed (BH G.5) located externally on the north elevation. The shed is a small steel-framed structure with a corrugated galvanised steel roof, enclosed in steel mesh, with gates along its north-facing side. Adjacent to this is a flight of steel stairs, installed in 2022–24, providing access to Level 1.

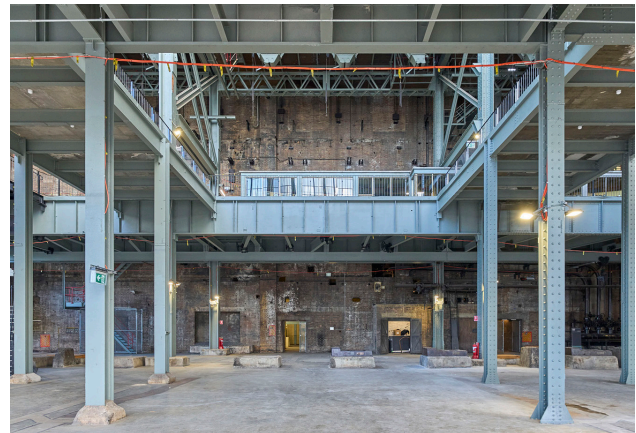


Figure 3.4 Boiler House Ground Floor, void of Boiler 3, 2024 (courtesy of Chris Bennett: Evolving Picture)



Figure 3.5 Boiler House decommissioning, 1996 (courtesy of ECNSW Archive)

The western brick wall of the Boiler House is shared with the Pump House and is the original wall of the 1917 demolished Boiler House. The evidence of the original wall is within the various cut-off steel beams as well as some of the remnant windows and blocked openings. At the base of the western elevation are a series of small brick rooms with timber doors added in the 1950s—two near the middle (BH G.6 & BH G.7) and two towards the northwest corner (BH G.8 and BH G.9). The east wall of ground floor Boiler House contains four large openings that are covered with polycarbonate sheet and extend to the first level. These openings housed the removed ash precipitators that were part of the Ash Handling System.

The building contains two elevator shafts, one at the northwest corner (BH G.10) and another located near the southeast corner (BH G.11). Also, in the southwest corner is a closed stairwell (BH G.12), comprising a concrete stair with rendered masonry and tiled walls, and full height square block glass windows on the southern wall. The ground level contains three large doors, one to each elevation, including the north, east and west. The north and south openings are original, albeit the roller door on the north elevation was replaced in 2022. The steel framed doors on the east elevation at Boiler No. 3 date from 2023.

Where Boiler No. 4 was formerly located (BH G.4A), a new set of steel stairs was installed in 2022–24.

3.4.3 Level 1

Level 1 contains elements of the Steam Raising System, including part of the No.1 Boiler, the Chutes from Hopper to Mill, the Pulverised Fuel Feed Pipes, the Forced Draft Fans, the Oil Heater Pumps and Valves, the Soot Blower Cabinet, and the Boiler Control Room (BH 1.5). The Pulverised Fuel Feed Pipes and Forced Draft Fans would send the pulverised fuel through to the Boiler furnace for combustion, where the resulting heat would be used to generate steam from the feedwater. Like the machinery and equipment on the Ground Level, this arrangement of equipment was replicated across the remaining three Boiler spaces during the White Bay Power Station's active years. The floor of this level is concrete supported by steel framing. The level contains large voids where the Nos. 2, 3, and 4 Boilers once stood. A roller door is located towards the west end of the north elevation.

At the northeast corner of Level 1 is a small bathroom (BH 1.8). Along the eastern end of Level 1 are a series of identical small voids in line with the current and former location of the four Boilers. Between the voids that line up with the No. 1 Boiler and the former No. 2 Boiler is the Sulphite Tank Room (BH 1.7), where sulphite was fed via pipes into the feedwater supply to eliminate dissolved oxygen, thereby preventing corrosion and pitting in the boiler system.



Figure 3.6 Extant Boiler No. 1, 2024 (courtesy of Toby Peet)

The Control Room is located along the middle of the western wall. It has a symmetrical layout, with a door on each side. The Control Room comprises a series of panels that allow for monitoring and controlling Boiler House operations, as well as large windows running along its eastern wall for visibility of the Boilers. Located on either side of the Control Room on the western wall are large aluminium-framed windows that connect to the second level of the adjacent Pump House. Behind the Boiler House Control Room is the west wall shared with the Pump House, which is original to the 1917 Boiler House.

Towards the south end of Level 1 near the No. 4 Boiler void is the Coal Weigher, which has been removed from its original operational position between the Chutes and the Hoppers. Along the western side of the level are a series of covered-up openings where the underside of the Hoppers once connected to the Weighers and Chutes down through to the Ground Level. The lift shaft and closed stairwell along the southern wall continue on this floor and also connect to a small bathroom (BH 1.6).

3.4.4 Mezzanine Level

The Mezzanine Level comprises a series of balustraded steel grate walkways that run on both sides of the Coal Hoppers, as well as surrounding the extant No. 1 Boiler. It is accessed by steel stairs that run on the north and south sides of the No. 1 Boiler. Along the west side of the hoppers, there are steel-framed stairs that lead down and turn into the Pump House, where they connect to the walkways accessing the Feedwater and Condensate Tanks.

The western wall comprises metal-framed windows along with brick walls that extend up from the original 1917 Boiler No.1. Two doors within these windows provide access to the concrete flat roof over the Pump House and access to the roof over the Turbine Hall.

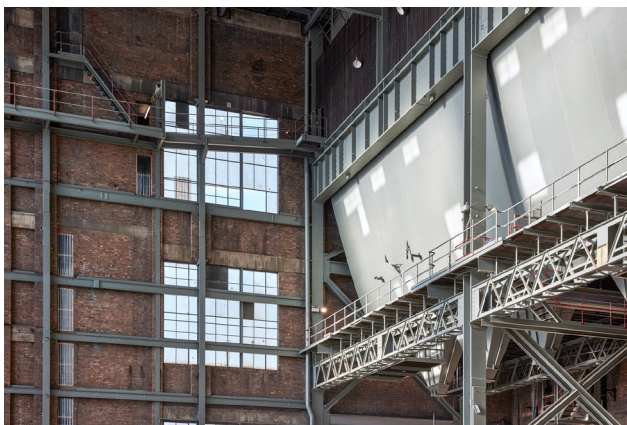


Figure 3.7 Facing south, hopper on the right, 2024 (courtesy of Toby Peet)

The eastern side of the Mezzanine Level is open to the rest of the Boiler House's main space. At this height, the curtain windows span nearly the entire southern half of the east elevation. The northern half comprises conventional steel framed windows set within brick openings and concrete lintels.

3.4.5 Conveyor Level

The Conveyor Level is accessed by three methods: the steel stairs located at the north end of the No. 1 Boiler, the incline conveyor connected to the Coal Handling Shed, and the enclosed stair at the south end of the Boiler House. The enclosed stairwell at the south of the Boiler House connects to a narrow steel grate that runs along the south wall at a high level. This narrow steel grate also provides access to a flight of stairs that connect to an external concrete landing leading to the south lift overrun.

The Conveyor Level contains the main coal-receiving machinery for the Boiler House, including the Transfer House, the top of the Hoppers, and the Conveyors. It is a space where the transition from the Coal Handling System to the Steam Raising System takes place. Like

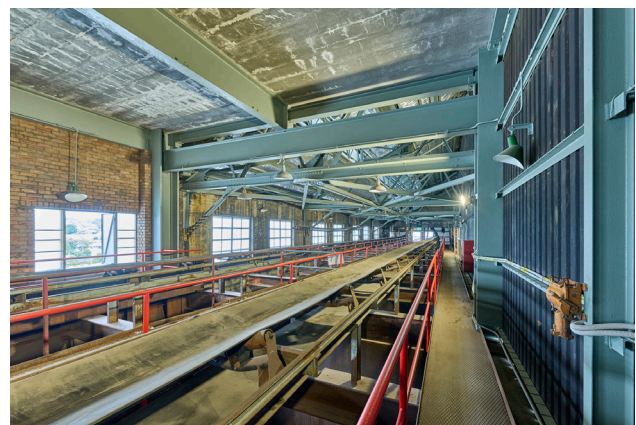


Figure 3.8 Conveyor Level, 2024 (courtesy of Chris Bennett: Evolving Picture)



Figure 3.9 Boiler House Western Elevation, 2024 (courtesy of Chris Bennett: Evolving Picture)

the main volume of the Boiler House, the Conveyor Level's construction is distinctly divided into its north (BH 3.2) and south halves (BH 3.1). The north half of the Conveyor Level has a corrugated metal sheet roof supported by trusses. The southern half of the Conveyor Level has a concrete ceiling supported by steel beams. The enclosing walls are brickwork for the west and south walls, while the east wall is a continuous corrugated metal. The north wall is open to the Transfer House (BH 3.4).

Similar to the Coal Handling Shed, the Boiler House's Transfer House (BH 3.4) is connected to the end of the External Conveyor and is steel-framed and clad with corrugated galvanised steel. It is located at the northern end of the Conveyor Level, has a gabled roof, and protrudes from the north façade of the Boiler House's main volume. The Transfer House received the crushed coal from the External Conveyor on its upper floor and directed it to the pair of conveyors in the Boiler House via its lower floor. This pair of conveyors travel north to south above the twelve large Hoppers (three for each Boiler) and were used to evenly distribute the coal to the Chutes for optimum efficiency of coal combustion. Steel check plate walkways with steel pipe handrails run between the conveyors and on either side of them. At the northwest corner of the Conveyor Level is a lift shaft, and pendant dish lights hang above the central walkway from the steel beam and along the eastern wall of the level at frequent intervals.

A door near the middle of the west elevation leads to a small rooftop space along the south half of the Boiler House. From here, the main roof area can be crossed to access the eastern side of the Boiler House roof, where steel double doors connect to a concrete walkway. This walkway has a ladder leading down to a small steel grate platform with a door leading to a smaller steel grate cantilevered platform outside the east Boiler House wall. This cantilevered platform was used to access a series of (now removed) rails that ran along the underside of the east roof overhang and was used to clean the windows on the eastern façade. Similar rails are found along the underside of the southern elevation's roof awning.

3.4.6 Roof

As detailed above, the Boiler House was built in two stages. The first stage is the East Boiler House, constructed in 1953, and the second is the West Boiler House, constructed in 1958. The roof of the east boiler house is a pitched roof constructed of steel trusses and contains a series of roof lanterns and box gutters. The roof lanterns are designed to be fully open to vent

the heat from the boilers below. There is no evidence that the vents were louvred or covered, but they are now covered with polycarbonate sheeting for weather and pigeon protection. On the eastern side of the roof are six ventilators supported by steel frames but disconnected from the vent pipework below. Further to the east, on the roof level, is a cantilevered awning added in 1958. The awning was initially constructed of concrete supported on cantilevered steel beams but was replaced in 2022–24 with a steel and Colorbond awning due to steel corrosion and concrete cancer.

The western side of the roof is a series of flat roofs covering the main Boiler House, the coal hopper, a small section of roof on the east elevation and small roof areas over the south stairwell and the lift overrun. These roofs were constructed of precast concrete panels, with waterproof lining and caulking, and supported on steel structure below. The concrete panels over the main Boiler House space have been replaced with a lightweight steel and Colorbond roof (c. 2015), but the original trusses remain. The east awning and Coal Hopper roofs remain but have been covered with a torch on membrane and an added Colorbond roof, respectively.

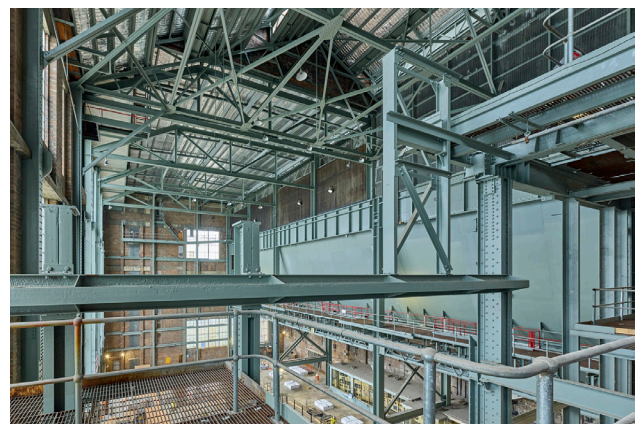


Figure 3.10 Boiler House internal roof trusses, 2024 (courtesy of Chris Bennett: Evolving Picture)



Figure 3.11 Boiler House Roof from southwest, 2024 (courtesy of Chris Bennett: Evolving Picture)

3.5 ALTERATIONS & CONDITION

The Boiler House has undergone a series of changes across the history of the White Bay Power Station following its construction. Following the decommissioning of the Power Station in 1983, Boiler Nos. 2, 3, and 4, as well as their associated steel grate walkways, were removed, which drastically altered the nature of the Boiler House's main internal space. The outer walls of the No. 1 Boiler were also removed. Externally, the removal of the electrostatic ash precipitators left a series of openings (later bricked up) and exposed beam ends along the north elevation of the Boiler House. Further, the 1996 asbestos removal program saw the removal of asbestos lagging, cowling, refractories and much of the steel cladding from the Boiler, leaving its internal pipework and tubes visible.

The 2022–24 works for the Boiler House have focused on essential maintenance, restoration, and preservation. This includes re-cladding, structural remediation, birdproofing, and stabilising and treating for corrosion. Other works have included safety, security, and lighting. The Boiler House also underwent activation works in 2024, which included floor remediation, accessibility upgrades, railings and barriers, and added safety. All of these are discussed in general terms below:

| Element / Room | Reference |
|---|--|
| Structural steel and Coal Hoppers | Overall, minor work was done apart from painting coatings for lead encapsulation. Some splicing and structural repairs were required to the conveyor-level beams. A steel plate was inserted above the clamshell buckets at the base of the Coal Hoppers to prevent debris from falling through. |
| Ground-floor and first-floor flooring | Floors on the ground level were treated with an epoxy-based screed and lightly ground to minimise trip hazards and comply with the BCA. Minor protruding trip hazards or diverts on the first floor were filled with epoxy to comply with BCA. Hatches were also repaired, strengthened or replaced to comply with BCA, while some floor hatches on the ground level were filled with concrete and epoxy toppings where heavy vehicle access is required. Some machinery plinths that pose a trip hazard were ground down and made flush or covered over with timber seats. Floors were coated with a clear topping to provide a seal and slip resistance. |
| Metal mesh grates | A small number of metal mesh grates were replaced for corrosion and safety reasons. A vast majority of metal mesh grates were retained, and clamp fixings were tightened or new clamps added. |
| Windows | Most external windows were retained in place. Some broken or cracked glass was removed and replaced with clear acrylic sheetings by mechanical fixings into window frames. The large window on the south elevation at the ground floor was cladded over with new transparent acrylic sheets. Other windows were cladded with new transparent corrugated polycarbonate sheets. |
| Roofing (1953 section) – northern half | The main corrugated roof over the boiler house was replaced with box gutters and new drainage and overflow. The original precast concrete east awning was replaced entirely with a new galvanised steel structure, lightweight cladding and metal roof. |
| Roofing (1958 section) – southern half | The original precast concrete roof over the main Boiler House was replaced in 2015, and the original steel ventilators were reinstated on top. The ventilators were repainted in 2022–24. The remaining flat areas of the roof received a new torch-on roof membrane. |
| Control Room | Minor works to clean and make it safe. |
| External / BHG.4 | New steel stairs were installed, externally at northern end, and internally at BHG.4. |

3.6 SIGNIFICANCE

The Boiler House is an integral part of the White Bay Power Station and has historical associations with the electrification of the Sydney rail and tramways systems. The building is demonstrative of engineering design principles and yields information on the High Pressure Steam Raising System during the early second half of the twentieth century.

The Boiler House demonstrates an evocative, industrial aesthetic in its interior, most notably with the exposed structure and sheer impressive scale of the extant No. 1 Boiler. Alongside the other extant machinery

and equipment, the No. 1 Boiler contributes to an understanding of rare High Pressure Steam Raising technology as the only known boiler of its type remaining in the country.

Externally, the Boiler House presents as a massive, functionalist and modernist form that has a vital role in the visual identification of the White Bay Power Station. Its landmark qualities as well as its extant technology mark its intrinsic social significance for both former workers and locals as a symbol of the area's industrial history. The Boiler House is further significant for its associations with Hungarian Modernist émigré architect Hugo Stossel, who designed the building.



Figure 3.12 Boiler House East Elevation, 2024 (courtesy of Chris Bennett: Evolving Picture)

3.7 REFERENCE TO POLICIES


The Boiler House is an integral part of the White Bay Power Station. The following policies from the CMP are relevant to the Boiler House and should guide its ongoing care and management, including decisions about conservation, future use, and development.

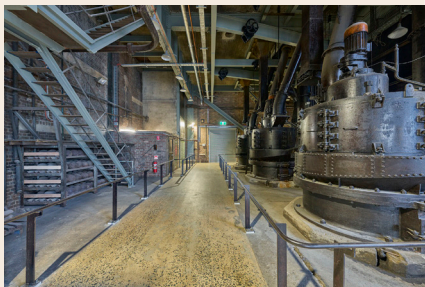
Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.

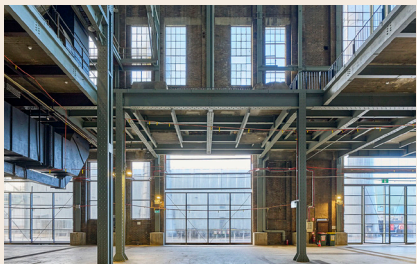
| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.20 | Boiler House |
| 6.21 | No. 1 Boiler |
| 6.22 | Boiler House walkways |
| 6.23 | Boiler House Coal Hoppers |
| 6.24 | Boiler House voids |
| Tolerance for Change Table 6.6.7.2 and Opportunities for Change Table 6.6.7.3 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |

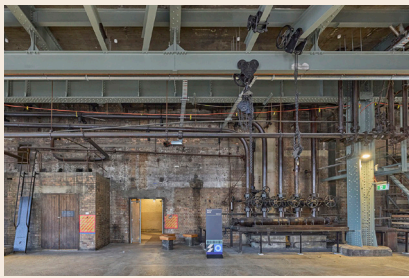
3.8 INVENTORY OF SPACES

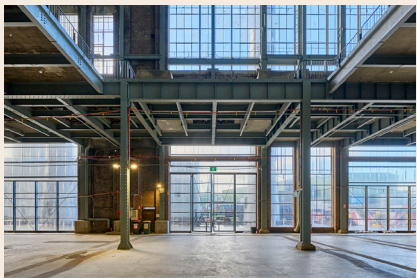
This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.

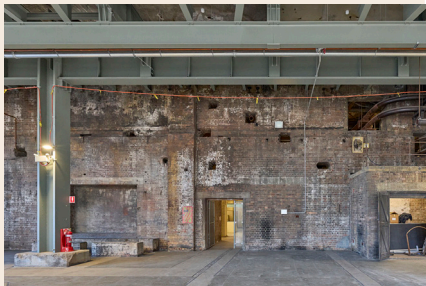
| | | |
|--------------------------|---|--|
| Room / Item | No. 1 Boiler – Ground (East) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Building | Boiler House | |
| Room No. | BH G.1A | |
| Significance | 1–Exceptional | |
| Description | <p>This space currently contains the lower section of the single extant Boiler of the Power Station, which was used for fuel combustion and steam raising. It also includes the Ash Kibble Sets that collected waste ash from the Boilers and the Selenium Rectifier that was used to charge the Ash Trucks.</p> <p>In 2022–24, the extant machinery and equipment underwent treatment and repainting. Floor remediation and replacement of some floor hatches for accessibility.</p> | |
| Elements | General Description | |
| Floor | <p>Concrete floor.</p> <p>The original heavy-duty cast iron grates were removed and stored in the Switch House Ground Floor, some have been reused to replace missing grates at Coal Handling Shed southern end. They were replaced with steel hatches and Fibre Reinforced Plastic (FRP) for safety and accessibility reasons.</p> <p>Some areas of the floor located behind handrails were not remediated in order to retain the original surfaces.</p> | |
| Walls | <p>The space is enclosed by the brick external wall on the north and a brick and polycarbonate opening to the east. The space is enclosed to the west by a wall approximately 4m high and partially demolished to the south. The space is open to the Boiler House on the south.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). The extant No. 1 Boiler dominates the space and includes steel and metal mesh hatches. There is a small steel framed and corrugated metal lean-to roof on the northeast corner over the Ash Truck recharge bay.</p> | |
| Doors and Windows | <p>There is a large opening on the eastern wall (former openings housed the removed ash precipitators that were part of the Ash Handling System). The opening is clad with transparent polycarbonate sheeting. The polycarbonate sheeting was replaced in 2022–24.</p> | |
| Lighting | <p>Former pendant dish lights from the ceiling.</p> <p>New lighting and catenary wires were installed in 2022.</p> | |
| Other | <p>The base of rivetted steel columns throughout the space was repaired in c. 2008. It included encasing some of the column bases in concrete.</p> <p>Extant machinery and equipment are balustraded.</p> | |
| Machinery | <p>The Pulverised Fuel Feed Pipes (2.3)</p> <p>The Boiler (No. 1) (2.4)</p> <p>The boiler machinery has been treated for corrosion and repainted.</p> <p>Ash Kibble Sets (7.1)</p> <p>Selenium Rectifier for charging Ash Carts (8.11)</p> | |
| Movable heritage | Ash Kibble Sets (7.1) | |

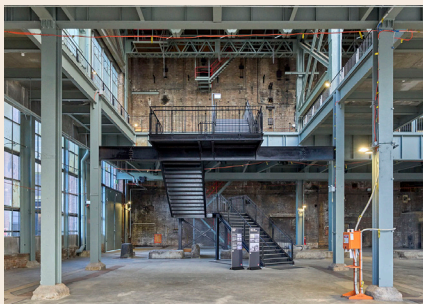
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| Room / Item | No. 1 Boiler – Ground (West) | |
| Building | Boiler House | |
| Room No. | BH G.1B | |
| Significance | 1 – Exceptional | |
| Description | <p>This area facilitated the pulverisation of the coal into powder using the three Mills, with the connecting Pulverised Fuel Feed Pipes to the floor above. The fuel would then be combusted in the adjacent Boiler to generate heat and steam.</p> <p>In 2022–24, the extant machinery and equipment were coated with a clear rust treatment, barriers were installed, and the floor was remediated for public access.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete floor with filled-in cable trenches. Octagonal concrete plinths for Pulverising Mills. The original heavy-duty cast iron grates were removed and replaced. The grates are stored in the Switch House Ground Floor, some have been reused to replace missing grates at Coal Handling Shed southern end.</p> | |
| Walls | <p>Brick on the north, east and west walls. The east wall is approximately 4m high, and the south side is partly demolished. The west wall is punctured with small openings for conduits and pipes.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). There are a series of beams with cable pulleys. Spalling concrete tested and deemed safe in 2022–24.</p> | |
| Doors and Windows | <p>The opening on the north wall is original, but the steel roller door was replaced in 2022–24.</p> | |
| Lighting | <p>Former pendant dish lights from the ceiling. New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>Steel-framed stairs near the western wall. Extant machinery and equipment are balustraded as part of the 2024 activation works.</p> | |
| Machinery | <p>Pulverising Mill (2.1) The Pulverised Fuel Feed Pipes (2.3) The Boiler (No. 1) (2.4) The machinery has been treated for corrosion and repainted.</p> | |
| Movable heritage | <p>A steel shelf assembly supports the heavy cast-steel crusher balls used in the pulverising mills.</p> | |

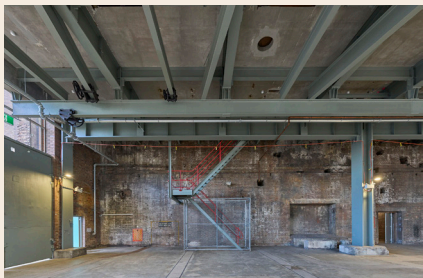
| | | |
|--------------------------|---|--|
| Room / Item | No. 2 Boiler – Ground (East) | |
| Building | Boiler House | |
| Room No. | BH G.2A | |
| Significance | 2 – High | |
| Description | <p>This space formerly contained a High Pressure Boiler, which was used for fuel combustion and steam raising.</p> <p>In 2022–24, the floor was remediated for public access.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete floor.</p> <p>The floor was remediated in 2022–24, including the removal of some plinths and the replacement of some steel hatches for public access. Some trenches were filled with concrete and epoxy toppings where heavy vehicle access is required.</p> | |
| Walls | <p>The space is open to adjacent spaces on the north, south and west. It is enclosed to the east by the external wall, which is a brick and polycarbonate screen replaced in 2022–24.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). The central space is open to the main steel trussed roof above. Spalling concrete tested and deemed safe in 2022–24.</p> | |
| Doors and Windows | <p>There is a large opening on the eastern wall (former openings housed the removed ash precipitators that were part of the Ash Handling System). The opening is clad with transparent polycarbonate sheeting. The large opening is flanked by two smaller openings, which are covered externally with clear polycarbonate. The polycarbonate sheeting was replaced in 2022–24.</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>The bases of riveted steel columns throughout the space were repaired in c. 2008. It included encasing some of the column bases in concrete.</p> | |


| | | |
|--------------------------|--|--|
| Room / Item | No. 2 Boiler – Ground (West) | |
| Building | Boiler House | |
| Room No. | BH G.2B | |
| Significance | 2 – High | |
| Description | <p>This area facilitated the pulverisation of the coal into powder using the three Mills, with the connecting Pulverised Fuel Feed Pipes to the floor above. The fuel would then be combusted in the adjacent Boiler to generate heat and steam.</p> <p>In 2022–24, the extant machinery and equipment were coated with a clear rust treatment, barriers were installed, and the floor was remediated for public access.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete floor.</p> <p>The floor was remediated in 2022–24, including the removal of some plinths and the replacement of some steel hatches for public access.</p> | |
| Walls | <p>The space is open to adjacent spaces on the north, south and east. The west wall is brick, which is the original 1917 wall of the Boiler House. The west wall contains evidence of the 1917 Boiler House and changes made in the 1950s.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). There are a series of beams with cable pulleys. Spalling concrete tested and deemed safe in 2022–24.</p> | |
| Doors and Windows | <p>Mesh screen gate was installed in 2022–24 along the west-ern wall to Pump House for security purpose</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>Timber seating over concrete plinths was installed in 2022–24 for public access and safety.</p> | |
| Machinery | <p>The Headers (2.6)</p> <p>The machinery has been treated for corrosion and repainted in 2022–24.</p> | |


| | | |
|--------------------------|---|--|
| Room / Item | No. 3 Boiler – Ground (East) | |
| Building | Boiler House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | BH G.3A | |
| Significance | 2 – High | |
| Description | <p>This space formerly contained a High Pressure Boiler, which was used for fuel combustion and steam raising.</p> <p>In 2022–24, the floor was remediated for public access.</p> | |
| Elements | General Description | |
| Floor | <p>Concrete floor.</p> <p>The floor was remediated in 2022–24, including the removal of some plinths and the replacement of some steel hatches for public access. Some trenches were filled with concrete and epoxy toppings where heavy vehicle access is required.</p> | |
| Walls | <p>The space is open to adjacent spaces on the north, south and west. It is enclosed to the east by the external wall, which is a brick and polycarbonate screen replaced in 2022–24.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). The central space is open to the main steel trussed roof above. Spalling concrete tested and deemed safe in 2022–24.</p> | |
| Doors and Windows | <p>There is a large opening on the eastern wall (former openings housed the removed ash precipitators that were part of the Ash Handling System). They are clad with transparent polycarbonate sheeting. The centre bay contains a steel-framed double door that was installed in 2022–24. The large opening is flanked by two smaller openings, which are covered externally with clear polycarbonate. Polycarbonate sheeting was replaced in 2022–24.</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>The base of riveted steel columns throughout the space was repaired in c. 2008. It included encasing some of the column bases in concrete.</p> | |

| | | |
|--------------------------|---|--|
| Room / Item | No. 3 Boiler – Ground (West) | |
| Building | Boiler House | |
| Room No. | BH G.3B | |
| Significance | 2 – High | |
| Description | <p>This area facilitated the pulverisation of the coal into powder using the three Mills, with the connecting Pulverised Fuel Feed Pipes to the floor above. The fuel would then be combusted in the adjacent Boiler to generate heat and steam.</p> <p>In 2022–24, the floor was remediated for public access.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete floor.</p> <p>The floor was remediated in 2022–24, including the removal of some plinths and the replacement of some steel hatches for public access.</p> | |
| Walls | <p>The space is open to adjacent spaces on the north, south and east. The west wall is brick, which is the original 1917 wall of the Boiler House. The west wall contains evidence of the 1917 Boiler House and changes made in the 1950s – multiple openings for extant pipes and conduits.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). There are a series of beams with cable pulleys. Spalling concrete tested and deemed safe in 2022–24.</p> | |
| Doors and Windows | <p>Mesh screen gate was installed in 2022–24 along the west-ern wall to Pump House for security purpose</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |


| | | |
|--------------------------|--|--|
| Room / Item | No. 4 Boiler – Ground (East) | |
| Building | Boiler House | |
| Room No. | BH G.4A | |
| Significance | 2 –High | |
| Description | <p>This space formerly contained a High Pressure Boiler, which was used for fuel combustion and steam raising.</p> <p>In 2022–24, the extant machinery and equipment were coated with a clear rust treatment, barriers were installed, and the floor was remediated for public access.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete floor.</p> <p>The floor was remediated in 2022–24, including the removal of some plinths and the replacement of some steel hatches for public access. Some trenches were filled with concrete and epoxy toppings where heavy vehicle access is required.</p> | |
| Walls | <p>The space is open to adjacent spaces on the north and west. It is enclosed to the east by the external wall, which is a brick and polycarbonate screen replaced in 2022–24. The south wall is the external wall consisting of brick and glazed openings.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). The central space is open to the main steel trussed roof above. Spalling concrete tested and deemed safe in 2022–24.</p> | |
| Doors and Windows | <p>There is a large opening on the eastern wall (former openings housed the removed ash precipitators that were part of the Ash Handling System). They are clad with transparent polycarbonate sheeting.</p> <p>The large opening is flanked by two smaller openings, which are covered externally with clear polycarbonate. Polycarbonate sheeting was replaced in 2022–24.</p> <p>Existing large window on the south is cladded over with new transparent acrylic sheets in 2022–24.</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>Stairs connecting to Level 1 through the void of the former Boiler No. 4 installed in 2022–24.</p> | |


| | | |
|--------------------------|--|--|
| Room / Item | No. 4 Boiler – Ground (West) | |
| Building | Boiler House | |
| Room No. | BH G.4B | |
| Significance | 2 – High | |
| Description | <p>This area facilitated the pulverisation of the coal into powder using the three Mills, with the connecting Pulverised Fuel Feed Pipes to the floor above. The fuel would then be combusted in the adjacent Boiler to generate heat and steam.</p> <p>In 2022–24, barriers were installed, and the floor was remediated for public access.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete floor.</p> <p>The floor was remediated in 2022–24, including the removal of some plinths and the replacement of some steel hatches for public access. Portion of southern trench is filled with concrete and epoxy topping for heavy vehicle access</p> | |
| Walls | <p>The space is open to adjacent spaces on the north and east. The west wall is brick, which is the original 1917 wall of the Boiler House. The west wall contains evidence of the 1917 Boiler House and changes made in the 1950s – multiple openings for extant pipes and conduits. The south wall is the external wall consisting of brick and glazed openings.</p> | |
| Ceiling | <p>The ceilings consist of a steel frame supporting off-form concrete (level 1 above). There are a series of beams with cable pulleys. Spalling concrete tested and deemed safe in 2022–24.</p> | |
| Doors and Windows | <p>The large steel door on the western end of the south wall is original, door was strengthened and repaired in 2022–24.</p> <p>Single door opening adjacent to the gate is original, door leaf replaced in 2022–24.</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>Steel-framed stairs near the western wall are original and fenced off. Timber seating over concrete plinths was installed in 2022–24 for public access and safety.</p> | |


| | | |
|--------------------------|---|--|
| Room / Item | Ash Truck Storage | |
| Building | Boiler House | |
| Room No. | BH G.5 | |
| Significance | 3 – Moderate | |
| Description | <p>The Ash Truck Storage is a small shed located on the northern façade of the Boiler House. It housed the battery-run Ash Trucks, which transported the Ash Kibbles, which contained waste ash, from the boiler house to the Ash Handling Tower.</p> |  <p>(Design 5 – Architects, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete slab | |
| Walls | Brick of Boiler House on the south. The north, east and west walls are steel frames clad with clear corrugated polycarbonate. Steel frame painted and clear corrugated polycarbonate installed in 2022–24. | |
| Ceiling | Roofing was replaced in 2022–24. The roof is corrugated Colorbond roofing supported by timber joists and steel trusses. | |
| Doors and Windows | Three steel framed single-leaf gates cladded with clear corrugated polycarbonate, that comprise the north wall. Gates repaired and cladded in 2022–24 | |
| Other | A small switch cabinet is mounted on the south wall. | |
| Machinery | Ash Kibble Trucks (7.2) | |
| Movable heritage | The space contains various pieces of moveable heritage, including former machinery and three Ash Kibble Trucks' extant machinery and equipment. | |


| | | |
|--------------------------|--|---|
| Room / Item | No. 2 Aux Trans Boiler House | |
| Building | Boiler House |  |
| Room No. | BH G.6 | |
| Significance | 2-High | |
| Description | This room would have once housed the No. 2 Auxiliary Transformer. It is located along the western wall of the Boiler House. | |
| Elements | General Description | |
| Floor | The concrete floor was raised above the level of the Boiler House floor by 60mm. It contains a cable trench for machinery near the northern end. | |
| Walls | Brick with openings for vents. The west wall shows evidence of a large opening now bricked up and patchy with white paint. | |
| Ceiling | Off-form concrete. | |
| Doors and Windows | Original timber double doors on the eastern wall. | |
| Lighting | New temporary lighting was installed in 2022-24. | |
| Other | The roof is accessible via a steel ladder and is balustraded. | |

(Design 5 – Architects, 2023)


| | | |
|--------------------------|--|--|
| Room / Item | No. 1 22 DCV / 45V Aux Transformer Room | |
| Building | Boiler House | |
| Room No. | BH G.7 | |
| Significance | 2 - High | |
| Description | <p>This room would have once housed the No. 1 2.2 KV/45 V Auxiliary Transformer. It is located along the western wall of the Boiler House.</p> | |
| |  <p>(Design 5 - Architects, 2023)</p> | |
| Elements | General Description | |
| Floor | The concrete floor was raised above the level of the Boiler House floor by 60mm. | |
| Walls | Brick with openings for vents. | |
| Ceiling | The west wall shows evidence of cabinets. Off-form concrete. | |
| Doors and Windows | Original timber double doors on the eastern wall. | |
| Lighting | New temporary lighting was installed in 2022-24. | |
| Other | The roof is accessible via a steel ladder and is balustraded. Ladder access restricted. | |
| Movable heritage | Machine parts and assorted metal components | |

| | | |
|--------------------------|---|--|
| Room / Item | Ground Floor – Room (South) | |
| Building | Boiler House | |
| Room No. | BH G.8 | |
| Significance | 1–Exceptional | |
| Description | This room is located in the northwest corner of the Boiler House. Its exact use is not known. | |
| |  | |
| | (Design 5 – Architects, 2024) | |
| Elements | General Description | |
| Floor | Concrete with a large cable trench occupying the northern half of the room. | |
| Walls | Brick, patchy coating of white paint. | |
| Doors and Windows | Original timber door on the eastern wall. | |
| Lighting | New temporary lighting was installed in 2022–24. | |
| Other | Two sets of steel railings were installed on the southern wall. | |

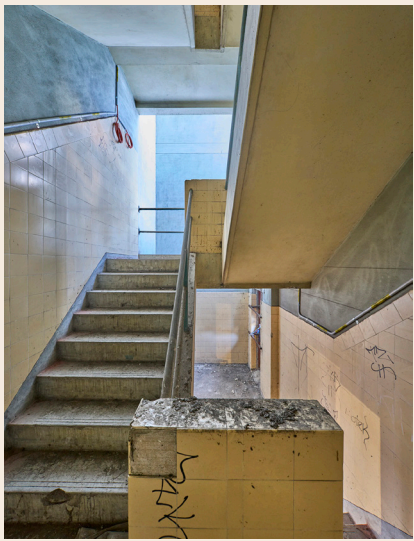
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| Room / Item | Ground Floor – Room (North) | |
| Building | Boiler House | |
| Room No. | BH G.9 | |
| Significance | 1–Exceptional | |
| Description | <p>This room is located in the northwest corner of the Boiler House, adjacent to the lift shaft. Its exact use is not known.</p> | |
| |  | |
| | (Design 5 – Architects, 2024) | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Brick on east, south and west walls. The west wall has a slight offset back around 1m (approx.) high. Concrete wall shared with elevator shaft casing. | |
| Doors and Windows | The doorframe on the eastern wall is missing. | |
| Lighting | New temporary lighting was installed in 2022–24. | |
| Other | Two steel brackets on the south wall. The entrance is balustraded. | |
| Movable heritage | Metal toolbox and metal tray | |

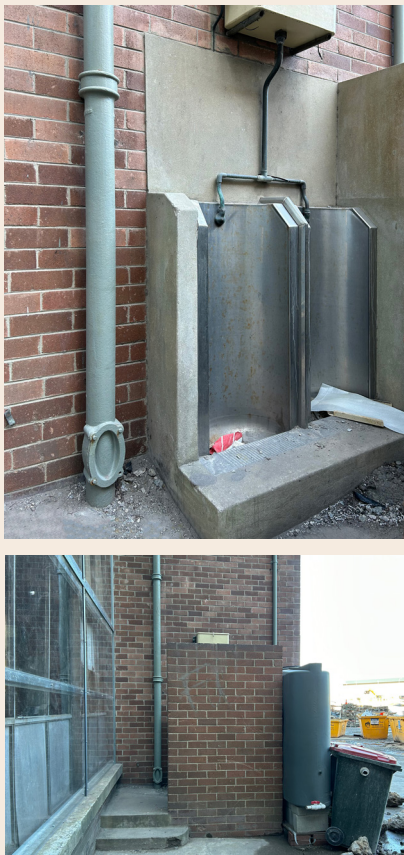
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|--------------------------|---|---|
| Room / Item | Lift Shaft (North) | |
| Building | Boiler House |  |
| Room No. | BH G.10 | |
| Significance | 3 – Moderate | |
| Description | Lift car and counterweights have been lowered in 2022–24. | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Steel lift shaft walls in concrete casing. | |
| Doors and Windows | Steel elevator shaft door on the east wall with mesh windows. | |
| Other | The entrance is balustraded. | |

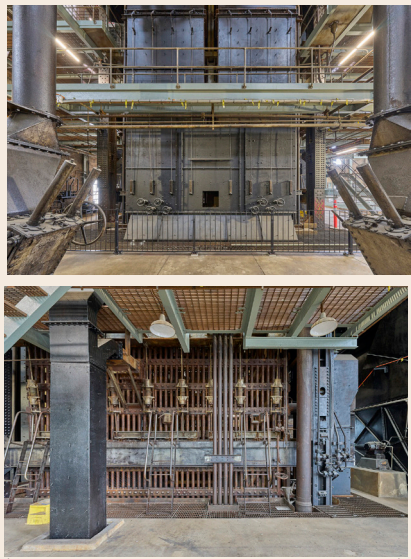
(Design 5 – Architects, 2024)


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|--------------------------|---|---|
| Room / Item | Lift Shaft (South) | |
| Building | Boiler House |  |
| Room No. | BH G.11 | |
| Significance | 4 - Little / Neutral | |
| Description | It is likely that no lift carriage was ever installed into the shaft. | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Brick | |
| Doors and Windows | The door opening on the northern side. The door is boarded up. | |

(Design 5 - Architects, 2024)

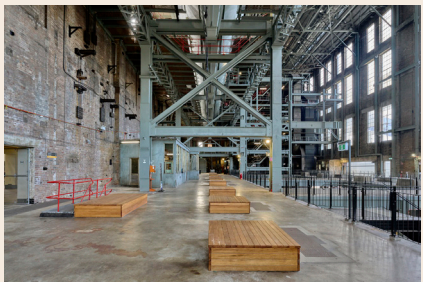
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|--------------------------|--|--|
| Room / Item | Stairwell | |
| Building | Boiler House | |
| Room No. | BH G.12 | |
| Significance | 3 – Moderate | |
| Description | This stairwell connects from the ground level to the mezzanine level. | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Skirting | Coved concrete. | |
| Walls | Rendered masonry, cream tiles to 2050mm | |
| Ceiling | Stairs and landing above. | |
| Doors and Windows | <p>Temporary timber sheeting door leading outside Boiler House on the south wall. The doors were replaced in 2022–24.</p> <p>South wall: full-height glass block windows four blocks wide in precast concrete frame. Internally, it is boarded up with transparent polycarbonate sheets, and externally, it is clad with clear acrylic for safety.</p> | |
| Lighting | New temporary lighting and catenary wires were installed in 2022–24. | |

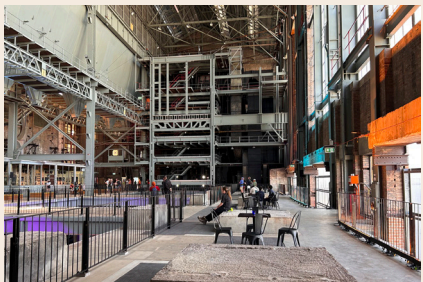
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|---------------------|--|--|
| Room / Item | Ground Floor – W.C. | |
| Building | Boiler House | |
| Room No. | BH G.13 | |
| Significance | 3 – Moderate | |
| Description | <p>The W.C. is a small, brick-clad volume adjacent to the southern stairwell. It is not accessible from the main volume of the Boiler House.</p> | |
| |  | |
| | (Design 5 – Architects, 2023) | |
| Elements | General Description | |
| Floor | Concrete. Two steps lead up into the space. | |
| Walls | Brick walls on the east, south and west sides. Windows of Boiler House on the north side. Concrete encasing urinals. | |
| Other | Two metal urinals and a mounted tank on the southeast corner. | |


| | | |
|--------------------------|---|--|
| Room / Item | No. 1 Boiler – Firing Floor | |
| Building | Boiler House | |
| Room No. | BH 1.1 | |
| Significance | 1 – Exceptional | |
| Description | <p>This space is dominated by the single extant Boiler of the Power Station and its associated equipment, which was used for fuel combustion and steam-raising. The Pulverised Fuel Feed Pipes and the Forced Draft Fans fed the pulverised coal into the furnace.</p> <p>In 2022–24, the extant machinery and equipment underwent treatment and repainting. Floor remediation and replacement of some floor hatches for accessibility.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins and steel grates around machinery and along the western side. | |
| Walls | Brick walls on the north, east and west sides. | |
| Ceiling | Western side: Steel grate of mezzanine floor, underside of Coal Hoppers. Eastern half: underside of Boiler machinery. The roof of the Boiler House is made of steel trusses with corrugated Colorbond roof sheeting. | |
| Doors and Windows | <p>The opening at the western end of the north wall is original, but the steel roller door was replaced in 2022–24.</p> <p>Western wall: Steel framed windows at higher levels are original to the 1917 east wall of the Pump House.</p> <p>Northern wall: Low-level steel frame windows externally covered with clear corrugated polycarbonate.</p> <p>Eastern wall: opening for the former ash precipitator and window openings covered with polycarbonate.</p> | |
| Lighting | Former pendant dish lights from the ceiling. New temporary lighting and catenary wires were installed in 2022–24. | |
| Other | <p>The lift shaft continues from the ground floor in the northwest corner.</p> <p>Stairs leading up to Boiler walkways on the north and south sides.</p> <p>Extant equipment and machinery are balustraded. Chain wire fence and gates were installed around the No. 1 Boiler.</p> <p>New balustrades surround the void</p> | |
| Machinery | <p>Chutes from Hopper to Mill (2.2)</p> <p>The Pulverised Fuel Feed Pipes (2.3)</p> <p>The Boiler (No. 1) (2.4)</p> <p>Forced Draft Fans (2.5)</p> <p>Oil Heater Pumps and Valves (2.7)</p> <p>Soot Blower Cabinet (2.9)</p> <p>The machinery has been treated for corrosion and repainted.</p> | |


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|--------------------------|--|---|
| Room / Item | No. 2 Boiler – Firing Floor | |
| Building | Boiler House |  |
| Room No. | BH 1.2 | |
| Significance | 2 – High | |
| Description | This space formerly contained a High Pressure Boiler and its associated equipment which was used for fuel combustion and steam raising. | |
| Elements | General Description | |
| Floor | Concrete with scribed margins and a large central void. The floor was remediated in 2022–24. A number of concrete plinths remain on the eastern side. Small voids on the east side are covered with steel check plates. | |
| Walls | The brick wall on the east and west sides. The western wall shows evidence of former machinery and equipment above the Boiler House Control Room. | |
| Ceiling | Western side: Steel grate of the mezzanine floor and underside of Coal Hoppers. Eastern half: The roof of the Boiler House is steel truss with corrugated Colorbond roof sheeting. Reroofed and painted in 2022–24. | |
| Doors and Windows | Eastern wall: opening for precipitator and window openings covered with clear corrugated polycarbonate. Replaced in 2022–24. | |
| Lighting | New temporary lighting and catenary wires were installed in 2022–24. | |
| Other | New timber seating over concrete plinths that formerly supported machinery and new balustrades surround the void, all dating from 2022–24. | |


(Design 5 – Architects, 2024)

| | | |
|--------------------------|---|--|
| Room / Item | No. 3 Boiler – Firing Floor | |
| Building | Boiler House | |
| Room No. | BH 1.3 | |
| Significance | 2 – High | |
| Description | This space formerly contained a High Pressure Boiler and its associated equipment, which was used for fuel combustion and steam raising. | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | <p>The floor was remediated in 2022–24. Concrete with scribed margins and a large central void. A number of concrete plinths remain on the eastern side. Small voids on the east side are covered with steel check plates. A number of penetrations are covered with steel plates.</p> | |
| Walls | <p>The brick wall on the east and west sides. The western wall shows evidence of former machinery and equipment above the Boiler House Control Room.</p> | |
| Ceiling | <p>Western side: Steel grate of the mezzanine floor and underside of Coal Hoppers. Eastern half: The roof of the Boiler House is steel truss with corrugated Colorbond roof sheeting. Reroofed and painted in 2022–24.</p> | |
| Doors and Windows | <p>Eastern wall: opening for precipitator and window openings covered with clear corrugated polycarbonate. Replaced in 2022–24.</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>New timber seating over concrete plinths that formerly supported machinery and new balustrades surround the void, all dating from 2022–24.</p> | |

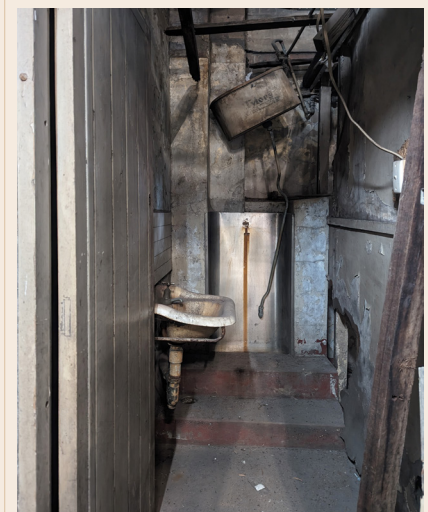
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|--------------------------|--|--|
| Room / Item | No. 4 Boiler – Firing Floor | |
| Building | Boiler House | |
| Room No. | BH 1.4 | |
| Significance | 2 – High | |
| Description | <p>This space formerly contained a High Pressure Boiler and its associated equipment which was used for fuel combustion and steam raising.</p> <p>In 2022–24, new stairs were installed in the central void (former location of Boiler No. 4).</p> |  <p>(Design 5 – Architects, 2024)</p> |
| Elements | General Description | |
| Floor | <p>The floor was remediated in 2022–24.</p> <p>Concrete with scribed margins and a large central void.</p> <p>A number of concrete plinths remain on the eastern side. Small voids on the east side are covered with steel check plates.</p> <p>A number of penetrations are covered with steel plates.</p> | |
| Walls | <p>The brick wall on the east and west sides. The western wall shows evidence of former machinery and equipment above the Boiler House Control Room.</p> | |
| Ceiling | <p>Western side: Steel grate of the mezzanine floor and underside of Coal Hoppers.</p> <p>Eastern half: The roof of the Boiler House is steel truss with corrugated Colorbond roof sheeting.</p> <p>Reroofed and painted in 2022–24.</p> | |
| Doors and Windows | <p>Replaced in 2022–24.</p> <p>Eastern wall: opening for precipitator and window openings covered with clear corrugated polycarbonate.</p> | |
| Lighting | <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>Original stairs from Level 1 near the west end of the space are blocked at the top level. The original stairs along the south wall are blocked and cut off below floor level.</p> <p>Stairs were installed in the central void in 2022–24 for public use.</p> <p>New timber seating was installed over concrete plinths. New balustrades surround the void.</p> | |
| Machinery | <p>Coal Weigher (1.11)</p> | |

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|--------------------------|--|--|
| Room / Item | Control Room | |
| Building | Boiler House | |
| Room No. | BH 1.5 | |
| Significance | 1-Exceptional | |
| Description | <p>The Boiler House Control Room was used to monitor and control the operations of the Boilers. Masonry walls enclose the space, and large glazed windows face the Boiler House.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | <p>Raised concrete floor. Recessed cable paths are covered with a steel check plate.</p> | |
| Walls | <p>Rendered masonry walls are on the north, east, and south sides. Some graffiti on the external side of the eastern wall. The west wall is painted face brick.</p> | |
| Ceiling | <p>Concrete beams support the off-form concrete ceiling.</p> | |
| Doors and Windows | <p>North: timber door with two panels – top glazed and bottom sheet metal with bronzed finish. East: two doors, each aluminium with two panels. The top glazing is missing from the northern door, and the south aluminium door has a glazed top and louvred bottom. West: timber sliding door connecting to Pump House. Windows: Aluminium framed windows with clear glazing and 900mm high sill to full height at ceiling.</p> | |
| Lighting | <p>Former pendant dish lights from the ceiling. New temporary lighting and catenary wires were installed in 2022-24.</p> | |
| Machinery | <p>The Boiler House Control Room (2.10) There is some enamel cracking on the control boards.</p> | |


| | | |
|--------------------------|---|--|
| Room / Item | Level 1 – W.C. (South) | |
| Building | Boiler House | |
| Room No. | BH 1.6 | |
| Significance | 3 – Moderate | |
| Description | <p>A small room accessed from the enclosed stair contains a basin, urinal and pan. The floor and walls are tiled, and a window is located on the west wall.</p> | |
| |  | |
| | (courtesy of Chris Bennett: Evolving Picture, 2024) | |
| Elements | General Description | |
| Floor | Blue and cream 50mm x 50mm tiles. | |
| Walls | Pale grey 150mm x 150mm glazed tiles to door framed height (approximately 1980 mm). Cream painted rendered masonry above. Walls graffitied. | |
| Ceiling | Concrete, roof above waterproofed in 2022–24. | |
| Doors and Windows | External door missing. Cubicle door solid leaf. | |
| Lighting | Lightbulb secured to the ceiling. | |
| Other | Metal tap and sink on the southern wall with mirror above. One urinal and one WC. | |


| | | |
|--------------------------|---|--|
| Room / Item | Sulphite Tank Room | |
| Building | Boiler House | |
| Room No. | BH 1.7 | |
| Significance | 1-Exceptional | |
| Description | <p>This room contains the Sulphite Tank and associated No. 2 Stainless Steel Feeder, along with a series of pipes and valves that extend outside the room to the No. 1 Boiler.</p> <p>The room was used to feed sulphite into the feedwater supply to eliminate dissolved oxygen and prevent corrosion and pitting in the Boiler equipment.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete. Various concrete plinths and hobs for equipment. | |
| Walls | Painted brick wall on the eastern side (external wall of Boiler House). Rendered masonry on north, south and west walls. | |
| Ceiling | The timber beam roof structure remains, but the roof sheeting has been removed. | |
| Doors and Windows | <p>Timber boarded, ledged and braced the door on the west side.</p> <p>East: two metal frame windows, eight panes each with lower section pivot, frosted and wired.</p> <p>West: three metal frame windows with frosted glazing.</p> | |
| Lighting | Former pendant dish light from the ceiling. | |
| Other | <p>U-shaped metal-topped bench with sink and timber cupboards at the northern side of the room.</p> <p>Tank, feeder switchboard, and various pipes and valves on the southern side.</p> <p>Missing doors on the eastern side and timber boards on the remaining sides. The remaining doors are also off their hinges.</p> | |

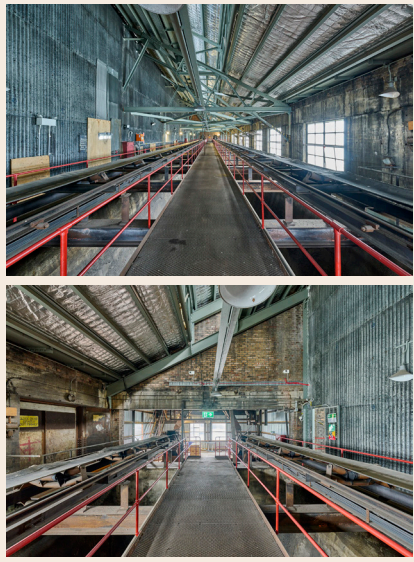
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|--------------------------|---|--|
| Room / Item | Level 1 – W.C. (North) | |
| Building | Boiler House | |
| Room No. | BH 1.8 | |
| Significance | 1 – Exceptional | |
| Elements | General Description | |
| Floor | Concrete. Two painted red steps up to the urinal in the northern room. | |
| Walls | Brick-enclosed walls, rendered internally with a lightweight timber wall separating the space into two rooms. Ceramic tiles above the sink in the north room. | |
| Ceiling | The timber-framed roof structure remains, but the roof sheeting has been removed. Sections were demolished in 2022 due to poor condition. | |
| Doors and Windows | Two doors on the western side are timber-panelled. Louvred window on the eastern wall in the south room, frosted wired glass. | |
| Other | North room: porcelain sink on the north wall, urinal on the eastern wall, with cistern above. The cistern is dislodged and skewed. South room: toilet on the eastern wall. | |




(Design 5 – Architects, 2023)

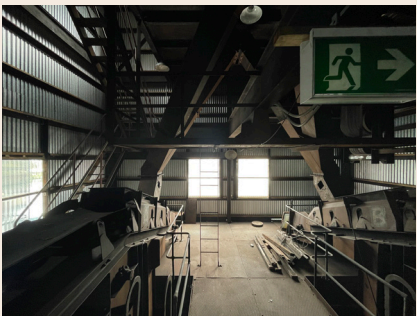

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|--------------------------|---|--|
| Room / Item | Mezzanine Below Hoppers – Walkway | |
| Building | Boiler House | |
| Room No. | BH 2.1 | |
| Significance | 2 – High | |
| Description | <p>This space comprises the metal mesh walkways surrounding the sides of the large Hoppers, where crushed coal was distributed and dropped down to the Chutes and Mills for pulverising. The metal mesh walkways surround the No. 1 Boiler.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | | |
| Floor | <p>Steel mesh grate supported on steel frame. The type of grate changes from north to south half.</p> <p>Reviewed in 2022–24 with some clamps replaced. Minor replacement of some metal mesh panels.</p> | |
| Walls | <p>Brick walls on the north and south sides.</p> <p>Western wall: concrete in the north half, brick in the south half.</p> | |
| Ceiling | <p>The roof of the boiler house is made of steel truss with corrugated Colorbond roof sheeting. The structure differs for the north and south ends. The south roof was initially made of off-form concrete, which was replaced circa 2015.</p> | |
| Doors and Windows | <p>Two steel double doors along the west wall connect to the Pump House roof. South doors were removed, and the opening was covered with transparent corrugated polycarbonate sheets.</p> <p>The windows on the west wall are large metal frames with frosted wire glass.</p> | |
| Lighting | <p>Former pendant dish lights from the ceiling.</p> <p>New temporary lighting and catenary wires were installed in 2022–24.</p> | |
| Other | <p>Two Surge Tank Heater control cabinets are located on the western side.</p> | |
| Machinery | <p>Sides of the Coal Hoppers (1.12)</p> <p>Repainted as part of the 2022–24 remediation works.</p> | |

| | | |
|--------------------------|---|--|
| Room / Item | Conveyor Level (South) | |
| Building | Boiler House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | BH 3.1 | |
| Significance | 2-High | |
| Description | <p>The Conveyor Level allowed for the transportation of coal from the Transfer House to the Coal Hoppers. Crushed coal would be transported along the pair of conveyors and distributed among the twelve large Hoppers below.</p> | |
| Elements | General Description | |
| Floor | Void for hoppers along the middle of the floor. Steel check plate for central and flanking walkways. | |
| Skirting | Steel coving upturn approx. 100mm. | |
| Walls | The west wall is brickwork with windows. The east wall is corrugated fibre cement. | |
| Ceiling | Concrete supported by steel trusses painted and sealed from water ingress in 2022-24. | |
| Doors and Windows | Steel frame-wired windows on the western wall. Some panes were broken and filled in. Windows externally clad with clear corrugated polycarbonate on a timber frame. | |
| Lighting | Former pendant dish lights from ceiling and walls. New temporary lighting and catenary wires were installed in 2022-24. | |
| Other | Tubular steel handrails painted red. | |
| Machinery | Tops of Coal Hoppers (1.12) Coal Conveyors and associated machinery | |

| | | |
|--------------------------|--|--|
| Room / Item | Conveyor Level (North) | |
| Building | Boiler House | |
| Room No. | BH 3.2 | |
| Significance | 2-High | |
| Description | <p>The Conveyor Level allowed for the transportation of coal from the Transfer House to the Coal Hoppers. Crushed coal would be transported along the pair of conveyors and distributed among the twelve large Hoppers below.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | <p>Void for hoppers along the middle of the floor. Steel check plate for central and flanking walkways.</p> <p>The metal plate walkway along the west wall was removed in 2022-24 due to corrosion. The steel supporting structure was also strengthened and repaired in 2022-24 due to corrosion.</p> | |
| Skirting | Steel coving upturn approx. 100mm. | |
| Walls | The west wall is brickwork with windows. Corrugated galvanised steel on the east side fixed to steel cladding rails. | |
| Ceiling | The roof is steel truss with corrugated Colorbond roof sheeting. | |
| Doors and Windows | Steel frame-wired windows on the western wall. Windows externally clad with clear corrugated polycarbonate on a timber frame. | |
| Lighting | Former pendant dish lights from ceiling and walls. New temporary lighting and catenary wires were installed in 2022-24. | |
| Other | <p>Tubular steel handrails (top and middle rail unpainted).</p> <p>A ladder along the west wall provides access to the roof trusses and lantern space.</p> | |
| Machinery | <p>Tops of Coal Hoppers (1.12)</p> <p>Coal Conveyors and associated machinery</p> | |

| | | |
|--------------------------|--|---|
| Room / Item | Conveyor Level – Lift Overrun | |
| Building | Boiler House |  |
| Room No. | BH 3.3 | |
| Significance | 2-High | |
| Description | The lift overrun is located in the northwest corner of the Conveyor Level. The space contains the lift shaft and a narrow steel stair on the north side, providing access to the lift overrun. | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | The walls are brick, which enclose the stairs and the lift overrun space. At the lift overrun level, there is an opening on the west wall. | |
| Ceiling | Concrete supported by steel beams. | |
| Doors and Windows | Steel frame wire glass single pane window on north and south wall. | |
| Lighting | Lighting on walls | |
| Other | Lift machinery. Switches for Door Lock and Cab Circuit. The cathead beam protrudes from the opening on the west wall. Stairs with tubular steel handrails in the northwest corner. | |

(Design 5 - Architects, 2022)

| | | |
|--------------------------|--|--|
| Room / Item | Transfer House | |
| Building | Boiler House | |
| Room No. | BH 3.4 | |
| Significance | 2-High | |
| Description | <p>The Transfer House is a steel and timber-framed structure clad in corrugated galvanised steel located on the northern façade of the Boiler House. It has two levels. The bottom level connects to the Boiler House level BH3.2 and consists of the conveyors. The top level connects to the conveyors from the inclined conveyor.</p> <p>The purpose of the Transfer House was to receive the coal transported by the External Conveyor from the Coal Handling Shed and transfer it to the conveyors within the Boiler House for sorting and pulverising.</p> |   <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Steel check plate on both levels. | |
| Skirting | Steel coving upturn approx. 100mm. | |
| Walls | Galvanised corrugated steel cladding on steel and timber rails. The cladding was replaced in 2022-24. | |
| Ceiling | <p>The upper floor is a corrugated Colorbond roof with sarking on original timber battens and rafters. Steel roof sheeting replaced 2022-24.</p> <p>Lower floor: underside of the upper floor, steel check plates supported by steel rafters.</p> | |
| Doors and Windows | <p>There are two windows on the north and one window on the west elevation covered in clear corrugated polycarbonate.</p> <p>Steel frame wire mesh door on the upper floor of Transfer House.</p> | |
| Lighting | <p>Former pendant dish lights from ceiling and walls.</p> <p>New temporary lighting and catenary wires were installed in 2022-24.</p> | |
| Other | <p>Steel stairs with tubular steel handrail at the west side. Mesh fencing along the handrail on the upper floor.</p> <p>There is a ladder leading to the upper floor of the Transfer House located between the Coal Conveyors.</p> | |
| Machinery | <p>End of the External Conveyor (1.10)</p> <p>End of the Coal Conveyors</p> | |

3.9 INVENTORY OF MACHINERY




This section aims to provide an overarching understanding of the extant machinery concerning the buildings and spaces, as well as their role in the operational systems at the White Bay Power Station. The information below is based on the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report prepared by Godden Mackay Logan (May 2003) for the first edition of the Conservation Management Plan. Refer to Volume 3, Appendix D for the full GML report.

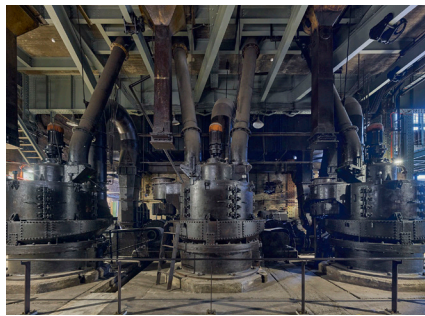

The machinery located within the Boiler House is listed below:


Summary of Machinery

| Machinery | Location | System | Vol. 3 Ref. |
|---|---|--|-------------|
| Coal Weigher | No. 4 Boiler – Firing Floor (BH 1.4) | Coal Handling System | 1.11 |
| Coal Hoppers | Conveyor Level (BH 3.1–3.2) | Coal Handling System | 1.12 |
| Pulverising Mill a) Drive Motor b) Fan Motor | No. 1 Boiler – Ground (West) (BH G.1B) | Steam Raising System | 2.1 |
| Chutes from Hopper to Mill | No. 1 Boiler – Firing Floor (BH 1.1) | Steam Raising System | 2.2 |
| The Pulverised Fuel Feed Pipes | No. 1 Boiler – Ground Floor and Firing Floor (BH G.1, BH 1.1) | Steam Raising System | 2.3 |
| The Boiler a) The Furnace b) Superheaters c) Attemperators d) Economisers e) Air Heaters f) Air Ducts | No. 1 Boiler – Ground Floor (East) and Firing Floor (BH G.1A, BH 1.1) | Steam Raising System | 2.4 |
| Forced Draft Fans | No. 1 Boiler – Firing Floor (BH 1.1) | Steam Raising System | 2.5 |
| The Headers | No. 2 Boiler – Ground Floor (West) (BH G.2B) | Steam Raising System | 2.6 |
| Oil Heater Pumps and Valves | No. 1 Boiler – Firing Floor (BH 1.1) | Steam Raising System | 2.7 |
| Soot Blower Cabinet | No. 1 Boiler – Firing Floor (BH 1.1) | Steam Raising System | 2.9 |
| The Boiler House Control Room | Control Room (BH 1.5) | Steam Raising System | 2.10 |
| Ash Kibble Sets | No. 1 Boiler – Ground (East) (BH G.1A) | Ash Handling System | 7.1 |
| Ash Trucks | Ash Kibble Truck Storage (BH G.5) | Ash Handling System | 7.2 |
| Selenium Rectifier for charging Ash Carts | No. 1 Boiler – Ground (East) (BH G.1A) | House Electrical and Auxiliary Supply System | 8.11 |


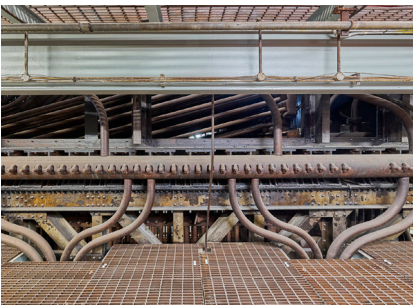


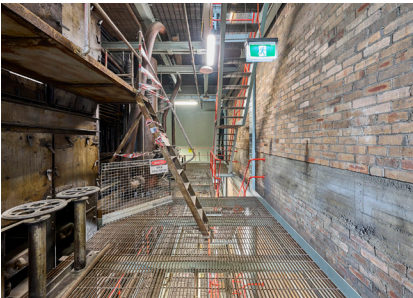
Machinery Descriptions Use and Significance

| | | |
|-----------------------|---|--|
| Machine / Ref. | Coal Weigher – 1.11 | |
| Location | No. 4 Boiler – Ground (BH 1.4) |  <p>(Design 5 – Architects, 2024)</p> |
| System | Coal Handling System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Coal Weigher received coal from the second Transfer House and transferred it to the high-level Hoppers in the Boiler House. When in use, they were inserted between the Chute and the Mill. The automatic weighing machines provided a precise measure of coal to each of the Hoppers for combustion. Only one of these Coal Weighers has been retained.</p> <p>Significance</p> <p>The Coal Weigher is an integral part of the Coal Handling System. It is a rare item, evidencing the processes and precision of coal delivery to the mills and furnaces, and it demonstrates the need for precision in the regulation of coal supply and temperature control for the functioning of the boilers.</p> | |
| | | |
| Machine / Ref. | Coal Hoppers – 1.12 | |
| Location | Conveyor Level (BH 3.1–3.2) |   <p>(courtesy of Toby Peet, 2024)</p> |
| System | Coal Handling System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Coal Hoppers are a series of large, welded steel tanks, each with a rectangular pyramidal chute, suspended along the western end of the Boiler House by steel trusses. Precise amounts of coal were dropped into each of these Hoppers, which then fed coal into the mill feed Chutes via pneumatically controlled gates.</p> <p>Significance</p> <p>The Coal Hoppers are integral parts of the Coal Handling System. They provide evidence of the way in which coal is transferred from the coal handling shed to the boiler house. The Hoppers are indicative of the need to have a quantity of coal immediately available to regulate fluctuations in demand. Through their size and configuration, they are evidence of the industrial technology of the early twentieth century.</p> | |
| | | |

| | | |
|-----------------------|---|--|
| Machine / Ref. | Pulverising Mill – 2.1 | |
| Location | No. 1 Boiler – Ground (BH G.1) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Steam Raising System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Pulverising Mills each stand around 3 metres high and comprise a 100 HP Driving Motor (2.1 a), which spins a crushing chamber containing a number of heavy cast-steel balls to pulverise the coal. Reduced to a fine powder, the coal would then be pushed upwards by a massive fan driven by the 100 HP Electric Fan Motor (2.1 b) into the Pulverised Fuel Feed Pipes.</p> <p>Significance</p> <p>The Pulverising Mills are an integral part of the steam Raising System. They are large, complex assemblages that are representative of the immediate post-war industrial plant, the influence of English technology on the power station, and the efficiency of pulverised fuel boiler technology, which superseded the solid coal boilers.</p> | |
| | | |
| Machine / Ref. | Chutes from Hopper to Mill – 2.2 | |
| Location | No. 1 Boiler – Firing Floor (BH 1.1-1.4) |  <p>(Design 5 – Architects, 2023)</p> |
| System | Steam Raising System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Chutes from Hopper to Mill are cylinders of welded steel that fed coal from bunkers down to the Pulverising Mills.</p> <p>Significance</p> <p>The Chutes from the Hopper to Mill are integral to the transfer of coal from the Coal Handling System to the Steam Raising System. The chutes evidence the travel of coal from the Hopper to the Mills and are highly visible items within both the firing floor and the basement.</p> | |
| | | |

| | | |
|-----------------------|--|---|
| Machine / Ref. | The Pulverised Fuel Feed Pipes – 2.3 | |
| Location | No. 1 Boiler –Ground Floor and Firing Floor (BH G.1, BH 1.1) |  |
| System | Steam Raising System | |
| Significance | 1–Exceptional | |
| Description | <p>The Pulverised Fuel Feed Pipes comprise a series of pipes arranged in the firing floor space. They pneumatically transferred the pulverised coal from the Mill to the Boiler.</p> <p>They would start at ground level as two pipes that each led to a distribution box where a two-way valve split the flow into four main risers, which then divided again to form eight feeder pipes that entered the burner box of the Boiler. This ensured even and optimum combustion.</p> <p>Significance</p> <p>The Pulverised Fuel Feed Pipes are an integral part of the Steam Raising System. Their complex arrangement is a visually evocative industrial element and evidence of the way in which pulverised coal was transferred pneumatically from the Mill to the Boiler.</p> | |

(Design 5 –Architects, 2023)

| | | |
|-----------------------|--|---|
| Machine / Ref. | The Boiler – 2.4 | |
| Location | No. 1 Boiler –Ground Floor and Firing Floor (BH G.1, BH 1.1) |  |
| System | Steam Raising System |  |
| Significance | 1–Exceptional |  |
| Description | <p>The Boiler (No. 1) combusted fuel and generated steam. It comprises several key components:</p> <p>a) The Furnace The Furnace is a rectangular chamber located at the base of the Boiler, where fuel combustion takes place, producing hot air to heat water to steam.</p> <p>b) Superheaters The Superheaters are a set of boiler tubes carrying steam produced from feedwater in the lower part of the boiler. The Superheaters heated the steam to a desired output temperature, maintaining temperature control.</p> <p>c) Attemperators The Attemperators are large steel cylinders located on the upper floors of the Boiler. They reduced the temperature of the steam from the Boilers for processing by the early Turbo-Alternators. As these Turbo-Alternators were phased out, the Attemperators were rendered obsolete.</p> <p>d) Economisers The Economisers are chambers containing a set of pipes carrying incoming, pre-heated feedwater from the Condensers to the Furnace.</p> <p>e) Air Heaters The Air Heaters are of the cross-floor tubular type of two banks arranged in parallel with a total of 1878 tubes. Hot gases entered the air preheater tubes from the multiclone collectors and were discharged into the electrostatic precipitators.</p> <p>f) Air Ducts The air ducts ran down either side of the Boiler and were responsible for carrying primary air to the Pulverising Mills and secondary air to the Furnace.</p> <p>Significance</p> <p>The No. 1 Boiler is the principal element in the Steam Raising System. It illustrates the development of steam-raising technology in the early second half of the twentieth century. With its visible steam pipes, tank, and suspension springs, it is a massive industrial item evocative of older technologies and industrial environments now rarely seen.</p> |   |

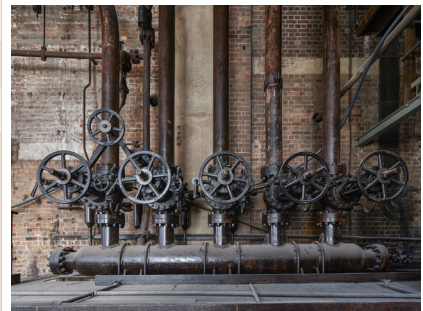
(courtesy of Chris Bennett: Evolving Picture, 2024)

| | | |
|-----------------------|--|--|
| Machine / Ref. | Forced Draft Fans – 2.5 | |
| Location | No. 1 Boiler – Firing Floor (BH 1.1) | |
| System | Steam Raising System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Forced Draft Fans are massive air turbines that force crushed coal fuel and heated air into the furnace through multiple air inlets. They ensured that the air provided to the Boilers at different points was at the ideal temperature – hot enough for optimum combustion of pulverised coal but not so hot that any pre-combustion occurred.</p> <p>Significance</p> <p>The Forced Draft Fans are an integral part of the Steam Raising System. They provide evidence of the operation of the boiler and demonstrate the need for massive amounts of air to be used for the combustion of coal in the furnace. The fans also evidence that English technology is predominantly used throughout the power station.</p> | |



(courtesy of Toby Peet, 2024)

| | | |
|-----------------------|---|--|
| Machine / Ref. | The Headers – 2.6 | |
| Location | No. 2 Boiler – Ground Floor (West) (BH G.2B) | |
| System | Steam Raising System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Headers comprise a primary Header pipe with five valve-operated steam pipes. The initial steam feed is received from the boilers and directed to the Turbo-Alternator Sets. The asbestos-filled lagging and cowling have been removed.</p> <p>Significance</p> <p>The Headers are an integral part of the Steam Raising System. They indicate the steam feed to the Turbine Hall and are evocative of the industrial processes and milieu of the early twentieth century.</p> | |



(courtesy of Toby Peet, 2024)

| | | |
|-----------------------|--|--|
| Machine / Ref. | Oil Heater Pumps and Valves – 2.7 | |
| Location | No. 1 Boiler – Firing Floor (BH 1.1) | |
| System | Steam Raising System | |
| Significance | 2 – High | |
| Description | <p>The Oil Heater Pumps and Valves were used to start the Boilers after they had been shut down, by pumping oil into the furnace to increase temperatures until they reached firing levels, upon which pulverised coal fuel mixed with air would be introduced.</p> <p>Significance</p> <p>The Oil Heater Pumps and Valves are an integral part of the Steam Raising System. They provide evidence of the need for a volatile start-up fuel for pulverised coal-fuelled boilers and illustrate past industrial processes.</p> | |





(courtesy of Chris Bennett: Evolving Picture, 2024)

| | | |
|-----------------------|---|--|
| Machine / Ref. | Soot Blower Cabinet – 2.9 | |
| Location | No. 1 Boiler – Firing Floor (BH 1.1) | |
| System | Steam Raising System | |
| Significance | 2 – High | |
| Description | <p>The Soot Blowers were compressed-air lances that removed soot from the top of the water tubes within the Boiler chamber. The operating panel cabinet (one of thirteen that once existed in the power station) is the only remaining element of the Soot Blowers.</p> <p>Significance</p> <p>The Soot Blower Cabinet is an integral part of the Steam Raising System. As the operating panel for the remote control for the Soot Blower (now removed), it is visible evidence of the need to control the deposition of soot on the Boiler tubes.</p> | |



(courtesy of Chris Bennett: Evolving Picture, 2024)

| | | |
|-----------------------|---|--|
| Machine / Ref. | The Boiler House Control Room – 2.10 | |
| Location | Control Room (BH 1.5) | |
| System | Steam Raising System | |
| Significance | 1 – Exceptional | |
| Description | <p>Comprising a series of panels of metres and switches, this room allowed for monitoring and controlling the operation of the Boiler.</p> <p>Significance</p> <p>The Boiler House Control Room is an integral part of the Steam Raising System. It retains remnant evidence of the operation of the original four boiler systems and can provide information on the processes of steam generation associated with electrical power. The Boiler Control Room is a rare example of a mid-twentieth-century semi-automatic materials flow control system.</p> |  <p>(courtesy of Toby Peet, 2024)</p> |
| Machine / Ref. | Ash Kibble Sets – 7.1 | |
| Location | No. 1 Boiler – Ground (East) (BH G.1A) | |
| System | Ash Handling System | |
| Significance | 3 – Moderate | |
| Description | <p>The Ash Kibble Sets held ash – a waste product – which was passed through ash chutes from the Boilers to the Kibbles. They were then carried by the Ash Trucks to the Ash Handling Tower, where they were lowered onto motor lorries by the Kibble Crane via trunnion pins and emptied for offsite transportation.</p> <p>Significance</p> <p>The Ash Kibble Sets are an integral part of the Ash Handling System. They demonstrate one of the ash handling processes utilised at White Bay and are evocative of the labour-intensive nature of the system when in operation.</p> |  <p>(Design 5 – Architects, 2023)</p> |

| | |
|-----------------------|--|
| Machine / Ref. | Ash Trucks – 7.2 |
| Location | Ash Kibble Truck Storage (BH G.5) |
| System | Ash Handling System |
| Significance | 2 – High |
| Description | <p>The Ash Trucks were purpose-built, low-loading, rigid frame, battery-powered trucks that removed the ash-filled Ash Kibbles from beneath the discharge chutes and conveyed them to the Kibble Crane located on the Ash Tower.</p> <p>Significance</p> <p>The Ash Trucks are an integral part of the Ash Handling System. They provide evidence of the labour-intensive methods of removal of ash from the Boiler. The Ash Trucks are early examples of electrically powered industrial vehicles.</p> |



(Design 5 – Architects, 2023)

| | |
|-----------------------|---|
| Machine / Ref. | Selenium Rectifier for charging Ash Carts – 8.1 |
| Location | No. 1 Boiler – Ground (East) (BH G.1A) |
| System | The Electricity Supply + Auxiliary Systems |
| Significance | 2 – High |
| Description | <p>The Selenium Rectifier for charging Ash Carts are located in the northeast corner of the Boiler House and was used to charge the batteries of the ash carts.</p> <p>Significance</p> <p>The Selenium Rectifier for charging Ash Carts is an integral part of the Auxiliary Electrical System. It provides a link between the Ash Handling System and the efficient disposal of the ash waste from the Electrical Generating System. The Battery Charging System indicates the method of charging the batteries of the Ash Trucks.</p> |

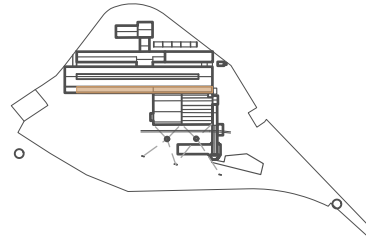


(Design 5 – Architects, 2023)

4 PUMP HOUSE



Figure 4.1 Pump House Internal, facing north, 2024 (courtesch of Chris Bennett: Evolving Picture)



The Pump House is a tall, narrow building located west of the Boiler House and along the east side of the Turbine Hall. It is shown in the following diagrams.

4.1 FUNCTION

The Pump House recycles the feedwater by changing its state for repeated use in the Boiler House and Turbine Hall.

4.2 HISTORY

The first half of the Pump House was constructed alongside the Turbine Hall during the first phase of construction, completed in 1917, while the second southern half was built during the second phase of construction and completed in 1928. When the second Boiler House was demolished in 1976, a marred, grey wall was left along the southern half of the Pump House's eastern elevation. The Pump House primarily facilitated key elements of the Feedwater System.

The Pump House was last used in 1983, when power production at White Bay Power Station was decommissioned. Major restoration works were carried out in 2022–24 to address structural and safety issues, and these are discussed further in this section.

4.3 SPATIAL REFERENCES

The Pump House comprises the following spaces:

| Spaces | Ref. |
|-------------------------|-----------------|
| Ground Floor – Corridor | PH G.1A–PH G.1C |
| Ground Floor – Room | PH G.2 |
| Ground Floor – Room | PH G.3 |
| Ground Floor – Room | PH G.4 |
| Ground Floor – Room | PH G.5 |
| Ground Floor – Room | PH G.6 |
| Ground Floor – Room | PH G.7 |
| Ground Floor – Room | PH G.8 |
| Ground Floor – Room | PH G.9 |
| Mezzanine | PH M.1 |
| Mezzanine – Roofs | PH M.2A –M.2B |
| Level 1 – Room | PH 1.1 |
| Level 1 – Room | PH 1.2 |
| Level 2 – Pumps | PH 2.1 |

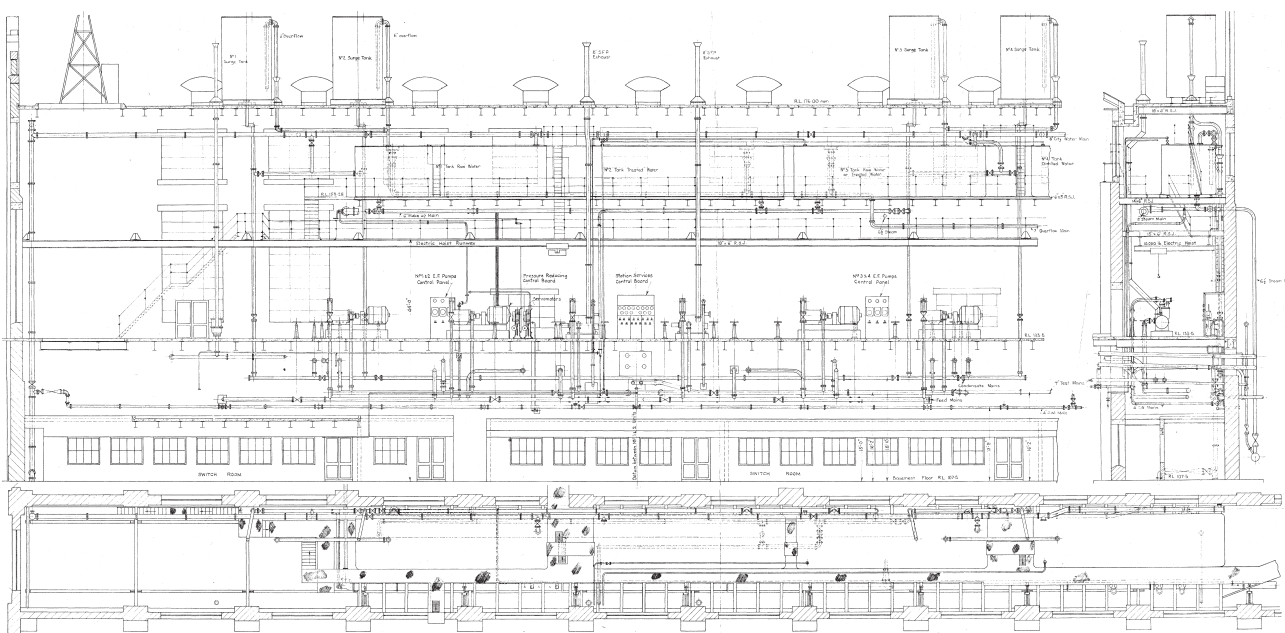
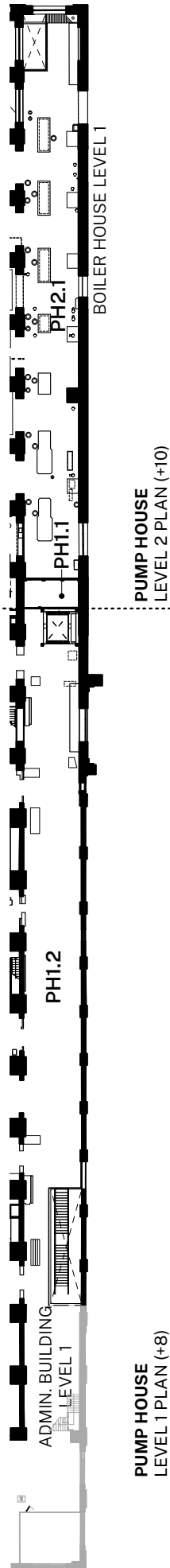
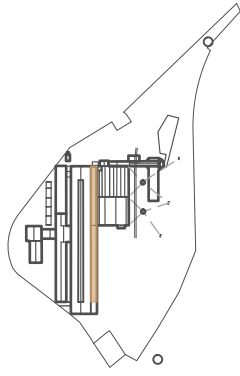
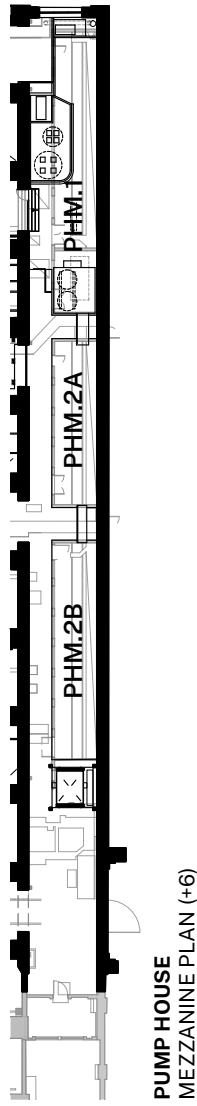


Figure 4.2 Extract of archival drawing of Pump House northern section arrangement, 1950 (courtesy of PMNSW Archive, 12194), cropped

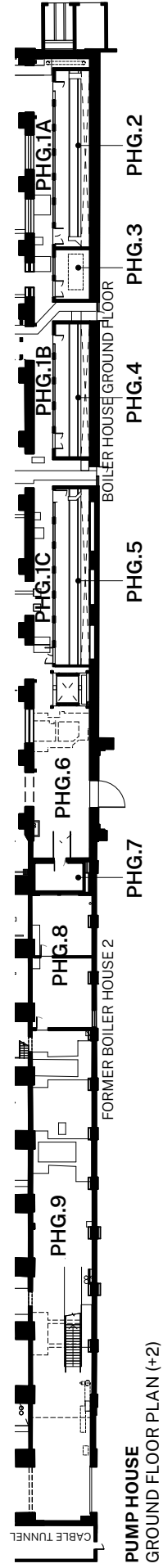
PUMP HOUSE



**PUMP HOUSE
LEVEL 1 PLAN (+8)**



**PUMP HOUSE
MEZZANINE PLAN (+6)**



**PUMP HOUSE
GROUND FLOOR PLAN (+2)**

Figure 4.3 Pump House plans (Ground Floor, Mezzanine, Level 1, and 2).

4.4 DESCRIPTION

4.4.1 General

The Pump House is a tall, narrow building located west of the Boiler House and along the east side of the Turbine Hall. The building is approximately 130 metres long, 6 metres wide and 27 metres tall and is connected to the Turbine Hall by broad openings at the lower levels as one building under separate roofs. It is also accessible from the neighbouring Boiler House at several locations and is connected to the Administration and Staff Accommodation at its southern end. It comprises four levels: a continuous ground level, a mezzanine level at the north end, Level 1 at the south end, and Level 2 at the northern end. At the north end of the Pump House, there remains extant machinery and associated structures, including pumps, pipes, water tanks, gantry cranes, steel structures, walkways, and stairs. Above Level 2 is a series of gantry walkways that run adjacent to and above the Feedwater Tanks and are accessed via stairs from the Mezzanine Level of the Boiler House. The southern end of the Pump House is considerably open space, with all equipment removed except for the steel supporting structures. Due to the Pump House being built in two stages, the walls of the northern end are constructed with brick, whilst the southern end is reinforced concrete. The removal of the second Boiler House in 1976 has left a marred grey wall along the south half of the eastern elevation, with several bricked-up doorways and openings.

4.4.2 Ground Level

The Ground Level of the Pump House at the northern end contains a series of corridors and largely empty rooms that housed machinery. It comprises a concrete floor, brick walls forming the room divisions and a concrete roof. For the southern half, the space is open except for the bin room constructed in 2022–24 and a first aid room, which occupies a small brick enclosure formed in the late 1970s. In the northern half, a corridor runs along the west side of the level (PH G.1A–C), and the rooms (PH G.2–5) are positioned along the eastern side. Access to the Boiler House is by two openings along the east elevation, which would have been closed off with timber-boarded double doors. At the midway of the Pump House, a large steel door provides access to the southern forecourt. Externally, the centre is marked by a large steel window set within the brick wall on the upper levels. The ceiling largely comprises steel beams and concrete slabs up until the end of the corridor, and large amounts of pipework run along it.

Past the corridor, there is an open space (formerly PH G.6) with a ceiling of steel I-beams and vaulted jack-arches formed with corrugated steel. In 2022–24, a new glass elevator was installed in its northeast corner, providing access to levels 1 and 2. At the south end of this space is the only entrance to a small brick-enclosed room (PH G.7), likely constructed in the late 1970s and recently repurposed as the first aid room. South of the first aid room is space PH G.8, which has been

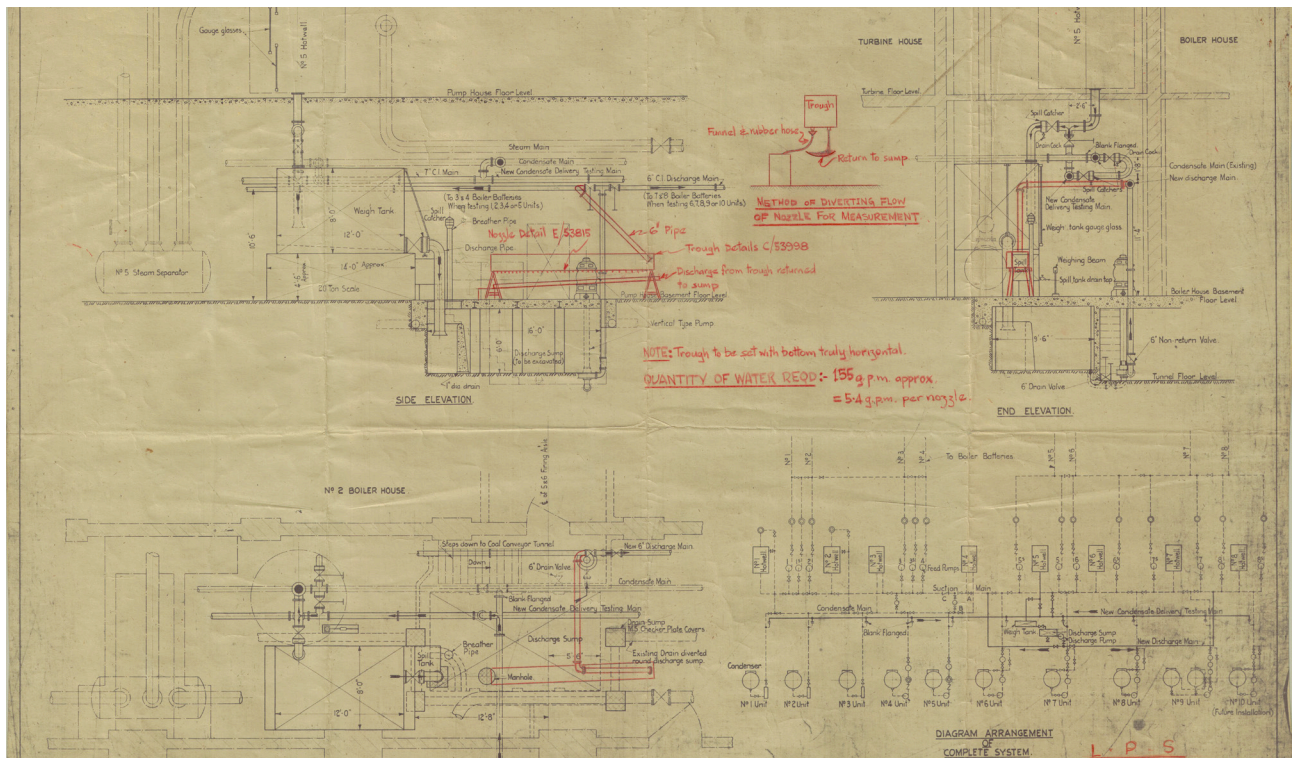


Figure 4.4 Archival Drawing of Pump House southern section arrangement, machinery now removed, 1928 (courtesy of PMNSW Archive, 12149), cropped

repurposed as the Bin Room in 2022–24. The work to accommodate the Bin Room includes demolishing and replacing the internal steel partitions with concrete blockwork. The Bin Room has an existing opening along the east wall, which would have connected to the second Boiler House, and is fitted with a roller shutter.

At the far south end is space PH G.9, mainly comprised of open space. It is connected to the Turbine Hall to the west by three openings and has a large roller door on the south end of the east elevation connecting to the south yard. A new flight of stairs connects to Level 1 (PH1.2) in this space. Beyond the south wall is a cable tunnel that runs past the Turbine Hall and Switch House (SH G.12).

4.4.3 Mezzanine Level

The Mezzanine Level is in the northern half of the Pump House and comprises three spaces connected by walkways. The space is accessed by an opening to the Turbine Hall at the north end (PH M.1). It contains a series of extant pipes and tanks that soften water and alter its pH levels. The other two spaces (PH M.2A, PH M.2B) are the roofs of PH G.4 and PH G.5 and PH G.6. These spaces and their associated walkways do not have balustrades and are empty. The space has I-beams housed in the eastern wall, and several holes connect to the Boiler House, evidence of removed pipework. Very little work was carried out to this space during activation, and it retains its original character.

4.4.4 Level 1

Level 1 is in the southern half of the Pump House with a concrete floor, concrete block walls and a ceiling formed by girders. It is accessed from the ground level via a new flight of stairs, a glass elevator, and openings along its western elevation connecting it to the Turbine Hall. The space is also connected to level 1 of the Administration and Staff Accommodation at its southern end. At the north end of Level 1 is a small storage space enclosed by wire mesh (PH 1.1). The rest of the level comprises a large open space (PH 1.2).

Adjacent to this is a larger open space with a workbench, lathes, and pulley chain and hook suspended from the ceiling. A large opening in the western wall also connects to the Turbine Hall. Along the western wall at several points are bricked-up doorways and various openings that once connected the level with the second Boiler House.

4.4.5 Level 2

Level 2 is in the northern half of the Pump House and houses most of the extant machinery and equipment of this building. It is accessed via the six openings along the western wall that connect to the Turbine Hall and a door at the north end of the eastern wall connecting to the Boiler House. Its main space (PH 2.1) houses the Electric High Pressure Feedwater Pumps, the Steam High Pressure Feedwater Pumps, the Monitor and Metering Cabinets, and the Feedwater and Condensate Tanks, all of which are part of the Feedwater System. The machinery and equipment here was responsible for recycling the feedwater by a change in state for repeated use in the Boiler House and Turbine Hall. Supported at a high level, there are four large cast iron tanks, each supported by I-beam girders and associated metal walkways accessed from the Hopper Level of the adjacent Boiler House. The walls are painted brick, with metal-framed pivot windows occupying the full height of the space on the northern elevation, while the eastern and western walls have extant pipework running along them.



Figure 4.5 Pump House north, Ground Floor, 2024 (courtesy of Chris Bennett: Evolving Picture)

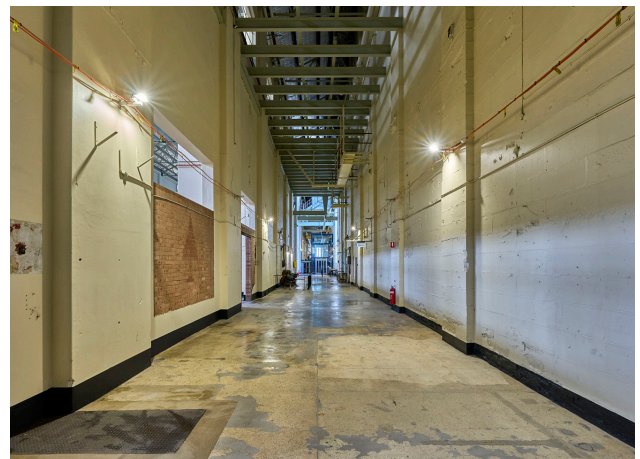


Figure 4.6 Pump House south, Level 2, 2024 (courtesy of Chris Bennett: Evolving Picture)

4.5 ALTERATIONS & CONDITION

Following the decommissioning of White Bay Power Station in 1984, the Pump House fell into a considerably dilapidated state. Broken windows and openings have led to the heavy corrosion and deterioration of internal elements, damage from pigeon and pest entry, and vandalism.

The 2022–24 remediation works for the Pump House have focused on essential maintenance, restoration, and preservation, as well as the demolition of certain spaces – these include a small control room on the Ground Level, a pair of storage rooms on Level 1, and a pair of cabins at the south end of Level 2. New stairs and a glass elevator have also been installed. Other works have included safety, security, and lighting. These are discussed in general terms below:

| Element / Room | Reference |
|--|--|
| Flooring in public areas | Most concrete floors were lightly ground, and holes patched to minimise trip hazards. Floor hatches were repaired, strengthened or replaced where required for safety. Floors were coated with a clear topping to seal and provide a compliant slip resistance. |
| Internal walls | Walls and surfaces that were originally painted were repainted to encapsulate lead paint in colours that closely match the original. |
| External east wall | The east wall remains exposed and has un-remediated spalling concrete blocks. |
| Ground floor north end | The floor slab of the space PHM.1 remains in poor condition and are supported from below with temporary props. Internal rooms received minimal attention. |
| PHG.6 | Installation of a new steel framed and glazed lift. The lift involved the removal of a brick enclosure on ground floor and a timber framed office on level 2. |
| First Aid Room (PGH.7) and Bin Room (PHG.8) | The existing brick enclosure (PHG.7) was repurposed to house a first aid room by re-lining the walls, floor, new ceiling and fitout. The room PHG.8 was repurposed to a Bin Room which included a new concrete block wall (replacing c.1950s steel wall), the removal of a steel framed partition (circa 1950s) and new services. |
| PHG.9 | A new steel stair is installed at the southern end of the space. |
| Ground floor south end (PHG.9) | Ground water continues to seep through the base of wall next to the new steel stair addition |
| Roofing – flat roof at north end | A new torch on membrane installed over the concrete flat roof. The roof ventilators were repaired, repainted and new flashing installed. Additional rainwater outlets were installed in the concrete box gutter along the western edge. |
| Roofing – metal sheeting southern half | The main corrugated roof over the boiler house was replaced with box gutters and new drainage and overflow. The original precast concrete east awning was replaced entirely with a new galvanised steel structure, lightweight cladding and metal roof. |

4.6 SIGNIFICANCE

The Pump House is an integral part of the White Bay Power Station and has historical associations with the electrification of the Sydney rail and tramway systems during the twentieth century. The industrial building and its extant equipment and machinery are demonstrative of engineering design principles and the Feedwater System, by which feedwater was continuously cycled and reused during the steam raising process.

Internally, the Pump House presents as a narrow and tall space, with large amounts of extant machinery

and equipment located at its north end, most notably in the form of numerous tanks and networks of pipes. Externally, the Pump House is integral to the scale and overall industrial aesthetic of the White Bay Power Station. Together with the adjacent Turbine Hall, it forms the largest volume in the complex of buildings and contributes to the power station's landmark qualities.

It is a combination of both this external form and its internal spaces and machinery that accords the Pump House social significance for former workers and locals alike as a key part of an industrial symbol for the area.



Figure 4.7 Pump House East Elevation, between Administration and Staff Building (left) and Boiler House (right), 2024 (courtesy of Chris Bennett: Evolving Picture)

4.7 REFERENCE TO POLICIES

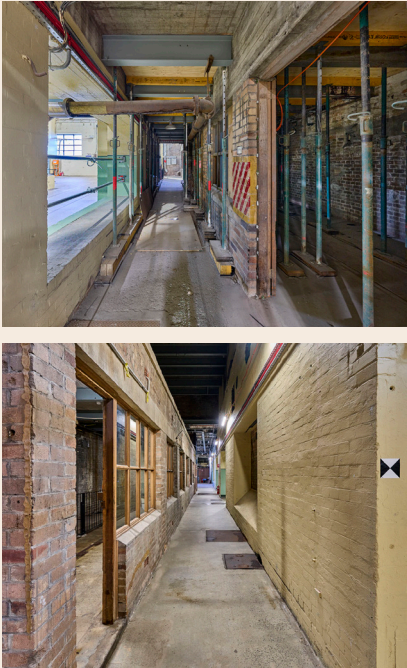
The Pump House is an integral part of the White Bay Power Station. The following policies from the White Bay Power Station CMP are relevant to the Pump House and should guide its ongoing care and management, including decisions about conservation, future use, and development.

Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.



| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.25 | Pump House |
| 6.26 | Pump House north |
| 6.27 | Pump House machinery configuration |
| 6.28 | Pump House south |
| 6.29 | Pump House openings |
| Tolerance for Change Table 6.6.8.1 and Opportunities for Change Table 6.6.8.2 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 11.2 | New Structure – No. 2 Boiler House |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |


4.8 INVENTORY OF SPACES

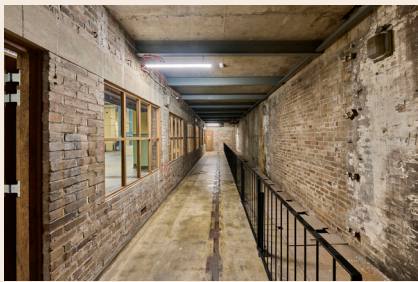
This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.

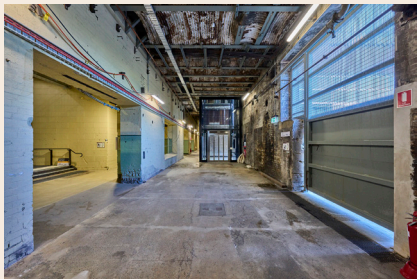
| Room / Item | Ground Floor – Corridor | |
|-------------------|--|--|
| Building | Pump House | |
| Room No. | PH G.1A–G.1C | |
| Significance | 1–Exceptional (PHG.1A), 2–High (PHG.1B–G.1C) | |
| Description | <p>This corridor comprises the main circulation space on the ground floor of the Pump House. It is accessed by six openings in the western wall that connect to the adjacent Turbine Hall, and from two doors that connect to the ground floor of the Boiler House.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with shallow cable trenches, with steel grate covering in G.1A. Steel plates have been refurbished or replaced in 2022–24. | |
| Walls | Brick on east, north and west sides. | |
| Ceiling | PH G.1A: Off-form concrete with evidence of boarded formwork supported by steel I-beams. PH G.1B–C: Void to underside of level 2, off-form concrete with evidence of boarded formwork supported by steel I-beams with network of pipes and conduits. Concrete slab corroded and spalling and currently supported on temporary props. | |
| Doors and Windows | Windows on eastern side (refer to PH G.2–5). | |
| Lighting | Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | PHG.1A: Temporary structural props supporting spalling concrete ceiling. Barrier added in 2022–24 to limit access | |

| | | |
|--------------------------|--|--|
| Room / Item | Ground Floor – Room | |
| Building | Pump House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | PH G.2 | |
| Significance | 1–Exceptional | |
| Description | <p>This room is located in the northeast corner of the Pump House ground floor. The space was used to house machinery and equipment that have since been removed. The extant machinery in space PH G.3 provides the best evidence for the type of machinery that this space likely housed. ce likely housed.</p> | |
| Elements | General Description | |
| Floor | Concrete with longitudinal steel tracks. Channel covered with steel grates along east side. Some steel grates missing. | |
| Walls | Brick | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Doors and Windows | <p>Red door frame on north end of west wall, door missing. Timber double doors on south end of west wall. Timber frame windows along west wall. Several panes broken or missing, some boarded up with plywood. Broken panes removed.</p> | |
| Lighting | Wall lights on east side and fluorescent lights from ceiling | |
| Other | Exhaust fan on north wall | |

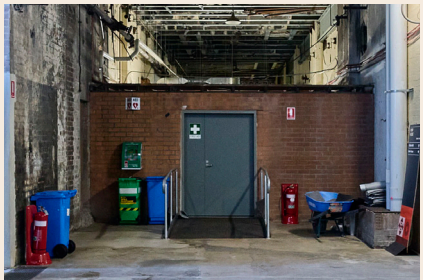
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| Room / Item | Ground Floor – Room | |
| Building | Pump House | |
| Room No. | PH G.3 | |
| Significance | 1–Exceptional | |
| Description | <p>This small brick room is located near the north end of the Pump House ground level. It hosts the Oil Circuit Breakers for the Tie Group No. 1 Station Transformer, No. 1 Auxiliary Group Tie, Tie Group No. 2 Station Transformer, No. 2 Auxiliary Group Tie, and the 1A Feed Pump.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>(Design 5 – Architects, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete, large pit/cable trench running longitudinal into PH G.2. Steel channels with extant machinery. | |
| Walls | Brick | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Doors and Windows | Timber double doors on south end of west wall. Door repaired and closed in 2024. Timber frame window along west wall. One broken pane replaced in 2022–24, one filled in with mesh wire. | |
| Lighting | Former caged lightbulb from ceiling. New temporary lighting and catenary wires installed 2022–24. | |
| Other | Exhaust fan on south wall, conduits and closing coil supply box on east wall. | |
| Machinery | Oil Circuit Breakers (6.5) | |


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|--------------------------|--|--|
| Room / Item | Ground Floor – Room | |
| Building | Pump House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | PH G.4 | |
| Significance | 2 – High | |
| Description | <p>This room is located in the north half of the Pump House ground level. The space was used to house machinery and equipment that have since been removed. The extant machinery in space PH G.3 provides the best evidence for the type of machinery that this space likely housed.</p> | |
| Elements | General Description | |
| Floor | Concrete with longitudinal steel tracks. Channel on east side covered with steel sheets with various holes for machinery parts and wires to drop down. | |
| Skirting | Concrete plinth along east wall 100mm (approx.) above steel. | |
| Walls | Unpainted brick | |
| Ceiling | Off-form concrete with evidence of boarded form-work supported by steel I-beams (notably smaller than those in PH G.2 and G.3). Beams painted 2022–24. | |
| Doors and Windows | <p>Timber single door on north end of west wall, and timber double door at south end. Both boarded, ledged, and braced.</p> <p>Three timber frame 8 pane windows on west wall. Some windows smashed one filled in with wire mesh. Broken glass replaced with new glass in 2022–24.</p> | |
| Lighting | <p>Fluorescent lights from ceiling.</p> <p>New temporary lighting and catenary wires installed 2022–24 along west wall.</p> | |
| Other | <p>Exhaust fan on north wall.</p> <p>Balustrade along east side of floor channel, installed in 2022–24.</p> | |

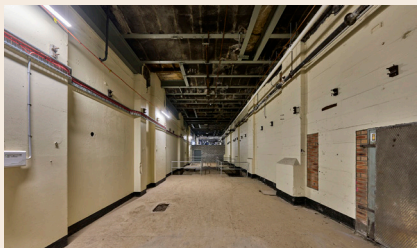
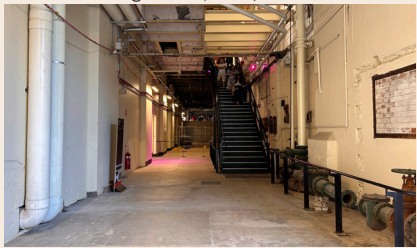
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| Room / Item | Ground Floor – Room | |
| Building | Pump House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | PH G.5 | |
| Significance | 2 – High | |
| Description | <p>This room is located near the middle of the Pump House ground level. The space was used to house machinery and equipment that have since been removed. The extant machinery in space PH G.3 provides the best evidence for the type of machinery that this space likely housed.</p> | |
| Elements | General Description | |
| Floor | Concrete with longitudinal steel tracks. Channel on east side covered with steel sheets. | |
| Walls | Unpainted brick | |
| Ceiling | Off-form concrete supported by steel I-beams. Beams painted 2022–24. | |
| Doors and Windows | <p>Timber single door on north end of west wall, and timber double door at south end. Southern door hinges were replaced in 2022–24.</p> <p>Five timber frame 8 pane windows along west wall. Broken glass replaced with new, intact panes cleaned in 2022–24.</p> | |
| Lighting | <p>Wall lights along east and west walls.</p> <p>New temporary lighting and catenary wires installed 2022–24 along west wall.</p> | |
| Other | Balustrade along east side of floor channel, installed in 2022–24. | |

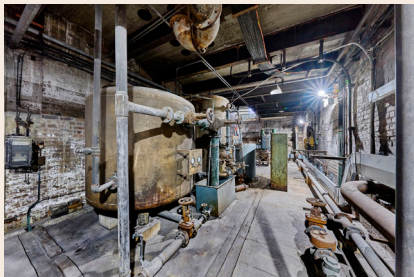
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| Room / Item | Ground Floor – Room | |
| Building | Pump House |  |
| Room No. | PH G.6 | |
| Significance | 2 –High | |
| Description | This room is located at the middle of the Pump House ground level. It is not known what exactly this space was once used for, but it is likely that some form of machinery/equipment was located here. | |
| Elements | General Description | |
| Floor | Concrete was made level for compliance and large service pits in northern half were filled in 2022–24. | |
| Skirting | Painted black | |
| Walls | East: Unpainted face brick, evidence of bricked up openings. West: Painted brickwork -2022–24 works. | |
| Ceiling | Steel I-beams supporting Jack-arches with retained corrugated steel formwork. Steel beams painted 2022–24. | |
| Doors and Windows | Large steel framed gate with clear corrugated polycarbonate on east side, leads to outside, installed in 2022–24. Metal frame of 12 pane window on west wall. No glass. | |
| Lighting | No evidence of original lights New temporary lighting and catenary wires installed 2022–24 along west wall. | |
| Other | Small control room was demolished to allow for new steel framed and glass lift installation in 2022–24. Pipes and valves along eastern wall and protruding out of ceiling. | |


(courtesy of Chris Bennett: Evolving Picture, 2024)

| | | |
|--------------------------|--|--|
| Room / Item | Ground Floor – Room | |
| Building | Pump House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024) cropped</p> |
| Room No. | PH G.7 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>This room is located near the middle of the Pump House ground level. The use of the space is unknown. Based on the brickwork, it was constructed in the late 1970s.</p> <p>In 2022–24, room refurbished and used as First Aid Room.</p> | |
| Elements | General Description | |
| Floor | Concrete levelled, covered with linoleum in 2022–24 | |
| Skirting | Linoleum | |
| Walls | New lightweight partition walls with plasterboard lining, covering existing masonry walls, built in 2022–24. | |
| Ceiling | New plasterboard ceiling in 2022–24. | |
| Doors and Windows | Existing windows on south covered with new walls. New unequal double doors, painted. | |
| Lighting | New lighting installed 2022–24. | |
| Other | Lightweight accessible ramp with handrails installed in 2022–24 in front of door. Internal space fitted out with services, joinery and equipment to house a First Aid Room. | |



| | | |
|--------------------------|---|--|
| Room / Item | Ground Floor – Room | |
| Building | Pump House | |
| Room No. | PH G.8 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>This room is located in the south half of the Pump House ground level, near the middle. The use of the space is unknown. The brick partition at the northern end dates from the 1970s.</p> <p>In 2022–24, the room was divided in two and repurposed to a Bin Room and storage room which included internal modifications.</p> |  <p>(Design 5 – Architects, 2024)</p> |
| Elements | General Description | |
| Floor | Northern half: concrete with scribed margins. Southern half: concrete with epoxy (2022–24). | |
| Skirting | Northern half: – Southern half: Epoxy coving | |
| Walls | <p>Northern half: Face brick wall on north side. Concrete block wall on east side New concrete block wall on south side Rendered masonry wall on west side.</p> <p>Southern half: New concrete block wall on north and south side. Existing concrete block wall on east side, with evidence of removed services. Rendered masonry on west side.</p> | |
| Ceiling | Northern half: – Southern half: New plasterboard ceiling in 2022–24 | |
| Doors and Windows | <p>Northern half: Windows on north wall, two 4 pane metal frame windows with figured, frosted, and wired glass, and middle pair vertical pivot. New single timber door on south side.</p> <p>Southern side: New single timber doors on north and south side. Perforated roller shutter on east side.</p> | |
| Lighting | New lighting installed 2022–24 | |
| Other | Metal Joinery along northern wall | |


| | | |
|--------------------------|---|---|
| Room / Item | Ground Floor – Room | |
| Building | Pump House |  <p>Northern end looking north (courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>Southern end looking north (Design 5 – Architects, 2024)</p> |
| Room No. | PH G.9 | |
| Significance | 4 – Little / Neutral, 2 – High (front of roller door area) | |
| Description | <p>This space makes up most of the south half of the Pump House ground level. The space does not contain machinery. The space is connected to the Turbine Hall by several openings along the west wall and a large roller door on the east wall at the south end provides access to the South Yard.</p> | |
| Elements | General Description | |
| Floor | <p>Northern end: concrete, with multiple pits located throughout, surrounded by steel safety rails.</p> <p>Southern area: concrete floor remediated for compliant access, pits concrete filled in 2022–24. Small area on eastern side behind balustrade retained as is. Existing rail tracks along south.</p> | |
| Skirting | Painted black | |
| Walls | <p>New block wall at north end.</p> <p>Concrete block wall with infills on east side. Openings filled in with brick.</p> <p>Rendered masonry wall on west side.</p> | |
| Ceiling | <p>The ceiling is the floor plate of level 1 above. It is concrete (varies as Jack-arch and flat concrete) supported on painted steel I beams that span east and west. Some concrete at south end has been removed and infilled with timber and steel panels.</p> | |
| Doors and Windows | <p>Metal roller blind door located at the south end of the eastern wall, replaced in 2022–24.</p> <p>Two entrances to Turbine Hall on west wall.</p> | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | |
| Other | <p>Redundant fixings on east and west walls.</p> <p>New stair connecting to Level 1 of Pump House through opening installed in 2022–24. (some steel beams were cut)</p> <p>New barrier around existing pipes on south, until around midway of the space.</p> <p>New two downpipes from above on western wall.</p> | |

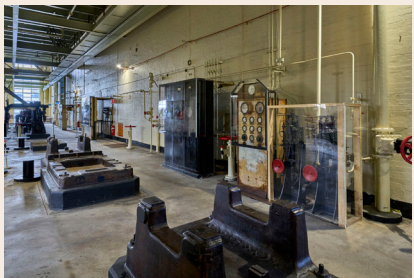
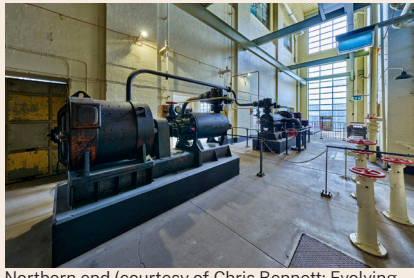
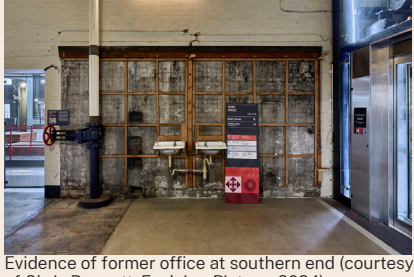
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| Room / Item | Mezzanine | | |
| Building | Pump House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Room No. | PH M.1 | | |
| Significance | 1-Exceptional | | |
| Description | This mezzanine level is located at the north end of the Pump House. It houses several tanks and equipment that were used for the Feedwater System and Boiler operations. | | |
| Elements | General Description | | |
| Floor | Concrete, machines are slightly elevated, step down at entrance. | | |
| Walls | <p>East wall: Unpainted brick with lintels housed in wall at approx. 1 metre high. Evidence of former external windows blocked up when the current Boiler House was constructed in 1953.</p> <p>West wall: Unpainted brick with plinth line at approx. 2 metres. Some holes that have been patched up with brick.</p> | | |
| Ceiling | Off-form concrete supported by steel I-beams, with some openings to pass conduits through. All unpainted. | | |
| Doors and Windows | Steel frame and mesh door at west wall to Turbine Hall. | | |
| Lighting | Former pendant dish lights from the ceiling. New temporary lighting and catenary wires installed 2022-24. | | |
| Other | Surge tanks, pipes, and valves located at the south end and the northwest end of the space. Conduits and pipes attached to walls and ceiling. | | |

| | | |
|---------------------|---|---|
| Room / Item | Mezzanine – Roofs | |
| Building | Pump House |  |
| Room No. | PH M.2A–M.2B | |
| Significance | 2 – High | |
| Description | This mezzanine level is located in the northern half of the Pump House. It comprises the roof of PH G.4 and PH G.5. | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Unpainted brick wall on east and west sides. Roof I-beams are housed into the walls, and plinth line at approx. 2 metres. | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Other | Bridges between the two spaces are dangerous, no balustrades on the sides of the rooftops. Pipes and some associated machinery run through the space. | |

(Design 5 – Architects, 2023)

| | | |
|--------------------------|---|--|
| Room / Item | Level 1 – Room | |
| Building | Pump House | |
| Room No. | PH 1.1 | |
| Significance | 3 – Moderate | |
| Description | <p>This room is located at the north end of Pump House Level 1. It was likely used for storage.</p> <p>The space was dramatically altered as part of the lift installation including the renewal of the floor slab over the top and the timber and wire screen.</p> | |
| |  <p>Existing Condition (Design 5 – Architects, 2023)</p>  <p>After work (courtesy of Chris Bennett: Evolving Picture, 2024) cropped</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Painted brick wall on north, east and west sides. South wall is made up of timber posts and wire mesh. Mesh replaced in 2022/2024 as part of the lift installation works. | |
| Ceiling | New concrete deck 2022–24 as part of the lift installation works. | |
| Doors and Windows | Braced timber door with wire mesh on south wall. Timber door relocated to western side to allow for lift installation in 2022–24. | |
| Other | Timber bracing on north wall. Half of the south elevation is covered with new lift. | |
| Movable heritage | Various metal cabinets from around Pump House, and tool racks from demolished offices in Pump House. | |

| | | |
|--------------------------|---|--|
| Room / Item | Level 1 – Room | |
| Building | Pump House | |
| Room No. | PH 1.2 | |
| Significance | 3 – Moderate | |
| Description | <p>The construction for the southern part of the Pump House was completed in 1928. The space connects at the same height with level 2 of the Turbine Hall to the west and would have connected to Boiler House No. 2, to the east. The Boiler House No. 2 was demolished in c.1976 which is evidenced by blocked up doors.</p> <p>Any machinery, pumps and water tanks that was inside the space has been removed leaving the first floor and the area above as an empty void. Some of the high-level walkways and platforms remain but there is evidence of many more having been removed.</p> <p>Along the east wall is an old lathe and at the northern end, is a workbench with grinding wheels. The newly installed steel and glazed passenger lift occupies the north end of the space.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete, remediated in 2022–24 for compliance. | |
| Skirting | Painted black | |
| Walls | <p>Walls painted in 2022–24.</p> <p>North: Steel framed and glazed passenger lift 2022–24.</p> <p>East wall: Original concrete block wall (painted) with multiple bricked up openings is evidence of connection with former Boiler House No. 2. Former steel sheeted partitions (post 1950s) forming workshops were demolished in 2022–24 due to condition. Evidence retained on perimeter walls with paint colours and fixings.</p> <p>South: The external wall of Administration block is above the first-floor level. It is rendered masonry supported by steel I-beam.</p> <p>West: Rendered concrete/masonry wall with multiple bricked up openings.</p> | |
| Ceiling | Formed by girders and the roof of the Pump House. The roof is a pitched steel truss roof with corrugated Colorbond metal sheets on the outside. The roof incorporates a lantern skylight which is blocked with Colorbond. | |
| Doors and Windows | <p>Multiple openings along western wall provides level access to the Turbine Hall.</p> <p>East wall: Former steel framed windows at the northern end are covered externally with clear corrugated polycarbonate. Original glazing and framing removed and replaced in 2022–24.</p> <p>West wall: At level 1, there are two large steel framed door and window suites at the south end and two at the north. At high level (height of the Turbine Hall gantry crane), there are large steel framed windows between each structural bay.</p> | |
| Lighting | <p>Former pendant dish lights along walls.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | <p>Timber bench with metal top located at north end of the eastern wall. Three grinding wheel machines and extract fan, pulley chain and hook all located at north end of the space.</p> <p>There is a large lathe located along the western wall approximately midway within the space.</p> | |

| | | |
|--------------------------|---|---|
| Room / Item | Level 2 – Pumps | |
| Building | Pump House | |
| Room No. | PH 2.1 | |
| Significance | 1 – Exceptional | |
| Description | <p>This space forms the entirety of the Pump House Level 2. The construction of this building was completed 1917. However, most the contents, including the floor, high level steel beams, flat concrete roof, and machinery, tanks and high. Level walkways, machinery and flat concrete roof all date from the 1950s modernisation.</p> <p>The space is connected flush with Level 1 of the Boiler House through openings at the north and south ends and to the Boiler House Control Room via a sliding door located approximately midway. The space also connects flush with Level 2 of the Turbine Hall by openings between almost each structural bay.</p> <p>The Feedwater pumps and control valves and panels are retained. The Feedwater Pumps that would receive feedwater from the Deaerators and pump it to the Feed Heaters. Located above the space are the Feedwater and Condensate Tanks supported on steel I-beam girders that span east to west masonry walls. The tanks stored feedwater which would be fed into the Boilers in the event of a pump systems failure.</p> |  <p>Southern end (courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>Northern end (courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>Evidence of former office at southern end (courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with scribed margins and steel plates along the east wall. The concrete floor dates from 1950s alterations. Steel grates replaced with chequer plate in 2022–24. At the south end, a new concrete slab was constructed outside the lift. This was previously a timber framed floor with a timber framed and sheeted office which has since been demolished. | |
| Skirting | Repainted black as part of 2022–24 works. | |
| Walls | Painted brick, dating from the 1917 construction. The wall is penetrated for various services and windows. On the east wall at the south end, there is timber framing attached to an unpainted section of brick wall. This marks the location of a timber enclosed office that was demolished in 2022–24 to accommodate the lift. Wall repainted as part of 2022–24 works. | |
| Ceiling | The ceiling extends to the underside of the concrete flat roof, supported on steel I-beam girders and dating from the 1950s modifications. There are also large cast iron tanks and walkways at high level supported by steel I-beams. | |
| Doors and Windows | Multiple openings along western wall to the Turbine Hall. On the east wall at the north end, there are three bays of large steel framed windows shared with the Boiler House. These windows were originally external windows prior and were made internal in 1950s when the Boiler House was constructed. West wall: At high level (height of the Turbine Hall gantry crane), there are 12 pane wired frosted windows high between each structural bay. Two sets of the same windows are at ground level at the north end. | |

| | |
|-------------------------|---|
| Lighting | Former pendant dish lights along walls and from ceiling. New temporary lighting and catenary wires installed 2022-24. |
| Other | New lift installed in 2022-24 at southern end. Metal topped timber bench in the northeast corner. Pipes and conduits running along the walls on either side. Steel balustrade installed around pumps machinery, and to north and middle sections of the space in 2022-24. Perspex protection installed to cabinets in 2022-24. Floor penetrations are covered using round steel seats or steel plates (2022-24). At southern end next to lift, two sinks from former offices, cleaned and treated in 2022-24. |
| Machinery | Electric High Pressure Feedwater Pumps (4.1) Steam High Pressure Feedwater Pumps (4.2) Monitor and Metering Cabinets (4.5) Feedwater and Condensate Tanks (4.6) Cleaned and treated as part of 2022-24 works. |
| Movable heritage | Boiler 2 signage on bench at restricted northern end area |

4.9 INVENTORY OF MACHINERY

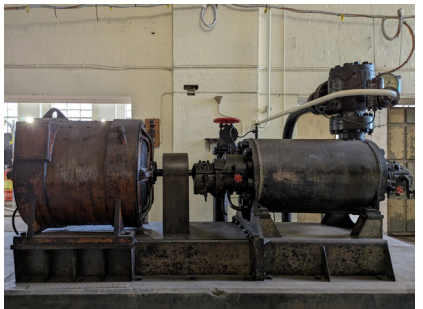
This section aims to provide an overarching understanding of the extant machinery in the buildings and spaces and their role in the operational systems at the White Bay Power Station. The information below is based on the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report prepared by Godden Mackay Logan (May 2003) for the first edition of the Conservation Management Plan. Refer to Volume 3, Appendix D for the full GML report.




The machinery located within the Pump House is listed below:



Summary of Machinery

| Machinery | Location | System | Vol. 3 Ref. |
|--|------------------------------|-------------------------------|-------------|
| Electric High Pressure Feedwater Pumps | Level 2 – Pumps (PH 2.1) | The Feedwater System | 4.1 |
| Steam High Pressure Feedwater Pumps | Level 2 – Pumps (PH 2.1) | The Feedwater System | 4.2 |
| Monitor and Metering Cabinets | Level 2 – Pumps (PH 2.1) | The Feedwater System | 4.5 |
| Feedwater and Condensate Tanks | Level 2 – Pumps (PH 2.1) | The Feedwater System | 4.6 |
| Oil Circuit Breakers | Ground Floor – Room (PH G.3) | The Power Reticulation System | 6.5 |

Machinery Descriptions Use and Significance

| Machine / Ref. | Electric High Pressure Feedwater Pumps – 4.1 | |
|----------------|--|--|
| Location | Level 2 – Pumps (PH 2.1) | |
| System | The Feedwater System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Electric High-Pressure Feedwater Pumps are three multi-stage centrifugal pumps powered by an electric motor. They receive the feedwater from the Deaerator, which is then pumped to the Feed Heaters..</p> <p>Significance</p> <p>The Electric High Pressure Feedwater Pumps are integral to the Feedwater System. They demonstrate the technique by which feedwater is constantly reused in power generation. They are robust and representative of electric high pressure feedwater pumps used in power stations in the mid-twentieth century.</p> | |
| |  <p>(Design 5 – Architects, 2023)</p> | |

| | | |
|-----------------------|--|--|
| Machine / Ref. | Steam High Pressure Feedwater Pumps – 4.2 | |
| Location | Level 2 –Pumps (PH 2.1) | |
| System | The Feedwater System | |
| Significance | 1–Exceptional | |
| Description | <p>The Steam High Pressure Feedwater Pumps are two multi-stage centrifugal pumps powered by a steam engine motor. They receive the feedwater from the Deaerator, which is then pumped to the Feed Heaters.</p> <p>Significance</p> <p>The Steam High Pressure Feedwater Pumps are integral to the Feedwater System. They demonstrate the technique by which feedwater is constantly reused in power generation and are representative of rare steam high pressure feedwater pumps used in power stations up to the mid-twentieth century.</p> | |
| Machine / Ref. | Monitor and Metering Cabinets – 4.5 | |
| Location | Level 2 –Pumps (PH 2.1) | |
| System | The Feedwater System | |
| Significance | 3–Moderate | |
| Description | <p>The Monitor and Metering Cabinets are made up of two steel electrical cabinets with various recorders, dial gauges, control valves and switches that allowed for the monitoring and control of the feedwater supply system.</p> <p>Significance</p> <p>The Monitor and Metering Cabinets are integral to the Feedwater System. They represent mid-twentieth-century electrical control and metering equipment and technological developments in the supply of electricity in the first half of the twentieth century.</p> | |
| |  <p>(Design 5 – Architects, 2023)</p> | |
| |   <p>(Design 5 – Architects, 2023)</p> | |

| | | |
|-----------------------|--|---|
| Machine / Ref. | Feedwater and Condensate Tanks – 4.6 | |
| Location | Level 2 –Pumps (PH 2.1) |  |
| System | The Feedwater System | |
| Significance | 3 –Moderate | |
| Description | <p>The Feedwater and Condensate Tanks are a set of large cast iron water tanks and were suspended above the Pump Gallery floor for the economical, gravitational feed of feedwater into the Boilers in the event of a pump systems failure.</p> <p>Significance</p> <p>The Feedwater and Condensate Tanks are integral to the Feedwater System. They demonstrate the technology by which feedwater is constantly reused in power generation and are representative of the size, design, and layout of water storage arrangements in a large Boiler House.</p> | |
| Machine / Ref. | Oil Circuit Breakers – 6.5 | |
| Location | Ground Floor –Room (PH G.3) |  |
| System | The Power Reticulation System | |
| Significance | 2 –High | |
| Description | <p>The Oil Circuit Breakers are a set of motor-driven oil-bath electrical switches in steel cabinets. Each is labelled with its function.</p> <p>Significance</p> <p>The Oil Circuit Breakers are integral to the Power Reticulation System. They represent mid-twentieth-century electrical control and distribution equipment and technological developments in the supply of electricity in the first half of the twentieth century.</p> | |

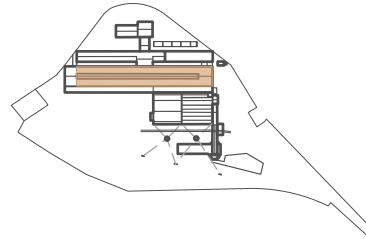
(Design 5 – Architects, 2023)

(Design 5 – Architects, 2023)

5 TURBINE HALL



Figure 5.1 Turbine Hall Internal, facing north, 2024 (courtesy of Chris Bennett: Evolving Picture)



The Turbine Hall is located on the western half of the site, towards the centre and is shown in the following diagrams.

5.3 SPATIAL REFERENCES

5.1 FUNCTION

The Turbine Hall functions to utilise the steam produced by the Boiler House to generate electricity, before cooling it and returning it as feedwater back to the Boiler House.

5.2 HISTORY

The first half of the Turbine Hall was constructed alongside the Pump House during the first phase of construction in 1917, while the second, southern half was constructed during the second phase of construction in 1928. The Turbine Hall facilitated elements of the Power Generating, Feedwater, and Circulating Water System. Throughout its operating years, several turbine-alternator sets were replaced in the building – for increased efficiency (notably during the conversion from 25Hz to 50Hz turbo-alternators) as well as due to failures and damage. At its maximum capacity, the Turbine Hall was intended to host nine turbo-alternator sets. Notably in 1958, the No. 2 turbine failed, leading to a massive explosion early in the morning and resulting in extensive repairs for the Turbine Hall.

The last use of the Turbine Hall was in 1983 before it was decommissioned. Major restoration works were carried out in 2022–24 to address structural and safety issues and are discussed further in this section.

The Turbine Hall comprises the following spaces:

| Spaces | Ref. |
|----------------------------------|----------|
| Ground Floor – Section A (South) | TH G.A.1 |
| Ground Floor – Section A (North) | TH G.A.2 |
| Ground Floor – Section B | TH G.B.1 |
| Ground Floor – Section C | TH G.C.1 |
| Ground Floor – Section D | TH G.D.1 |
| Ground Floor – Section E | TH G.E.1 |
| Mezzanine – Section A | TH M.A |
| Mezzanine – Section B | TH M.B |
| Mezzanine – Section C | TH M.C |
| Mezzanine – Section D | TH M.D |
| Level 1 – Section C | TH 1.C.1 |
| Level 1 – Section D | TH 1.D.1 |
| Level 1 – Section E | TH 1.E.1 |
| Level 2 – Section A | TH 2.A.1 |
| Supervisor’s Shed / Toolroom | TH 2.A.2 |
| Level 2 – Section B | TH 2.B.1 |
| Control Room Lower | TH 2.B.2 |
| Control Room Upper | TH 2.B.3 |

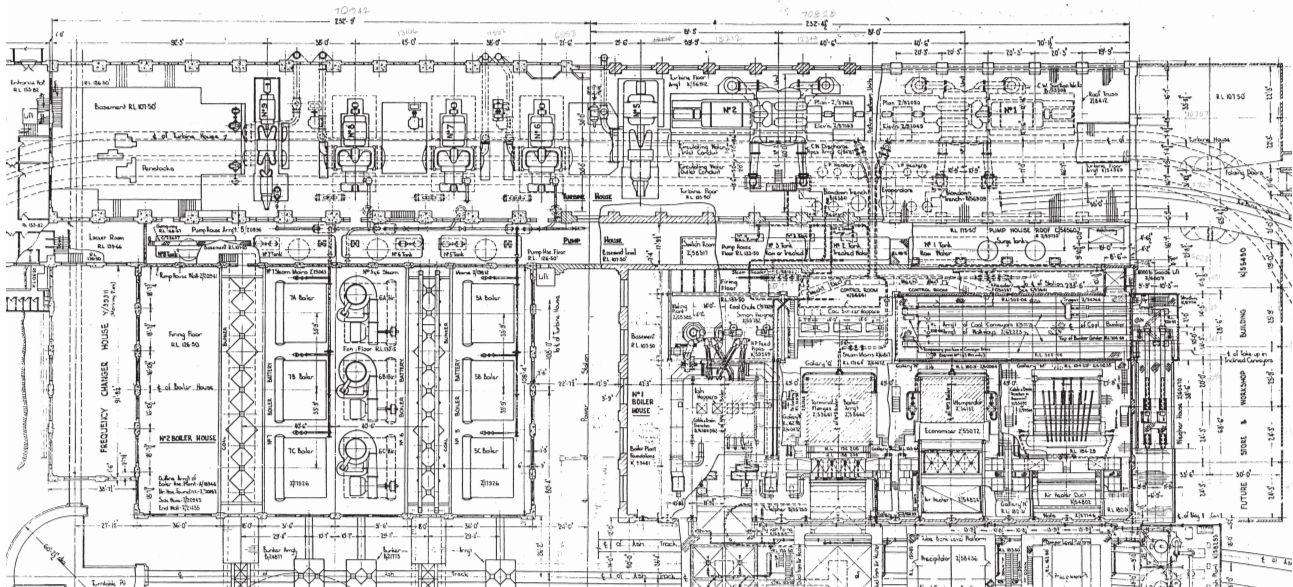
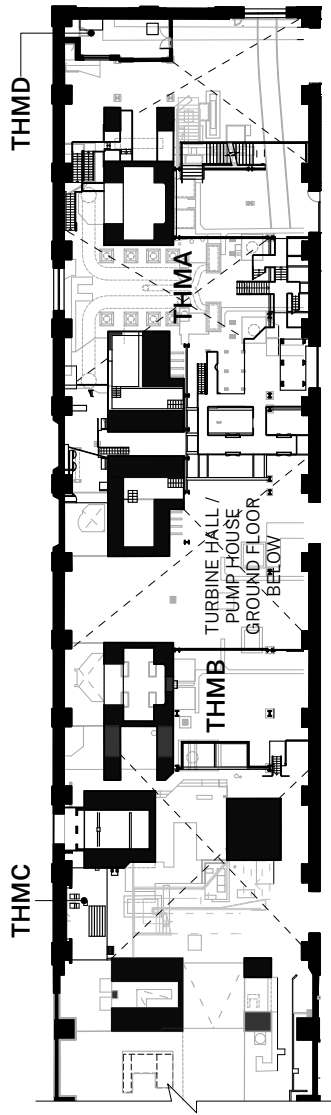
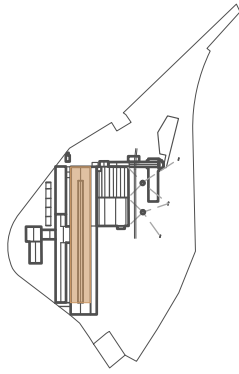
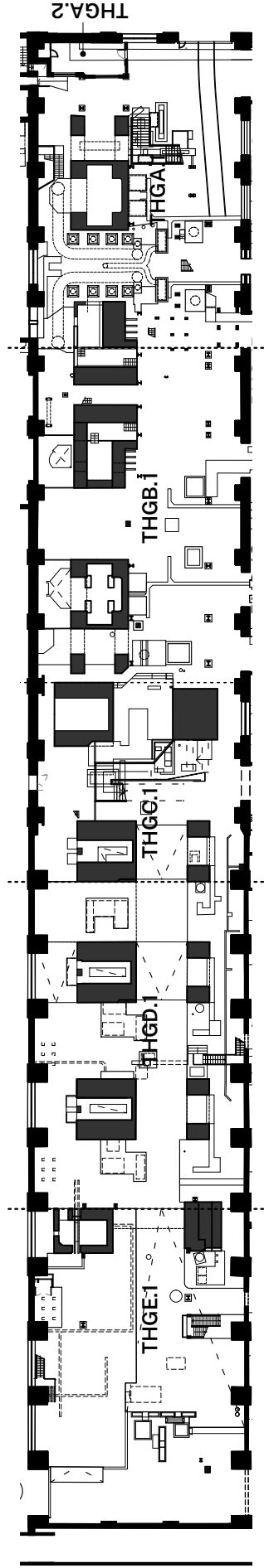


Figure 5.2 Excerpt of archival drawing showing configuration of nine turbine generators, and relationship with other buildings, 1953 (courtesy of PMNSW Archive, 12190)

TURBINE HALL

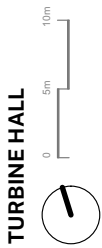


**TURBINE HALL
MEZZANINE PLAN (+6)**



**TURBINE HALL
GROUND FLOOR PLAN (+2)**

Figure 5.3 Turbine Hall Ground Floor and Mezzanine plans.



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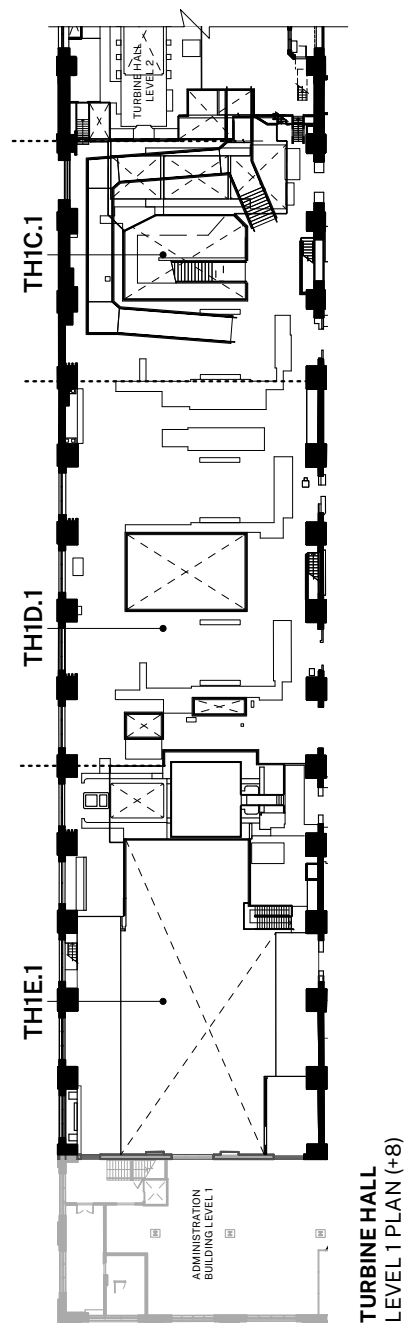
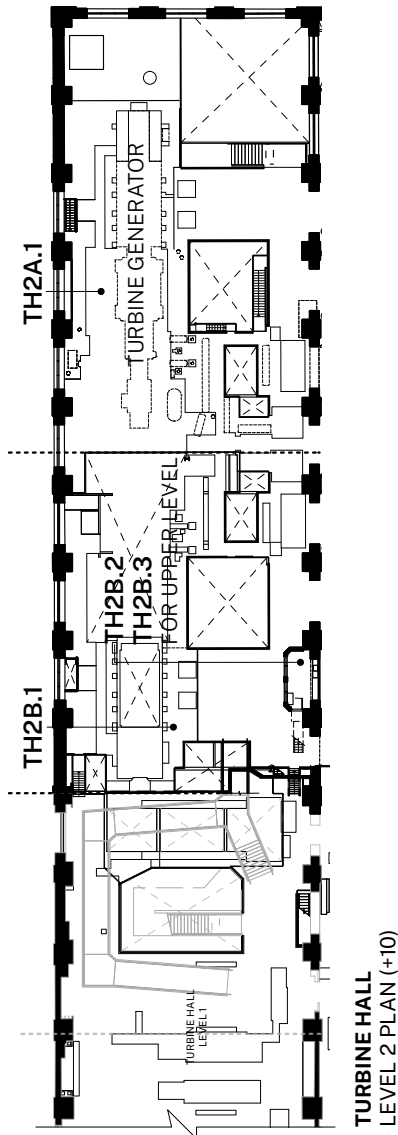


Figure 5.4 Turbine Hall Level 1 and 2 plans.

5.4 DESCRIPTION

5.4.1 General

The Turbine Hall is located on the western half of the White Bay Power Station complex. The building is approximately 130 metres long, 18 metres wide and 27 metres tall. It sits adjacent to the Pump House as one building under separate roofs and is connected to the Pump House by broad openings at the lower levels, and to the Administration and Staff Accommodation at its southern end. The Turbine Hall comprises a vast Ground Level with extant machinery and equipment located at its northern end, three mezzanine spaces and a Level 2 located in the northern half of the building, as well as a vast Level 1 located in the southern half. The northern end contains the remaining turbine, condenser machinery, pipework, and associated control panels. Elsewhere, the removed turbines have left a series of buttresses, pillars, and plinth blocks. Having been built in two stages, the northern end is constructed with brick, whilst the southern end is constructed with reinforced concrete. The roof is an insulated, gabled steel truss roof clad in corrugated galvanised steel. The Turbine Hall also contains several drains and covered shafts on the ground level that connect to an underground water channel. These channels included an intake from Rozelle Bay and an outlet to White Bay and were used for carrying water in and out of the Condenser for the cooling process.

5.4.2 Ground Level

The ground level contains the Condensate Pumps, the De-aerators, the Sluice Gates and Motors, the Circulating Water Pumps, and the Condensers, all of which are part of either the Feedwater System or the Circulating Water System. This machinery is located in the northmost area of the floor (TH G.A.1) and would have been replicated across the ground floor

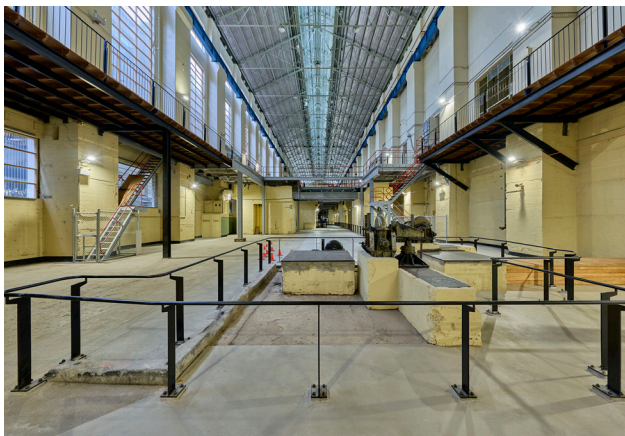


Figure 5.5 Ground Level south, looking north, 2024 (courtesy of Chris Bennett: Evolving Picture)

(TH G.B.1, TH G.C.1, TH G.D.1, and TH G.E.1) during the power station's active years and was used to circulate the seawater needed to condense the feedwater back into a liquid state. The floor of the Ground Level is concrete, as are the plinths located throughout the Level that once supported machinery. Where there are floor levels above, the ceiling comprises of I-beams supporting plank concrete. At the east end of the northern elevation is a large roller door leading to North Forecourt. Along western wall, a double door around midway and roller door at south end, lead to the Transformer Alley. Behind the south wall of the main Ground Level is a Cable Tunnel (SH G.12) that runs through to the Switch House. Along the eastern wall are ten openings that connect to the ground level of the adjacent Pump House. At the northwest corner of Ground Level is a small room (TH G.A.2) containing a sink and various furniture, as well as a small stairwell. This room has two hatches in its ceiling that provide access to a similar room above (TH M.D).

As part of 2022–24 works, three new set of steel stairs were installed. One at northern end connecting Ground Floor, Mezzanine and Level 2, another two at midway and southern end connecting Ground Floor and Level 1. Temporary lightweight raised deck was installed on southern end for compliant access, covering and retaining existing uneven ground. The three open penetrations to underground conduits on southern end, are covered with glass reinforced panels that sit flush with the deck. Balustrades were also installed around machinery and non-compliant areas.

5.4.3 Mezzanine Level

The Mezzanine Level comprises three separate spaces located in the northern half of the Turbine Hall. The northmost –and largest –mezzanine space (TH M.A) is a roughly U-shaped series of spaces that sits partially



Figure 5.6 Mezzanine level, 2024 (courtesy of Chris Bennett: Evolving Picture)

along the eastern wall and is accessed via several sets of steel stairs from the ground floor. These stairs are located near the middle of the mezzanine space, at multiple points at its south end, and at the northwest end. This mezzanine comprises a concrete platform at the northern end, whilst the rest of the level is made up of a series of steel grate catwalks at varying heights connected by flights of steel stairs. These walkways interweave amongst the Ground Floor machinery (notably, the De-aerators and the Condensers) and are surrounded by extensive sets of extant pipes and valves. TH M.A has two separate openings along the eastern elevation that connect to Mezzanine Level of the Pump House and has a ceiling of concrete slab with boarded formwork supported by a steel structure. Next to the northern opening is a series of switches and buttons for operating vent fans, sluice valves, alternative electricity supplies, and exchange pumps. A new steel stair was installed in 2022–24 connecting ground floor and Level 2 above.

The middle mezzanine space (TH M.B) is adjacent to the eastern wall and is a balustraded concrete platform with a steel structure and concrete slab ceiling. It is accessed by a set of steel-framed stairs near the southeast corner of the platform.

The southmost mezzanine space (TH M.C) is a small balustraded concrete platform that stops just short of the western wall. It is accessed by a ladder along the eastern edge and has a ceiling of arched corrugated steel. Though now empty, it shows traces of machinery that was once tied to the floor.

In the northeast corner is a small storage room (TH M.D). It is accessed from the level below TH G.A.2 via two hatches in its floor, or via timber double doors on its east wall (through which equipment could have been hoisted up via a pulley system).

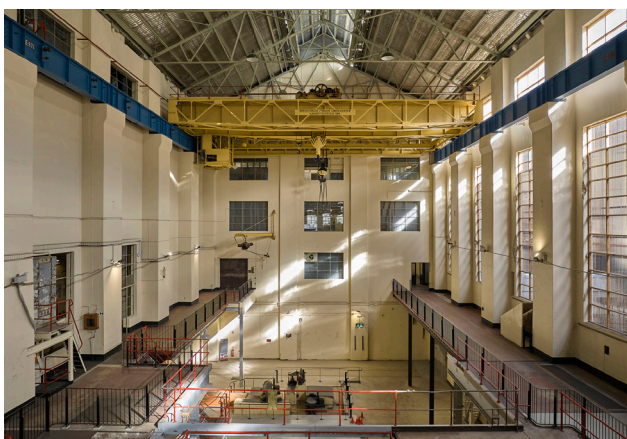


Figure 5.7 Level 1 looking south, 2024 (courtesy of Chris Bennett: Evolving Picture)

5.4.4 Level 1

Level 1 occupies the southern half of the Turbine Hall and is accessed via new steel stairs at southern Pump House (PH1.2), as well as down the concrete stairs from Administration and Staff Building. It used to be accessed through steel-framed stairs at the northeast corner of the large void in the southern half of the level (TH 1.E.1), which has now been fenced. Along western and eastern of the void are new steel framed timber platforms, installed in 2022–24, replacing dilapidated timber platforms. Suspended above the void are Overhead Cranes supported by gantry crane rails that run the length of the eastern and western walls and are supported by the capitals of the brick piers. At the middle (TH 1.D.1) and north end (TH 1.C.1) of the floor are additional voids that overlook the Ground Level of the Turbine Hall. Along the western wall are bays of large metal-framed windows. At the south end of the level, a large set of metal-frame windows allow observation of the hall from Administration and Staff Accommodation. Similarly, at the north end of the level on the western wall are three sets of protruding bay windows from the 1925 Switch House’s original Control Room.

5.4.5 Level 2

Level 2 occupies the northern half of the Turbine Hall. It contains the single remaining Parsons Turbo-Alternator Set, the Steam Control Valves, and the bright yellow Overhead Cranes at its northwest end (TH 2.A.1), all of which are a part of the Power Generating System. During the power station’s active years, steam was sent to the Turbo-Alternator for the generation of electricity. The cranes are supported by gantry crane rails that run the length of the eastern and western walls and are supported by the capitals of the brick piers. Level 2 is accessed by a pair of stairs from Level 1, a pair of stairs



Figure 5.8 Level 2 extant Parsons Turbo-Alternator Set, 2024 (courtesy of Chris Bennett: Evolving Picture)

from the ground floor, and also via six large openings on the eastern wall that connect to Level 2 of the adjacent Pump House.

A large void is located at the northeast corner of the level. Adjacent to this void along the eastern wall originally was a small Supervisor's Shed / Toolroom (TH 2.A.2) with timber framed walls, ceiling, and sliding door, and an extant bench and cupboards. This toolroom was later demolished in 2022-24 to allow for new steel stair from ground floor. Several smaller voids of varying shape and size are located largely on the eastern half of the floor, through which the Ground Level is visible. On the west and north elevations are large metal-framed windows.

At the southern end of the eastern elevation is a small Control Room that was used to monitor and manage the operations of the Turbine Hall. It is a small concrete-walled space which comprises two floors, the higher of which is accessed by a set of external steel-framed stairs on its southern side.

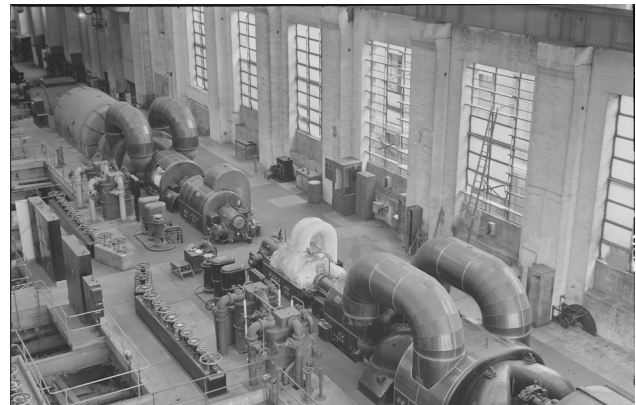


Figure 5.9 No. 1 and 2 Parsons Turbo-Alternator Set, 1956 (courtesy of ECNSW Archive, 00937Xa)

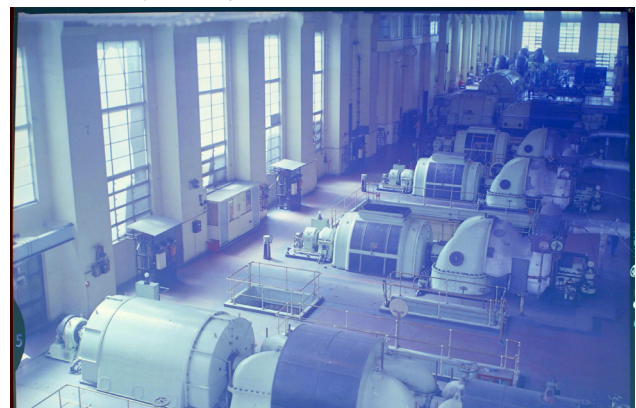


Figure 5.10 Turbo-Alternator (from the top) No. 1, 2, 3, 4, 6, 7, 1964 (courtesy of ECNSW Archive, CN7.0000-B)

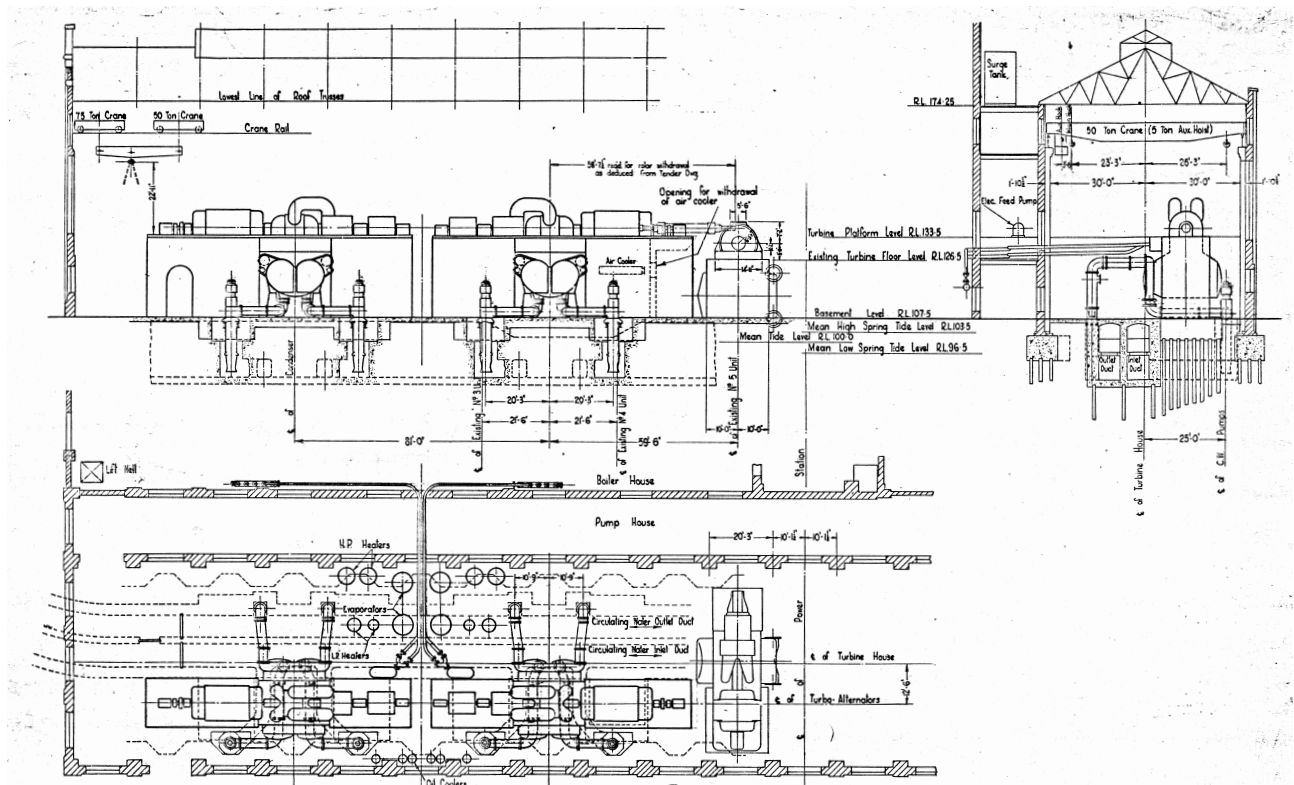


Figure 5.11 Archival drawing showing Turbine Alternator Set 1, 2 and 3. Only No. 1 remains now, 1947 (courtesy of PMNSW Archive, 12079) cropped

5.5 ALTERATIONS & CONDITION

Following its completion across two construction phases, the Turbine Hall underwent very little changes during its years of active operations. The most notable (and frequent) change was the continued addition of Turbo-Alternators in order to meet increased output demands and loading supply.

| Element / Room | Reference |
|-------------------------------|---|
| Flooring | Concrete floors intended for public access were lightly ground, and holes were patched to minimise trip hazards. Floor hatches and steel plates were repaired, strengthened, or replaced as necessary for safety. The floors were then coated with a clear topping to seal and provide slip-resistance. |
| Internal walls | Walls and surfaces that were originally painted were repainted to encapsulate lead paint in colours that closely match the original. |
| External walls | <p>Sandstone cornices were made safe by removing loose and delaminated material or by dressing them back flat with the facade. Sandstone sills and pier capitals were also dressed back or repaired.</p> <p>Brickwork has been remediated by repointing where necessary, removing or treating ferrous materials, and removing or securing loose materials.</p> <p>The external render was remediated. Missing or drummy external render was patched with compatible cement mortar.</p> <p>Ferrous materials, such as brackets, fixings, lintels, and embedded elements, were either removed or treated for corrosion.</p> |
| Windows | Most steel window frames and glass were retained in place and treated for rust. However, the steel window frames on the west elevation, at the south end, were in very poor condition and removed. Cracked glass was also removed, but some glass panes were sheeted using acrylic sheets glued to existing glass (particularly on the west elevation, at the north end). Most external openings were covered over with added timber frames (fixed to masonry or cement rendered reveals) and sheeted using polycarbonate sheeting. |
| Roof and roof lanterns | <p>Box gutters were repaired by lining existing cast iron gutters with Colorbond Ultra. Gutter sumps and outlets were also lined with Colorbond Ultra.</p> <p>Roof sheets and polycarbonate coverings for roof lanterns were replaced in 2015, and additional polycarbonate sheeting for roof lanterns was replaced in 2023.</p> |
| Stair | <p>New steel stair was installed at the northern end (THG.2A and TH2A.1) and middle space (THGC.1 and TH1C.1).</p> <p>New steel ramp on level 1 and 2 (TH2B.1 and TH1C.1).</p> <p>New steel framed platforms (replacing former timber platforms) installed at south end (TH1E.1)</p> |
| Control panels | Acrylic shields installed around control panels on Level 2 (PH2.1). |

5.6 SIGNIFICANCE

The Turbine Hall is an integral part of the White Bay Power Station and has historical associations with the electrification of the Sydney rail and tramways systems. The building, alongside its rare collection of extant equipment and machinery, is demonstrative of engineering design principles. It is representative of twentieth century power generation technology and processes including the Power Generating System, the Feedwater System, and the Circulating Water System.

Internally, the Turbine Hall presents as a massive space of vast proportions, and also retains large amounts of

extant machinery and equipment located at its northern end, including the Overhead Cranes and the Turbo-Alternator. Externally, together with the adjacent Pump House, the Turbine Hall forms the largest volume in the complex of buildings that make up the power station and therefore contributes to its landmark qualities. The Turbine Hall thus stands as a symbol of the industrial history of the area, and has social significance to both former workers and locals alike. For the workers, the Turbine Hall was viewed as the heart of the White Bay Power Station, as both demonstrative of power station technology and symbolic of electricity generation.

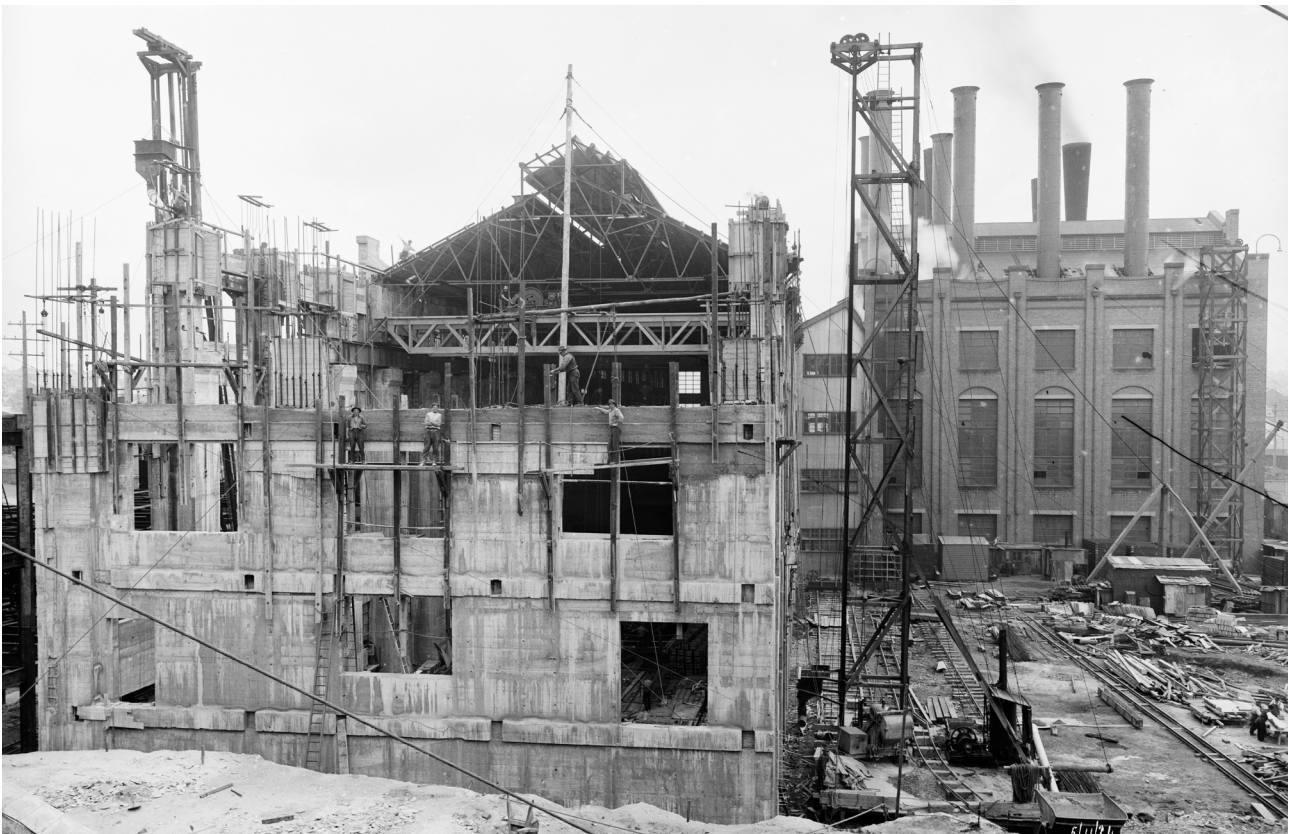


Figure 5.12 Turbine Hall during construction, southern end, 1924 (Arthur Ernest Foster, courtesy of State Library New South Wales, box 41 no. 480)

5.7 REFERENCE TO POLICIES

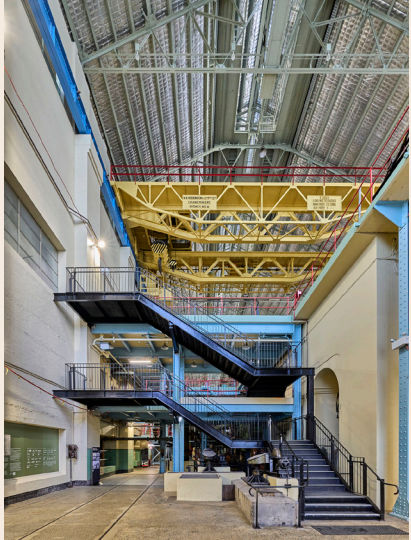
The Pump House is an integral part of the White Bay Power Station. The following policies from the White Bay Power Station Conservation Management Plan are relevant to the Pump House and should guide its ongoing care and management, including decisions about conservation, future use, and development.

Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.


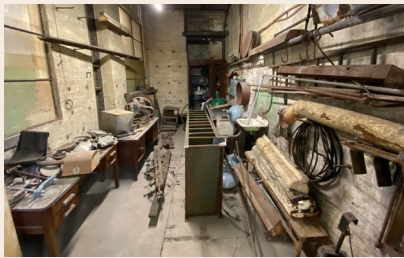
| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.30 | Turbine Hall |
| 6.31 | Parsons Turbo–Alternator Set |
| Tolerance for Change Table 6.6.9.2 and Opportunities for Change Table 6.6.9.3 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |

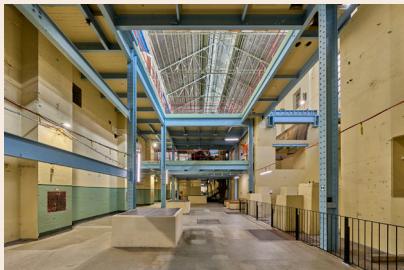
5.8 INVENTORY OF SPACES


This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.

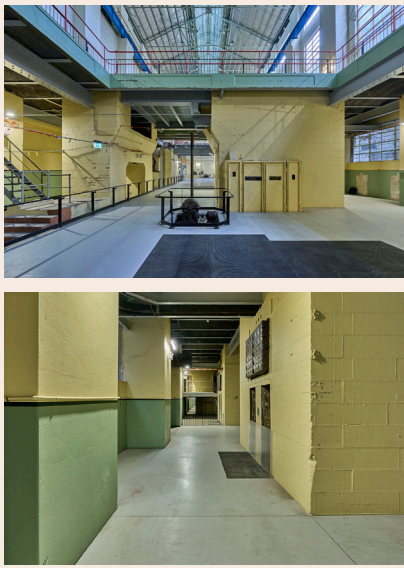
| Room / Item | Ground Floor – Section A (South) | |
|-------------------|--|---|
| Building | Turbine Hall | |
| Room No. | TH G.A.1 | |
| Significance | 1-Exceptional | |
| Description | <p>Section A occupies the northmost end of the Turbine Hall ground level. It houses key machinery used to facilitate the Feedwater, Circulating Water, and Power Generating Systems. These include Cooling Fans that cooled the Turbo-Alternator sets, Condensate Pumps that sent water back into the Boiler from the Condenser, the De-aerators that removed oxygen and other gases from the Condensate, the Sluice Gates and Motors that controlled distribution to the Condensers, the Circulating Water Pumps that transported feedwater, and the Condensers which condensed steam for the Feedwater System.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete, with grooves from rail line running north-south approximately halfway through the space. Main area of concrete floor remediated for compliance in 2022–24. Small ramp with scribed concrete near northwest corner leading to Transformer Alley. Water channel running along the north end of the space covered by concrete block covers.</p> | |
| Skirting | <p>Black paint along north and east walls, coved skirting at base of large concrete columns in west half of the space. Repainted in 2022–24 works.</p> | |
| Walls | <p>Painted brick walls and painted concrete block dividing walls and arches (yellow) in west half of the space. Painted blue riveted steel columns throughout eastern half of space. North: painted brick walls (cream), white tiles above roller door 1700mm high (approx.). West: green to 1900mm (approx.), dark green dado band 30mm (approx.), cream above. East: cream to level with mezzanine floors. Walls repainted and paint removed from tiles on north wall in 2022–24 works.</p> | |
| Ceiling | <p>Underside of mezzanine level and Level 2: off-form concrete with evidence of boarded formwork supported by steel I-beams. Roof of the Turbine Hall: corrugated galvanised steel and sarking supported by steel trusses.</p> | |
| Doors and Windows | <p>Large roller door on the north wall, replaced in 2022–24. Boarded timber door with window to TH GA.2. Metal door at north end of west wall connecting to the Transformer Alley. Door repainted in 2022–24. Steel frame 12 pane figured, frosted, and wired glass pivot windows, on north wall. Covered with clear corrugated polycarbonate sheeting in 2022–24.</p> | |
| Lighting | <p>Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed 2022–24.</p> | |

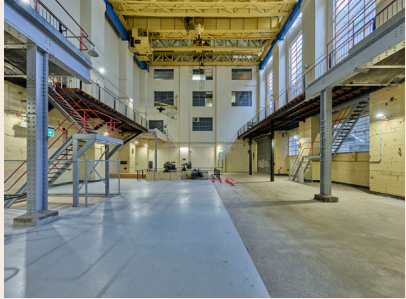
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| Other | <p>Large concrete plinths throughout space for machinery. Steel frame stairs with tubular handrails going up to walkways amongst machinery. Balustraded in 2022–24. New steel framed stair, L-shaped, roughly in middle of space, between sluice gates and motors and the wall, to mezzanine and Level 2.</p> |
| Machinery | <p>Cooling Fans (3.3) The Condensate Pumps (4.3) The De-aerators (4.4) Sluice Gates and Motors (5.1) Circulating Water Pumps (5.2) Condensers (5.3) Cleaned in 2022–24. Machinery within accessible areas are also treated.</p> |



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| Room / Item | Ground Floor – Section A (North) | |
| Building | Turbine Hall | |
| Room No. | TH G.A.2 | |
| Significance | 2 – High | |
| Description | <p>This small room is located in the northwest corner of the Turbine Hall Ground Level. It is not known exactly what this room was used for, but it is likely that it acted as a storage space during the active years of the power station.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p>  <p>(Design 5 – Architects, 2023)</p> |
| Elements | General Description | |
| Floor | Concrete, water channel running through the space covered by concrete block covers. | |
| Walls | Painted brick: white in the bottom half, yellow in the top half. Wall surrounding the sink is painted green. | |
| Ceiling | Painted off-form concrete with evidence of boarded formwork. Northwest corner and northeast corner each have a hatch providing access to THMD.1. | |
| Doors and Windows | <p>Boarded timber door with window at east end.</p> <p>Boarded timber door to small storage closet at west end of the room. Door repainted, glass replaced in 2022–24.</p> <p>Two 8 pane frosted and wired glass windows on south wall. Covered with clear acrylic sheeting externally in 2022–24.</p> <p>Single pane window above door.</p> | |
| Lighting | <p>Former pendant dish lights from ceiling.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | <p>Various steel brackets, conduits, and wires on walls. Small ceramic sink mounted on north wall.</p> <p>Steel rail fixed to north wall.</p> <p>Balustrade limiting access to machinery/uneven surfaces installed in 2022–24.</p> | |
| Movable heritage | Miscellaneous items from Turbine Hall including lampshades, broken machinery pipes, pulleys, etc. | |


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| Room / Item | Ground Floor – Section B | |
| Building | Turbine Hall |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | TH G.B.1 | |
| Significance | 2-High | |
| Description | Section B is located in the northern half of the Turbine Hall ground level. The space once hosted extensive amounts of equipment and machinery relevant to the operations of the Turbine Hall. | |
| Elements | General Description | |
| Floor | Concrete. Numerous channels, drains, and covered shafts. Floor remediated for compliance in 2022-24. | |
| Skirting | Painted dark green. Repainted in 2022-24. | |
| Walls | <p>East and west walls: 6 piers and 5 bays of painted brick. Light green until dark green dado strip, cream above. Three openings to Pump House in east wall second, fourth, and fifth bays (from north).</p> <p>Riveted steel columns throughout space.</p> <p>Internal walls comprise of concrete block painted cream with various openings and formed arches.</p> <p>Walls repainted in 2022-24.</p> | |
| Ceiling | Underside of Level 1: painted off-form concrete supported by steel I-beams. Voids through to underside of Turbine Hall roof. | |
| Lighting | New temporary lighting and catenary wires installed in 2022-24. | |
| Other | <p>Numerous concrete plinths throughout the space that once held various equipment and machinery. Two timber seats on top of plinths on southern end installed in 2022-24.</p> <p>Balustrade limiting access to machinery/uneven surfaces installed in 2022-24.</p> | |


| Room / Item | Ground Floor – Section C | |
|-------------------|--|--|
| Building | Turbine Hall | |
| Room No. | TH G.C.1 | |
| Significance | 2 – High | |
| Description | <p>Section C comprises the middle section of the Ground Floor of the Turbine Hall. The space once hosted extensive amounts of equipment and machinery relevant to the operations of the Turbine Hall.</p> <p>A new steel framed stair installed in 2022–24 providing access to Level 1.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete. Numerous channels, drains, and covered shafts. Evidence of rail track to Pump House. Parts of northern area remediated for level access. Southern end central passage is covered with reversible lightweight deck. | |
| Skirting | Painted dark green. Repainted in 2022–24. | |
| Walls | <p>East and west walls: 6 piers and 5 bays of painted concrete block. Light green until dark green dado strip, cream above. East wall has opening to Pump House in northmost bay. Riveted steel columns throughout space.</p> <p>Internal walls comprise of concrete block painted cream.</p> <p>Walls repainted in 2022–24.</p> | |
| Ceiling | Underside of Level 1 (TH 1.C.1): iron girders with vaulted concrete infill. Void through to underside of Turbine Hall roof above. | |
| Doors and Windows | <p>Steel frame 12 pane window frame in northmost east bay, glazing missing.</p> <p>Unequal double door on west wall leading to Transformer Alley reinstated in 2022–24.</p> | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | New steel framed stair to Level 1 was installed in 2022–24, along with associated balustrade. | |

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| Room / Item | Ground Floor – Section D | |
| Building | Turbine Hall |  |
| Room No. | TH G.D.1 | |
| Significance | 2 –High | |
| Description | <p>Section D is located in the southern half of the Ground Floor of the Turbine Hall. The space once hosted extensive amounts of equipment and machinery relevant to the operations of the Turbine Hall.</p> | |
| <small>(courtesy of Chris Bennett: Evolving Picture, 2024)</small> | | |
| Elements | General Description | |
| Floor | <p>Concrete. Numerous channels, drains, and covered shafts. Middle and western side of flooring covered with reversible lightweight deck. Three sections of fibre glass reinforced panels covering opening for cooling water channel below.</p> | |
| Skirting | Painted dark green. Repainted in 2022–24. | |
| Walls | <p>East and west walls: 6 piers and 5 bays of painted concrete block. Light green until dark green dado strip, cream above. Riveted steel columns throughout space. Internal walls comprise of concrete block painted cream. Walls repainted in 2022–24.</p> | |
| Ceiling | Vaulted concrete supported by steel girders. Void through to underside of roof of Turbine Hall above. | |
| Doors and Windows | West wall: second (from north) and fourth bays each externally clad with operable curtain clear polycarbonate, installed in 2022–24 for ventilation. | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Concrete steps near east wall leading to steel frame stairs with tubular handrail leading up to Level 1 (TH 1D.1). Balustrade installed in 2022–24 limiting access. | |
| Machinery | <p>Sluice Gates and Motors (5.1) Cleaned, treated, and balustraded in 2022–24.</p> | |


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| Room / Item | Ground Floor – Section D | |
| Building | Turbine Hall | |
| Room No. | TH G.E.1 | |
| Significance | 2 – High | |
| Description | <p>Section E is located at the south end of the Ground Level of the Turbine Hall. It connects to the Transformer Alley to its west and the outdoor area to its east via roller blind doors, and also provides access to Level 1 above. The space once hosted extensive amounts of equipment and machinery relevant to the operations of the Turbine Hall. The sluice gates and motors used to control inflow and outflow of water remain.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with railtracks along south end of space. Floor remediated in 2022–24. Railtracks treated. | |
| Skirting | Painted black. Repainted in 2022–24. | |
| Walls | East and west walls: each 6 piers and 5 bays of painted concrete block. Repainted in 2022–24. | |
| Ceiling | <p>Underside of Level 1 (TH 1E.1): underside of timber walkways along east and west walls, and underside of off-form concrete floor (vaulted on underside in some areas) supported by steel trusses. Timber walkways replaced in 2022–24.</p> <p>Large void above through to underside of Turbine Hall roof: steel truss frames with corrugated galvanised steel cladding. Monitor roof with additional clerestory windows and vents.</p> | |
| Doors and Windows | <p>Large roller blind doors at south end of east and west walls. Roller doors replaced in 2022–24.</p> <p>West wall: first (from north), third, and fourth bays each externally clad with operable curtain clear polycarbonate, installed in 2022–24 for ventilation.</p> | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | <p>Steel frame grate stairs with tubular steel handrails leading up to Level 1 (TH 1E.1) on both east and west ends.</p> <p>New timber seat on southern end concealing on ground downpipes installed in 2022–24.</p> <p>Wiremesh fencing installed in 2022–24.</p> | |
| Machinery | <p>Sluice Gates and Motors (5.1)</p> <p>Three sets of motors at south end of space, cleaned and treated in 2022–24.</p> | |


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| Room / Item | Mezzanine – Section A | |
| Building | Turbine Hall | |
| Room No. | TH M.A.1 | |
| Significance | 1–Exceptional | |
| Description | <p>The mezzanine floor is located near the northern end of the Turbine Hall. It is accessed via steel framed stairs and also connects to the Pump House mezzanine level (PH M.1). The mezzanine area forms a U-shaped space comprised of a concrete slab at the northeast end, a series of catwalks and contains various equipment and pipes on the platform at its southwest end (not connected to catwalks or northeast area).</p> <p>New steel framed stair installed in 2022–24, connecting from ground floor to level 2.</p> |   <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Northeast platform: concrete with scribed margins. Multiple steel checker cover plates over holes in the floor.</p> <p>The rest of the space comprises a series of steel grate walkways that span the width of the Turbine Hall.</p> | |
| Skirting | Northeast platform: concrete coving along north and south walls to 200mm (approx.). | |
| Walls | <p>Northeast platform: painted yellow brick wall on east side. Holes and openings for conduits and pipes into Pump House. Concrete lintel opening to Pump House. Painted blue riveted steel columns throughout space. Floor stops 200mm (approx.) from the western wall (painted concrete, yellow).</p> | |
| Ceiling | Underside of Level 2: painted off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Doors and Windows | Wire mesh door to Pump House (PH M.1). Door added in 2022–24. | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | <p>Painted red tubular balustrades on north and south sides of northeast platform and throughout walkway spaces. Some parts cut to allow for new stairs. Repainted in 2022–24. New steel balustrades installed internally of existing in 2022–24.</p> <p>Northeast platform: pipes, wires, and conduits on east and west walls. Orange switch cabinet and other small buttons and switches mounted on east wall for operating vent fans, sluice valves, alternative electricity supplies, and exchange pumps. Cabinet covered with timber framed perspex in 2022–24.</p> <p>Southeast end: steel frame stairs leading up to platform with various extant pipes and equipment.</p> | |

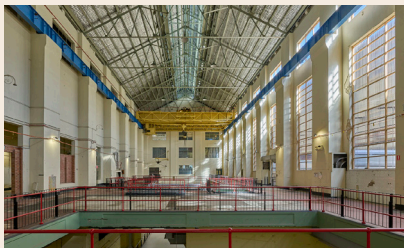
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| Room / Item | Mezzanine – Section B | |
| Building | Turbine Hall |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | TH M.B.1 | |
| Significance | 3 – Moderate | |
| Description | <p>The mezzanine space is located near the middle of the Turbine Hall, along the east wall. It is accessed by a set of steel stairs to its south from Ground Level (TH G.B.1), and likely once hosted machinery relevant to the operations of the Turbine Hall.</p> | |
| Elements | General Description | |
| Floor | Concrete, with two large steel plate covered holes on west side of mezzanine. | |
| Skirting | <p>North and south wall: concrete coving at 200mm (approx.). East wall: concrete coving at 100mm (approx.).</p> | |
| Walls | <p>East wall: brick wall, two holes for pipes, some patching to wall with concrete. West wall: small opening 1000mm x 1000mm (approx.) for machinery access. Larger opening in wall covered by steel sheeting, steel columns set back from wall. Walls repainted in 2022–24.</p> | |
| Ceiling | Underside of Level 2: off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Other | Tubular steel balustrading on north and south sides of mezzanine. Repainted in 2022–24. Some conduits running along west wall. | |
| Machinery | Sluice Gate and Motors (5.1) | |
| Movable heritage | Timber blocks | |

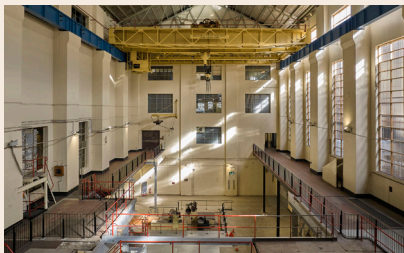
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| Room / Item | Mezzanine – Section C | |
| Building | Turbine Hall |  |
| Room No. | TH M.C.1 | |
| Significance | 3 – Moderate | |
| Description | Section C of the mezzanine level is located along the middle of the west wall of the Turbine Hall. It is accessed via a ladder from the Ground Floor (TH GC.1), and likely once housed various machinery related to the operations of the Turbine Hall. | |
| Elements | General Description | |
| Floor | Thick concrete slab with timber boards over area on the east side. Uncovered holes, section of unbalustraded opening on west. Evidence of former machinery secured to floor. | |
| Walls | North wall: painted concrete wall. East and south wall: balustraded. West wall: painted brick wall. Walls repainted 2022–24. | |
| Ceiling | Arched corrugated steel supported by steel I-beams. Corrugated sheeting has been removed in some areas, patchy. | |
| Other | Steel ladder at south end of east side. Ladder cover installed in 2022–24. Tubular steel handrail around mezzanine. Conduits running along walls. | |

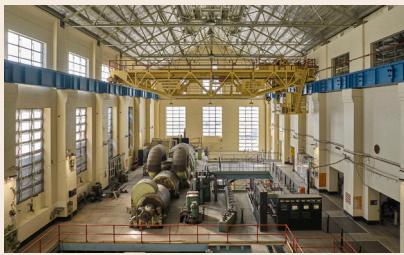
(courtesy of Chris Bennett: Evolving Picture, 2024)

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| Room / Item | Mezzanine – Section D | | |
| Building | Turbine Hall |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024) cropped</p> | |
| Room No. | TH M.D.1 | | |
| Significance | 2 –High | | |
| Description | <p>Section D of the mezzanine level is a small room located in the northwest corner of the Turbine Hall and is the upper floor of TH G.A.2. It is accessed by either a hatch in its floor, or via door.</p> <p>It is not known exactly what this room was used for, but it is likely that it acted as a storage space during the active years of the power station.</p> | | |
| Elements | General Description | | |
| Floor | Concrete with timber hatch opening in northwest corner leading to space below. | | |
| Walls | Painted brick. Externally repainted in 2022–24. | | |
| Ceiling | Painted off-form concrete with evidence of boarded formwork supported by steel trusses. | | |
| Doors and Windows | <p>Timber double doors on east wall.</p> <p>Steel frame 12 pane and 8 pane windows on south wall. Covered externally with timber framed acrylic sheetings.</p> | | |
| Lighting | Original pendant dish lights from ceiling. | | |
| Other | Pulley mechanism extending outside above the door. | | |
| Movable heritage | A large number of various pulleys, hooks, and cables. | | |

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| Room / Item | Level 1 – Section C | |
| Building | Turbine Hall | |
| Room No. | TH 1.C.1 | |
| Significance | 2 – High | |
| Description | <p>Section C is the northmost area of Level 1 of the Turbine Hall. It is accessed via newly installed stairs from the Ground Level within the void and an opening to the Pump House, and also a ramp and stair set to Level 2 of the Turbine Hall to its north. The space once hosted turbo-alternators used to receive steam from the Boiler House to generate electricity.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024) cropped</p> |
| Elements | General Description | |
| Floor | Concrete with scribed margins and steel checker plates. Four voids in floor, one large and three smaller voids to its north. | |
| Skirting | Black paint on east and west walls. Repainted in 2022–24. Raised concrete margins around voids. | |
| Walls | <p>East wall: 4 piers and 3 bays. First bay (from north) has opening filled and framed doorway surrounded by steel frame glazing, the second bay has an opening that has been filled halfway with brick with steel frame glazing above, and the third bay has an opening partially filled with brick forming a doorway to the Pump House.</p> <p>West wall: 4 piers and 3 bays, each with bay window from Switch House. The first bay (from north) and the second are painted brick, while the third bay and its piers are painted concrete.</p> <p>Walls repainted in 2022–24.</p> | |
| Ceiling | Underside of Turbine Hall roof: steel truss frames with corrugated galvanised steel cladding. Truss repainted in 2022–24. Monitor roof with additional clerestory windows and vents. | |
| Doors and Windows | <p>Double steel door in northmost bay of west wall, made operable in 2022–24.</p> <p>Windows: all panes originally frosted, figured, and wired.</p> <p>East wall: upper level of each bay is a steel frame 12 pane window. Glazing around doorway of first bay. Broken panes removed in 2022–24.</p> <p>West wall: steel windows framing removed due to deterioration in 2022–24, stored in Switch House ground floor. Currently covered with temporary timber framed clear corrugated polycarbonate sheeting.</p> | |
| Lighting | Original pendant dish lights from trusses above space, and original lights along walls. New temporary lighting and catenary wires installed in 2022–24 along east and west walls. | |
| Other | <p>Gantry crane rail supported by capitals of piers on both east and west walls.</p> <p>Stair has painted tubular steel handrails and voids have similar balustrades around them. Balustrades around voids repainted in 2022–24.</p> <p>New steel balustrade installed in 2022–24 to stairs and ramp, and around void.</p> <p>Existing stair on the west wall is covered with fibre glass reinforced panel flooring.</p> | |

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| Room / Item | Level 1 – Section D | |
| Building | Turbine Hall |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | TH 1.D.1 | |
| Significance | 2 – High | |
| Description | <p>Section D is located at the middle of Level 1 of the Turbine Hall. It is accessed via newly installed steel framed stairs from the Ground Level at TH1.C.1 and three openings to the Pump House. The space once hosted turbo-alternators used to receive steam from the Boiler House to generate electricity.</p> | |
| Elements | General Description | |
| Floor | <p>Concrete with scribed margins and steel checker plates. Steel checker plates replaced and strengthened in 2022–24. Three voids in floor, one large and two significantly smaller voids to its south. Fibre glass reinforced panel flooring covered the voids in 2022–24.</p> | |
| Skirting | <p>Black paint on east and west walls. Repainted in 2022–24. Raised concrete margins around voids.</p> | |
| Walls | <p>East wall: painted concrete with 6 piers and 5 bays. First bay has a largely bricked up and rendered opening, the second bay is half bricked up with a doorway, the middle bay is half bricked up and rendered, the fourth bay has a brick doorway with opening above, and the fifth has a half bricked up opening with decorative brickwork in the form of a Christmas tree.</p> <p>West wall: painted concrete with 6 piers and 5 bays. Repainted in 2022–24.</p> | |
| Ceiling | <p>Underside of Turbine Hall roof: steel truss frames with corrugated galvanised steel cladding. Monitor roof with additional clerestory windows and vents. Truss repainted in 2022–24.</p> | |
| Doors and Windows | <p>Windows: all panes originally frosted, figured, and wired.</p> <p>East wall: each bay has upper level with steel frame 12 pane window. Broken panes removed in 2022–24.</p> <p>West wall: each bay except the northmost bay has an upper level with temporary timber frame 12 pane clear corrugated polycarbonate windows, and a similar lower window of 36 panes. The northmost bay has an upper level with temporary timber frame 8 pane clear corrugated polycarbonate window, and a lower opening that has similarly been cladded.</p> | |
| Lighting | <p>Original pendant dish lights from trusses above space, and original lights along walls. New temporary lighting and catenary wires installed in 2022–24 along east and west walls.</p> | |
| Other | <p>Gantry crane rail supported by capitals of piers on both east and west walls.</p> <p>10 cwt crane fixed to west of mid-level window of the east bay.</p> <p>Stair has painted tubular steel handrails and voids have similar surrounding balustrades. Balustrades around voids repainted in 2022–24. New steel balustrade installed around the balustrades.</p> <p>Set of steel cabinets located in first bay. Repainted in 2022–24.</p> | |

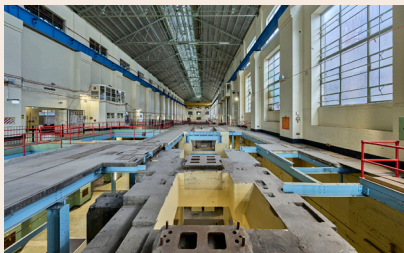
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| Room / Item | Level 1 – Section E | |
| Building | Turbine Hall | |
| Room No. | TH 1.E.1 | |
| Significance | 2 – High, newly added elements 3 – Moderate | |
| Description | <p>Section E is located at the south end of Level 1 of the Turbine Hall. It is accessed via newly installed steel framed stairs from the Ground Level at TH1.C.1, two openings to the Pump House, and two openings to the Administration and Staff Accommodation at its south end. The space once housed turbo-alternators used to receive steam from the Boiler House to generate electricity.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | <p>Concrete with scribed margins and steel checker plates. Steel checker plates replaced and strengthened in 2022–24. Two voids in floor, one that occupies the majority of the space and a smaller one to its north.</p> <p>Timber board walkways on east and west walls replaced and widened in 2022–24 due to water damage to original.</p> | |
| Skirting | Black paint on east and west walls. Raised concrete margins around voids. Repainted in 2022–24. | |
| Walls | <p>East wall: painted concrete with 6 piers and 5 bays.</p> <p>South wall: painted concrete with 4 piers and 3 bays. Opening on west side connecting to Administration and Staff Accommodation, currently blocked off with steel mesh.</p> <p>West wall: painted concrete with 6 piers and 5 bays.</p> <p>Repainted in 2022–24.</p> | |
| Ceiling | Underside of Turbine Hall roof: steel truss frames with corrugated galvanised steel cladding. Monitor roof with additional clerestory windows and vents. Truss repainted in 2022–24. | |
| Doors and Windows | <p>Steel roller door located on east end of south wall connecting to Administration and Staff Accommodation.</p> <p>Windows: all panes originally steel frame, frosted, figured, and wired. Covered externally with timber framed acrylic sheetings.</p> <p>East wall: northmost and middle bay each have steel frame doorway with surrounding windows. All bays upper have steel frame 12 pane windows.</p> <p>South wall: middle bay has a 9 pane window at lower height, a 12 pane window above that, followed by a 9 pane window and a 6 pane window. East and west bays each have a middle height 12 pane window, a 9 pane window above that and a 6 pane window at the top.</p> <p>West wall: windows replaced with timber framing and clear corrugated polycarbonate in 2022–24, each bay has 36 pane window for lower, and 12 pane window for upper.</p> | |
| Lighting | <p>Original pendant dish lights from trusses above space, and original lights along walls.</p> <p>New temporary lighting and catenary wires installed in 2022–24 along east and west walls.</p> | |
| Other | <p>Gantry crane rail supported by capitals of piers on both east and west walls.</p> <p>Stair cover over stairs from ground floor located along the west wall.</p> <p>Stairs have painted tubular steel handrails and voids have similar balustrades around them. Balustrades around voids repainted in 2022–24. New steel balustrades installed around void and along reinstated timber walkways.</p> <p>Ladder stair along east wall leading to steel grate platform with steel cabinet with various switches. Cabinet repainted partially and ladder cover installed in 2022–24.</p> | |
| Machinery | Overhead Cranes (3.4) Repainted in 2022–24. | |


| | | |
|--------------------------|--|--|
| Room / Item | Level 2 – Section A | |
| Building | Turbine Hall | |
| Room No. | TH 2.A.1 | |
| Significance | 1–Exceptional | |
| Description | <p>Section A comprises the north half of Level 2 of the Turbine Hall. It houses the remaining extant Turbo-Alternator once used to receive steam from the Boiler House to generate electricity. High above the floor are the overhead gantry cranes. The space used to be accessed via a series of stairs coming up from the mezzanine walkways (TH M.A.1). In 2022–24, new steel framed stairs installed on the northern void from ground floor via mezzanine level. It can also be accessed via openings connecting to the adjacent Pump House.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with scribed margins and steel checker plates. Four voids located in floor plate, all of varying sizes. | |
| Skirting | Black paint on east and west walls. Raised concrete margin around voids. Repainted in 2022–24. | |
| Walls | <p>North wall: painted brick.</p> <p>East wall: painted brick with 6 piers and 5 bays. Three openings through to adjacent Pump House with high windows above.</p> <p>West wall: painted brick with 6 piers and 5 bays.</p> <p>Walls repainted in 2022–24.</p> | |
| Ceiling | Underside of Turbine Hall roof: steel truss frames with corrugated galvanised steel cladding. Monitor roof with additional clerestory windows and vents. Truss repainted in 2022–24. | |
| Doors and Windows | <p>Windows: all panes frosted, figured, and wired. broken glass were removed in 2022–24. Cracked stable glass direct covered with acrylic sheet.</p> <p>North wall: upper levels of each of the three bays has a steel frame 15 pane window.</p> <p>East side lower has steel frame 36 pane window, middle and west side lower have steel frame 24 pane windows. Externally clad in temporary timber frame with clear corrugated polycarbonate.</p> <p>East wall: northmost bay has two sets of steel frame 12 pane windows, one at the upper level and the other in line with the floor level.</p> <p>West wall: south three bays upper have steel frame 12 pane windows and lower have steel frame 24 pane. Third, fifth and sixth bays' windows are covered externally with temporary timber framed corrugated polycarbonate.</p> | |
| Lighting | <p>Original pendant dish lights, pendant cone lights, and casings for fluorescent lights from trusses above space.</p> <p>New temporary lighting and catenary wires installed in 2022–24 along east and west walls.</p> | |


| | |
|-------------------------|---|
| Other | <p>Gantry crane rail supported by capitals of piers on both walls. Painted tubular steel balustrades around voids. New steel balustrade installed in 2022/2024 along eastern side of voids for safety and limiting access to Turbine Generator. Various switches, small amenities, boxes, and cabinets located along the east and west walls. Steel framed acrylic cover installed to cabinets and switches along eastern wall in 2022-24.</p> |
| Machinery | <p>Steam Control Valves (3.1) The Turbo-Alternator Set (3.2) Overhead Cranes (3.4) Overhead cranes repainted in 2022-24.</p> |
| Movable heritage | <p>Various loose equipment and tools, steel beams, ropes, steel shrouds</p> |



Figure 5.13 East wall of TH 2.A.1, 2024 (courtesy of Chris Bennett: Evolving Picture)

| | | | |
|--------------------------|---|--|--|
| Room / Item | Level 2 – Section B | | |
| Building | Turbine Hall |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Room No. | TH 2.B.1 | | |
| Significance | 2-High | | |
| Description | <p>Section B comprises the southern half of Level 2 of the Turbine Hall. It is accessed via a series of openings connecting from the adjacent Pump House, as well as from newly installed stairs on northern end from ground floor, and a set of ramp and stair on southern end from Level 1. The space once hosted turbo-alternators used to receive steam from the Boiler House to generate electricity.</p> | | |
| Elements | General Description | | |
| Floor | Concrete with scribed margins and steel checker plates. Steel checker plates replaced and strengthened in 2022–24. Five voids located in floor plate, all of varying sizes. | | |
| Skirting | Black paint on east and west walls. Repainted in 2022–24. Raised concrete margin around voids. | | |
| Walls | <p>East wall: painted brick with 6 piers and 5 bays. Three openings through to adjacent Pump House with high windows above.</p> <p>West wall: painted brick with 6 piers and 5 bays.</p> <p>Walls repainted in 2022–24.</p> | | |
| Ceiling | Underside of Turbine Hall roof: steel truss frames with corrugated galvanised steel cladding. Truss repainted in 2022–24. Monitor roof with additional clerestory windows and vents. | | |
| Doors and Windows | <p>Windows: all panes frosted, figured, and wired. Broken glass replaced, cracked stable glass covered with acrylic sheet in 2022–24.</p> <p>East wall: steel frame 12 pane windows in each bay upper levels.</p> <p>West wall: all bays except the southmost one: upper level steel frame 12 pane windows with lower level steel frame 24 panes windows. Southmost bay has middle level steel frame 8 pane window and lower level steel frame six pane window.</p> | | |
| Lighting | <p>Original pendant dish lights, pendant cone lights, and casings for fluorescent lights from trusses above space.</p> <p>New temporary lighting and catenary wires installed in 2022–24 along east and west walls.</p> | | |
| Other | <p>Gantry crane rail supported by capitals of piers on both walls.</p> <p>Painted tubular steel balustrades around voids.</p> <p>Cabinet with meters and switches for various gears, pumps, and fans for the turbo-alternators and their respective pumps. Roughly and partially repainted, and steel framed acrylic cover installed to cabinets and switches along eastern wall in 2022–24.</p> | | |

| | | |
|--------------------------|--|--|
| Room / Item | Control Room Lower | |
| Building | Turbine Hall | |
| Room No. | TH 2.B.2 | |
| Significance | 2-High | |
| Description | <p>The lower floor of the control room is located at the south end of the east wall of Level 2 of the Turbine Hall. It, along with the upper floor of the Control Room (TH 2.B.3), was used to monitor the operations of the Turbine Hall.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Skirting | Painted black around exterior of Control Room continuing on from the main east wall of the Turbine Hall. Repainted in 2022–24. | |
| Walls | <p>East wall: rendered masonry. North, south, and west walls: concrete, with chamfered corners. Repainted in 2022–24.</p> | |
| Ceiling | Masonite panels with wide timber battens. | |
| Doors and Windows | <p>Timber door half-glazed on south wall. Hatch in wall on chamfered south end, with shutter missing. Steel frame 4 pane frosted and figured glass louvre windows on west wall. Single operable bar running across windows. Broken louvre panes removed in 2022–24.</p> | |
| Lighting | <p>Single light fitting on ceiling. New temporary lighting and catenary wires installed in 2022–24 around the exterior of the Control Room.</p> | |
| Other | <p>Low level cupboard along east wall with benchtop and stainless-steel sink with a single tap. Small timber shelf mounted above sink. Small metal shelf mounted on south end of west wall.</p> | |

| | | |
|--------------------------|---|--|
| Room / Item | Control Room Upper | |
| Building | Turbine Hall | |
| Room No. | TH 2.B.3 | |
| Significance | 2-High | |
| Description | <p>The upper floor of the control room is accessed by a set of stairs on its south. It, along with the lower floor of the Control Room (TH 2.B.2), was used to monitor the operations of the Turbine Hall.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | <p>East wall: rendered masonry. North, south, and west walls: concrete, with chamfered corners. Repainted in 2022-24.</p> | |
| Ceiling | Timber frame with timber battens and masonite panels. | |
| Doors and Windows | <p>Timber frame half glazed door on south wall. Pane repaired in 2022-24. Steel frame windows on north wall (3 pane with extract fan on upper window) and west wall. Panes replaced, covered with acrylic externally in 2022-24.</p> | |
| Lighting | <p>Original fluorescent light casings from ceiling. Lightbulbs missing. New temporary lights and catenary wires installed 2022-24 (externally).</p> | |
| Other | <p>External steel frame grate stairs with painted tubular handrail on south end of the Control Room Upper. Handrail painted in 2022-24. Low level cupboards around north, south, and west walls with a bench on top and sink in the southeast corner. Red tally board located at south end of east wall.</p> | |

5.9 INVENTORY OF MACHINERY


This section aims to provide an overarching understanding of the extant machinery concerning the buildings and spaces, as well as their role in the operational systems at the White Bay Power Station. The information below is based on the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report prepared by Godden Mackay Logan (May 2003) for the first edition of the Conservation Management Plan. Refer to Volume 3, Appendix D for the full GML report.

The machinery located within the Turbine Hall is listed below:


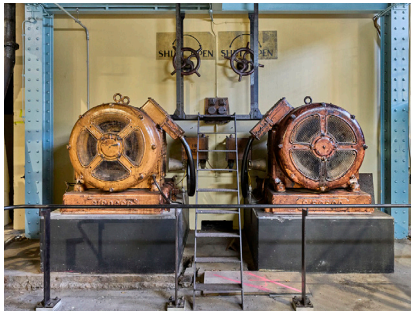
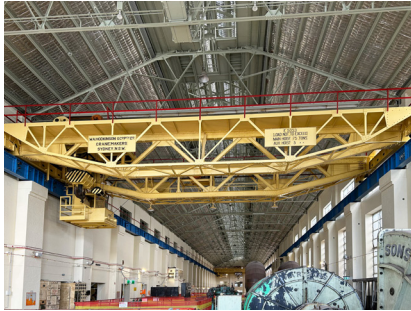
Summary of Machinery




| Machinery | Location | System | Vol. 3 Ref. |
|-------------------------|--|------------------------------|-------------|
| Steam Control Valves | Level 2 – Section A (TH 2.A.1) | Power Generating System | 3.1 |
| Turbo-Alternator Set | Level 2 – Section A (TH 2.A.1) | Power Generating System | 3.2 |
| Cooling Fans | Ground Floor – Section A (South) (TH G.A.1) | Power Generating System | 3.3 |
| Overhead Cranes | Level 1 – Section E (TH 1.E.1) Level 2 – Section A (TH 2.A.1) | Power Generating System | 3.4 |
| The Condensate Pumps | Ground Floor – Section A (South) (TH G.A.1) | The Feedwater System | 4.3 |
| The De-aerators | Ground Floor – Section A (South) (TH G.A.1) | The Feedwater System | 4.4 |
| Sluice Gates and Motors | Ground Floor – Section A (South) (TH G.A.1) Ground Floor – Section D (TH G.D.1) | The Circulating Water System | 5.1 |
| Circulating Water Pumps | Ground Floor – Section A (South) (TH G.A.1) | The Circulating Water System | 5.2 |
| Condensers | Ground Floor – Section A (South) (TH G.A.1) | The Circulating Water System | 5.3 |


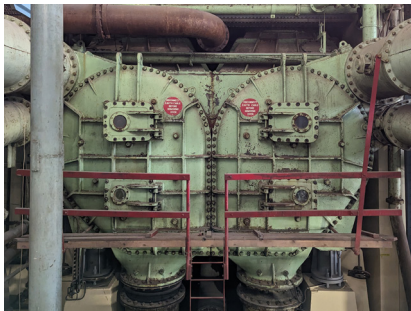
Machinery Descriptions Use and Significance

| Machine / Ref. | Steam Control Valves – 3.1 | |
|----------------|---|---|
| Location | Level 2 – Section A (TH 2.A.1) |  |
| System | Power Generating System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Steam Control Valves controlled the inlet and passage of steam through the Turbine to ensure stabilised temperatures and pressures.</p> <p>Significance</p> <p>The Steam Control Valves are an integral part of the Power Generating System. They are identifiable as industrial power station elements and are representative of superseded steam power generation technologies.</p> | |
| | | |

(Design 5 – Architects, 2023)

| | | |
|-----------------------|--|---|
| Machine / Ref. | The Turbo-Alternator Set – 3.2 | |
| Location | Level 2 – Section A (TH 2.A.1) |  <p>(Design 5 – Architects, 2023)</p> |
| System | Power Generating System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Parsons Turbo-Alternator Set is a three-cylinder horizontal steam turbine. The steam from the Headers travelled from the high to medium-pressure cylinder before entering the low-pressure cylinder and being exhausted into the Condenser.</p> <p>Significance</p> <p>The Turbo-Alternator Set is an integral part of the Power Generating System. Regarded as the heart of the power station, it is a prominent element of the Turbine Hall, and evidences the influence of English technology on the design of the power station.</p> | |
| Machine / Ref. | Cooling Fans – 3.3 | |
| Location | Ground Floor – Section A (South) (TH G.A.1) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024) cropped</p> |
| System | Power Generating System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Cooling Fans were used to reduce the build-up of heat on components of the Turbo-Alternator Set.</p> <p>Significance</p> <p>The Cooling Fans are an integral part of the Power Generating System. They illustrate the provision of air to the Turbo-Alternator to cool its operation components.</p> | |
| Machine / Ref. | Overhead Cranes – 3.4 | |
| Location | Level 1 – Section E (TH 1.E.1), Level 2 – Section A (TH 2.A.1) |  <p>(Design 5 – Architects, 2023)</p> |
| System | Power Generating System | |
| Significance | 1 – Exceptional | |
| Description | <p>The three Overhead Cranes were used for lifting, installation, maintenance, and construction in the Turbine Hall.</p> <p>Significance</p> <p>The Overhead Cranes are integral to the continuing maintenance of the elements associated with the Power Generating System. They are representative of the ongoing process of systems upgrading, and the move away from dependence on English equipment to locally made machinery.</p> | |

| | | |
|-----------------------|---|--|
| Machine / Ref. | The Condensate Pumps – 4.3 | |
| Location | Ground Floor –Section A (South) (TH G.A.1) |  <p>(Design 5 – Architects, 2023)</p> |
| System | The Feedwater System | |
| Significance | 1–Exceptional | |
| Description | <p>The Condensate Pumps sent the water from the Condenser through the Economisers and De-aerators, eventually sending the water back into the Boiler.</p> <p>Significance</p> <p>The Condensate Pumps are an integral part of the Feedwater System. They are representative of medium-capacity, electrically driven pump technology by which feedwater is constantly reused in power generation.</p> | |
| | | |
| Machine / Ref. | The De-aerators – 4.4 | |
| Location | Ground Floor –Section A (South) (TH G.A.1) |  <p>(Design 5 – Architects, 2023)</p> |
| System | The Feedwater System | |
| Significance | 1–Exceptional | |
| Description | <p>The De-aerators are large steel cylinders with domed tops that used low pressure and heat to remove dissolved oxygen and other gases from the Condensate.</p> <p>Significance</p> <p>The De-aerators are an integral part of the Feedwater System. They are characteristic of early to mid-twentieth century power station technology.</p> | |
| | | |
| Machine / Ref. | Sluice Gate and Motors – 5.1 | |
| Location | Ground Floor –Section A (South) (TH G.A.1) Ground Floor –Section D (TH G.D.1) |  <p>(Design 5 – Architects, 2023)</p> |
| System | The Circulating Water System | |
| Significance | 1–Exceptional | |
| Description | <p>The Sluice Gates and Motors could exclude water from passing into suction wells and isolate each of the Condensers for the respective Turbo-Alternator Sets for maintenance of the well or pump.</p> <p>Significance</p> <p>The Sluice Gate and Motors are an integral part of the Circulating Water System. They evidence the way circulating water is controlled throughout the power station and admitted to the Condenser Pump Wells.</p> | |
| | | |

| | | |
|-----------------------|--|--|
| Machine / Ref. | Circulating Water Pumps – 5.2 | |
| Location | Ground Floor – Section A (South) (TH G.A.1) |  |
| System | The Circulating Water System | |
| Significance | 1–Exceptional | |
| Description | <p>The Circulating Water Pumps are large, vertically mounted, positive-displacement pumps that were used to pump and circulate saltwater into the base of the condensers to condense the steam sent into the Condensers.</p> <p>Significance</p> <p>The Circulating Water Pumps are an integral part of the Circulating Water System. They have the ability to provide information on the operations of the Condensers.</p> | |
| | | |
| Machine / Ref. | Condensers – 5.3 | |
| Location | Ground Floor – Section A (South) (TH G.A.1) |  |
| System | The Circulating Water System | |
| Significance | 1–Exceptional | |
| Description | <p>The Condensers are massive cast iron chambers that were used to condense steam and return it back to the Feedwater system.</p> <p>Significance</p> <p>The Condensers are an integral part of the Circulating Water System. They have landmark qualities in the Turbine Hall basement and are representative of the process of conversion of steam into water for recirculation to the Boilers.</p> | |
| | | |

(Design 5 – Architects, 2023)

(Design 5 – Architects, 2023)

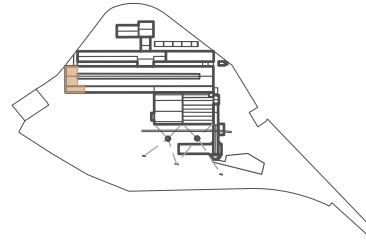


Figure 5.14 West wall of TH1. E1, 2024 (courtesy of Chris Bennett: Evolving Picture)

6 ADMINISTRATION & STAFF ACCOMMODATION



Figure 6.1 East Elevation of Administration and Staff Accommodation, from Victoria Access Bridge, 2024 (courtesy of Chris Bennett: Evolving Picture).



The Administration and Staff Accommodation is located at the southwest corner of the site and is shown in the following diagrams.

6.1 FUNCTION

The Administration and Staff Accommodation provided the staff and workers of White Bay Power Station with various amenities and facilities and hosted several of the management aspects of the power station's operations.

6.2 HISTORY

The Administration and Staff Accommodation was constructed during the second phase of construction at the Power Station during the 1950s, alongside the southern half of the Pump House and Turbine Hall. It was known as the front of house for its main entrance across the Victoria Road Bridge.

Certain spaces became less used and or redundant as the White Bay Power Station gradually fell into decline during the 1970s, such as the laboratory spaces, as lab testing activities were moved off site. Any activity here eventually ceased in 1983 when the power station was decommissioned. Major restoration works were carried out in 2022–24 to address internal damage, structural and safety issues, and are discussed further in this section.

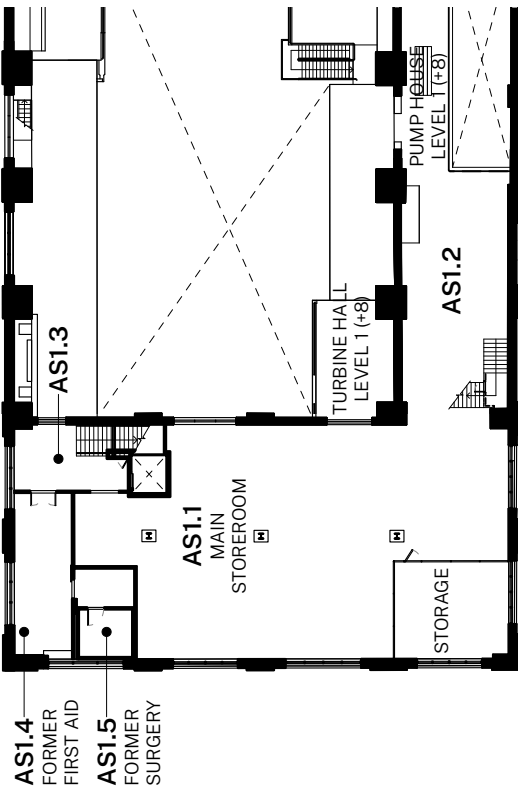
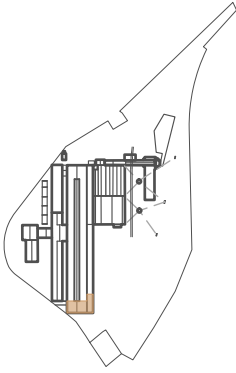
6.3 SPATIAL REFERENCES

The Administration and Staff Accommodation comprises the following spaces:

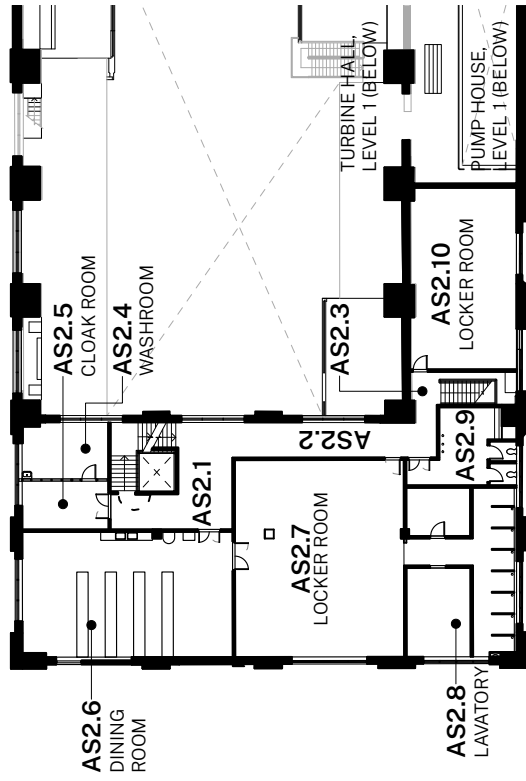
| Spaces | Ref. |
|------------------------------|--------|
| Level 1–Main Storeroom | AS 1.1 |
| Level 1–Space | AS 1.2 |
| First Aid Foyer | AS 1.3 |
| First Aid Room | AS 1.4 |
| Surgery | AS 1.5 |
| Level 2–Lift Lobby and Stair | AS 2.1 |
| Level 2–Hall | AS 2.2 |
| Level 2–Hall with Stairs | AS 2.3 |
| Washroom | AS 2.4 |
| Cloak Room | AS 2.5 |
| Level 2–Dining Room | AS 2.6 |
| Level 2–Locker Room (South) | AS 2.7 |

| Spaces | Ref. |
|---|---------|
| Level 2–Lavatory (South) | AS 2.8 |
| Level 2–Lavatory (North) | AS 2.9 |
| Level 2–Locker Room (North) | AS 2.10 |
| Level 3–Main Lobby and Stair | AS 3.1 |
| Level 3–Hall | AS 3.2 |
| Meeting Room 1 (Former Efficiency Engineers) | AS 3.3 |
| Workstation 1 (Former Level 3–Dining Rm) | AS 3.4 |
| Workstation 2 (Former Level 3–Locker Room (South)) | AS 3.5 |
| Janitor / Toilets (Former Level 3–Lavatory) | AS 3.6 |
| Female Toilet (Former Foreman's Showers) | AS 3.7 |
| Level 3–Locker Room (North) | AS 3.8 |
| Kitchenette / Meeting Room 2 (Former Shift Engineers) | AS 3.9 |
| Level 4–Lift Lobby and Stair | AS 4.1 |
| Level 4–Hall | AS 4.2 |
| Office 1 (Former Mechanical Super / Ass. Mech. Super) | AS 4.3 |
| Office 2 (Former Powerhouse Super 1) | AS 4.4 |
| Office 3 (Former Powerhouse Super 2) | AS 4.5 |
| Office 4 (Former Timekeeper) | AS 4.6 |
| Former Correspondence Records (North) | AS 4.7 |
| Former Correspondence Records (South) | AS 4.8 |
| Statistical | AS 4.9 |
| Level 4–Lobby | AS 4.10 |
| Stores Officer | AS 4.11 |
| Kitchenette | AS 4.12 |
| Level 4–Lavatory | AS 4.13 |
| Lab Hall | AS 4.14 |
| Lab 1 | AS 4.15 |
| Lab 2 | AS 4.16 |
| Laboratory | AS 4.17 |
| Assistant Engineers | AS 4.18 |
| Stationery Store (South) | AS 4.19 |
| Stationery Store (North) | AS 4.20 |
| Level 4–Draftsman's Room | AS 4.21 |

ADMINISTRATION AND STAFF ACCOMMODATION



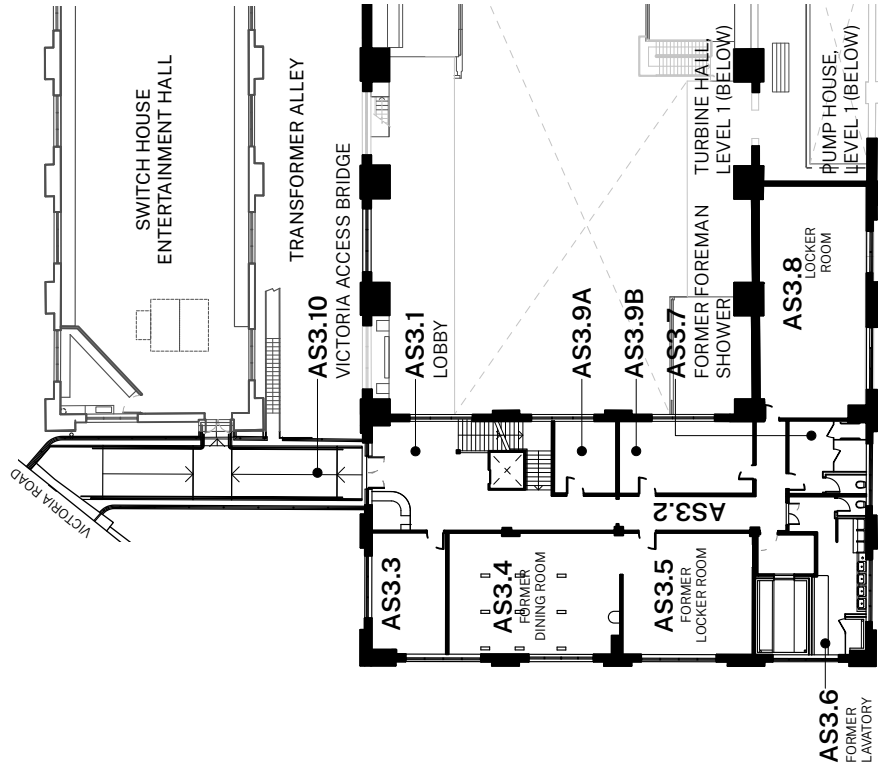
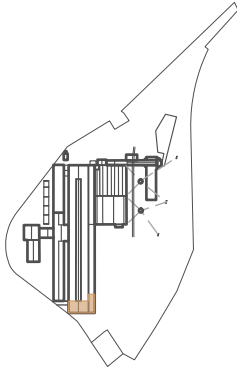
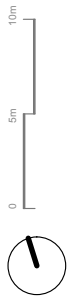
**ADMIN & STAFF ACCOMMODATION
LEVEL 1 PLAN (+8)**



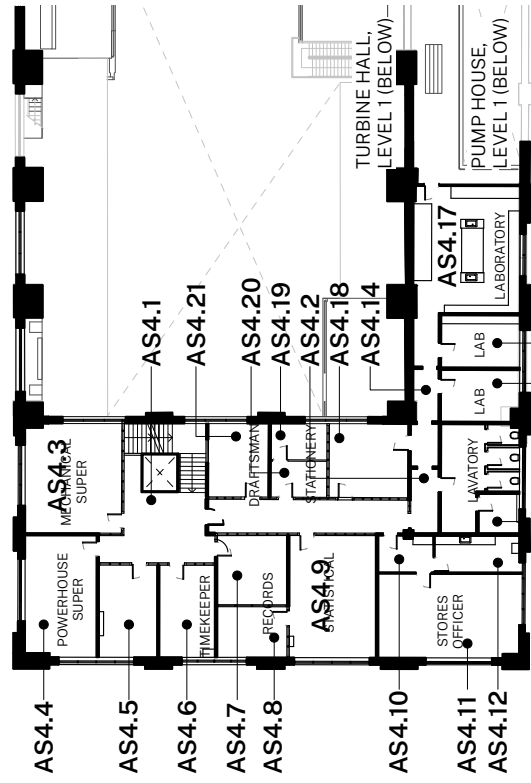
**ADMIN & STAFF ACCOMMODATION
LEVEL 2 PLAN (+12)**

Figure 6.2 Administration and Staff Accommodation Level 1 and 2 plans.

ADMINISTRATION AND STAFF ACCOMMODATION



ADMIN & STAFF ACCOMMODATION
LEVEL 3 PLAN (+16)



ADMIN & STAFF ACCOMMODATION
LEVEL 4 PLAN (+20)

Figure 6.3 Administration and Staff Accommodation Level 3 and 4 plans.

6.4 DESCRIPTION

6.4.1 General

The Administration and Staff Accommodation is a reinforced concrete building located at the southern end of the White Bay Power Station complex. The building is approximately twenty-seven metres (27m) long and thirteen metres (13m) wide, and also extends into the Pump House building space on some floors (by approximately eleven metres). It is connected at Level 1 to the Pump House and Turbine Hall, and also has multiple spaces that directly overlook the Turbine Hall. It is divided into a series of smaller offices, as well as various amenities and facility spaces for the staff and workers. For visitors to the power station, this building was the front of house and point of entry from Victoria Road. The Administration and Staff Accommodation has a partially marred eastern wall with several bricked-up openings as a result of the demolition of the second Boiler House in 1976. The 2022–24 works have seen sections of the building reactivated for office and administrative uses.

6.4.2 Level 1

Level 1 of the Administration and Staff Accommodation houses a large storage space, as well as the on-site first aid and medical facilities where nurses were stationed to treat worker injuries during the active years of the power station. It is connected to Level 1 of both the Pump House and Turbine Hall at its east and west ends (AS 1.2 and AS 1.3), while a main storeroom space occupies most of the south end. This space (AS 1.1) has a concrete ceiling supported by steel beams and a metal-caged area in the southeast corner with additional shelves and equipment. The medical spaces are located in the southwest corner of Level 1, with the First Aid Room (AS 1.4) accessed from the lobby (AS 1.3) via a pair of timber French doors. The Ambulance / Surgery Room (AS 1.5) is accessed via a sliding door from the First Aid Room. Both rooms have concrete floors and rendered masonry walls, and ceilings of Masonite panels.

6.4.3 Level 2

Level 2 of the Administration and Staff Accommodation houses several staff amenities that were used by the workers during the active years of the power station. It is accessed via the lift lobby and stairs (AS 2.1) as well as from the stairwell located at the east end of the level (AS 2.3). The ceiling is concrete with steel beams, with the exception of the lavatories, which have ceilings of

suspended fibre sheeting. Internal dividing walls largely comprise rendered masonry, with the exception of certain walls facing circulation spaces, which are timber partitions with framed glazing. The floor is concrete, with the lavatories having a tiled floor layered on top of the concrete. West of this lobby are a Cloakroom (AS 2.5) with double French doors and a Washroom (AS 2.4) with a basin. In the southwest corner is the Dining



Figure 6.4 Level 1 storage space, 2024 (courtesy of Chris Bennett: Evolving Picture)



Figure 6.5 Level 3 main lobby, 2024 (courtesy of Chris Bennett: Evolving Picture)



Figure 6.6 Level 4 laboratory, 2024 (courtesy of Chris Bennett: Evolving Picture)

Room (AS 2.6), with three long timber dining tables with concrete stands, a sink, a pie warmer, and a projection screen. This Dining Room was once connected to an external canteen which has been demolished due to deterioration. Further east is a corridor (AS 2.2) with a series of windows overlooking the Turbine Hall. Along the south is a large locker room (AS 2.7), via which a lavatory (AS 2.8) can be accessed. A second lavatory (AS 2.9) is located at the end of the corridor, adjacent to the east stairwell. To the north of this stairwell is another smaller locker room (AS 2.10), with steel-framed windows along its eastern wall.

6.4.4 Level 3

Level 3 of the Administration and Staff Accommodation houses several staff amenities, as well as the offices of higher authority workers that managed various aspects of operation of the power station. It is an L-shaped level accessed by the main lobby and stair located at its western end (AS 3.1). On the west wall of this space is a pair of doors that provide access to Victoria Road via a concrete bridge, and a polished maple reception desk in the southwest corner of the space. The lift and main doors are also polished maple, the lobby floor is intricately mosaic tiled, and the ceiling is a patterned, pressed metal. During the active years of the power station, this space served as the front of house and point of entry for visitors. Elsewhere, the ceiling of Level 3 is concrete supported by steel beams, while perimeter walls are rendered masonry, and internal dividing walls are rendered masonry with high level opening boarded or covered with wired mesh. The 2022–24 activation works have covered much of this ceiling with plasterboard, and fixed louvres replacing the boarded high level openings. At the southwest corner is the Efficiency Engineer’s Office (AS 3.3), which has been converted into a meeting room as part of the 2022–24 activation works. A corridor (AS 3.2) leads from the southeast of the lobby further east. Along the north side of this corridor is the Shift Engineer’s Office (AS 3.9), which has steel-framed windows overlooking the Turbine Hall. This space was divided into a kitchenette (AS 3.9A) and a meeting room (AS 3.9B) as part of the activation works. The two large rooms to the south of the corridor and adjacent to AS 3.3 were once the Dining Room (AS 3.4) and the Locker Room (AS 3.5), both with south-facing steel frame windows, and have since been activated as a series of open plan workstations. The Lavatory (AS 3.6) in the southeast corner has been divided into a janitor’s closet (AS 3.6A), a male toilet (AS 3.6B), and a unisex accessible toilet (AS 3.6C). To the north of the lavatory along the eastern wall is the

Foreman’s Showers (AS 3.7) which has been converted into a female toilet. At the end of the corridor at the northeast section of the floor is a large Locker Room (AS 3.8) that is now used as storage room. The floors of the aforementioned activated workstations and meeting rooms have been carpeted.

6.4.5 Level 4

Level 4 of the Administration and Staff Accommodation houses staff amenities, offices, a series of labs, and administrative spaces. It is an L-shaped level accessed by the lobby and stair (AS 4.1) near the western end. The asbestos-filled ceiling has been removed in the western half of the floor and replaced with new plasterboard ceiling as part of the activation works. The floor of Level 4 largely comprises timber flooring, which rests atop joists on a concrete slab. Internal dividing walls largely comprise of rendered masonry, with the exception of certain walls facing circulation spaces, which are timber partitions with framed glazing. The offices are in the western half of the level and include the Mechanical Superintendent’s office (AS 4.3) to the west, the two Powerhouse Superintendent’s offices (AS 4.4 and AS 4.5) in the southwest corner, the Timekeeper’s office (AS 4.6) at the south, and the Draftsman’s office (AS 4.21) to the east. Each of these spaces have been activated as

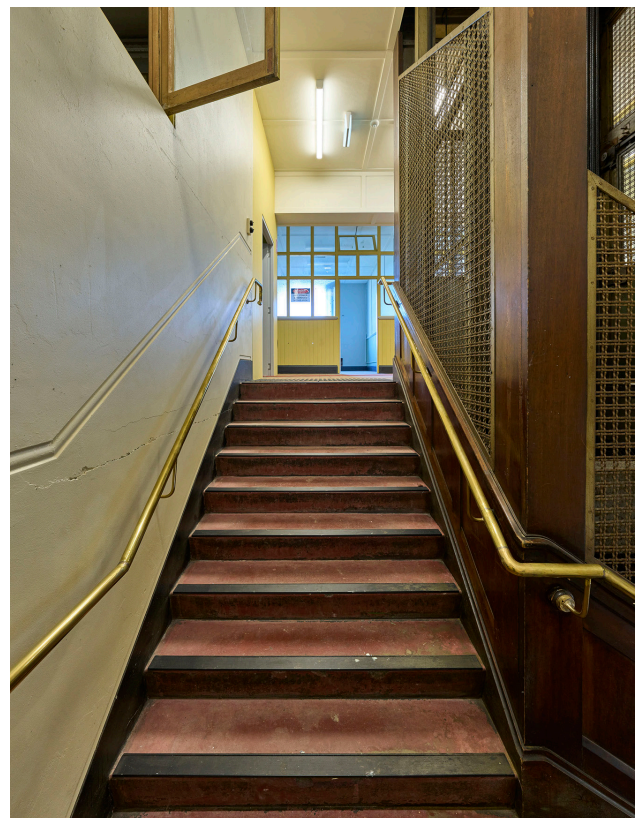


Figure 6.7 Stairwell leading to level 4, 2024 (courtesy of Chris Bennett: Evolving Picture)

office spaces once more during the 2022–24 works. A new wall partition and door have been constructed to separate the lobby and stair from the corridor (AS 4.2) that leads to the remaining rooms. Along the middle of the south wall are two records rooms, one (AS 4.7) of which is accessed via the lobby, and another (AS 4.8) which is accessed via the adjacent statistical room (AS 4.9). Opposite this, on the north side of the corridor next to the Draftsman’s Office are two Stationery Rooms (AS 4.20 and AS 4.19) and the Assistant Engineer’s Office (AS 4.18), which has a steel-framed window on the northern wall overlooking the adjacent Turbine Hall. At the southeast corner of Level 4 is a small lobby space (AS 4.10) that connects to a kitchenette (AS 4.12) and the Stores Officer office (AS 4.11), which has steel-framed

windows on its south and east walls. The lavatory (AS 4.13) is located at the east end of the level and has four cubicles – three toilets and a shower area. Past this at the northeast end of Level 4 is a corridor (AS 4.14) leading to a series of lab spaces (AS 4.15 and AS 4.16), each with a rather dilapidated fitout of cabinets, shelves, and benches. These lab spaces were once used for testing coal samples and ensuring that the power station was operating at optimal efficiency. The large laboratory (AS 4.17) has a door at its north wall which shows evidence there used to be walkway connecting the former Boiler House 2 and Pump House machinery from the Administration and Staff Accommodation.

6.5 ALTERATIONS & CONDITION

Following its completion, the Administration and Staff Accommodation did not record any significant changes during the power station’s years of active operations.

| Element / Room | Reference |
|--|--|
| Flooring | The concrete floors need minor patching and leveling. Carpet was installed in the office areas on Level 3. The mosaic tiles on the Level 3 entry have been coated to provide clear slip-resistance. Level 4 contains timber floorboards (originally covered with lino) installed over timber battens and supported on the structural concrete slab. Timber floorboards in good condition are retained. Water damaged timber floorboards were removed or replaced with sheet flooring. |
| Lift and stair | The existing lift car and counterweight have been lowered to the base. Stairs have been enclosed on the lower levels with a two-hour firewall to separate Level 3 and 4 from the lower levels. |
| Internal walls | Walls and surfaces that were originally painted were repainted to encapsulate lead paint in colours that closely match the original. Some graffitied walls were clear coated to preserve graffiti. |
| Laboratory and executive offices on Level 4 | New stormwater downpipes were installed in the space to meet current standards. Repair and conservation to rooms on Level 4 were limited to making them safe. |
| Windows | Most openings were replaced with new awning-type steel-framed windows that were in similar configuration to the existing windows. Some windows on Levels 1 and 2 remain timber-framed with polycarbonate sheeting. |
| Roofing – metal sheeting | The roof is continuous with Turbine Hall. Refer to Turbine Hall section. |
| External walls | External rendered walls are continuous from Turbine Hall. Refer to Turbine Hall section. |

6.6 SIGNIFICANCE

The Administration and Staff Accommodation is an integral part of the White Bay Power Station and has historical associations with the electrification of the Sydney rail and tramways systems. Whilst it does not have the same industrial aesthetic present throughout the rest of the power station, the Administration and Staff Accommodation is representative of administrative and management operations needed to keep the power station running effectively and efficiently.

The Administration and Staff Accommodation internal spaces demonstrate the administrative aspects of the power station's operations primarily through amenities

and gathering spaces. Additionally, the laboratory spaces where testing of coal was conducted to optimise operations and output highlights a degree of technical / scientific significance to the place, which is less evident throughout the rest of the building. Externally, as part of the same building as the Turbine Hall and Pump House, the Administration and Staff Accommodation forms part of the largest volume in the complex of buildings that make up the power station, and therefore contributes to its landmark qualities. The building also served as the primary front of house entry to the power station.

Overall, the building is of high social significance, moreso for the former workers of the White Bay Power Station, as its gathering spaces were integral to a sense of community and camaraderie.



Figure 6.8 Administration Building Lobby, facing towards Turbine Hall, 2024 (courtesy of Chris Bennett: Evolving Picture).

6.7 REFERENCE TO POLICIES


The Administration and Staff Accommodation is an integral part of the White Bay Power Station. The following policies from the White Bay Power Station CMP are relevant to the Administration and Staff Accommodation and should guide its ongoing care and management, including decisions about conservation, future use, and development.


Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.

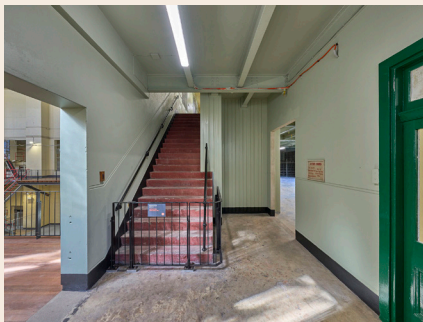
| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.32 | Administration and Staff Accommodation |
| 6.33 | Existing administration and staff accommodation fitout |
| 6.34 | Victoria Road access bridge and entrance |
| Tolerance for Change Table 6.6.10.1 and Opportunities for Change Table 6.6.10.2 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 11.4 | South Yard and White Bay Hotel |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |


6.8 INVENTORY OF SPACES


This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.


| | | |
|--------------------------|---|--|
| Room / Item | Level 1 – Main Storeroom | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 1.1 | |
| Significance | 3 – Moderate | |
| Description | <p>This space is accessed via the Pump House and is a vast open space that was likely once used for storage. The metal cage area in the southeast corner of the room contains shelves indicative of storage space for uniforms.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete. Smoothened and sealed in 2022–24. | |
| Walls | <p>Painted rendered masonry – exposed patch of unrendered brick near north end of east wall from bricked up doorway.</p> <p>Three riveted steel I-beam columns evenly spaced through middle of the room.</p> <p>Steel frame wire mesh cage in southeast corner.</p> <p>Walls and columns repainted in 2022–24.</p> | |
| Ceiling | Painted off-form concrete with evidence of boarded formwork supported by riveted steel I-beams. Repainted in 2022–24. Chains (likely from supporting equipment) hanging from beams. | |
| Doors and Windows | <p>Wire mesh door to caged area in southeast corner on the east wall.</p> <p>Metal roller door to Turbine Hall on south wall. Made operational in 2022–24.</p> <p>North wall: steel frame 9 pane window overlooking Turbine Hall with one exhaust fan. Broken window panes replaced in 2022–24.</p> <p>East wall: two 6 pane windows with exhaust opening on southern part, externally covered with clear Perspex. Under the window on northern end is bricked up opening.</p> <p>South wall: three 6 pane windows. East window is bricked up externally. Middle and west steel windows were reinstated in 2022–24.</p> <p>New opening on west of the lift connecting to AS 1.3 and Turbine Hall was made in 2022–24.</p> | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | <p>Ceramic sink along east wall adjacent to metal cage area.</p> <p>Conduits along walls and ceiling, as well as steel brackets along south wall and near west wall.</p> <p>Lift located in northwest corner, covered with non-combustible wall for fire protection in 2022–24.</p> | |
| Movable heritage | <p>Metal frame shelving within caged space and along west wall.</p> <p>Various tools, equipments, and removed partitions from demolished Pump House offices stored within caged space.</p> | |

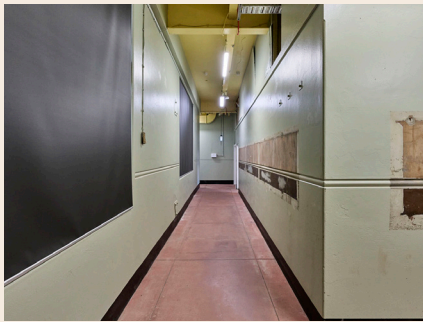
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| Room / Item | Level 1 – Space | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 1.2 | |
| Significance | 3 – Moderate | |
| Description | <p>This space connects Level 1 of the Pump House to the Administration and Staff Accommodation Level 1. It appears to have primarily been a connecting circulation space, with some switch boxes mounted on the west wall. The space is also connected to Level 2 of the Administration and Staff Accommodation.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. Smoothened and made compliant as part of 2022–24 works. | |
| Walls | Painted rendered masonry. Repainted in 2022–24. Exposed patches of unrendered brick on eastern wall. | |
| Ceiling | Off-form concrete supported by steel I-beams. Repainted in 2022–24. | |
| Lighting | Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | <p>Concrete stairs in southeast corner leading up to Level 2 of the Administration and Staff Accommodation.</p> <p>Painted timber bracing on west wall supporting multiple switch boxes. Similar bracing located opposite on east wall. Switch boxes covered with timber framed Perspex in 2022–24.</p> <p>Conduits running along east and south walls.</p> <p>New steel balustrade at bottom of stairs.</p> | |


| | | |
|--------------------------|---|--|
| Room / Item | First Aid Foyer | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 1.3 | |
| Significance | 3 – Moderate | |
| Description | The First Aid Foyer is accessed via the stairs from Level 2 of the Administration and Staff Accommodation, or from an opening connecting to Level 1 of the Turbine Hall. | |
| Elements | General Description | |
| Floor | Concrete, remediated in 2022–24. | |
| Skirting | Black paint with plaster moulding top. Repainted in 2022–24. | |
| Walls | Painted rendered masonry with incised dado moulding at 1340–80mm. Repainted in 2022–24. Opening on north wall leading to Level 1 of the Turbine Hall. | |
| Ceiling | Painted off-form concrete supported by steel I-beams. Repainted in 2022–24. | |
| Doors and Windows | Lift door on east side of foyer. Half-glazed 4 panel painted timber French doors with figured glass windows above on south wall. Door repaired and repainted in 2022–24. Steel frame casement window on west wall with obscured figured glass –6 pane window but cut off by wall just past 4 panes. Windows cladded externally with timber framed corrugated polycarbonate sheeting in 2022–24. | |
| Lighting | Pendant dish light hanging from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Painted concrete stairs in northeast corner of the foyer, with braced timber door to storage under stair and tubular steel handrails. Lift in southeast corner with metal door with woven mesh panel. Fire-rated proprietary wall installed around lift shaft in 2022–24. West wall: wooden cupboard doors with telephone wiring. Cupboard fuse box with electric machinery and conduits extending out and running along the walls. Glass replaced in 2024. Steel balustrade installed at bottom of stairs in 2022–24. | |


| | | |
|--------------------------|--|--|
| Room / Item | First Aid Room | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 1.4 | |
| Significance | 3 – Moderate | |
| Description | <p>The First Aid Room is accessed via the Foyer to its north. It was used to provide first aid treatment to workers at the power station who experienced injuries or unwellness from the dangerous and often extreme working environment.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Painted concrete with grey linoleum tiles on top. Around half the tiles are missing / have been removed | |
| Skirting | Black paint | |
| Walls | Painted rendered masonry walls. | |
| Ceiling | Masonite panel with timber cove cornice. | |
| Doors and Windows | <p>Half-glazed 4 panel painted timber French doors with figured glass windows above. Door repaired and repainted in 2022/2024.</p> <p>Sliding door on east wall, unmounted and resting against wall.</p> <p>Steel frame 6 pane louvre window with frosted glass (on three panes) externally cladded with clear corrugated polycarbonate. Operable via a pulley mechanism with linked chain.</p> <p>Steel frame 2 pane window on south wall that continues into AS 1.5, externally cladded with clear corrugated polycarbonate.</p> <p>Windows externally cladded with timber framed corrugated polycarbonate in 2022–24.</p> | |
| Lighting | <p>Former fluorescent lights on ceiling.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | <p>Stainless steel metal sink cupboard in southeast corner.</p> <p>Ceramic sink mounted on south end of east wall with paper towel dispenser above. Sink cupboard doors repaired in 2022–24.</p> <p>Fuse box on west wall.</p> <p>Conduits running along south and west walls.</p> | |


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|--------------------------|--|--|
| Room / Item | Surgery | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 1.5 | |
| Significance | 3 – Moderate | |
| Description | <p>A small room along the south wall of Level 1 of the Administration and Staff Accommodation accessed from the First Aid Room. It was used for medical treatment of workers at the power station who experienced injuries or unwellness from the dangerous and often extreme working environment.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Skirting | Black paint | |
| Walls | Painted rendered masonry. | |
| Ceiling | Masonite panels with timber battens. | |
| Doors and Windows | Sliding door on west wall, leaf unmounted. | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | <p>Chipboard cupboards and shelves along east wall. Small bench mounted along south wall.</p> | |


| | | |
|--------------------------|--|--|
| Room / Item | Level 2 – Lift Lobby and Stair | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 2.1 | |
| Significance | 2 – High | |
| Description | <p>The central lift lobby and stair connects to all levels of the Administration and Staff Accommodation. It comprises a central lift shaft with stairs and lobby space running around it in an approximate square shape.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Painted concrete with scribed margins. Crack approximately 1500mm long running near west wall. | |
| Skirting | Painted black on walls, timber with profile moulding at top around the lift well. Repainted in 2022–24. | |
| Walls | Rendered masonry with incised dado moulding at 1350mm high (approx.). Repainted in 2022–24. Some sections where items were likely hung not painted to show evidence. | |
| Ceiling | Off-form concrete ceiling supported by steel I-beams. Repainted in 2022–24. | |
| Doors and Windows | <p>5 panel (4 glazed) timber French doors to AS 2.5, and AS 2.6. AS 2.5 door has a blocked fanlight above door. Doors painted in 2022–24.</p> <p>Steel frame 12 pane window with clear glass overlooking Turbine Hall. Glazing of window to Turbine Hall repaired and blackout blinds installed internally in 2022–24.</p> <p>Meshed-over opening high up on south wall.</p> | |
| Lighting | <p>Original pendant dish lights from ceiling.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | Lift shaft in centre of the space with panelled walls of timber boarding and woven metal mesh. Fire-rated proprietary wall installed around lift shaft in 2024, with fire rated door to stairwell. | |


| | | |
|--|---|---|
| Room / Item | Level 2 – Hall | |
| Building | Administration and Staff Accommodation |  |
| Room No. | AS 2.2 | |
| Significance | 2 – High | |
| Description | The hall is the main circulation space on Level 2 of the Administration and Staff Accommodation and connects the east main Lift Lobby and Stair with the stairwell at the west end of the level. | |
| <small>(courtesy of Chris Bennett: Evolving Picture, 2024)</small> | | |
| Elements | General Description | |
| Floor | Painted concrete with scribed margins. | |
| Skirting | Painted black. Repainted in 2022–24. | |
| Walls | Painted rendered masonry with dado moulding at 1350mm high (approx.). Repainted in 2022–24. Some sections where items were likely hung not painted to show evidence. | |
| Ceiling | Painted off-form concrete supported by steel I-beams. Repainted in 2022–24. | |
| Doors and Windows | <p>Single timber door to AS 2.7 and double timber door to AS 2.9 on south wall. Repainted in 2022–24.</p> <p>Steel frame 12 pane window with clear glass overlooking Turbine Hall. Glazing of window to Turbine Hall repaired and blackout blinds installed internally in 2022–24.</p> <p>Highlighted window on south wall blocked in with soft board, evidence of wall hung joinery removed.</p> | |
| Lighting | <p>Former pendant dish light from ceiling.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |


| | | |
|--------------------------|---|--|
| Room / Item | Level 2 – Hall with Stairs | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 2.3 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The stairs provide access to the northeast part of Level 2 of the Administration and Staff Accommodation from Level 1.</p> | |
| |  | |
| | (courtesy of Chris Bennett: Evolving Picture, 2024) | |
| Elements | General Description | |
| Floor | Painted concrete with scribed margins. | |
| Skirting | Painted black. Repainted in 2022–24. | |
| Walls | Painted rendered masonry with dado moulding at 1350mm high (approx.). Repainted in 2022–24. | |
| Ceiling | Painted off-form concrete supported by steel I-beams. Repainted in 2022–24. | |
| Doors and Windows | Steel frame window with wired and figured glass on east wall blocked up to half height with concrete platform and handrail. Window externally blocked with temporary timber frame and clear corrugated polycarbonate. | |
| Lighting | Original lightbulb from ceiling. Temporary lighting and catenary wires installed in 2022–24. | |
| Other | Concrete stairs with tubular steel handrail. Handrail repainted in 2022–24. Steel ladder attached to wall on north end of east wall leading to small platform. A/C duct running along ceiling. Chainwire fence installed at top of stairs for safety measure in 2022–24. | |

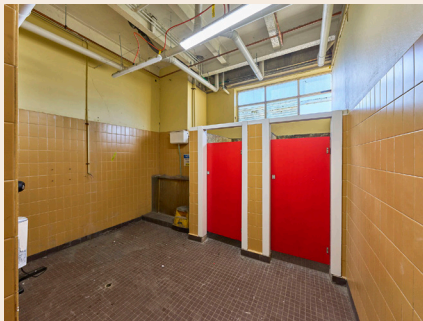
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|--------------------------|---|--|
| Room / Item | Washroom | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 2.4 | |
| Significance | 4-Little / Neutral | |
| Description | <p>The washroom is located in the northwest corner of Level 2 of the Administration and Staff Accommodation. It is accessed via the Cloak Room to its south and overlooks the Turbine Hall.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Temporary particle board floor raised up over concrete floor, installed in 2022-24. | |
| Skirting | Timber quad along north, east, and west walls. | |
| Walls | <p>Painted rendered masonry wall with dado moulding at 1350mm (approx.) high on north, east and west sides. Repainted in 2022-24.</p> <p>Timber partition wall with framed figured glass glazing on south side.</p> | |
| Ceiling | Off-form concrete ceiling supported by steel I-beams. | |
| Doors and Windows | <p>4 panel timber door from Cloak Room (AS 2.5) at east end of south wall.</p> <p>Steel frame 12 pane window on north and west walls (west window cut off in the middle by south partition wall). West wall externally clad with timber frame clear corrugated polycarbonate.</p> | |
| Lighting | <p>Original lightbulb from ceiling.</p> <p>New temporary lighting and catenary wires installed as part of 2022-24 works.</p> | |
| Other | <p>Ceramic sink mounted to south wall at west end. Cupboard (fuse box) with a glazed 2 panel door.</p> <p>Timber shelving and an open fuse box on north wall.</p> | |

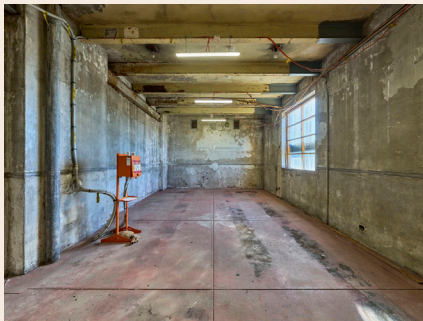
| | | |
|--|--|---|
| Room / Item | Cloak Room | |
| Building | Administration and Staff Accommodation |  |
| Room No. | AS 2.5 | |
| Significance | 3 – Moderate | |
| Description | The Cloak Room is located at the west end of Level 2 of the Administration and Staff Accommodation. It is accessed via the main Stair and Lift Lobby (AS 2.1). | |
| <small>(courtesy of Chris Bennett: Evolving Picture, 2024)</small> | | |
| Elements | General Description | |
| Floor | Temporary particle board floor raised up over concrete floor at east end of the room. The remainder of the room comprises timber board floor raised over concrete. | |
| Skirting | Timber quad. | |
| Walls | Painted rendered masonry with dado moulding at 1350 mm high (approx.) and green painted dado strip above on east, south and west walls. Timber partition wall with framed figured glass glazing on north side. | |
| Ceiling | Off-form concrete supported by steel I-beams. | |
| Doors and Windows | 5 panel (4 glazed) timber French doors on east wall with blocked fanlight above. Steel frame 12 pane window on west wall (cut off by partition wall, only 4 full panes and 4 half-panes visible). Externally clad with timber frame clear corrugated polycarbonate. | |
| Other | Timber shelf with labels. | |


| | | |
|--------------------------|---|--|
| Room / Item | Level 2 – Dining Room | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 2.6 | |
| Significance | 2 – High | |
| Description | The Dining Room is located in the southwest corner of Level 2 of the Administration and Staff Accommodation. It is accessed from the main Stair and Lift Lobby (AS 2.1). | |
| Elements | General Description | |
| Floor | Painted concrete with scribed margins. | |
| Skirting | Painted black. | |
| Walls | Painted rendered masonry walls with dado moulding at 1350mm high (approx.). Two woven mesh vents along top of north wall. Exposed brick covering former window opening at east end of south wall. | |
| Ceiling | Suspended fibre sheeting with timber corner strips. | |
| Doors and Windows | 5 panel (4 glazed) timber French doors at east end of north wall (to AS 2.1) and north end of east wall (to AS 2.7). Steel frame window on south wall has been removed, steel frame, 12 pane figured glass windows on west wall. Windows externally clad with timber frame clear corrugated polycarbonate. | |
| Lighting | Original fluorescent lights along ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Four tables with timber tabletops fixed to the floor, two with concrete stands and two with pipe stands. Along north wall: terrazzo sink bench with steel frames and ceramic bowls (1 missing). Steel frame bench, and wall-mounted steel pie warmer. Fuse box on north end of west wall. Projection screen: white and black painted canvas on wall. | |
| Movable heritage | A single red door leaf and multiple window frames currently stored in the space. | |


| | | |
|--------------------------|--|--|
| Room / Item | Level 2 – Locker Room (South) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 2.7 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Locker Room (south) is located along the south end of Level 2 of the Administration and Staff Accommodation. It is accessed via the corridor to its north (AS 2.2) and via the Dining Room to its east (AS 2.6) and was used as a Locker Room by the workers of the power station.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Painted black (original) in north half and red (later) in south half. Repainted in 2022–24. | |
| Walls | <p>Painted rendered masonry with dado moulding at 1350mm high (approx.). North wall has blocked in (soft board) highlight windows and two woven mesh vents. Repainted in 2022–24.</p> <p>One rendered masonry column in northwest area of space. Exposed brick at southwest corner, covering former window</p> | |
| Ceiling | Off-form concrete supported by steel I-beams. Repainted in 2022–24. | |
| Doors and Windows | <p>Timber 4 panel French doors with 2 glazed panels on west wall. Repainted in 2022–24.</p> <p>Architrave and opening at east end of north wall.</p> <p>Opening with architrave on east wall.</p> <p>Steel frame 12 pane wired and figured glass window on south wall. Window externally clad with timber framed clear corrugated polycarbonate.</p> | |
| Lighting | <p>Original lightbulbs from ceiling.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Movable heritage | <p>Lockers from level 3 currently stored in this space, some with loose / missing doors, graffitied.</p> <p>Door painted red, possibly from the east wall double door.</p> | |

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| Room / Item | Level 2 – Lavatory (South) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 2.8 | |
| Significance | 4 – Little / Neutral | |
| Description | The Lavatory (south) is located in the southeast corner of Level 2 of the Administration and Staff Accommodation. It is accessed via the Locker Room to its west (AS 2.7) and comprises an area partitioned into three spaces: a main space with shower cubicles, and two rooms in the northwest corner and southwest corner. |  |
| | | (courtesy of Chris Bennett: Evolving Picture, 2024) |
| Elements | General Description | |
| Floor | Concrete with 150x150mm vitrified tiles in main space. Smaller room floors comprise of rough concrete. | |
| Skirting | Tile | |
| Walls | Painted rendered masonry walls, repainted in 2022–24. Partition walls are rendered masonry on sides of main space, and face brick in the two internal rooms. One partition nearly entirely removed. Tiling to door head height in main space. Terrazzo partitions for shower cubicles. | |
| Ceiling | Main space with shower cubicles: suspended fibre sheeting and steel cover strips. Ceiling removed. Exposed beams repainted in 2022–24. Internal rooms: off-form concrete supported by steel I-beams. Repainted in 2022–24. | |
| Doors and Windows | Door to northwest internal room. Repainted in 2022–24. Doorway on west wall of main space with architraves, door leaf missing. Steel frame 8 pane window with two exhaust fans and wired glass louvres along bottom row and figured wired glass along the top row. Externally covered with clear polycarbonate sheeting in 2022–24. | |
| Lighting | Original lightbulbs from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Eight shower cubicles with Bradley shower system. Multiple original pipes embedded in south wall. | |

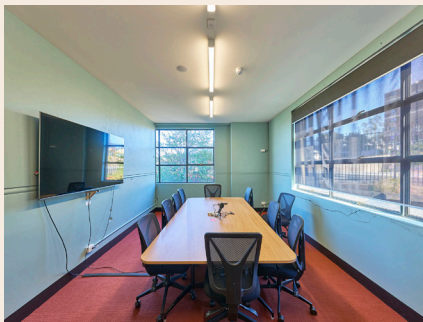
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| Room / Item | Level 2 – Lavatory (North) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 2.9 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Lavatory (north) is located along the east wall of Level 2 of the Administration and Staff Accommodation. It is accessed via the north corridor (AS 2.2) and is adjacent to the northeast stairwell.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with vitrified tiles. | |
| Skirting | Tile | |
| Walls | Painted rendered masonry, tiled to door head height on all walls. Rendered wall section repainted in 2022–24. | |
| Ceiling | Suspended fibre sheeting with steel cover strips removed due to deterioration. Exposed beams repainted in 2022–24. | |
| Doors and Windows | <p>Timber double doors with one glazed figured panel. Repainted in 2022–24.</p> <p>East wall: fixed timber frame wired and figured glass windows, with louvres in two bottom panels. Externally clad with temporary clear polycarbonate.</p> | |
| Lighting | <p>Original fluorescent lights from ceiling.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | <p>Two toilet cubicles with masonry partition at southeast corner of room, urinal with missing basin.</p> <p>Downpipes on ceiling from plumbing above, installed in 2022–24.</p> | |

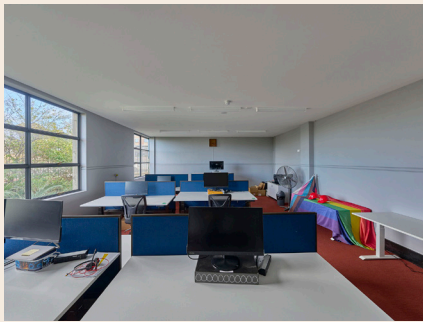
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| Room / Item | Level 2 – Locker Room (North) | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 2.10 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Locker Room (north) is located in the northeast corner of Level 2 of the Administration and Staff Accommodation. It is accessed from the northeast stairwell (AS 2.3) and was used as a Locker Room by the workers of the power station.</p> | |
| Elements | General Description | |
| Floor | Painted concrete with scribed margins. | |
| Skirting | Painted black. | |
| Walls | Rendered masonry with dado moulding at 1350mm high (approx.). North wall has two mesh-covered vents, south wall has five vents (three at floor level, one at moulding height, and one near the ceiling). | |
| Ceiling | Painted off-form concrete supported by steel I-beams. Repainted in 2022–24. | |
| Doors and Windows | <p>East wall: steel frame 12 pane window on south end of wall partially blocked off by south wall, partially bricked up – only two panes visible. Second window is a steel frame 8 pane figured glass window. Both windows externally clad with temporary timber frame clear corrugated polycarbonate in 2022–24.</p> <p>Original door and architrave removed in 2022–24.</p> | |
| Lighting | <p>Original lightbulbs from ceiling.</p> <p>New temporary lighting and catenary wires installed 2022–24</p> | |
| Other | Downpipe on west wall. | |

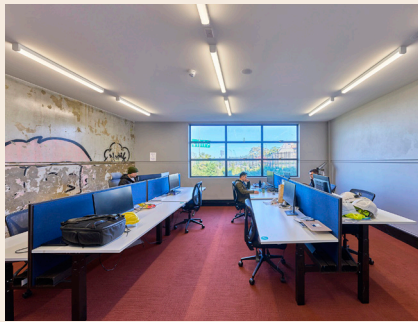
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| Room / Item | Level 3 – Main Lobby and Stair | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 3.1 | |
| Significance | 1–Exceptional | |
| Description | <p>The Main Lobby and Stair is located in the northwest corner of Level 3 of the Administration and Staff Accommodation and was the front of house for visitors to the White Bay Power Station. It is accessed from the Victoria Road Access Bridge (AS 3.10).</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Tiled floor on concrete–black and white Greek key pattern margin, and white hexagonal body tiles. Added timber floor to reception desk and behind. | |
| Skirting | Painted black with recessed moulding above. Repainted in 2022–24. | |
| Walls | Painted rendered masonry with dado moulding at 1350mm high (approx.). Repainted in 2022–24. | |
| Ceiling | Pressed metal ceiling with cornice. Pressed metal cleaned and repainted, rusted portions removed and replaced with panels identical to the original in 2022–24. | |
| Doors and Windows | <p>Polished Queensland Maple double doors with glazed panel on west wall with access to Victoria Road bridge. Doors were repaired, repainted, and made automated in 2022–24. Timber frame frosted glass windows on either side of the door (8 pane) and above (cross pattern, three windows).</p> <p>Steel frame 9 pane window on north wall overlooking Turbine Hall. Perspex framed cover on eastern side for safety, and blackout blinds were installed in 2022–24.</p> <p>Single door on south to AS3.3, installed in 2022–24.</p> | |
| Lighting | Three no.s pendant lights installed in 2022–24. | |
| Other | <p>Lift: Queensland Maple with dentil cornice and woven ribbon mesh panels that were replaced in 2022–24.</p> <p>Stair to level 3 timber balustrade with newel. Additional brass handrails installed in 2022–24 for compliance at stair to level 3.</p> <p>Steel handrail to stairs going down to Level 2.</p> <p>Curved polished Maple reception desk in southwest corner. Minor repair works in 2022–24.</p> <p>Switch boxes with timber framed double panel glazed doors.</p> | |



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| Room / Item | Level 3 – Hall | |
| Building | Administration and Staff Accommodation |  |
| Room No. | AS 3.2 | |
| Significance | 1–Exceptional | |
| Description | <p>This hall forms the main circulation space of Level 3 of the Administration and Staff Accommodation. It starts at the southeast corner of the Main Lobby and Stair and forms an L-shape.</p> | |
| Elements | General Description | |
| Floor | Painted concrete with scribed margins. | |
| Skirting | Painted black. Repainted in 2022–24. | |
| Walls | <p>Painted rendered masonry with dado moulding at 1350mm high (approx.). East wall has “A. Accom” and “Foreman’s Showers” painted on the wall. Repainted in 2022–24. Opening along middle of corridor has been roughly widened. Made good in 2022–24.</p> | |
| Ceiling | Off-form concrete supported by steel I-beams. | |
| Doors and Windows | <p>Refer to individual rooms. High level opening along east-west corridor replaced with louvred (woven mesh parts remain), whilst along north south corridor, most glazing remained, broken ones replaced.</p> | |
| Lighting | <p>Original pendant dish lights from ceiling. New surfaced mounted batten lighting and wiring on cable tray installed in 2022–24.</p> | |


(courtesy of Chris Bennett: Evolving Picture, 2024)


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| Room / Item | Meeting Room (Former Efficiency Engineers) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 3.3 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Efficiency Engineers was an office for the engineers who were responsible for monitoring and optimising the energy generation of the power station. It is located in the southwest corner of Level 3 of the Administration and Staff Accommodation. The room originally contained a cloak room in the northwest corner of the room, and a wash closet in the southeast corner. Both rooms were removed during 2022–24 works and the space has been repurposed into a meeting room.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Carpet installed in 2024. | |
| Skirting | Painted black. Repainted in 2022–24. | |
| Walls | Painted rendered masonry with dado moulding at 1350mm high (approx.). Walls repaired and repainted in 2024. | |
| Ceiling | Plasterboard ceiling installed in 2022–24. | |
| Doors and Windows | <p>Steel windows on east and south replaced in 2022–24. Blockout blinds installed on east windows.</p> <p>Window opening on south wall cut off by east wall and continues into the adjacent AS 3.4. Glass panel in between spaces.</p> <p>New door to room installed in 2022–24.</p> | |
| Lighting | New surface mounted batten lights installed in 2022–24. | |
| Other | Distribution board installed on northwest corner in 2022–24. | |


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| Room / Item | Workstation 1 (Former Level 3 – Dining Room) | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 3.4 | |
| Significance | 3 – Moderate | |
| Description | <p>The dining room is located in the southwest area of Level 3 of the Administration and Staff Accommodation. It was used by workers during mealtimes and was a place of gathering and socialising. During 2022–24 activation works, the space has been fitted out as a series of open plan workstations.</p> | |
| Elements | General Description | |
| Floor | Carpet installed in 2022–24. | |
| Skirting | Painted black. Repainted in 2022–24. | |
| Walls | Rendered masonry with dado moulding at 1350mm high (approx.). Opening to adjacent Locker Room (AS 3.5) at north end of east wall. Walls repaired and repainted in 2022–24. | |
| Ceiling | Suspended ceiling installed in 2022–24. | |
| Doors and Windows | Two large window openings on south wall. Steel windows replaced in 2022–24. | |
| Lighting | New surface mounted batten lights installed in 2022–24. | |
| Other | <p>Ceramic sink with terrazzo drainer and wall tank stand in southeast corner. Nine concrete table stands 760mm high (approx.) fixed to the floor. New desks placed in between.</p> | |


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| Room / Item | Workstation 2 (Former Level 3 – Locker Room (South)) | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 3.5 | |
| Significance | 3 – Moderate | |
| Description | <p>The Locker Room (south) is located along the south end of Level 3 of the Administration and Staff Accommodation in the southeast area. It once hosted a series of lockers used by the workers of the power station. The space has been fitted out with desks to create open plan workstations as part of 2022–24 activation works.</p> | |
| Elements | General Description | |
| Floor | Carpet installed in 2022–24. | |
| Skirting | Painted black with recessed moulding above. Repainted in 2022–24. | |
| Walls | <p>Rendered masonry with dado moulding at 1350mm high (approx.). Walls repaired and repainted in 2022–24. High level openings refitted with louvres installed in 2022–24, and another two with woven metal mesh.</p> <p>Opening to adjacent Workstation 1 (AS 3.4) at north end of west wall.</p> <p>High level opening to corridor replaced with louvres, and some woven mesh.</p> | |
| Ceiling | New plasterboard installed in 2022–24. | |
| Doors and Windows | <p>New doorway near west end of north wall.</p> <p>Steel windows on south replaced in 2022–24</p> <p>Double door with 5 panels (4 glazed) on west to AS3.6 fixed shut in 2022–24.</p> | |
| Lighting | New surface mounted batten lights installed in 2022–24. | |
| Other | Open plan workstation fitout installed in 2022–24. | |

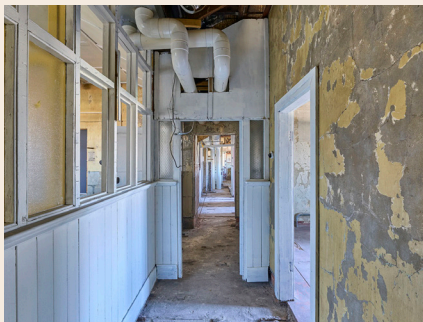
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| Room / Item | Janitor / Toilets (Former Level 3 – Lavatory) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 3.6A-C | |
| Significance | 3 – Moderate | |
| Description | The Lavatory is located in the southeast corner of Level 3 of the Administration and Staff Accommodation. It contains a large shower space in its southwest corner as well as sinks, urinals, and a toilet cubicle with a bowl cistern. As part of the 2022–24 activation works, the space has been repurposed: the large shower space has been converted to a janitor’s closet (AS 3.6A), a male toilet (AS 3.6B), and a unisex accessible toilet (AS 3.6C). |   <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with scribed margins. A raised threshold in the southwest corner of the room to the shower area with drainage channels along the east and west walls, and a raised floor to the showers along the east wall of shower area. AS 3.6C: new vinyl flooring installed in 2022–24. | |
| Skirting | AS 3.6A: no skirting, covered by tiling in tiled areas. AS 3.6B: painted black at north end, and none for the rest. AS 3.6C: vinyl coving in 2022–24. Repainted in 2022–24. | |
| Walls | AS 3.6A: tiling (white) to door head height on west wall, part of the north and south walls in the shower area. AS 3.6B: painted rendered masonry mostly. North wall new lightweight wall painted, separating AS 3.6B and AS 3.6C. Eastern side to urinals left unpainted showing remnants of graffiti. New lightweight cubicle partition giving privacy to urinals. AS 3.6C: white tiled walls. Walls repaired and repainted in 2022–24 works. | |
| Ceiling | New plasterboard ceiling installed in 2022–24. | |
| Doors and Windows | New door opening for AS 3.6C on north wall. Steel framed windows replaced in 2022–24. High level windows on facing corridor AS 3.2 at AS 3.6 | |
| Lighting | New surface mounted batten lights installed in 2022–24. | |
| Other | New male bathroom, unisex accessible bathroom/shower, and janitor’s closet fitout installed in 2022–24. Existing urinals and basins reconditioned. | |


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| Room / Item | Female Toilet (Former Foreman's Showers) | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 3.7 | |
| Significance | 3 – Moderate | |
| Description | <p>The Foreman's Showers is located along the east wall of Level 3 of the Administration and Staff Accommodation. It is accessed via the main Hall (AS 3.2). As part of the 2022–24 activation works, the space has been repurposed into a female toilet.</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | <p>Rendered masonry. Tiling (white with light brown marbled pattern) to door head height at cubicle wall. Some existing tiles remained on eastern wall, most removed due to drumminess. Render repaired and repainted in 2022–24.</p> | |
| Ceiling | New plasterboard ceiling with bulkhead for exhaust installed in 2022–24. | |
| Doors and Windows | <p>Door opening on west wall and window opening on east wall (opening partially cut off by south wall). New door installed in 2022–24. Steel windows replacement in 2022–24. High level opening on western wall with frosted glass and woven wire mesh.</p> | |
| Lighting | New surface mounted batten lighting installed in 2022–24. | |
| Other | Female fitout toilet including new lightweight cubicle partitions installed in 2022–24. | |


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| Room / Item | Level 3 – Locker Room (North) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 3.8 | |
| Significance | 4 – Little / Neutral | |
| Description | The Locker Room (north) is located in the northeast corner of Level 3 of the Administration and Staff Accommodation. It is accessed via the end of the Hall (AS 3.2), and housed the lockers used by the workers of the power station. |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Painted. | |
| Walls | Rendered masonry with dado moulding at 1350mm high (approx.). North wall has two high vents, south wall has one high woven mesh vent. | |
| Ceiling | New plasterboard bulkhead on western side, installed in 2022–24. | |
| Doors and Windows | Steel windows replaced on 2022–24, blinds installed. New door on south wall. | |
| Lighting | New suspended batten lightings installed in 2022–24. | |


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| Room / Item | Kitchenette / Meeting Room 2 (Former Shift Engineers) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 3.9A-B | |
| Significance | 4 - Little / Neutral | |
| Description | <p>The former Shift Engineers Room is located along the north wall of Level 3 of the Administration and Staff Accommodation. It is accessed via the Hall (AS 3.2) and in 2022-24 works, was divided into two separate spaces that were fitted out as a kitchen (AS 3.9A) and meeting room (AS 3.9B).</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. Carpet installed in AS 3.9B in 2022-24 | |
| Skirting | Painted black, painted over the north and west walls in AS 3.9B. Repainted in 2022-24. | |
| Walls | <p>Painted rendered masonry with dado moulding at 1350mm high approx. Repainted in 2022-24. Two vents with metal mesh screens on west wall, one on east wall of AS 3.9A. New lightweight wall constructed in 2022-24 dividing space into AS 3.9A and AS 3.9B. AS 3.9B: high level framing on east and east side of south walls, louvers refitted on 2022-24. Framing on south wall has two panels of woven metal mesh.</p> | |
| Ceiling | New plasterboard ceiling installed in 2022-24. Small hatch in ceiling of AS 3.9B. | |
| Doors and Windows | <p>AS 3.9A: door on south wall. Steel frame 9 pane window with steel I-beam through the middle on north wall. Window is partially cut off by west wall, only 6 panes are located within the space. Blackout blinds installed internally.</p> <p>AS 3.9B: doors on east wall and south wall. Steel frame 9 pane window overlooking Turbine Hall on north wall, panes repaired in 2022-24. Blackout blinds installed internally.</p> | |
| Lighting | Original lights removed, new surface mounted batten lightings installed in 2022-24. | |
| Other | <p>AS 3.9A: new kitchen fitout installed in 2022-24 comprising benches along the east and west walls, and overhead cabinetry on east wall.</p> <p>AS 3.9B: meeting room fitout.</p> | |


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| Room / Item | Level 4 – Lift Lobby and Stair | |
| Building | Administration and Staff Accommodation |  |
| Room No. | AS 4.1 | |
| Significance | 2 – High | |
| Description | <p>The Lift Lobby and Stair is located in the northwest area of Level 4 of the Administration and Staff Accommodation. It is accessed via the stairs and lift from Level 3.</p> | |
| <small>(courtesy of Chris Bennett: Evolving Picture, 2024)</small> | | |
| Elements | General Description | |
| Floor | Timber boards over concrete slab. Stairs: painted concrete with carborundum strips. | |
| Skirting | Painted timber skirting except for on masonry walls to stair, which are painted black with an incised skirting mould above. Repainted in 2022–24. | |
| Walls | All painted timber framed partitions with glazed panels except for north and east walls to lift and stairwell, which comprise painted rendered masonry. Walls cleaned and repainted in 2022–24. Incised dado moulding to stair and evidence of handrail fixing points. New wall and door separating AS 4.1 from AS 4.2. | |
| Ceiling | New plasterboard with same details as original installed in 2022–24. | |
| Doors and Windows | Timber 4 pane (upper two glazed) doors to majority of adjacent spaces – refer to individual room inventories. Repaired and repainted in 2022–24. New lock to doors. Steel frame 2 pane (continues into neighbouring AS 4.21) window. Timber casement 4 pane operable window on east wall above upper flight of stairs. Glazing to partitions elsewhere. New door on east wall to AS 4.2 installed in 2024. | |
| Lighting | New surface mounted batten lightings installed in 2022–24. | |
| Other | Lift: Queensland Maple with woven ribbon mesh panels. | |


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| Room / Item | Level 4 – Hall | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.2 | |
| Significance | 2 – High | |
| Description | The Hall is located in the eastern half of Level 4 of the Administration and Staff Accommodation and is an L-shaped corridor that forms the main circulation of the level. It is accessed from the Lift Lobby and Stair (AS 4.1). At its north end it is connected to the Lab Hall (AS 4.14). |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Timber boards over concrete slab. | |
| Skirting | Splayed timber skirting. | |
| Walls | Largely timber board partitions with glazed upper section, some glazing replaced by fibre cement panels. Ends of hall are rendered masonry. Repainted in 2022–24. New wall constructed at west end of hall in 2022–24 to AS 4.1. | |
| Ceiling | Fibre cement panels have been removed, ceiling largely comprises timber joists and exposed underside of roof with trusses and sarking. Repainted in 2022–24. | |
| Doors and Windows | Doors: refer to individual rooms. New door installed at west end connecting to AS 4.1. | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |


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| Room / Item | Office 1 (Former Mechanical Super / Ass. Mech. Super) | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 4.3 | |
| Significance | 3 – Moderate | |
| Description | <p>The Mechanical Superintendent / Assistant Mechanical Superintendent Office is located at the northwest corner of Level 4 of the Administration and Staff Accommodation. It is accessed via the Lift Lobby and Stair (AS 4.1) and was the office for both the Mechanical Superintendent and Assistant of the power station. Activation works in 2022–24 have turned this space into an office again.</p> | |
| Elements | General Description | |
| Floor | Existing flooring removed to deterioration, replaced with particle board. | |
| Skirting | Timber skirting. Repainted in 2022–24. | |
| Walls | <p>North and west walls: painted rendered concrete. East wall: timber board partition with glazed panels above. Figured glass on bottom row, fanlight above door. South wall: timber board partition with fibreboard over glazing for section adjoining AS 4.4. Walls repainted in 2022–24.</p> | |
| Ceiling | Plasterboard ceiling with wide timber battens. Asbestos ceiling removed and new ceiling installed in 2022–24. | |
| Doors and Windows | <p>4 panel half glazed door on east wall. Door repaired in 2022–24. Window opening on west wall. Works to install new steel frame windows are ongoing at the time of writing this report. Steel frame 6 pane window on north wall overlooking turbine hall. Replaced in 2022–24.</p> | |
| Lighting | New fluorescent lighting installed in 2022–24. | |
| Other | <p>Rear of large dials on south wall. Small ledge shelf on north wall. Telephone switchboard on north end of west wall.</p> | |


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| Room / Item | Office 2 (Former Powerhouse Super 1) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.4 | |
| Significance | 2 – High | |
| Description | <p>The Powerhouse Superintendent 1 Office is located in the southwest corner of Level 4 of the Administration and Staff Accommodation building. It is accessed via the Lift Lobby and Stair (AS 4.1) area and was an office space used by the Powerhouse Superintendent. Activation works in 2022–24 have turned this space into an office again.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Existing floor replaced with particle board flooring in 2022–24. | |
| Skirting | Timber skirting. Repainted in 2022–24. | |
| Walls | <p>North wall: timber board partition with fibre cement panels above. East wall: timber board partition with fibre cement panels above, fanlights and glazing only above door. South and west wall: painted rendered masonry. Repainted in 2022–24.</p> | |
| Ceiling | Plasterboard ceiling with wide timber battens. Asbestos ceiling removed and new ceiling installed in 2022–24. | |
| Doors and Windows | <p>Door opening at north end of east wall and window openings on west and south walls. New door installed in 2022–24. Steel windows replaced in 2022–24.</p> | |
| Lighting | New surface mounted batten lightings installed in 2022–24. | |
| Other | <p>Distribution panel installed in 2022–24. Megawatt dials on northern wall missing.</p> | |


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| Room / Item | Office 3 (Powerhouse Super 2) | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 4.5 | |
| Significance | 3 – Moderate | |
| Description | <p>The Powerhouse Superintendent 2 Office is located in the southwest section of Level 4 of the Administration and Staff Accommodation building. It is accessed via the Lift Lobby and Stair (AS 4.1) area and was an office space used by the Powerhouse Superintendent. Activation works in 2022–24 have turned this space into an office again.</p> | |
| Elements | General Description | |
| Floor | Existing timber flooring cleaned in 2022–24. | |
| Skirting | Timber skirting. Repainted in 2022–24. | |
| Walls | <p>North wall: timber board partition with glazing and fanlight above door. East and west walls: timber board partition with fibre cement panels over glazed areas. South wall: painted rendered masonry. Walls repainted in 2022–24.</p> | |
| Ceiling | <p>Plasterboard ceiling with wide timber battens. Asbestos ceiling removed and new ceiling installed in 2022–24.</p> | |
| Doors and Windows | <p>4 pane half glazed timber door on north wall. Repaired, repainted, and new hardware installed in 2022–24. Window opening on south wall (continues east into AS 4.5). New steel frame windows installed.</p> | |
| Lighting | New surface mounted batten lighting installed in 2022–24. | |
| Other | Phone distribution bay mounted on west wall. | |


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|--------------------------|---|--|
| Room / Item | Timekeeper | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.6 | |
| Significance | 3 – Moderate | |
| Description | <p>The Timekeeper Room is located towards the west side of the south wall of Level 4 of the Administration and Staff Accommodation. It is accessed via the Lift Lobby and Stair (AS 4.1) to its north and was used by the power station's timekeeper as an office space. Activation works in 2022–24 have turned this space into an office again.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Existing timber flooring cleaned in 2022–24. | |
| Skirting | Timber skirting. Repainted in 2022–24. | |
| Walls | <p>North wall: timber board partition with glazing and fanlight above door. East and west wall: timber partition with fibre cement panels over glazed areas. South wall: painted rendered masonry. Walls repainted in 2022–24.</p> | |
| Ceiling | Plasterboard ceiling with wide timber battens. Asbestos ceiling removed and new ceiling installed in 2022–24. | |
| Doors and Windows | <p>Door repaired, repainted, and new hardware installed in 2022–24. New steel frame windows installed in window opening on south wall in 2024.</p> | |
| Lighting | New surface mounted batten lighting installed in 2022–24. | |
| Other | <p>Sliding hatch on east wall to adjacent space. Telephone distribution cupboard at south end of east wall.</p> | |


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| Room / Item | Former Correspondence Records (North) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.7 | |
| Significance | 3 – Moderate | |
| Description | The Former Correspondence Records (North) is located along the south end of Level 4 of the Administration and Staff Accommodation. It is accessed via the Lift Lobby and Stair space (AS 4.1) and was used as an administrative space for keeping correspondence records of the powers station. |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Existing timber flooring cleaned in 2022–24. | |
| Skirting | Timber skirting. Repainted in 2022–24. | |
| Walls | <p>North wall: timber board partition with glazing above.</p> <p>East and west walls: timber partitions with fibre cement panels above. West wall has glazed fanlight above door.</p> <p>South wall: timber framed partition with fibre cement board and glazed top partition: centre 2 panels of sliding figured glass and 2 end panels of fixed glass.</p> <p>Walls repainted in 2022–24.</p> | |
| Ceiling | Fibro panels with wide timber cover battens and mechanical fan vent. Repainted in 2022–24. May contain asbestos. | |
| Doors and Windows | 4 panel half glazed door on west wall with fanlight above. Door repaired, repainted, and new hardware installed in 2022–24. | |
| Lighting | Original fluorescent light casings from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Evidence for furniture and fixings on walls. | |


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| Room / Item | Former Correspondence Records (South) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.8 | |
| Significance | 4 – Little / Neutral | |
| Description | The Former Correspondence Records (South) is located along the south end of Level 4 of the Administration and Staff Accommodation. It is accessed via the adjacent Statistical room (AS 4.9) and was used as an administrative space for keeping correspondence records of the powers station. |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Timber tongue and groove flooring. | |
| Skirting | Timber skirting. Repainted in 2022–24. | |
| Walls | <p>North wall: timber framed partition with fibre cement board and glazed top partition: centre 2 panels of sliding figured glass and 2 end panels of fixed glass.</p> <p>East wall: timber board partition with glazing above.</p> <p>South wall: rendered masonry.</p> <p>West wall: timber partition with fibre cement boards replacing glazed areas.</p> <p>Walls repainted in 2022–24.</p> | |
| Ceiling | Fibro panels with wide timber cover battens. Repainted in 2022–24. May contain asbestos. Some panels removed from south section, exposing underside of roof with trusses and sarking. | |
| Doors and Windows | <p>Half glazed hollow core door on east wall.</p> <p>Steel frame 9 pane window on south wall (only 6 full panes visible, continues into adjacent AS 4.6). Windows replaced in 2022–24.</p> | |
| Other | <p>Small ledge and sliding hatch on west wall to adjacent space (AS 4.6). Similar-sized hatch on east wall.</p> <p>Telephone console panel on south wall.</p> | |


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|--------------------------|---|--|
| Room / Item | Statistical | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 4.9 | |
| Significance | 4 – Little / Neutral | |
| Description | The Statistical Room / Office is located along the south end of Level 4 of the Administration and Staff Accommodation. It is accessed via the main Hall (AS 4.2) and was likely used to monitor statistics pertaining to the operations of the power station. | |
| Elements | General Description | |
| Floor | Timber tongue and groove floor on concrete. Rotted timber boards in the south section have been removed. | |
| Skirting | Timber skirting. Repainted in 2022–24. | |
| Walls | North wall: timber board partition with glazing and fanlight above door. Fibre cement boards above glazing. East and south walls: painted rendered masonry. West wall: timber board partition with glazing above to neighbouring AS 4.8. North half of wall comprises fibre cement panels. Walls repainted in 2022–24. | |
| Ceiling | Fibro panels with wide timber cover battens. Repainted in 2022–24. May contain asbestos. Some panels removed from south section, exposing underside of roof with trusses and sarking. Metal vent near centre of ceiling. | |
| Doors and Windows | Half glazed door on north wall (4 panel) and west wall. Steel frame 9 pane window on south wall. Windows replaced in 2022–24. Externally clad with clear corrugated polycarbonate. | |
| Lighting | Original fluorescent light casings from ceiling. New temporary lighting and catenary wires installed in 2022–24 | |
| Other | Hatch and small shelf with phone unit at south end of west wall. | |
| Movable heritage | Single leaf door on ground | |

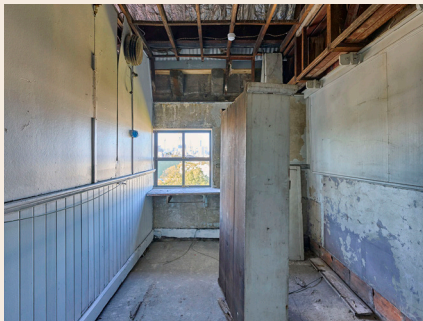
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| Room / Item | Level 4 – Office Lobby | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.10 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Lobby is located in the southeast area of Level 4 of the Administration and Staff Accommodation. It is accessed via the main Hall (AS 4.2) and connects to the Kitchenette (AS 4.12) and the Stores Officer Room (AS 4.11), with which it used to form one room.</p> | |
| |  <p>Existing condition before work, 2022 (Design 5 – Architects)</p> | |
| Elements | General Description | |
| Floor | Temporary particle board floor raised up over concrete floor, installed in 2022–24. | |
| Skirting | Original timber skirting on north and west walls, simple batten to east wall, and quad on south wall. Repainted in 2022–24. | |
| Walls | North and west walls: painted rendered masonry with incised dado moulding at 1490mm high (approx.). Walls repainted in 2022–24. Timber frame with fibre cement panels and two high woven wire mesh panels above. | |
| Ceiling | Fibro panels removed, timber battens remain, exposed underside of roof with sarking and trusses. | |
| Doors and Windows | 4 panel timber door on north wall. Ledged, boarded, sheeted door on east wall. Timber door with higher glazed panel and three lower panels on south wall. | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Painted timber cupboard in northeast corner of room. | |


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| Room / Item | Stores Officer | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.11 | |
| Significance | 4-Little / Neutral | |
| Description | <p>The Stores Officer Room is located in the southeast corner of Level 4 of the Administration and Staff Accommodation. It is accessed via the small Lobby (AS 4.10) off from the main Hall and was used by the Stores Officer.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Timber tongue and groove floor on concrete. Rotted timber boards in the east section have been removed. | |
| Skirting | Painted timber skirting on east, south, and west walls. Repainted in 2022-24. | |
| Walls | <p>North wall: timber board partition with vertical boards to door head, framed fibre cement panels above.</p> <p>East, south, and west walls: painted rendered masonry with incised dado moulding at 1490mm high (approx.)</p> <p>Walls repainted in 2022-24.</p> | |
| Ceiling | Ceiling removed, timber battens remain, exposed underside of roof with sarking and trusses. | |
| Doors and Windows | <p>Timber door with higher glazed panel and three lower panels on north wall. Repainted in 2022-24.</p> <p>Steel frame window on east wall, 4 full panes visible (continues into neighbouring AS 4.12).</p> <p>Steel frame 9 pane window on south wall. Replaced in 2022-24.</p> | |
| Lighting | New temporary lighting and catenary wires installed in 2022-24. | |
| Other | <p>Evidence of electric clock on north wall.</p> <p>Telephone outlet on east wall, multiple pipes on south at east end.</p> <p>Frame on east wall, likely for blackboard.</p> | |


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|--|---|---|
| Room / Item | Kitchenette | |
| Building | Administration and Staff Accommodation |  |
| Room No. | AS 4.12 | |
| Significance | 3 – Moderate | |
| Description | <p>The Kitchenette is located in the southeast area of Level 4 of the Administration and Staff Accommodation. It is accessed via the small lobby (AS 4.10) off from the hall and was likely primarily used by the administrative workers of the power station.</p> | |
| <small>(courtesy of Chris Bennett: Evolving Picture, 2024)</small> | | |
| Elements | General Description | |
| Floor | Temporary particle board floor raised up over concrete floor, installed in 2022–24. | |
| Skirting | Painted timber skirting on north and east walls. Repainted in 2022–24. | |
| Walls | <p>Painted rendered masonry on north and east walls with broad incised dado moulding at 1490mm high (approx.). North wall has protruding framing with fibre cement panels. South wall: painted timber partition with framing above for glazing, now boarded with fibre cement panels.</p> <p>West wall: timber frame fibre cement panels with woven wire mesh panels above.</p> | |
| Ceiling | Ceiling removed, timber battens remain, exposed underside of roof with sarking and trusses. | |
| Doors and Windows | <p>Ledged, boarded, and sheeted timber door on west wall.</p> <p>Steel frame window on east wall, two full panes visible, the rest cut off by south wall. Externally clad in temporary timber frame clear corrugated polycarbonate. Replaced in 2022–24.</p> | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. | |
| Other | <p>Original kitchenette fitout with timber bench, sink and cupboards along almost full length of north wall.</p> <p>Small timber shelf on east wall.</p> | |


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| Room / Item | Level 4 – Lavatory | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 4.13 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Lavatory is located along the east side of Level 4 of the Administration and Staff Accommodation. It is accessed via the main Hall (AS 4.2). It contains a shower cubicle and three toilet cubicles.</p> | |
| Elements | General Description | |
| Floor | Painted concrete with scribed margins. | |
| Skirting | Painted coved concrete (continued from floor). | |
| Walls | Rendered masonry walls. Evidence of blocked up opening on north wall. Tiles to 1600 high (approx.) on south side of floor including shower cubicle. | |
| Ceiling | Ceiling panels removed, timber battens remain, exposed underside of roof with sarking and trusses. | |
| Doors and Windows | <p>4 panel timber door for entry on west wall and shower. 4 panel cubicle doors to three toilets. Steel frame 4 pane louvre window on east wall across shower and two toilet cubicles. Windows replaced in 2022–24.</p> | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | |
| Other | <p>Three sinks along south wall with adjacent paper towel dispenser. Three toilet bowls and cisterns. Evidence of removed urinal in northwest corner.</p> | |


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|--------------------------|--|
| Room / Item | Lab Hall |
| Building | Administration and Staff Accommodation |
| Room No. | AS 4.14 |
| Significance | 4-Little / Neutral |
| Description | <p>The Lab Hall is a circulation space located in the northeast section of Level 4 of the Administration and Staff Accommodation. It is connected to and accessed via the main Hall (AS 4.2) and leads to the three lab spaces (AS 4.13–4.17).</p> |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description |
| Floor | Concrete: removed timber tongue and groove flooring. |
| Skirting | Painted timber skirting. |
| Walls | <p>North wall: timber and glass partition.</p> <p>East wall: painted timber partition wall with framing for glazing, glazing replaced with fibre cement panels. Hole in one panel for mechanical fan vent.</p> <p>South and west wall: rendered masonry wall with incised dado moulding.</p> |
| Ceiling | Ceiling removed, timber battens remain, exposed underside of roof with sarking and trusses. |
| Doors and Windows | Architrave to south. Timber 4 panel doors to AS 4.15 and AS 4.16. |
| Lighting | New temporary lighting and catenary wires installed in 2022–24. |
| Other | Downpipes running along west wall. Downpipes and gutter replaced in 2022–24 works. |


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| Room / Item | Lab 1 | |
| Building | Administration and Staff Accommodation |  |
| Room No. | AS 4.15 | |
| Significance | 2-High | |
| Description | <p>Lab 1 is located in the northeast section of Level 4 of the Administration and Staff Accommodation. Similar to the larger Laboratory (AS 4.17) and its counterpart (AS 4.16), it was used for tests to ensure that the power station was operating at an optimal efficiency and output.</p> | |
| <small>(courtesy of Chris Bennett: Evolving Picture, 2024)</small> | | |
| Elements | General Description | |
| Floor | Concrete: removed timber tongue and groove flooring. | |
| Skirting | Painted timber skirting. Skirting removed from south wall. | |
| Walls | <p>North and west walls: painted timber partition with framing for glazing, glazing replaced with fibre cement panels. Mechanical fan vent in north wall.</p> <p>East and south walls: rendered masonry with incised dado moulding. South wall has two large boards and a pulley system.</p> | |
| Ceiling | Fibre cement panels removed, timber battens remain, exposed underside of roof with sarking and trusses. | |
| Doors and Windows | <p>Timber 4 panel door with fanlight above on west wall.</p> <p>Steel frame 4 pane window at north end of east wall, replaced in 2022-24.</p> | |
| Lighting | New temporary lighting and catenary wires installed in 2022-24. | |
| Other | <p>Free standing timber cupboard.</p> <p>Timber bench in front of east window on east wall with brackets on underside for sliding boards.</p> | |

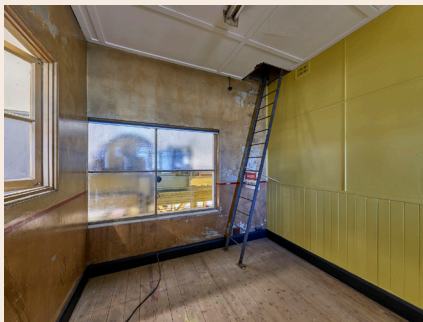
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| Room / Item | Lab 2 | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.16 | |
| Significance | 2 – High | |
| Description | <p>Lab 2 is located in the northeast section of Level 4 of the Administration and Staff Accommodation. Similar to its larger Laboratory (AS 4.17) and its counterpart (AS 4.15), it was used for tests to ensure that the power station was operating at an optimal efficiency and output.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with evidence of removed timber tongue and groove flooring. | |
| Skirting | Painted timber skirting. Repainted in 2022–24. | |
| Walls | <p>North wall: painted timber partition with row of glazing above bench and fibre cement panels above.</p> <p>East wall: painted rendered masonry with incised dado moulding.</p> <p>South and west walls: timber partitions with framing for glazing, glazing replaced with fibre cement panels. South wall has a mechanical vent fan, west wall has an opening for a mechanical vent fan (missing).</p> <p>Walls repainted in 2022–24.</p> | |
| Ceiling | Ceiling removed, timber battens remain, exposed underside of roof with sarking and trusses. | |
| Doors and Windows | <p>Timber 4 panel door on west wall.</p> <p>Steel frame window on east wall. Windows replaced in 2022–24.</p> | |
| Lighting | <p>Fluorescent light casing from ceiling. Light missing.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | <p>Full length timber bench along north wall.</p> <p>Full length timber cupboard with glazed panels along south wall.</p> | |

| | | |
|--------------------------|---|--|
| Room / Item | Laboratory | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.17 | |
| Significance | 2-High | |
| Description | <p>The Laboratory is located in the northeast corner of Level 4 of the Administration and Staff Accommodation and is accessed via the Lab Hall (AS 4.14). It was used by the workers to conduct various tests, such as the testing of coal samples to ensure that the station was optimising its energy output through steam raising.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Timber tongue and groove floor on concrete. Rotted timber boards in the north section and southeast corner of the room have been removed. | |
| Skirting | Painted timber skirting except for where cupboards are. | |
| Walls | <p>North, east, and west walls: rendered masonry with incised dado moulding and timber frame above. North wall has row of fibre cement panels with two fanlights.</p> <p>South wall: timber partition with row of glazing above bench and fibre cement with shelves above. All glazing has been removed.</p> | |
| Ceiling | Ceiling removed, timber battens remain, exposed underside of roof with sarking and trusses. | |
| Doors and Windows | <p>Timber 4 panel door (half glazed) at west end of north wall connecting to former landing overlooking the Pump House).</p> <p>Steel frame 3 pane casement window on east wall, replaced in 2022-24.</p> | |
| Lighting | <p>Fluorescent light casing from ceiling. Light missing.</p> <p>New temporary lighting and catenary wires installed 2022-24.</p> | |
| Other | <p>Laboratory fitout with cupboards, drawers, sinks, and shelves.</p> <p>Large downpipes in southwest area of room, are a new replacement from 2022-24.</p> | |

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|--------------------------|--|--|
| Room / Item | Assistant Engineers | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.18 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Assistant Engineers Room is located along the north end of Level 4 of the Administration and Staff Accommodation. It overlooks the neighbouring Turbine Hall to its north and was likely used by the Assistant Engineer of the power station as an office space.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Timber tongue and groove floor on concrete. Approximately half of the timber boards have been removed, mostly in the western half of the room. | |
| Skirting | Painted timber skirting. Partially repainted in 2022–24. | |
| Walls | <p>North wall: painted rendered masonry.</p> <p>East and west walls: painted timber board partition with framing for glazing. Glazing has been removed and boarded up from external.</p> <p>South wall: painted timber board partition with glazing.</p> <p>Partially repainted in 2022–24.</p> | |
| Ceiling | Fibro panels with wide timber cover battens and metal vent near centre of ceiling. Ceiling has a row of sloping panels along the east wall. Repainted in 2022–24. May contain asbestos. | |
| Doors and Windows | <p>East wall: timber door with two lower panels and one glazing panel above (blocked).</p> <p>South wall: 4 panel timber door with two glazing panels (upper) and a fanlight above.</p> <p>Doors repainted in 2022–24.</p> <p>Steel frame 4 pane window (continues from adjacent Stationery Room AS 4.19) with mechanical fan vent in glazing. Blackout blinds installed internally.</p> | |
| Lighting | <p>Fluorescent light casing from ceiling. Light missing.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | Electrical box mounted to north wall: “supply from No. 4 S.S. Fdr.” Two sets of switches and multiple conduits running along north wall. | |

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|--------------------------|---|--|
| Room / Item | Stationery Store (South) | |
| Building | Administration and Staff Accommodation | |
| Room No. | AS 4.19 | |
| Significance | 4-Little / Neutral | |
| Description | <p>The Stationery Store (North) is located along the north end of Level 4 of the Administration and Staff Accommodation. It houses an electrical box and switch gear, though its exact use is not known.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Timber tongue and groove floor on concrete. | |
| Skirting | Painted timber skirting. Repainted in 2022-24. | |
| Walls | <p>North wall: rendered masonry. East and west walls: painted timber partition with fibre cement above glazing line. South wall: painted fibre cement partition with woven metal mesh panel. Walls repainted in 2022-24.</p> | |
| Ceiling | Fibro panels with wide timber cover battens. May contain asbestos. | |
| Doors and Windows | Steel frame 2 pane window (continues into neighbouring AS 4.18). | |
| Lighting | <p>Fluorescent light casing from ceiling. Light missing. New temporary lighting and catenary wires installed 2022-24.</p> | |
| Other | Electrical box and switch gear. Conduits running along walls. | |

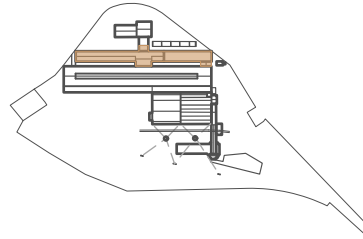
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|--------------------------|---|--|
| Room / Item | Stationery Store (North) | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 4.20 | |
| Significance | 4-Little / Neutral | |
| Description | The Stationery Store (South) is located along the north area of Level 4 of the Administration and Staff Accommodation. Its exact function is not known. | |
| Elements | General Description | |
| Floor | Timber tongue and groove floor on concrete. | |
| Skirting | Painted timber skirting. | |
| Walls | North wall: painted fibre cement partition with woven metal mesh panel. Contains asbestos. East and west wall: painted timber partition with fibre cement above glazing line. South wall: painted timber partition with glazing and boarded up fanlight. Walls repainted in 2022-24. | |
| Ceiling | Fibro panels with wide timber cover battens. May contain asbestos. | |
| Doors and Windows | Timber 4 panel (top 2 panels frosted glass) door on south wall. Glazing on south wall partition: timber frame, combination of frosted glass (lower half) and clear glazing (upper half). | |
| Lighting | Fluorescent light casing from ceiling. Light missing. New temporary lighting and catenary wires installed 2022-24. | |

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|--------------------------|---|--|
| Room / Item | Level 4 – Draftsman’s Room | |
| Building | Administration and Staff Accommodation |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | AS 4.21 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The Draftsman’s Room is located along the north wall of Level 4 of the Administration and Staff Accommodation. It overlooks the neighbouring Turbine Hall to its north and was likely used as an office space by the draftsman/men of the power station.</p> | |
| Elements | General Description | |
| Floor | Timber tongue and groove floor on concrete. | |
| Skirting | Painted timber skirting. Skirting on east repainted in 2022–24. | |
| Walls | <p>Painted rendered masonry on north and west walls.</p> <p>East wall: painted timber partition with fibre cement panels and two small metal vents. Repainted in 2022–24. May contain asbestos.</p> <p>South wall: painted timber partition with glazing and fanlight.</p> <p>Paint: ochre to bottom of partition wall glazing height, red dado strip, and cream above.</p> | |
| Ceiling | Fibro panels with wide timber cover battens and access panel in northeast corner. Repainted 2022–24. May contain asbestos. | |
| Doors and Windows | <p>Timber 4 panel (top 2 panels frosted glass) door on south wall.</p> <p>Steel frame 4 pane (3 figured and wired panes, 1 clear with vertical join) window on north wall (continues into the Lift and Stair Lobby area).</p> <p>Timber framed 4 pane casement window on west wall.</p> <p>Glazing partition on south wall: timber frame, combination of frosted glass (lower half) and clear glazing (upper half).</p> | |
| Lighting | <p>Fluorescent light casing from ceiling. Light missing.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | <p>Altered free-standing timber table in southwest corner.</p> <p>Steel ladder in northeast corner to access panel.</p> | |

7 SWITCH HOUSE



Figure 7.1 Switch House Roof from North, 2024 (courtesy of Chris Bennett: Evolving Picture)



The Switch House is located towards the western side of the site and is shown in the following diagrams.

7.1 FUNCTION

The Switch House functions to import and export electricity used and generated by the White Bay Power Station's operations.

7.2 HISTORY

The first, northern half of the Switch House was constructed during the first phase of construction at the power station in 1917, while the second, southern half was constructed during the second phase of construction in 1928. The Switch House primarily facilitated the Power Reticulation System and the House Electrical and Auxiliary Supply System. Its operations were largely replaced by the newer 1948 Switch House and Control Room during the third phase of construction. In 1952, an additional floor was built onto the roof of the Switch House to accommodate a new battery room and staff amenities, including the Amenities Hall (later known as the Entertainment Hall). This would become a place of bustling gathering and social life for the workers of the power station.

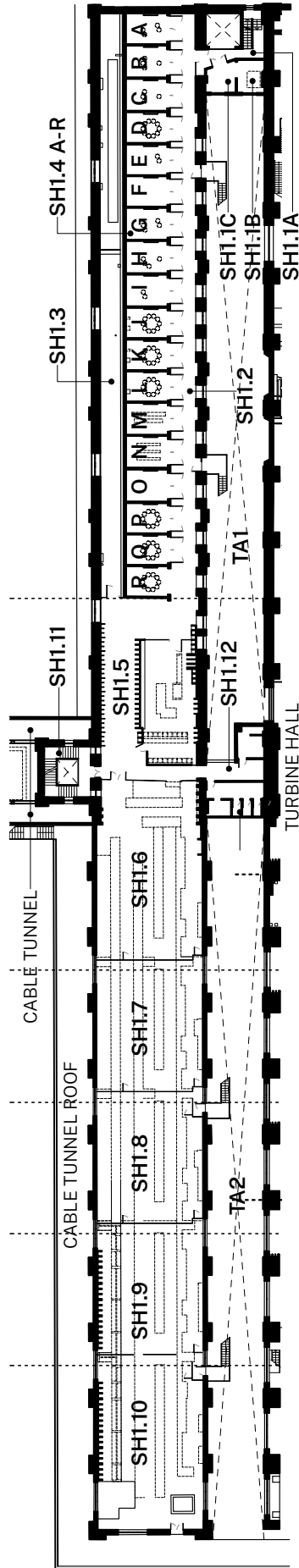
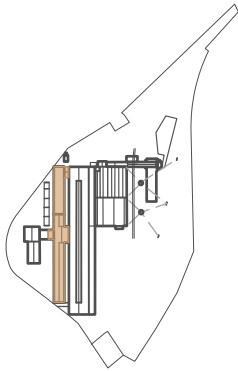
7.3 SPATIAL REFERENCES

The Switch House comprises the following spaces:

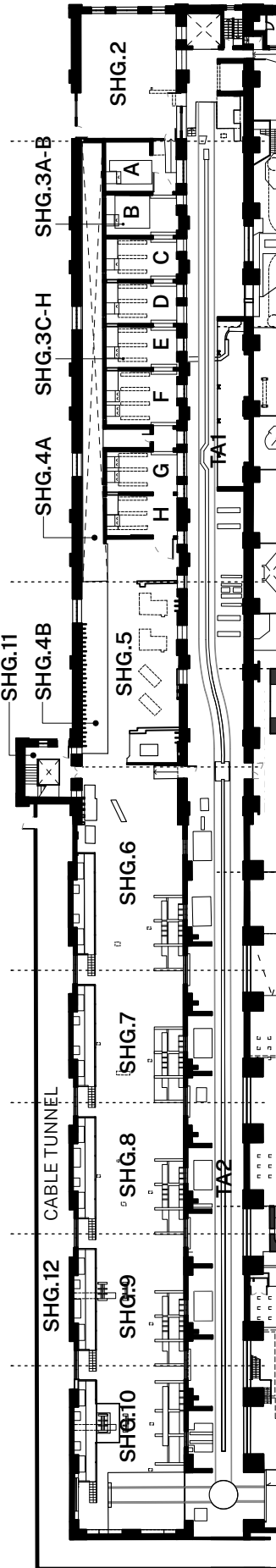
| Spaces | Ref. |
|----------------------------|------------------------------------|
| Transformer Alley (North) | TA1 |
| Transformer Alley (South) | TA2 |
| Lift and Stairwell (North) | SH G.1, SH 1.1A, SH 2.1, SH 3.1 |
| Ground Floor-Workshop | SH G.2 |
| Ground Floor-Spaces | SH G.3A-H |
| Ground Floor-Corridor | SH G.4A & 4B |
| Ground Floor-Space | SH G.5 |
| Ground Floor-Space | SH G.6-G.9 |
| Ground Floor-Space | SH G.10 |
| Lift and Stairwell (West) | SH G.11, SH 1.11, SH 2.11, SH 3.11 |

| Spaces | Ref. |
|---|-------------|
| Cable Tunnel | SH G.12 |
| Inner Electric Oil Filter Room | SH 1.1B |
| Electric Oil Filter Room | SH 1.1C |
| Level 1-Corridor (East) | SH 1.2 |
| Level 1-Corridor (West) | SH 1.3 |
| Level 1-Reactor Tie Spaces | SH 1.4 A-R |
| Level 1-Space | SH 1.5 |
| Level 1-Spaces | SH 1.6-1.10 |
| Amenity Spaces | SH 1.12 |
| Level 2-Room | SH 2.2 |
| Tie Bank Room | SH 2.3 |
| Level 2-Rooms | SH 2.4A-D |
| Level 2-Space | SH 2.5 |
| Level 2-Spaces | SH 2.6-2.10 |
| Mezzanine Level-Original Control Basement | SH 2.12 |
| Elevator Machine Room | SH 3.2 |
| Rooftop | SH 3.3 |
| Workshop | SH 3.4 |
| Passage Between SH 3.6 & SH 3.7 | SH 3.5 |
| Level 3-Room | SH 3.6 |
| Toilet | SH 3.7 |
| Level 3-Room | SH 3.8 |
| Level 3-Room (adjacent to SH 3.6) | SH 3.9 |
| Level 3-Room | SH 3.10 |
| Level 3-Room | SH 3.12 |
| Control Room | SH 3.13 |
| Motor-Generator Switch Room | SH 3.14 |
| Battery Workshop | SH 3.15 |
| Battery Room | SH 3.16 |
| Level 3-Entertainment Hall-Stage | SH 3.17 |
| Level 3-Entertainment Hall | SH 3.18 |
| Level 3-Entertainment Hall-Kitchen | SH 3.19 |
| Level 4-Lift Overrun | SH 4.1 |

SWITCH HOUSE / TRANSFORMER ALLEY



SWITCH HOUSE
LEVEL 1 PLAN (+8)



SWITCH HOUSE
GROUND FLOOR PLAN (+2)

Figure 7.2 Switch House Ground Floor and Level 1 plan.

7.4 DESCRIPTION

7.4.1 General

The Switch House is located towards the western corner of the White Bay Power Station complex. The building is approximately 130 metres long and 16 metres wide. It is adjacent to the Turbine Hall, and is of similar construction, with steel-framed windows and brick and reinforced concrete wall. Between the Switch House and the Turbine Hall is the Transformer Alley (TA1 and TA2). Levels 2 and 3 of the Switch House each have an area that protrudes out of the Switch House eastern wall, over the Transformer Alleys and looks over the Turbine Hall with multiple sets of windows.

7.4.2 Ground Level

The Ground Level of the Switch House is accessed via the Transformer Alley from the Turbine Hall. The floor of this level is concrete, and the ceiling is concrete supported by either steel I-beams or concrete beams. At the northeast corner of the building, in line with the Transformer Alleys, is the lift shaft, stairwell, and a semi-enclosed space (SH G.1). It connects to the workshop (SH G.2) in the northwest corner of the Ground Level via a sliding door. This workshop space has concrete walls, and various extant tools, materials,

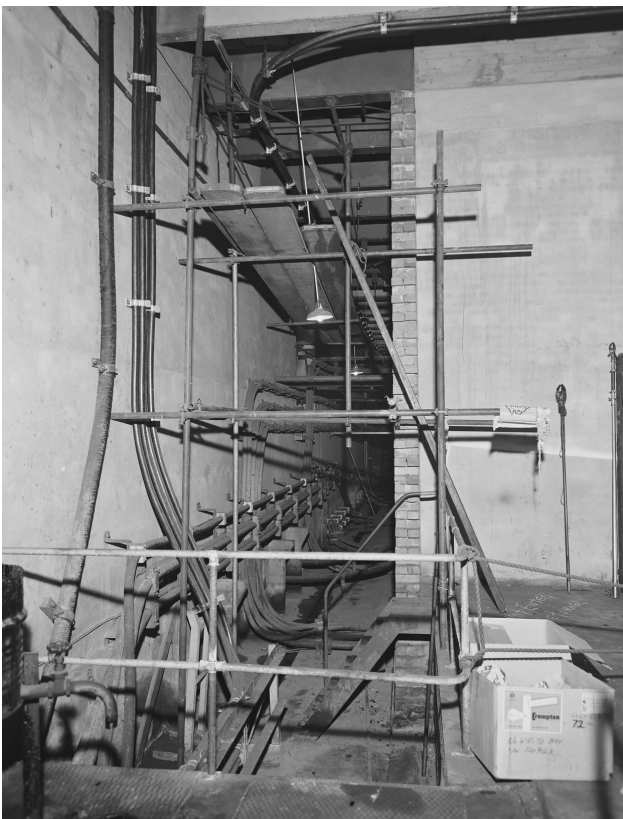


Figure 7.4 Switch House Ground Floor SHG.4A, 1967 (courtesy of New South Wales State Archive, NRS 20347-1 007573 B)

switches, and equipment. It has a door on the west wall at the south corner to Western Yard, and three steel-framed windows along its north elevation. At the eastern end of the south wall is a small door that leads through to a series of eight near-identical spaces (SH G.3A–H) connected by metal-clad timber sliding doors. The first space (SH G.3A) houses the Motor-Driven Oil-bath Switches for the No. 2 Auxiliary Transformer, and the second (SH G.3B) houses the Motor-Driven Oil-bath Switches for the Bus Bar Circuit Breaker. The remaining six spaces are empty and show traces of having once hosted various machinery and equipment.

Running along the western side of these eight spaces is a narrow corridor (SH G.4A) that has walls of rendered masonry and a sunken floor. Following the decommissioning of the power station, this corridor was filled with water. The corridor continues (SH G.4B) into the northern section of the next space (SH G.5) and has brick cable channels along its west wall. The space it continues into houses a Broom & Wade air compressor, as well as concrete plinths that once supported extant equipment.

Past this space, in the southern half of the ground floor are a series of open spaces (SH G.6–SH G.10). The north wall is brick, whilst the east and west walls comprise concrete with cable trays and partitioned bays (cells). Each space has a set of steel-framed stairs along the western wall leading up to a small steel-framed timber panel walkway. Running along the south and around to the southern half of the western side is the Cable Tunnel (SH G.12). At the end of the tunnel along the western elevation is a door leading outside. Adjacent to the end of the Cable Tunnel halfway along the western elevation is a lift shaft and stairwell (SH G.11), with a door leading outside on its northern wall. Halfway along the eastern elevation is a door that opens on to the middle of the Transformer Alleys. Similarly, at the south end of the eastern wall is a roller door that connects to the south Transformer Alley (TA2).



Figure 7.5 Switch House Ground Floor, SH G.5 looking north, 2024 (courtesy of Chris Bennett: Evolving Picture)

7.4.3 Level 1

Level 1 of the Switch House is accessed by the lift and stairwell halfway along the western side of the building, and by the lift and stairwell in the northeast corner (SH 1.1A). The floor of this level is concrete, and the ceiling is concrete expressed timber planks with steel I-beams. South of this space is a small set of two connected rooms – the Electric Oil Filter Room with an extant electric oven, and the Inner Electric Oil Filter Room, which houses an elevated metal tank with a ladder screwed to its side. In the northern half of Level 1 is a series of Reactor Tie Spaces (SH 1.4 A–R), some of which retain a set of concrete footings arranged in a circle which once supported equipment and machinery. Each of these Reactor Tie Spaces – with the exception of the southernmost one (SH 1.4R) – have a pair of locked metal-framed steel mesh doors. Running along the northern half of the western side of the level is a narrow corridor (SH 1.3), with four evenly spaced metal-framed windows on the western wall. At the southern end of this corridor is a series of brick cable runs on the western wall, which have been partially sprayed with grey paint from a movie shooting. The space (SH 1.5) neighbouring these brick cable runs is enclosed by walls on its south, east, and west sides, the latter two of which have concrete cable runs.

Further south of this space halfway along the western elevation is the entrance to the lift shaft and stairwell (SH 1.11). On the eastern side opposite SH 1.11 is a Lavatory (SH 1.12) that shares its east wall with the western elevation of the Turbine Hall. Past these spaces, in the southern half of Level 1 are a series of open spaces (SH 1.6–1.10). The walls of this space are rendered masonry with metal-framed pivot windows along the east and west walls, and the floors are concrete with extant red tiles in some sections towards the south end. Each space is divided by a metal frame and mesh. These spaces have aisles of concrete cable runs and extant signage. At the south end of Level 1 are double timber doors that likely once connected to the Cable Tunnel Roof (access to the door has been blocked). The roof continues along the western side of the main building volume and has a set of stairs adjacent to SH 1.11 that leads to level 2 of the Control Room Building. Evenly spaced along the eastern wall are four sets of doors each leading out to a small concrete platform and a set of steel-framed stairs that connect to Level 2.



Figure 7.6 Switch House Level 1 Bus Floor, 1964 (courtesy of ECNSW Archive, 05370D)



Figure 7.7 Switch House Level 1 Bus Floor, 2024 (courtesy of Chris Bennett: Evolving Picture)



Figure 7.8 Switch House Level 1 cable groups, 1957 (courtesy of ECNSW Archive, 01029 White Bay 1)

7.4.4 Level 2

Level 2 of the Switch House is accessed from the western lift and stairwell (SH 2.11) and the northeast lift and stairwell (SH 2.1). Directly south of the northeast lift and stairwell is a small room with a pair of steel-framed windows on its south wall overlooking the north Transformer Alley. At the north of the floor is the Tie Bank Room (SH 2.3), which houses the No. 1 Tie Bank Group. South of this is a series of rooms (SH 2.4A–D), each with steel-framed windows on their east and west walls. The door in the southeast corner of SH 2.4D connects to a series of large open spaces (SH 2.5–2.10) that once housed an extensive set of cycle switches. The floor is concrete in SH 2.7 and SH 2.8, and is tiled in SH 2.6, SH 2.9, and SH 2.10. The housing for the cycle switches remains, and SH 2.6 retains the 25 Cycle Switches, along with the timber joinery and doors. Separate to the rest of Level 2 is an enclosed Mezzanine space (SH 2.12) that protrudes from the main building volume along the middle of the eastern elevation over the Transformer Alleys. It is accessed via a set of steel-framed stairs leading from the Control Room on Level 3 (SH 3.13). The stairs are located in the northwest corner of the space. Externally, on either side of SH 2.12 along the eastern elevation are steel-framed concrete walkways with stairs connecting to Level 1 – part of this concrete has been removed due to deterioration. These are accessed via doors along the eastern elevation – four along the southern half, and one in the northern half.

7.4.5 Level 3

Level 3 of the Switch House contains spaces that were constructed later in the early 1950s to provide additional battery rooms and staff amenities. It is accessed from the western lift and stairwell (SH 3.11), the northeast stairwell (SH 3.1), and also from two sets of steel-framed stairs connect to the Transformer Alleys. Adjacent to the northeast stairs is an elevator machine room (SH 3.2), and also a flat concrete roof space (SH 3.3) that occupies most of the northern half of the level and is not connected to the rest of the Level 3 spaces. The stairs leading up from the Transformer Alley walkways connect to the north and south ends of the Control Room (SH 3.13), which protrudes out from the main body of the Switch House, over the Transformer Alley and into the Turbine Hall via a set of three bay windows. The semi-circular Control Panel that was once here has since been removed, and there are traces of its later use as a carpet bowls room that remain. A set of stairs along the north wall of the Control Room lead down to the Mezzanine space on Level 2 (SH 2.12).



Figure 7.9 Switch House Level 2 cycle switches, date unknown, pre-1950s (courtesy of Railway Department Archive Photo Cards, 1693-105)



Figure 7.10 Switch House Level 2 cycle switches, 2024 (courtesy of Chris Bennett: Evolving Picture)



Figure 7.11 Switch House Level 3 battery room, 2024 (courtesy of Chris Bennett: Evolving Picture)

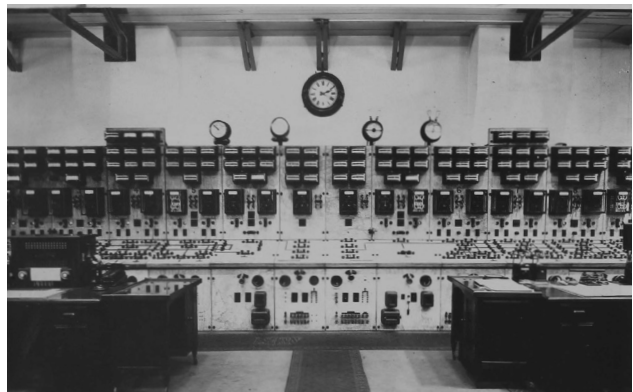


Figure 7.12 Control Room on Level 3 (SH 3.13), facing east, 1930 (courtesy of ECNSW Archive, 0363-071)

Along the northwest and western edges of the Control Room are several small rooms and spaces with lower ceilings of fibro sheets and battens. At the northwest corner of the Control Room is a small toilet (SH 3.7) and a corridor (SH 3.5) that leads to a workshop space (SH 3.4) with a dividing wall running through the middle of the space. At the north end of the western wall is a small room (SH 3.8), with a doorway in its southwest corner connecting to a similarly sized room with a bench (SH 3.9). To the south of these rooms is another room (SH 3.10) accessed by a timber door at the south end of its eastern wall. The south wall of SH 3.10 forms one wall of a corridor running from the Control Room to the western lift and stairwell (SH 3.11). At the western end of the corridor along the south wall is an opening that leads to a storage room (SH 3.12). This room has brick partition walls with timber-framed glazing above for its north and east walls and a metal framed window on the rendered masonry western wall. The room also has a timber bench and cupboards, and in the southeast corner of the room is a metal cage with wooden shelving.

The rooms located south of the Control Room have ceilings that follow the shape of the roof, with steel trusses and timber rafters, and some are lined with fibro sheets. Directly south of the Control Room is the Motor-Generator Switch Room (SH 3.14), which contains several pieces of machinery and equipment from the House Electrical and Auxiliary Supply System, including

the Motor-Generator Nos. 3 and 4, the Battery Charger Unit, the No. 1 Battery Booster, the Rectifier Sets, and the marble, regular, and battery charging Switchboards. A pair of four panel half-glazed French Doors along the south wall of the Motor-Generator Switch Room lead to the Battery Workshop (SH 3.15), which houses the Disused No. 1 Battery Booster and a Pedestal Drill. The room also contains two cupboard benches, a small hand sink on the eastern wall between two metal-framed windows, and a large stone sink and drainer in the northeast corner. A door in the southeast corner of the Battery Workshop leads to the Battery Room (SH 3.16), which houses a single remnant group of six lead-lined, wooden-framed Battery cells (nos. 51–56). At the south end of Level 3 is the Amenities Hall, now known as the Entertainment Hall (SH 3.18). The Entertainment Hall is separate from the rest of the floor and is accessed via double timber doors and newly installed ramp that lead to the same concrete bridge that connects the main lobby of the Administration and Staff Accommodation to Victoria Road. Internally, it is a timber floored, concrete-walled space situated at the southern end of the Switch House. The Hall has a stage (SH 3.17) at its northern end, and a triangular kitchenette (SH 3.19) in its southwest corner. Timber seating runs on the east and west sides of the Hall, and the east and west walls alternate between metal-framed windows and the remains of scenic murals. This space was once the social heart of the White Bay Power Station, where workers would gather during their lunchtime breaks for a myriad of recreational activities and events.

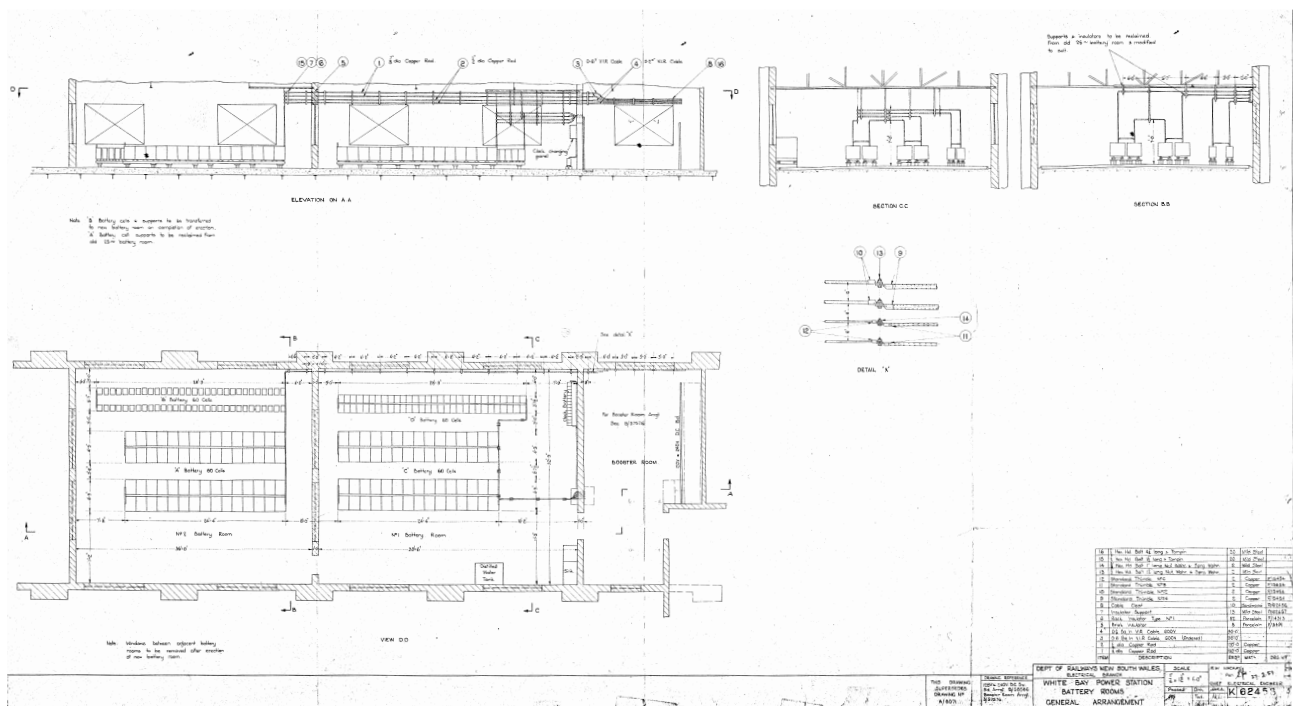


Figure 7.13 Archival Drawing of Switch House Level 3 battery room configuration, 1951 (courtesy of PMNSW Archive, 12201)

7.5 ALTERATIONS & CONDITION

Following the decommissioning of White Bay Power Station, the Switch House suffered considerable damage and deterioration. The adjacent Transformer Alley became overgrown, and the external stairs and gangways became heavily corroded. Broken windows in the Entertainment Hall led to extensive damage from the elements, as well as pigeon and pest entry.

The 2022–24 remediation works for the Switch House have focused on essential maintenance, restoration, and preservation. This includes structural remediation, bird proofing, waterproofing, and painting. Other works have included safety, security, and lighting. These are discussed in general terms below:

| Element / Room | Reference |
|-----------------------|--|
| Flooring | Holes and penetrations were covered and patched for safety. Existing floor hatches, including steel plates, were repaired, strengthened, or replaced as necessary for safety. The timber floor in the Entertainment Hall (south of Level 3, SH3.18) was lightly sanded and patched with new <i>Tallow</i> wood flooring. The floor was finished with <i>Tung Oil</i> . |
| Internal walls | Walls were cleaned and retained in existing condition |
| External walls | Sandstone sills and pier capitals were made safe by dressing back, removing loose and delaminated material. Brickwork has been remediated by repointing where necessary, removing or treating ferrous materials, and removing or securing loose materials. The external render was remediated. Missing or drummy external render was patched with compatible cement mortar. Ferrous materials, such as brackets, fixings, lintels, and embedded elements, were either removed or treated for corrosion. |
| Flat roof | A new ventilated torch on membrane was applied to the concrete flat roof on level 3 (SH3.3). This work included removing organic growth, levelling screed, and replacing the perimeter flashings. The concrete flat roof over the cable tunnel (west elevation above SHG.12) was remediated with a levelling screed, and installation of a new torch-on membrane. |
| Metal roof | Box gutters were repaired by lining existing cast iron gutters with Colorbond Ultra. Gutter sumps and outlets also lined with Colorbond Ultra. Ventilators over the Entertainment Hall were painted. New safe roof access systems were installed, including ladders, platforms and static lines. |
| Windows | Most steel window frames and glass were retained in place and treated for rust. Cracked glass was also removed, but some glass panes were sheeted using acrylic sheets glued to existing glass (particularly on the west elevation, at the north end). Aluminium window frames to the Entertainment Hall (circa 1953), were refurbished. Most external openings were covered over with added timber frames (fixed to masonry or cement rendered reveals) and sheeted using polycarbonate sheeting. |

7.6 SIGNIFICANCE

The Switch House is an integral part of the White Bay Power Station and has historical associations with the electrification of the Sydney rail and tramway systems. The Switch House and its increasingly rare extant equipment and machinery are representative of the generation and reticulation of electricity to a vast metropolitan region through facilitating the Power Regulation System and the House Electrical and Auxiliary Supply System. In combination with the 1948 Control Room Building, the Switch House is evidence of the increasingly complex electrical distribution management and evolution of operative processes over time.

The Switch House is integral to the industrial aesthetic of the White Bay Power Station. Internally, with its

extant equipment, the spaces of the Switch House have a strong industrial / technical aesthetic. The Entertainment Hall also offers an understanding of the social life in its layout, moveable heritage, performance stage, murals, and overall aesthetic. Externally, the Switch House is a building of considerable scale and mass, and contribute to the landmark qualities of the power station. This visual presence of the building, as well as its internal spaces, accord the Switch House social significance to both former workers and locals as a symbol of the industrial past and development of the area. In particular, the Entertainment Hall located on the top floor of the Switch House is of exceptional social significance as a place for socialising, performance, recreation, and entertainment that contributed to a sense of community and camaraderie among the workers.



Figure 7.14 Trouble Room on Level 3 (SH 3.12), 1930 (courtesy of ECNSW Archive, 0363-069)



Figure 7.15 Entertainment Hall, 1958 (courtesy of New South Wales State Archive, NRS-20347-1 001653 M)

7.7 REFERENCE TO POLICIES


The Switch House is an integral part of the White Bay Power Station. The following policies from the White Bay Power Station CMP are relevant to the Switch House and should guide its ongoing care and management, including decisions about conservation, future use, and development.


Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.

| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.35 | Switch House |
| 6.36 | Entertainment Hall |
| 6.37 | Entertainment Hall murals |
| 6.38 | Switch House Transformer Alley |
| Tolerance for Change Table 6.6.11.4 and Opportunities for Change Table 6.6.11.5 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 11.5 | Transformer Yard |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |


7.8 INVENTORY OF SPACES

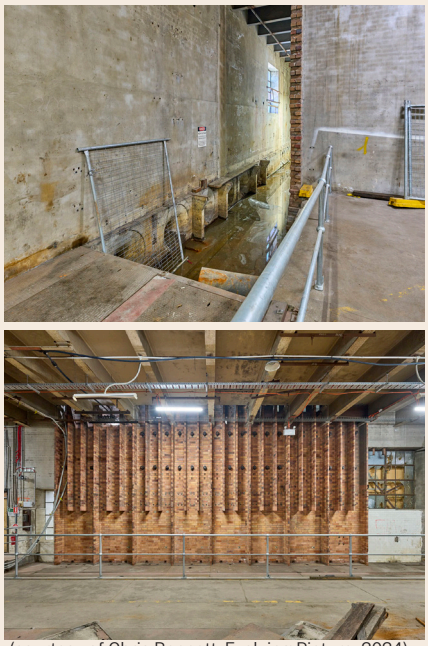
This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.


| Room / Item | Lift and Stairwell (North) | |
|-------------------|---|--|
| Building | Switch House | |
| Room No. | SH G.1, SH 1.1A, SH 2.1, SH 3.1 | |
| Significance | 3 – Moderate (Lift shaft: 4 – Little / Neutral) | |
| Description | <p>The lift and stairwell provide access to all floors of the Switch House and are located in the northeast corner of the building.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete stair set within steel frame structure. | |
| Walls | Painted rendered masonry: brown with a dark red dado strip, and cream above. | |
| Ceiling | <p>Underside of stairs and landing above.</p> <p>Level 3: off-form concrete with evidence of boarded formwork.</p> | |
| Doors and Windows | <p>Lift doors: vertical bi-parting doors on each floor.</p> <p>Ground Level: single door to stairwell.</p> <p>Level 1: timber double doors on south wall to SH 1.1C. Single door on west wall to SH 1.2.</p> <p>Level 2: timber double doors on south wall to SH 2.2. Single door on west wall to SH 2.3.</p> <p>Level 3: single door opposite the stairwell connecting to a small rooftop space, added in 2022–24.</p> <p>Windows on north wall of the stairwell: steel frame 36 pane frosted wired glass windows.</p> | |
| Lighting | <p>Pendant dish light from ceiling above landing of second floor.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | <p>Small brick enclosure at SH G.1 used to be electrical Foremans Office. Sink remains, niche on eastern wall used to be cupboard.</p> <p>Tubular steel handrail to stair.</p> <p>Conduits running along walls around Level 2 and 3 of the stairwell.</p> <p>Pipes along stairwell at Level 1.</p> | |

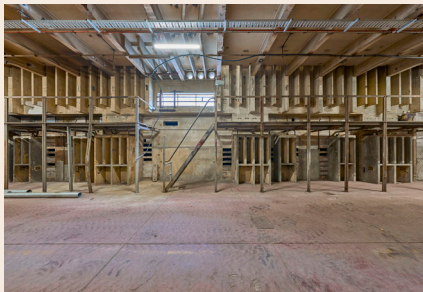
| | | |
|--------------------------|---|---|
| Room / Item | Ground Floor – Workshop | |
| Building | Switch House |  |
| Room No. | SH G.2 | |
| Significance | 3 – Moderate | |
| Description | <p>The workshop is an enclosed space located at the north end of the Ground Floor of the Switch House. The space was once a workshop, with steel tracks running from a since filled-in opening in the eastern wall.</p> | |
| Elements | General Description | |
| Floor | Timber floor with some concrete patching. Concrete floor in the southern section with steel tracks, as well as in northwest section. Small amounts of steel checker plates. | |
| Walls | North and south walls: off-form concrete. Boarded up opening on east end of south wall. East and west walls: off-form concrete with south end filled in with timber stud and metal cladding. | |
| Ceiling | Painted off-form concrete supported by steel I-beams. | |
| Doors and Windows | <p>Boarded timber door at south end of west wall. Timber door at east end of south wall. Sliding timber door at south end of east wall. North wall: three steel frame wire glass windows with operable sashes – 12 pane, 4 pane, and 12 pane respectively. Windows boarded up. East wall: three steel frame windows with operable sashes and variety of panes (wired and no wire). West wall: four steel frame 4 pane windows set in temporary wall. Windows covered with steel wire grid.</p> | |
| Lighting | <p>Large pendant dish lights. New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | <p>North and west walls: wires and conduits attached. South wall: numerous steel hooks, brackets and supports on walls for tools and equipment.</p> | |
| Movable heritage | <p>Original tools that were hung on the south wall are now stored in box. Grinder, toaster, and metal cabinet along the west wall. Stove and oven adjacent to sliding door on east wall. Large pendant dish lights stacked. Removed cast iron downpipes</p> | |

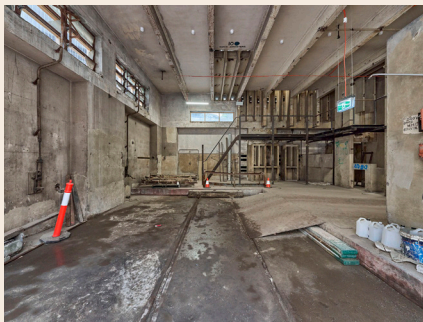
(courtesy of Chris Bennett: Evolving Picture, 2024)

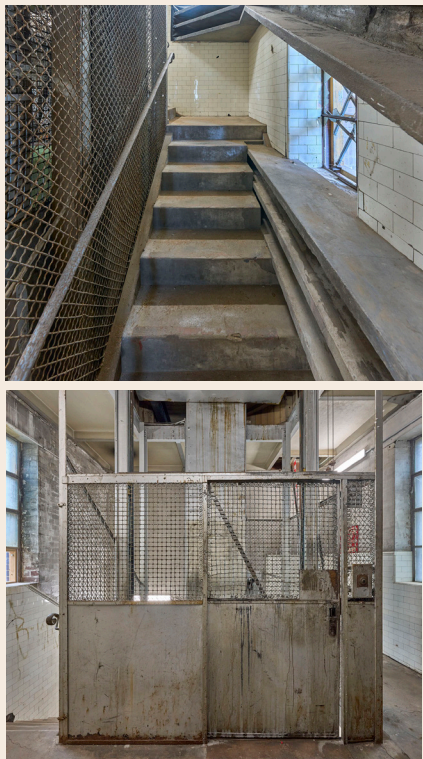
| | | |
|--------------------------|---|--|
| Room / Item | Ground Floor – Spaces | |
| Building | Switch House | |
| Room No. | SH G.3A–H | |
| Significance | G.3A and B: 2 – High; G.3C–H: 4 – Little / Neutral | |
| Description | <p>The series of adjacent spaces connected by openings along the eastern end are located in the north half of the Ground Floor of the Switch House. The first (northmost) of the spaces houses the switches for the No. 2 Auxiliary Transformer, and the second houses the switches for the Bus Bar Circuit Breaker. The remaining six spaces are empty but have channels and grooves that indicate they once housed similar machinery.</p> | |
| |  | |
| | (courtesy of Chris Bennett: Evolving Picture, 2024) | |
| Elements | General Description | |
| Floor | Concrete. Steel grates with drainage channels between each room partition running east-west. Temporary plywood ramp in SH G.3A to SH G.2 placed for protection in 2022–24. | |
| Walls | Rendered masonry. North wall of SH G.3A: eastern half comprises timber studs with timber sheet cladding. Orthogonal opening near west side of north-south walls. | |
| Ceiling | Off-form concrete supported by concrete and steel beams. | |
| Doors and Windows | <p>Timber door at east end of north wall of SH G.3A. Between each space: metal-clad sliding fire doors on suspended rollers. Between SH G.3F and SH G.3G: single metal-clad timber door on west wall connecting to SH G.4A. Steel frame wire mesh door on south wall of SH G.4H. Varying number of windows along east wall of each space: all 4 panes high, some running into partition walls (evidence of walls being a later addition), some fixed, some operable with either wired or frosted glass. With the exception of the windows in SH G.3A and B, all other windows are externally clad with timber frame corrugated clear polycarbonate.</p> | |
| Lighting | Lightbulbs (former pendant dish lights with lampshades removed) hanging from ceiling. New temporary lighting installed 2022–24. | |
| Other | Switches, wires, and conduits attached to west wall of SH G.3A. Timber cupboard for tool storage in SH G.3E and SH G.3F. | |
| Machinery | SH G.3A: Motor-Driven Oil-bath Switches (for No. 2 Auxiliary Transformer) (6.4) SH G.3B: Motor-Driven Oil-bath Switches (Bus Bar Circuit Breaker) (6.4) Cleaned in 2022–24. | |
| Movable heritage | Lifting device for Motor Driven Oil-bath Switches in SH G.3A. Cleaned in 2022–24 and left in situ. Small metal box for tool and parts storage behind machinery in SH G.3A along west wall. | |


| | | |
|--------------------------|---|--|
| Room / Item | Ground Floor – Corridor | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH G.4A and 4B | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The corridors are located end-to-end along the west end of the northern half of the Ground Floor of the Switch House. The floor of SH G.4A forms a channel which has filled with water. Partway along the channel is a small alcove along the east wall (located between SH G.3F and SH G.3G).</p> | |
| Elements | General Description | |
| Floor | Concrete, with floor of SH G.4B having cable trenches covered by chequer steel plates. | |
| Walls | Rendered masonry in SH G.4A, brick cable channels on west wall of SH G.4B with extant labels for cables. This cable channel is original to the 1917 building, as evidenced by historic image. | |
| Ceiling | Off-form concrete supported by steel I-beams. | |
| Doors and Windows | Metal-clad timber door on east side of G.4A to SHG.3. Three steel frame pivot windows on west side, with figured, frosted, and wired glass, 24 pane. | |
| Lighting | New temporary lighting installed 2022–24. | |
| Other | Tubular handrail installed to edge of SH G.4A and B for safety in 2022–24. | |


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| Room / Item | Ground Floor – Space | |
| Building | Switch House |  |
| Room No. | SH G.5 | |
| Significance | 2 – High | |
| Description | <p>The space is located near the middle of the Switch House Ground Floor. It houses an extant air compressor, and once had cables running down its cable channels on the east wall.</p> | |
| <small>(Design 5 – Architects, 2024)</small> | | |
| Elements | General Description | |
| Floor | Concrete with scribed margins and plinths for equipment. There is a ramp sloping down towards north wall. | |
| Walls | <p>North wall: rendered masonry. East wall: combination of rendered masonry, exposed brick cable channels, and concrete, with remnants of white tiling un-der windows.</p> | |
| Ceiling | Plastered concrete supported by steel I-beams. | |
| Doors and Windows | <p>North: steel frame wire mesh door to SH G.3H. East: two sets of three fixed, wired windows separated by protruding concrete blades. West: fixed, figured, frosted and wired steel frame, 12 pane near north. Covered externally with timber framed corrugated clear polycarbonate in 2022–24.</p> | |
| Other | Tubular handrail installed to edge of SH G.4B for safety in 2022–24. | |
| Machinery | Air Compressor (8.15) | |
| Movable heritage | <p>Ambulance stretcher cabinet Loose timbers</p> | |

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| Room / Item | Ground Floor – Spaces | |
| Building | Switch House | |
| Room No. | SH G.6–G.9 | |
| Significance | 3 – Moderate | |
| Description | This series of spaces are located in the south half of the Ground Floor of the Switch House. They were once used to hold various equipment including cables and oil switches, but only the housings for these now remain. |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete with scribed margins and some chequered steel plates. | |
| Skirting | Painted red in some areas. | |
| Walls | North wall: brick East and west walls: brick at north end with evidence of white tiling remaining. Concrete cable trays throughout each space. | |
| Ceiling | Plastered concrete supported by steel I-beams. | |
| Doors and Windows | <p>East wall: eight sets of high steel framed frosted glass windows, 3 pane: some have been removed entirely. Single door to Transformer Alley located at north end was replaced with a double door in 2022–24 and fanlight covered with mesh.</p> <p>West wall: each space has high steel framed frosted glass windows with circular vent holes. Four sets of steel frame frosted, wired windows, 18 pane: two operable, two fixed, lower 15 panes of each window all bricked up. Double doors to SH G.11 at north end of west wall. On either side of these doors are two sets of 4 pane steel frame windows with figured and frosted glass.</p> <p>Larger windows externally clad with timber framed clear corrugated polycarbonate.</p> | |
| Lighting | Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Each space contains steel framed stairs with walkway along west side of the space. | |
| Movable heritage | <p>Coal Elevator buckets, corrugated galvanised steel sheets (from building cladding), removed steel grates, lockers, demolished Pump House office window frames, stored in SH G.6-7.</p> <p>Miscellaneous items such as timber posts/planks, trolleys, floor cover plates, stored in SH G.8</p> | |


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| Room / Item | Ground Floor – Space | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH G.10 | |
| Significance | 3 – Moderate | |
| Description | <p>This space is located at the south end of the Ground Floor of the Switch House. It contains the housing for former equipment including cables and oil switches and other machinery. A loading dock connecting through to the Turbine Hall via steel rails is located at the southmost end of the space.</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins and stepdown at south end for loading bay. Steel rail tracks in loading bay area from Turbine Hall, running east-west. | |
| Walls | Concrete walls with cable trays on east and west walls and housing for oil switches. | |
| Ceiling | Plastered concrete supported by steel I-beams. | |
| Doors and Windows | <p>Roller door at south end of east wall at the loading dock.</p> <p>East: former steel-barred window, entirely replaced by timber framing and externally clad with clear corrugated polycarbonate.</p> <p>South: 2 sets of high steel frame operable louvre windows, 9 pane. Externally clad with timber frame, clear corrugated polycarbonate.</p> <p>West: original windows removed, openings clad with temporary timber frame, clear corrugated polycarbonate.</p> | |
| Lighting | <p>Former pendant dish lights from ceiling.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | <p>Steel framed stairs with walkway along west side of the space.</p> <p>Small switchboard for power and oil switches.</p> | |
| Movable heritage | <p>Original chimney ladder, removed steel window frames from Turbine Hall, timber bracing from removed Turbine Hall walkways, stored at south end.</p> | |

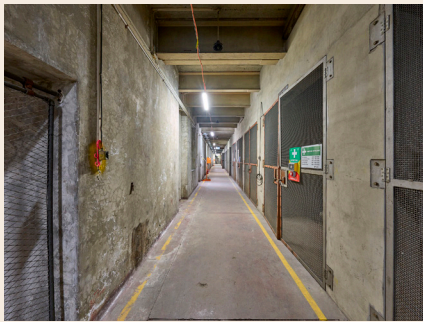
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| Room / Item | Lift and Stairwell (West) | |
| Building | Switch House | |
| Room No. | SH G.11, SH 1.11, SH 2.11, SH 3.11 | |
| Significance | 2-High | |
| Description | <p>The lift and stairwell provides access to all floors of the Switch House, and is located at the middle of the west side of the building. The stairwell also connects to the 1948 Control Room Building at a landing on Level 2.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete stair set within steel frame structure, with landings to the east. | |
| Walls | Masonry, with tiling to 1560mm (approx.). Evidence of windows blocked up: two on south wall, two on west wall, one on north wall. Some broken tiles and graffiti. | |
| Ceiling | Underside of each stair above. | |
| Doors and Windows | <p>Double panelled door to each level of the Switch House. Three-panel timber door at ground level along north wall. Six pane steel frame windows on north and south walls of stair well on each level (additional window on west wall of level 3). Externally clad with timber frame, clear corrugated polycarbonate.</p> | |
| Lighting | <p>Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022-24.</p> | |
| Other | Lift shaft up centre of stair, with decorative wire mesh caging around lift. Lift carriage stationary at ground level. | |

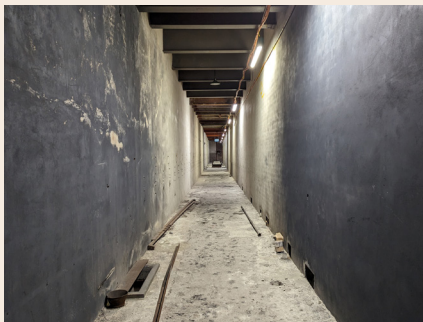
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| Room / Item | Cable Tunnel | |
| Building | Switch House | |
| Room No. | SH G.12 | |
| Significance | 3 – Moderate | |
| Description | <p>The Cable Tunnel is located in the south half of the exterior of the Ground Floor of the Switch House. It travels along the south and west walls of the Switch House main building, and once housed vast number of cables that carried electricity throughout the power station.</p> | |
| |  | |
| | (Design 5 – Architects, 2021) | |
| Elements | General Description | |
| Floor | Concrete. Channel in the middle of the section of the tunnel running on an east-west axis. Steel chequer plate near western exit on Switch House side. Water channel under, connected to SH G.4A. | |
| Walls | Concrete blocks with concrete cable trays. East-west section of tunnel: cable trays on both walls. North-south section of tunnel: cable trays on east wall. Exposed masonry on northern part of western Switch House area, bordering with SH G.11. | |
| Ceiling | Off-form concrete with evidence of boarded formwork. | |
| Doors and Windows | Single metal door to the cable tunnel located at the north end on the west wall of Switch House, and another at southern end of Turbine Hall. Some high level openings and timber framed louvers, bricked up from outside, on Switch House western side. | |

| | | | |
|--------------------------|---|---|--|
| Room / Item | Inner Electric Oil Filter Room | | |
| Building | Switch House |  | |
| Room No. | SH 1.1B | | |
| Significance | 3 – Moderate | | |
| Description | <p>The Inner Electric Oil Filter Room is a small space located in the northwest corner of Level 1 of the Switch House. It is accessed via the Electric Oil Filter Room (SH 1.1C) and houses a metal tank with a steel frame base.</p> | | |
| Elements | General Description | | |
| Floor | Concrete with scribed margins. | | |
| Skirting | Painted dark red in some areas. | | |
| Walls | Rendered masonry | | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | | |
| Doors and Windows | Only door frame remaining, door leaves missing. Steel frame pivot figured, frosted and wired windows, 12 pane. | | |
| Lighting | Former pendant dish light from ceiling. | | |
| Other | Metal tank in southeast corner of room supported by steel frame with a ladder and various connecting pipes that continue along the nearby walls. | | |


(courtesy of Chris Bennett: Evolving Picture, 2024)

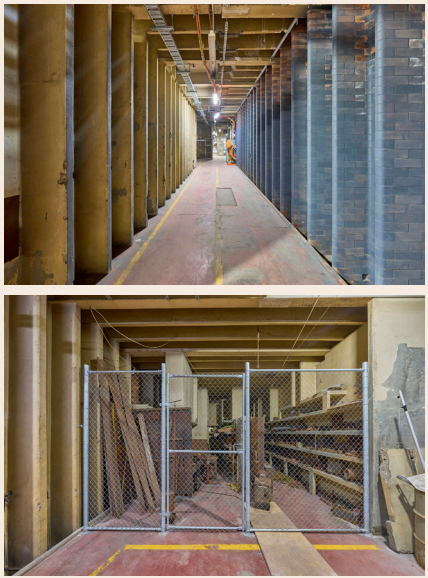
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| Room / Item | Electric Oil Filter Room | |
| Building | Switch House | |
| Room No. | SH 1.1C | |
| Significance | 3 – Moderate | |
| Description | <p>The Electric Oil Filter Room is a small room located in the northeast corner of Level 1 of the Switch House. It is accessed via the small lobby from SH 1.1A to its north and houses various shelves and storage cabinets.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Walls | North wall: timber partition wall. East, south and west walls: rendered masonry. | |
| Ceiling | Off-form concrete with evidence of boarded form-work supported by steel I-beams. | |
| Doors and Windows | North wall: framed and ledged timber double doors. South wall: steel framed, figured, and frosted windows, seven wired panes, 12 panes in total. | |
| Lighting | Former pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Old electric oven and steel cupboard on west wall, timber shelves above door on north wall. Pipes running along south wall and conduits on east and south walls. Low steel rail along south wall, possibly for storing equipment. | |

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| Room / Item | Level 1 – Corridor (East) | |
| Building | Switch House | |
| Room No. | SH 1.2 | |
| Significance | 3 – Moderate | |
| Description | <p>The corridor is located along the east wall in the north half of Level 1 of the Switch House. It leads to the eighteen Reactor Tie Spaces (SH 1.4 A-R) and opens on the south into a wider space (SH 1.5).</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Walls | Rendered masonry | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Doors and Windows | <p>Woven steel wire door to lobby to SH 1.1A along east wall. Two doors on east wall leading to landings over the Transformer Alley (TA1). Woven steel mesh doors to the Reactor Tie Spaces (SH 1.4 A-R) along west wall. East wall: twelve sets of steel framed, operable windows with a mix of frosted, figured, and wired panes, each 12 pane. All externally clad with timber frame, clear corrugated polycarbonate.</p> | |
| Lighting | <p>Former pendant lights from ceiling. New temporary lighting and catenary wires installed in 2022–24.</p> | |

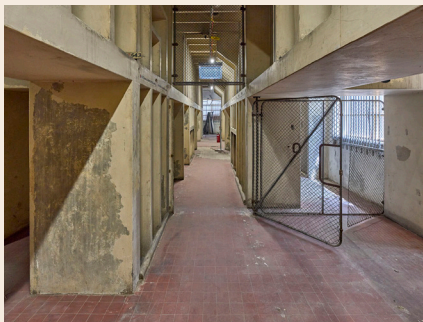
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| Room / Item | Level 1 – Corridor (West) | |
| Building | Switch House |  |
| Room No. | SH 1.3 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The corridor is located along the west wall in the north half of Level 1 of the Switch House, , used to be cable chamber. It leads to the eighteen Reactor Tie Spaces (SH 1.4 A-R) and opens on the south into a wider space (SH 1.5).</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Rendered masonry, painted black at south end. | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Doors and Windows | Steel wire mesh door at south end of corridor installed in 2022–24. | |
| Lighting | <p>Former pendant lights from ceiling. New temporary lighting and catenary wires installed in 2022–24.</p> | |

(courtesy of Chris Bennett: Evolving Picture, 2024)


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| Room / Item | Level 1 – Reactor Tie Spaces | |
| Building | Switch House | |
| Room No. | SH 1.4A–R | |
| Significance | 3 – Moderate | |
| Description | <p>The Reactor Tie Spaces are a series of 18 rooms located in the north half of Level 1 of the Switch House. They once housed the reactor ties on concrete footings (extant in most spaces) and are accessed by the corridor to their east (SH 1.2).</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Rendered masonry. | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Doors and Windows | Each space has a set of woven steel mesh double doors fitted with security locks, except for SH 1.4R, which is missing its doors. | |
| Lighting | Former pendant lights from ceiling. | |
| Other | Round concrete footings for equipment: various numbers and arrangements for each space, refer to plans. | |


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| Room / Item | Level 1 – Space | |
| Building | Switch House |  |
| Room No. | SH 1.5 | |
| Significance | 3 – Moderate | |
| Description | <p>The space is located near the middle of Level 1 of the Switch House. It contains several cable channels –both brick and concrete– and is currently being used as a storage space for extensive amounts of moveable heritage.</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Walls | <p>North wall: woven wire fence. East wall: concrete with cable channels. Central wall: concrete with cable channels on both sides. West wall: brick cable channels.</p> | |
| Ceiling | Concrete cable channels with steel I-beams. Two blades removed for safety. Additional support added in 2022–24. | |
| Doors and Windows | <p>East wall: steel frame, pivot windows, 12 pane. Partially blocked by concrete cable channels. Externally clad with clear corrugated polycarbonate. West wall: steel frame, figured and frosted windows, 24 pane. Bricked from outside. Woven wire gate to the eastern side of the space.</p> | |
| Lighting | Former pendant lights from ceiling. | |
| Other | Two concrete blades from ceiling loose, placed adjacent to wire mesh gate. | |
| Movable heritage | Extensive amounts of moveable heritage stored in the caged east space. Includes tool storage walls, machine parts and components, cabinets, loose drawers, screws, etc. Battery charger B located adjacent to door to stairwell. | |

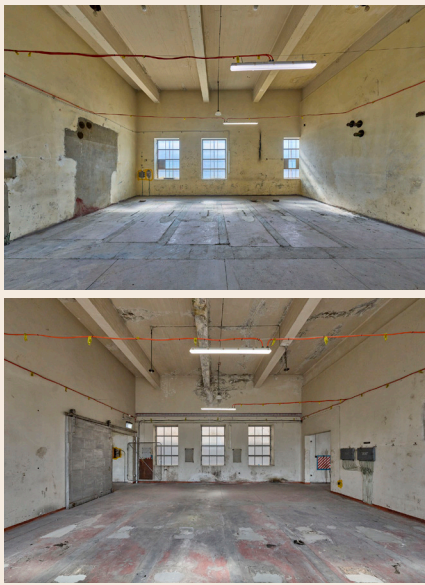
(courtesy of Chris Bennett: Evolving Picture, 2024)

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| Room / Item | Level 1 – Spaces | |
| Building | Switch House | |
| Room No. | SH 1.6–1.10 | |
| Significance | 3 – Moderate | |
| Description | <p>The spaces comprise the south half of Level 1 of the Switch House. They once housed the bus bars.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margin and tiling in some areas. | |
| Walls | <p>North wall: brick. East and west walls: rendered masonry with incised dado moulding.</p> | |
| Ceiling | Concrete cable channels with steel I-beams. | |
| Doors and Windows | <p>Metal frame and mesh door (sometimes two) between each space. East wall: two doors leading to landings over Transformer Alley (TA2). Three steel frame, pivot, figured frosted and wired win-dows, 12 pane. Externally clad with timber frame clear corrugated polycarbonate. South wall: timber double doors, framed ledged and braced. One steel frame window with glazing removed, externally clad with timber frame clear corrugated polycarbonate. West wall: Five steel frame, pivot, figured frosted and wired windows, 12 pane. Windows barred from inside.</p> | |
| Lighting | <p>Former pendant lights from ceiling. New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | Housings for various switches and cable runs throughout all spaces. | |
| Movable heritage | <p>Mobile trolley / step signed ELECTRICAL in SH 1.10. Boards, timber ladders in varying sizes and configurations Small ceramic isolators, loose floor tiles stacked</p> | |

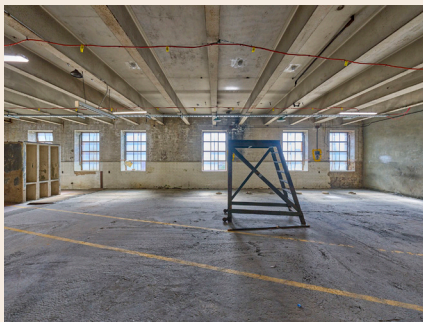
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| Room / Item | Amenity Spaces | |
| Building | Switch House | |
| Room No. | SH 1.12 | |
| Significance | 3 – Moderate, open walkway: 4 – Little / Neutral | |
| Description | <p>The Amenity Spaces are located near the middle of Level 1 of the Switch House and are east of the main bulk of the building. They are located over the top of the Transformer Alley and share a wall with the Turbine Hall. The space comprises a short walkway with two amenity blocks – a smaller one on the north adjacent to the Turbine Hall wall comprising a shower and hot water tank room; and a larger one on the south that spans the width of the Transformer Alley with toilet cubicles and urinals.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete, step up to each amenity block. | |
| Walls | <p>Shower unit: external walls have been removed but timber framing remains; internal partitions are rendered masonry.</p> <p>Toilet block: masonry, rendered internally, with timber internal partitions between toilet cubicles.</p> <p>Evidence of former entry to Turbine Hall bricked up.</p> | |
| Ceiling | <p>Shower unit and walkway: roof cladding of bathroom unit has been removed, exposed to underside of the Switch House Control Room – vaulted concrete supported by steel beams, remediated in 2022–24.</p> <p>Toilet block: underside of galvanised corrugated steel roof and timber rafters.</p> | |
| Doors and Windows | <p>Shower unit: timber, 4 panel French door with frosted wired glazing for two upper panes. Internal doors removed.</p> <p>Toilet block: external door is timber, braced and ledged door. Cubicle doors are similar. High figured and frosted glass louvre windows on north and south walls. Clad with clear acrylic (external on north side, some internal on south side).</p> | |
| Lighting | New temporary lighting and catenary wires installed in 2022–24 above walkway and in toilet block. | |
| Other | Ceramic urinals, and toilets in place in toilet block. Basin is present but dislodged from wall. | |


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| Room / Item | Level 2 – Room | |
| Building | Switch House | |
| Room No. | SH 2.2 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The room is located at the northeast corner of Level 2 of the Switch House. It is accessed via the lobby from the lift and stairwell in the northeast corner (SH 2.1), and it used to be High Voltage Testing Room.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Painted dark red. | |
| Walls | Rendered masonry. | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by concrete beams. | |
| Doors and Windows | <p>Timber double doors on north wall: framed and ledged.</p> <p>Two windows on south wall: both formerly steel framed with frosted panes (some wired), 12 pane. West window retains original window with lower row of panes replaced with acrylic (east has window removed), and both openings are externally clad with timber frame clear acrylic.</p> <p>West wall: steel frame figured frosted (some wired) window, 12 pane.</p> | |
| Lighting | <p>Former pendant lights hanging from ceiling, dish shades missing.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Movable heritage | Framing (and broken pane) for bottom row of south wall window propped against wall in corner. | |


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| Room / Item | Level 2 – Tie Bank Room | |
| Building | Switch House |  <p>(Design 5 – Architects, 2024)</p> |
| Room No. | SH 2.3 | |
| Significance | 2 – High | |
| Description | The Tie Bank Room is located at the north end of Level 2 of the Switch House. It houses a set of Motor-Driven Oil-bath switches comprising the No. 1 Tie Bank Group. | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Painted dark red. | |
| Walls | Rendered masonry. | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by concrete beams. | |
| Doors and Windows | East and south wall: weighted sliding timber door with metal cladding and pulley system. West wall: two steel frame, figured, frosted and wired pivot windows, 12 pane. | |
| Lighting | Former pendant dish lights hanging from ceiling and fluorescent light mounted on east wall. New temporary lighting and catenary wires installed in 2022–24. | |
| Machinery | Motor-Driven Oil-bath Switches (No. 1 Tie Bank Group) (6.4) | |
| Movable heritage | Loose machinery parts behind the machinery | |


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| Room / Item | Level 2 – Room | |
| Building | Switch House |  |
| Room No. | SH 2.4A–D | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The series of rooms are located in the north half of Level 2 of the Switch House. They are very similar in layout and size, and likely once housed additional tie bank groups, similar to that of the Tie Bank Room to the north (SH 2.3).</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. Steel chequer plates covering larger channels and holes in the floor. Concrete filled on evidence of former equipment and machinery. | |
| Skirting | Painted dark red. | |
| Walls | Rendered masonry with some punctures from conduits and equipment. | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by concrete beams. | |
| Doors and Windows | <p>North and south wall of each space: weighted sliding timber door with metal cladding and pulley system. Additional woven mesh gate at south of SH 2.4D.</p> <p>Windows: steel frame figured, frosted (and some wired) pivot windows, 12 pane. Several windows externally clad with timber frame corrugated polycarbonate. SH 2.4A: 2 on east wall, 3 on west; SH 2.4B: 2 on east wall, 2 on west; SH 2.4C: 3 on east wall, 3 on west; SH 2.4D: 2 on east wall and 2 on west.</p> | |
| Lighting | <p>Former pendant dish lights hanging from ceiling and some fluorescent lights mounted on walls.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | Extant switchboxes and conduits mounted on walls from former equipment and machinery. Wooden cable brackets mount-ed to walls in SH 2.4D. | |
| Movable heritage | Timber cable drums and timber ladders of various types and sizes | |

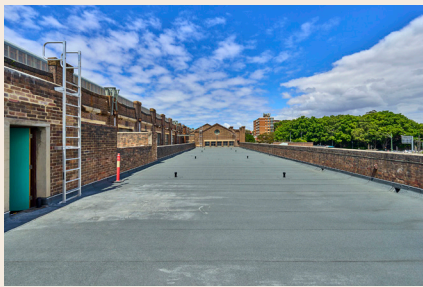
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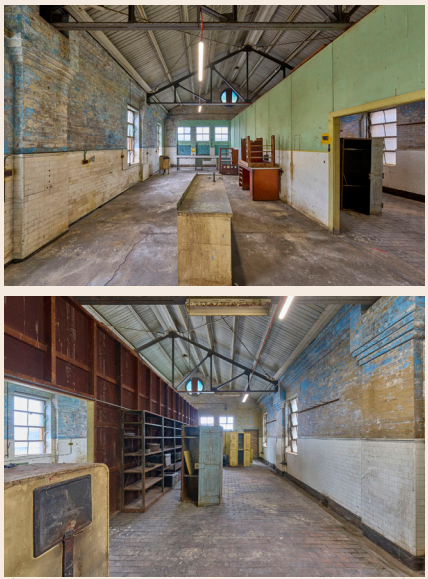
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| Room / Item | Level 2 – Space | |
| Building | Switch House | |
| Room No. | SH 2.5 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The large, open space is located near the middle of Level 2 of the Switch House in its northern half. It was once divided down the middle into two spaces, and housed various equipment including the oil bath switches on the south half (only the concrete housing remains).</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete, divided into north (single rough slab) and south (scribed margins and painted red) halves. Penetrations in south half of floor boarded over. | |
| Skirting | | |
| Walls | <p>North wall: rendered masonry East and west walls: brick with white tiling to 1470mm high (approx.) to dado moulding line. Recesses near south end of east wall are partially covered by panels and house large numbers of cables and conduits.</p> | |
| Ceiling | Off-form concrete supported by steel I-beams. | |
| Doors and Windows | <p>North: weighted sliding timber door with metal cladding and pulley system and a woven mesh gate. East wall: boarded up door leading to walkway overlooking Transformer Alley (TA1). Northmost window opening boarded up. Four steel frame figured frosted and wired pivot windows, 12 pane, each externally clad with timber frame clear corrugated poly-carbonate. West wall: eight steel frame, figured frosted and wired pivot windows, 12 pane, each externally clad with timber frame clear corrugated polycarbonate. One small 4 pane window.</p> | |
| Lighting | <p>Former pendant dish lights hanging from ceiling. New temporary lighting and catenary wires installed in 2022 / 24.</p> | |
| Other | Concrete housing for oil bath switches located in south half of space. Conduits running along walls. | |

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| Room / Item | Level 2 – Spaces | |
| Building | Switch House | |
| Room No. | SH 2.6–2.10 | |
| Significance | SH 2.6: 1–Exceptional, 2.7-2.10: 2 –High | |
| Description | <p>These spaces make up the south half of Level 2 of the Switch House. They once housed a full set of the cycle switches, though only some remain in SH 2.6.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Scribed concrete to SH 2.7–2.8. Red tiling to SH 2.6, 2.9 and 2.10. | |
| Walls | Rendered masonry with dado moulding. Some recesses partially covered by panels house large numbers of cables and con-duits. | |
| Ceiling | Off-form concrete supported by steel I-beams. Cable supports with large groups of cabling. | |
| Doors and Windows | <p>East wall: nine steel frame figured and frosted windows, 12 pane. Every second window has a door leading to walkway overlook-ing Transformer Alley (TA2).</p> <p>West wall: ten evenly spaced steel frame figured and frosted windows, 12 pane. Framed and ledged double doors at north end of west wall to stairwell (SH 2.11) with fanlight. Recessed steel frame frosted fig-ured (some wired) fixed window, 8 pane, near door.</p> <p>South: two steel frame figured and frosted windows, 12 pane. Windows externally clad with timber frame clear corrugated polycarbonate.</p> | |
| Lighting | Former pendant dish lights hanging from ceiling. New temporary lighting and catenary wires installed in 2022 / 24. | |
| Other | Large amounts of cables and conduits –some mounted on walls / bracketed, others dislodged and running along the floor. Coloured timber cabinets containing various items, along east wall. | |
| Machinery | 25 Cycle Switches (8.16) | |
| Movable heritage | Loose floor tiles, lightings, ceramic parts, timber boxes, timber glazed screens stored along woven wire fence north of SH 2.6. Timber ladders of various types and sizes Loose items and parts from oil circuit breaker | |


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| Room / Item | Mezzanine Level – Original Control Basement | |
| Building | Switch House | |
| Room No. | SH 2.12 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>The mezzanine space is located at the middle of Level 2 of the Switch House. It is accessed via stairs from the Control Room on the floor above (SH 3.13), hangs over the middle of the Transformer Alley and is separate from the rest of Level 2.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete, slopes down towards south side. Steel chequer plates covering openings and patches in the floor. Lengths of timber embedded in floor (running north-south) with protruding metal fixtures indicative of former placement of equipment. | |
| Walls | Brick until approximately 3/4s to the south, the wall of the remainder of the space is concrete. | |
| Ceiling | Off-form concrete supported by steel I-beams. Some punctures from lighting and conduit fixings. | |
| Doors and Windows | <p>North wall: three steel frame, figured and frosted pivot windows, 4 pane. Middle window removed and opening boarded up.</p> <p>South wall: steel frame figured and frosted pivot window, 6 pane.</p> <p>All windows externally clad with timber framed clear corrugated polycarbonate.</p> | |
| Lighting | <p>Former lights from ceiling.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | <p>Metal stair at north end coming down from level above.</p> <p>Small timber cabinet on west wall.</p> | |
| Movable heritage | Removed window panes stored near north end of space. | |


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| Room / Item | Elevator Machine Room | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH 3.2 | |
| Significance | 4 - Little / Neutral | |
| Description | <p>The Elevator Machine Room is located in the northeast corner of the Switch House Level 3. It is a small room adjacent to the northeast stairwell and houses the elevator machinery.</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | Concrete | |
| Ceiling | Off-form concrete with evidence of boarded formwork supported by steel I-beams. | |
| Doors and Windows | <p>Single leaf door on south wall. Steel frame 2 pane frosted and wired glass windows: two on north wall and two on west wall.</p> | |
| Lighting | Former pendant dish lights from ceiling. | |
| Other | <p>Wires and conduits secured to walls. Wire and conduit steel frames located in northwest corner.</p> | |
| Machinery | Elevator machinery on steel supporting structure. | |
| Movable heritage | <p>Timber planks and boards resting against the wall. Small painting hanging on the west wall.</p> | |


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| Room / Item | Rooftop |
| Building | Switch House |
| Room No. | SH 3.3 |
| Significance | 3 – Moderate |
| Description | <p>The rooftop is accessed from the northeast stairs and makes up most of the north half of the Switch House Level 3. The rooftop is not connected to the rest of Level 3.</p> |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description |
| Floor | Bitumen, resurfaced and waterproofed in 2022–24. |
| Skirting | Bitumen coving 160mm, part of 2022–24 works. |
| Walls | Brick parapet on north, east, and south sides. Brick wall on west side (external wall of Switch House). Fretted bricks replaced in 2022–24. |
| Doors and Windows | Single leaf door on east side from northeast lift and stairwell. New door installed in 2022–24. Windows on external wall of Switch House: five steel frame 4 pane wired and figured glass square windows with concrete lintel, one circular louvred window above. |
| Other | Aluminium ladder on east side and south side of space going up to additional rooftop spaces on the Switch House. Added in 2022–24. |


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| Room / Item | Workshop | |
| Building | Switch House |  |
| Room No. | SH 3.4 | |
| Significance | 3 – Moderate | |
| Description | <p>The workshop is located on Level 3 of the Switch House and is accessed from the Control Room (SH 3.13). It is divided longitudinally into two large spaces and was once used as a workshop for maintenance and repairs in the power station.</p> | |
| Elements | General Description | |
| Floor | <p>East side: brick paving with concrete gutter along east wall. West side: concrete over original floor.</p> | |
| Skirting | Rubber | |
| Walls | <p>Painted brick walls with tiling to (approx.) 1500mm high. North wall: bricked up door opening, and window openings bricked up to half height. East and west walls: pilaster corbels. Central timber partition wall (approx.) 3 metres high.</p> | |
| Ceiling | <p>Underside of roof: exposed steel trusses with timber purlins and raked timber boards. Vents through the ridge.</p> | |
| Doors and Windows | <p>North wall: five steel frame, figured and wired glass windows, 4 pane. Round louvre window above, partially blocked off. East: two steel frame, frosted and figured (some wired) glass pivot windows, 8 pane. West: four steel frame, frosted and figured (clear in lower 4 panes) pivot windows, 8 pane. South: new single door on east side to corridor (SH 3.5). East and west windows externally clad with timber frame clear corrugated polycarbonate.</p> | |
| Lighting | <p>Original fluorescent lights from exposed steel trusses. New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | <p>Long steel hooks secured to walls. Conduits running along walls. Timber bench with lead lining and two basins located in the southeast corner. Hot water tank with a bracket for urn above.</p> | |
| Movable heritage | <p>East side: steel shelves with storage boxes and machinery components. An old fridge, multiple cabinets and lockers. West side: two timber desk sets with drawers, a timber bench with metal top, a timber cabinet, small metal cabinet, and workbench. A panel with metres and dials.</p> | |

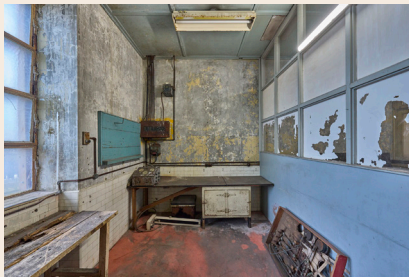
(courtesy of Chris Bennett: Evolving Picture, 2024)


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| Room / Item | Passage Between SH 3.6 & SH 3.7 | |
| Building | Switch House | |
| Room No. | SH 3.5 | |
| Significance | 4-Little / Neutral | |
| Description | <p>The passage is located in the north half of Level 3 of the Switch House. It connects the Workshops (SH 3.4) and the Control Room (SH 3.13), and also leads to a small room on the west (SH 3.6).</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete | |
| Skirting | Painted black along east wall. | |
| Walls | <p>North, south, and east walls: rendered masonry tiled to dado moulding strip (approx.) 1500mm high. West wall: timber partition wall.</p> | |
| Ceiling | Underside of roof: exposed steel trusses with timber purlins and raked timber boards. | |
| Doors and Windows | <p>New single door on north wall to SH 3.4. French 4 panel double doors (with glazing in higher panels) on south wall from SH 3.13. Single door on west wall to SH 3.6. Timber frame 4 pane window on west wall.</p> | |
| Lighting | <p>Former pendant dish lights from timber batten. New temporary lighting and catenary wires installed in 2022-24.</p> | |
| Other | Some conduits running along walls. | |


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| Room / Item | Level 3 – Room | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH 3.6 | |
| Significance | 4 – Little / Neutral | |
| Description | The room is located in the north half of Level 3 of the Switch House along the west wall. It is not known what exactly this room was once used for, though it may have been administrative / storage. | |
| Elements | General Description | |
| Floor | Concrete | |
| Skirting | Tiling once painted black. | |
| Walls | North, south, and west walls: rendered masonry with tiling to (approx.) 1500mm high. East wall: south third is rendered and tiled like other walls, remainder of wall is a timber partition wall. | |
| Ceiling | Timber frame with sheets and battens. Some sheets near central and west part of ceiling have been removed, exposing the underside of the roof. | |
| Doors and Windows | Timber four panel door on east wall. West wall: steel frame 8 figured, 4 plain, pivot window, 12 pane. | |
| Lighting | Former fluorescent lights from ceiling battens. New temporary lighting and catenary wires installed in 2022–24. | |
| Movable heritage | A metal locker and a timber cupboard. | |

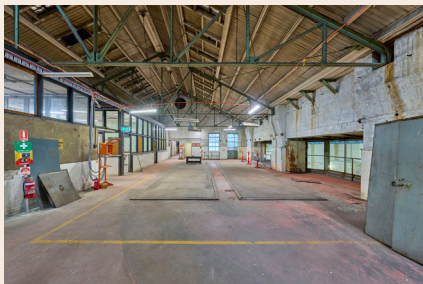
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| Room / Item | Toilet | |
| Building | Switch House | |
| Room No. | SH 3.7 | |
| Significance | 3 – Moderate | |
| Description | <p>The toilet is located in the north half of Level 3 of the Switch House along the east wall. It is accessed via the central Control Room (SH 3.13).</p> | |
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| | (Design 5 – Architects, 2024) | |
| Elements | General Description | |
| Floor | Painted concrete | |
| Skirting | Tiling | |
| Walls | Rendered masonry with white tiling to (approx.) 2000mm high. | |
| Ceiling | Fibro and battens | |
| Doors and Windows | <p>Internal door is three panel door with glazing in top panel. Entry door on south wall identical, except top glazing is replaced with solid panel.</p> <p>Timber frame 4 pane window on west wall.</p> <p>East wall: outside cubicle – steel frame, 8 pane pivot window. Inside cubicle – timber frame 4 pane louvre window. Both windows externally clad with timber frame clear corrugated polycarbonate.</p> | |
| Lighting | <p>Original light bulb from ceiling.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | WC in northeast corner with cistern supported by timber bracket. Ceramic sink outside cubicle, with small mirror hanging on wall. | |


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| Room / Item | Level 3 – Room | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH 3.8 | |
| Significance | 3 – Moderate | |
| Description | This room is located in the middle section of Level 3 of the Switch House. It was likely an administrative space, though its exact use is not known. | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | North wall: rendered masonry with white tiling to (approx.) 1020mm high. East wall is similarly rendered and tiled, but above tiling is timber framed glazing, with lower panels boarded up. South and west walls: partition wall with timber frame glazing above. | |
| Ceiling | Timber sheets and battens. | |
| Doors and Windows | Double doors on south wall. | |
| Lighting | Former fluorescent lights from ceiling battens. New temporary lighting and catenary wires installed in 2022–24. | |
| Movable heritage | Various switches and electric components stored in room. | |


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| Room / Item | Level 3 – Room | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH 3.9 | |
| Significance | 3 – Moderate | |
| Description | This room is located in the middle section of Level 3 of the Switch House along the west side. It was likely used as a small administrative / workshop space and is accessed via a small corridor from the Control Room (SH 3.13). | |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | North and west wall: rendered masonry with white tiling to (approx.) 1020mm high. South wall is similarly rendered and tiled, but above tiling is timber frames with sheet infill. East wall: partition wall with timber frame glazing above. | |
| Ceiling | Timber sheets and battens. | |
| Doors and Windows | Single door on east wall. West wall: two steel frame frosted pivot windows, 8 pane. Windows externally clad with timber frame clear corrugated polycarbonate. | |
| Lighting | Former fluorescent lights from ceiling battens. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Timber work bench with cupboards underneath along west wall. Small bench along north wall. Conduits and switch boxes on walls, part of an old switch system. | |
| Movable heritage | Part of a switch cabinet and other various electric components. A small metal cupboard. | |


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| Room / Item | Level 3 – Room | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH 3.10 | |
| Significance | 3 – Moderate | |
| Description | The room is located in the middle section of Level 3 of the Switch House along the west side. It is not known what this space was originally used for. | |
| Elements | General Description | |
| Floor | Concrete, opening in floor in northeast corner for conduits. | |
| Walls | North, east, and south walls: rendered masonry with tiling to (approx.) 1020mm high, with timber frame partition wall above (sheeting on north, glazing on east and south). One panel on east wall replaced with timber sheeting. West wall: rendered masonry with tiling to (approx.) 1020mm high. | |
| Ceiling | Timber sheets and battens. | |
| Doors and Windows | East: 3 panel timber door, glazed upper panel replaced with timber sheet. West: steel frame frosted pivot window, 8 pane, externally clad with timber frame clear corrugated polycarbonate. Thin steel frame window near south end of wall. | |
| Lighting | Former fluorescent lights from ceiling battens. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Timber cupboard and small timber bench with switch box along north wall. Telephone box mounted on west wall. Timber bench along south wall. | |
| Movable heritage | Set of three steel lockers. | |

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| Room / Item | Level 3 – Room | |
| Building | Switch House | |
| Room No. | SH 3.12 | |
| Significance | 2 – High | |
| Description | <p>The room is located near the middle of Level 3 of the Switch House along the west wall. It is accessed via a corridor from the Control Room (SH 3.13). The space contains a wire mesh caged area and was likely used as a storage and workshop space. It was a Trouble Room before the construction of the 1948 Control Room and Switch House.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete | |
| Walls | <p>North wall: partition wall brick to (approx.) 950mm high, timber frame glazing above. East wall: same as north, but with brick to 2200mm high, 4 panes. South wall: concrete. West wall: rendered masonry tiled in north half to (approx.) 1470mm. Timber frame wire mesh cage space in southeast corner of room.</p> | |
| Ceiling | Timber sheets and battens. | |
| Doors and Windows | <p>Single door at west end of north wall. West: steel frame mix of figured, wired, and plain pane pivot window, 12 panes. Externally clad with timber frame clear corrugated polycarbonate. Timber frame door into caged space.</p> | |
| Lighting | <p>Former fluorescent lights from ceiling battens. New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | <p>Timber work bench along north of east wall with switchboxes and electrical components mounted on wall above, timber cupboards along north wall. Three timber shelves within caged area. Conduits and pipes along walls.</p> | |
| Movable heritage | Small electrical components on shelves and floor. | |


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| Room / Item | Control Room | |
| Building | Switch House | |
| Room No. | SH 3.13 | |
| Significance | 2 – High | |
| Description | <p>The Control Room is located at the middle of Level 3 of the Switch House on the east side. It overlooks the Turbine Hall through three sets of bay windows, and was once the Control Room of the power station before the construction of the 1948 Control Room and Switch House. Nearly all its control room equipment has been removed, and it contains evidence of the lawn bowl strips that later occupied the space.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Concrete, two demarcated lawn bowl strips, with turf removed. Narrow openings down into mezzanine along west side, partially covered with timber. | |
| Walls | <p>North, east, and south walls: concrete with tiling to (approx.) 1430mm high. East wall has three sets of bay windows.</p> <p>West wall: partition walls, rendered masonry with white tiling to (approx.) 1020mm high, with timber frame glazed partition above. South half has additional concrete infill above sill height to (approx.) 2280mm.</p> | |
| Ceiling | Underside of roof: exposed steel trusses with timber purlins and raked timber boards. Vents through the ridge. | |
| Doors and Windows | <p>North wall: from west to east, double door (4 panel, glazing in upper panels) to SH 3.5, single door to SH 3.7, steel frame half-glazed door with 12 pane window surround to walkway overlooking Transformer Alley. Steel frame figured window, 12 pane.</p> <p>East wall: three sets of bay windows overlooking Turbine Hall. Glazing to bay windows replaced in 2022–24.</p> <p>South wall: steel frame half-glazed door with 12 pane window surround to walkway overlooking Transformer Alley. Former steel frame figured window, 12 pane, frame removed. North and south windows externally clad with timber frame clear corrugated polycarbonate.</p> | |
| Lighting | Original fluorescent lights and pendant dish lights from ceiling battens. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Set of stairs with steel balustrades at north end of room leading down to mezzanine space (SH 2.12). Steel chequer plate, and other loose materials stored in space. | |
| Machinery | Motor-Generator No. 2(8.2 a) Motor-Generator No. 2 Switchboard (8.2 b) Switch House Lighting Board (8.12) | |
| Movable heritage | Short square timber table. Metal cabinet | |


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|--------------------------|--|--|
| Room / Item | Motor-Generator Switch Room | |
| Building | Switch House | |
| Room No. | SH 3.14 | |
| Significance | 1-Exceptional | |
| Description | The Motor-Generator Switch Room is located in the southern half (towards the middle) of Level 3 of the Switch House. It houses vast amounts of switch house machinery and equipment, including the generators and switchboards. It is accessed via the Control Room (SH 3.13) and leads to the Battery Workshop (SH 3.15). |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Painted concrete with steel checker plates near machinery covering cable trenches. | |
| Walls | Concrete walls. South and west walls: white tiling to 1430mm high (approx.). Opening with architrave at east end of north wall with no door. | |
| Ceiling | Underside of roof: exposed steel trusses with timber purlins and raked timber boards. Vents through the ridge. Large concrete beam running across ceiling. | |
| Doors and Windows | Timber 4 panel half-glazed French doors on north wall. East and west wall: steel frame, frosted, figured (some wired) glass pivot window, 12 pane. | |
| Lighting | Original pendant dish lights from trusses, fluorescent light mounted on wall. New temporary lighting and catenary wires installed in 2022-24. | |
| Other | Extensive conduits running along walls. | |
| Machinery | Motor-Generator No. 3 (8.3) Motor-Generator No. 4 (8.4) Battery Charger Unit (Mercury Arc Rectifier) (8.5) No. 1 Battery Booster (8.6) Rectifier Sets 1 and 2 (8.7) Switchboard (marble) in Motor-Generator Room (8.8) Switchboard in Motor-Generator Room (8.13) Battery Charging Switchboard (8.14) | |


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| Room / Item | Battery Workshop | | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Room No. | SH 3.15 | | |
| Significance | 2-High | | |
| Description | The Battery Workshop is located in the south section of Level 3 of the Switch House. It is accessed via the Motor-Generator Switch Room (SH 3.14) to its north and was used as a workshop space. | | |
| Elements | General Description | | |
| Floor | Concrete with lead drain to east. | | |
| Skirting | Concrete coving. | | |
| Walls | Painted concrete with white tiling all round to 14300mm high (approx.). | | |
| Ceiling | Steel trusses with timber rafters and tongue and groove boards. | | |
| Doors and Windows | Timber 4 panel half-glazed French doors on north wall. Steel door at east end of south wall. Two windows on east and west walls: steel frame, 12 pane with figured, frosted, and wired glass windows externally clad with timber frame clear corrugated polycarbonate. Upper circular window on south wall. | | |
| Lighting | Original pendant dish lights from ceiling. Small en-cased light bulbs from steel trusses. New temporary lighting and catenary wires installed in 2022-24. | | |
| Other | Conduits for lights running along walls. Various steel brackets fixed to walls, once supported equipment and machinery. Two cupboard benches along north wall. Large stone sink and drainer over cupboard in northeast corner. Small hand sink mounted on east wall between windows. | | |
| Machinery | Disused No. 1 Battery Booster (8.1) Pedestal Drill (8.10) | | |
| Movable heritage | Five sets of three steel lockers | | |

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|--------------------------|---|--|
| Room / Item | Battery Room | |
| Building | Switch House | |
| Room No. | SH 3.16 | |
| Significance | 2-High | |
| Description | <p>The Battery Room is located in the southern section of Level 3 of the Switch House. It was part of the 1952 additions made to the Switch House and was used to store batteries, of which only six remain in the room (51–56).</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete, lead cover removed in 2022–24. | |
| Skirting | Concrete coving, small openings covered with metal mesh located along the skirting. | |
| Walls | Concrete | |
| Ceiling | Underside of Switch House roof: steel trusses with timber battens and sarking above. | |
| Doors and Windows | <p>Steel door located at the east end of north wall.</p> <p>Two windows on east and west walls: steel frame 12 pane windows externally clad with timber frame clear corrugated polycarbonate.</p> <p>Two timber frame windows without glazing on north wall. Upper circular window on north wall.</p> | |
| Lighting | <p>Small encased light bulbs from steel trusses. Casings for fluorescent lights on steel trusses and mounted on north and south walls (two each). Exhaust fan in south window on west wall.</p> <p>New temporary lighting and catenary wires installed in 2022–24.</p> | |
| Other | <p>Conduits for lights running along walls.</p> <p>Timber frame copperhead sink in southeast corner of room.</p> <p>Timber cupboard with lead lined battery fluid tank along west wall.</p> <p>Various steel brackets fixed to walls, once supported equipment and machinery.</p> | |
| Machinery | Batteries (8.9) | |

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| Room / Item | Level 3 – Entertainment Hall – Stage | |
| Building | Switch House |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | SH 3.17 | |
| Significance | 1–Exceptional | |
| Description | <p>The Entertainment Hall Stage is located at the northern end of the Entertainment Hall and was a platform for various shows and performances given to the workers and staff of the White Bay Power Station. It comprises a main stage area flanked by two wings.</p> | |
| Elements | General Description | |
| Floor | Timber tongue and groove boards. Deteriorated boards replaced in 2022–24. | |
| Skirting | Timber skirting, repainted in 2022–24. | |
| Walls | <p>North, east, and west external walls: painted rendered masonry, with murals. Masonry repainted in 2022–24.</p> <p>Internal walls are timber frame with masonite panels.</p> <p>North back wall of main stage has painted mural.</p> <p>Conservation works to retain mural conducted in 2022–24.</p> | |
| Ceiling | Masonite panels with timber framing | |
| Doors and Windows | Panel door to each stage wing space. | |
| Lighting | Small light fixed to wall above east door to stage wings. Two lights flush with ceiling surface above stage area. Original pendant dish lights from ceiling in stage wings. | |
| Other | <p>Timber steps on either side of stage.</p> <p>Storage space under stairs with boarded timber panels as covers.</p> | |
| Movable heritage | Pendant dish light coverings stored under stage. | |

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|--------------------------|---|--|
| Room / Item | Level 3 – Entertainment Hall | |
| Building | Switch House | |
| Room No. | SH 3.18 | |
| Significance | 1–Exceptional | |
| Description | <p>The Entertainment Hall was a place of relaxation, recreation and entertainment for the workers and staff of the White Bay Power Station. It was constructed in late 1952 as part of the new floor addition to the Switch House. The hall is accessed via the Victoria Road Access Bridge (AS 3.10) and is separate from the rest of Level 3 of the Switch House.</p> |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description | |
| Floor | Tongue and groove timber boards. Existing boards were cleaned, sanded, patched, and repaired; deteriorated boards replaced in 2022–24. | |
| Skirting | Timber quad, repainted in 2022–24. | |
| Walls | Painted rendered masonry with scenic murals on east and west walls. Rendered masonry was repainted in 2022–24. Conservation works to retain murals were done in 2022–24. | |
| Ceiling | Painted plasterboard ceiling with vents, ceiling replaced in 2022–24. | |
| Doors and Windows | <p>Timber double doors on south wall. Doors repaired, repainted, and made automated in 2024 as part of activation works.</p> <p>Steel frame figured glass 12 pane windows: five on east wall and four on west wall (wired). West windows externally clad with temporary timber frame and clear corrugated polycarbonate. East windows some are still operable.</p> | |
| Lighting | Former fluorescent lights and small pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Movable heritage | <p>Pair of timber seats spanning the length of the Entertainment Hall. Minor repairs and repainting in 2022–244.</p> <p>Two mess tables and a bar billiard table</p> <p>Three music stands and one drum stand, light fittings</p> <p>Dart boards</p> | |

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|--------------------------|--|--|
| Room / Item | Level 3 – Entertainment Hall – Kitchen | |
| Building | Switch House | |
| Room No. | SH 3.19 | |
| Significance | 1–Exceptional | |
| Description | <p>The Entertainment Hall Kitchen provided food and kitchen amenities to the workers. It was constructed in late 1952 as part of the new floor addition to the Switch House.</p> <p>Like the rest of the Entertainment Hall, extensive restoration works were required during 2022–24 due to severe damage and droppings from pigeons.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Tongue and groove timber boards. Boards were cleaned, sanded, patched, and repaired in 2022–24. | |
| Skirting | Timber skirting. | |
| Walls | Northeast wall: timber boarding with fibre cement sheeting. South and west walls: rendered masonry. Rendered masonry walls repainted in 2022–24. | |
| Ceiling | Painted timber joists and boarding. | |
| Doors and Windows | Painted ledged and braced timber boarded door at west end of room. Cleaned and repainted in 2022–24. Window with metal infill on south and west walls. | |
| Lighting | Original pendant dish lights from ceiling. New temporary lighting and catenary wires installed in 2022–24. | |
| Other | Kitchen benches and cabinets along walls. Pigeon damage cleaned out of cabinets in 2022–24. Multiple conduits running west wall. | |
| Movable heritage | Dart board (belongs to outside of the partition wall). | |

| | | |
|--------------------------|--|---|
| Room / Item | Level 4 – Lift Overrun | |
| Building | Switch House | |
| Room No. | SH 4.1 | |
| Significance | 4 – Little / Neutral | |
| Description | The Lift Overrun is located in the northeast corner of the Switch House Level 4. It is a small room on top of the lift and accessed through via the ladder on SH 3.11 on the north east side. It houses the elevator machinery that sits on top of timber platform in the middle of the space. |  |
| | | (courtesy of Chris Bennett: Evolving Picture, 2024) |
| Elements | General Description | |
| Floor | Concrete with timber tongue and groove for the platform. Boards were cleaned, sanded, patched, and repaired in 2022–24. Void for ladder access on northwest. | |
| Skirting | None for wall. Timber for platform | |
| Walls | Masonry | |
| Ceiling | Raked timber boarding falling to east, with a hatch. | |
| Doors and Windows | Steel central pivot windows on north, west and south sides with concrete lintels, 8 panes. Covered externally with timber framed clear corrugated polycarbonate in 2022–24. | |
| Lighting | Evidence of light bulb holder on ceiling. | |
| Other | Wires and conduits secured to walls. Switch equipment and cables. Picture frame with faded diagram (most likely manual) | |
| Machinery | Elevator machinery. | |

7.9 INVENTORY OF MACHINERY




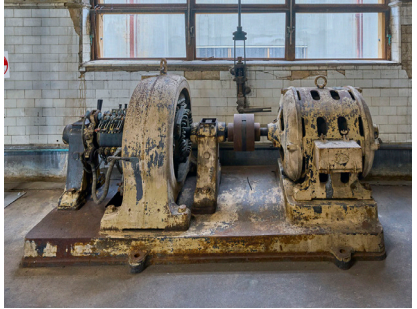
This section aims to provide an overarching understanding of the extant machinery concerning the buildings and spaces, as well as their role in the operational systems at the White Bay Power Station. The information below is based on the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report prepared by Godden Mackay Logan (May 2003) for the first edition of the Conservation Management Plan. Refer to Volume 3, Appendix D for the full GML report.




The machinery located within the Switch House is listed below:


Summary of Machinery



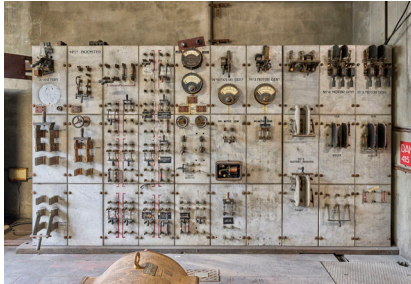
| Machinery | Location | System | Vol. 3 Ref. |
|--|--|--|-------------|
| Motor-Driven Oil-bath Switches | Ground Floor – Space (SH G.3A) Ground Floor – Space (SH G.3B) Tie Bank Room (SH 2.3) | Power Reticulation System | 6.4 |
| Disused No. 1 Battery Booster | Battery Workshop (SH 3.15) | House Electrical and Auxiliary Supply System | 8.1 |
| Motor-Generator Set 2 | Control Room (SH 3.13) | House Electrical and Auxiliary Supply System | 8.2 a) |
| No. 2 Motor-Generator Switchboard | Control Room (SH 3.13) | House Electrical and Auxiliary Supply System | 8.2 b) |
| Motor-Generator No. 3 | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.3 |
| Motor-Generator No. 4 | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.4 |
| Battery Charger Unit (Mercury Arc Rectifier) | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.5 |
| No. 1 Battery Booster | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.6 |
| Rectifier Sets 1 and 2 | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.7 |
| Switchboard (marble) in Motor-Generator Room | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.8 |
| Batteries | Battery Room (SH 3.16) | House Electrical and Auxiliary Supply System | 8.9 |
| Pedestal Drill | Battery Workshop (SH 3.15) | House Electrical and Auxiliary Supply System | 8.10 |
| Switch House Lighting Board | Control Room (SH 3.13) | House Electrical and Auxiliary Supply System | 8.12 |
| Switchboard in Motor-Generator Room | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.13 |
| Battery Charging Switchboard | Motor-Generator Switch Room (SH 3.14) | House Electrical and Auxiliary Supply System | 8.14 |
| Air Compressor | Ground Floor – Space (SH G.5) | House Electrical and Auxiliary Supply System | 8.15 |
| 50 Cycle Switches | Level 2 – Spaces (SH 2.6–2.10) | House Electrical and Auxiliary Supply System | 8.16 |




Machinery Descriptions Use and Significance


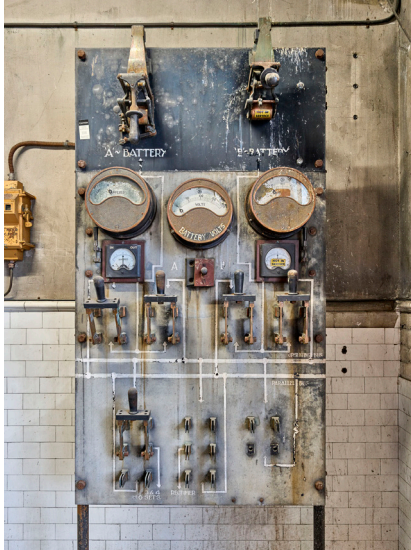
| | | |
|-----------------------|---|---|
| Machine / Ref. | Motor-Driven Oil-bath Switches–6.4 | |
| Location | Ground Floor –Space (SH G.3A), Ground Floor – Space (SH G.3B), Tie Bank Room (SH 2.3) |  |
| System | Power Reticulation System | (courtesy of Chris Bennett: Evolving Picture, 2022) |
| Significance | 3 –Moderate |  |
| Description | <p>The Motor-Driven Oil-bath Switches include the Transformer and Oil Circuit Breaker Switches, the Tie Bank Group, and the Bus Bar Circuit Breaker.</p> <p>Significance</p> <p>The Motor-Driven Oil-bath Switches are an integral part of the Power Reticulation System. They are representative of mid-twentieth century electrical control, metering, and distribution equipment. They are also representative of technological developments in the supply of electricity in the first half of the twentieth century.</p> | (courtesy of Chris Bennett: Evolving Picture, 2024) |
| | |  |
| | | (Design 5 – Architects, 2024) |
| Machine / Ref. | Disused No. 1 Battery Booster – 8.1 | |
| Location | Battery Workshop (SH 3.15) |  |
| System | House Electrical and Auxiliary Supply System | (courtesy of Chris Bennett: Evolving Picture, 2024), cropped |
| Significance | 1 –Exceptional | |
| Description | <p>The Disused No. 1 Battery Booster produced direct current for charging to the Batteries. It has been moved into the Battery Workshop.</p> <p>Significance</p> <p>The Disused No. 1 Battery Booster is an integral part of the House Electrical and Auxiliary Supply System. It is representative of English technology and engineering design.</p> | |



| | | |
|-----------------------|---|--|
| Machine / Ref. | Motor-Generator No. 2 – 8.2 a | |
| Location | Control Room (SH 3.13) |  <p>(Design 5 – Architects, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 1–Exceptional | |
| Description | <p>The Motor-Generator No. 2 is the largest of the Motor-Generators at White Bay Power Station.</p> <p>Significance</p> <p>The Motor-Generator No. 2 is an integral part of the House Electrical and Auxiliary Supply System. It is among the oldest items in the power station, and evidences early electrical power technology with DC generated via an AC motor. It is also representative of early manufacturing technology.</p> | |
| Machine / Ref. | Motor-Generator No. 2 Switchboard – 8.2 b | |
| Location | Control Room (SH 3.13) |  <p>(Design 5 – Architects, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 1–Exceptional | |
| Description | <p>The Motor-Generator No. 2 Switchboard controlled Motor-Generator No. 2 and is located in the former Control Room.</p> <p>Significance</p> <p>The Motor-Generator No. 2 Switchboard is an integral part of the House Electrical and Auxiliary Supply System. It is representative of the influences of English technology and engineering design.</p> | |
| Machine / Ref. | Motor-Generator No. 3 – 8.3 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(Design 5 – Architects, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 1–Exceptional | |
| Description | <p>The Crompton Parkinson Motor-Generator No. 3 is located between the No. 1 Booster and No. 4 Motor-Generator in the Motor-Generator room.</p> <p>Significance</p> <p>The Motor-Generator No. 3 is an integral part of the House Electrical and Auxiliary Supply System. It is representative of the influences of English technology and engineering design.</p> | |

| | | |
|-----------------------|--|--|
| Machine / Ref. | Motor-Generator No. 4 – 8.4 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(Design 5 – Architects, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Motor-Generator No. 4 is located in the Motor-Generator Room.</p> <p>Significance</p> <p>The Motor-Generator No. 4 is an integral part of the House Electrical and Auxiliary Supply System. It is representative of the inter-war period of electrical generation and the influence of English technology and engineering.</p> | |
| Machine / Ref. | Battery Charger Unit (Mercury Arc Rectifier) – 8.5 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(courtesy of Toby Peet, 2024)</p>  <p>Mercury Arc Rectifier during operation, date unknown (courtesy of Eitel Camilleri collection)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2 – High | |
| Description | <p>The Battery Charger Unit (Mercury Arc Rectifier) comprises a rectifier cabinet that charged and modified the electrical current of the Batteries.</p> <p>Significance</p> <p>The Battery Charger Mercury-Arc rectifier is an integral element of the House Electrical and Auxiliary Supply System. It is representative of English technology and engineering and has particular and impressive aesthetic qualities.</p> | |

| | | |
|-----------------------|--|--|
| Machine / Ref. | No. 1 Battery Booster – 8.6 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(Design 5 – Architects, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2 – High | |
| Description | <p>The No. 1 Booster is an integral part of the Electricity Supply + Auxiliary Systems. It was used to boost the current from the Batteries for the house system.</p> <p>Significance</p> <p>The No. 1 Battery Booster is an integral part of the House Electrical and Auxiliary Supply System.</p> | |
| Machine / Ref. | Rectifier Sets 1 and 2 – 8.7 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024), cropped</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 3 – Moderate | |
| Description | <p>The Mercury-Arc Rectifiers No. 1 and No. 2 are both in steel cabinets and were used to supply power directly to the Overhead Travelling Cranes, the Office lift, the Switch House lift, and the Boiler House lift. The bottles have been removed from both sets.</p> <p>Significance</p> <p>The Mercury-Arc Rectifiers are integral to the House Electrical and Auxiliary Supply System. They are representative of English technology and engineering.</p> | |
| Machine / Ref. | Switchboard (marble) in Motor-Generator Room – 8.8 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 1 – Exceptional | |
| Description | <p>The Switchboard is a 10x3-piece white marble board responsible for the distribution of current throughout the station for lighting and control.</p> <p>Significance</p> <p>The Marble Switchboard is an integral part of the House Electrical and Auxiliary Supply System. It is an example of an early twentieth century switchboard evidencing voltmeters and ammeters of now rare configurations, copper knife switches and open-air circuit breakers. It is evocative of early electrical Switch House technology.</p> | |

| | | |
|-----------------------|--|---|
| Machine / Ref. | Batteries – 8.9 | |
| Location | Battery Room (SH 3.16) |  <p>(Design 5 – Architects, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2 – High | |
| Description | <p>The Batteries are lead-acid Wet Cells. There are six open-celled batteries (51–56) remaining in the Battery Room, each lead-lined and wooden-framed.</p> <p>Significance</p> <p>The Batteries are an integral part of the House Electrical and Auxiliary Supply System. They evidence the need for an emergency supply of power and the remaining wet cells illustrate the method by which electrical power was stored in the early twentieth century.</p> | |
| | | |
| Machine / Ref. | Pedestal Drill – 8.10 | |
| Location | Battery Workshop (SH 3.15) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2 – High | |
| Description | <p>The Pedestal Drill is a precision instrument located in the Battery Workshop. It was manufactured in Australia prior to 1920.</p> <p>Significance</p> <p>The Pedestal Drill is evidence of the need of an in-house workshop. It is representative of a class of power tools which could be powered by a standalone motor or a lineshaft belt.</p> | |
| | | |
| Machine / Ref. | Switch House Lighting Board – 8.12 | |
| Location | Control Room (SH 3.13) |  <p>(courtesy of Toby Peet, 2024)</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2 – High | |
| Description | <p>The Switch House Lighting Board distributed regular and emergency power supply to the Switch House.</p> <p>Significance</p> <p>The Switch House Lighting Board is an integral part of the House Electrical and Auxiliary Supply System. It is representative of mid-twentieth century power board technology.</p> | |
| | | |

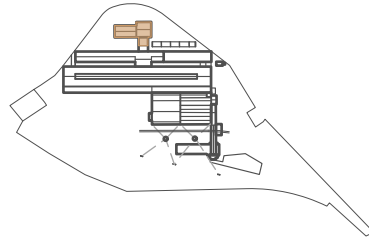
| | | |
|-----------------------|--|--|
| Machine / Ref. | Switchboard in Motor-Generator Room – 8.13 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024), cropped</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2-High | |
| Description | <p>The marble Switchboard was used to control current from the Booster sets which boosted the supply of DC power when demand exceeded the Battery capacity.</p> <p>Significance</p> <p>The Switchboard is an integral part of the House Electrical and Auxiliary Supply System. It is representative of early twentieth century switchboard technology.</p> | |
| Machine / Ref. | Battery Charging Switchboard – 8.14 | |
| Location | Motor-Generator Switch Room (SH 3.14) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024), cropped</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2-High | |
| Description | <p>The Battery Charging Switchboard used to power select pieces of equipment throughout the Power Station.</p> <p>Significance</p> <p>The battery Charging Switchboard is an integral part of the House Electrical and Auxiliary Supply System. It is representative of early twentieth century switchboard technology.</p> | |

| | | |
|-----------------------|--|--|
| Machine / Ref. | Air Compressor – 8.15 | |
| Location | Ground Floor –Space (SH G.5) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024), cropped</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 2 –High | |
| Description | <p>The Air Compressor produced compressed air to power switching devices in high temperature environments.</p> <p>Significance</p> <p>The Air Compressor is an integral part of the House Electrical and Auxiliary Supply System. It is representative of air compressors used in power stations during the twentieth century.</p> | |
| Machine / Ref. | 50 Cycle Switches – 8.16 | |
| Location | Level 2 –Spaces (SH 2.6–2.10) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024), cropped</p> |
| System | House Electrical and Auxiliary Supply System | |
| Significance | 3 –Moderate | |
| Description | <p>The 50 Cycle Switches are motor-driven oil-bath switches that run vertically and were used during the earlier period of electricity production at White Bay. The 50 Cycle Switches found in the Switch House are associated with the earlier period of electricity production at White Bay.</p> <p>Significance</p> <p>The 50 Cycle Switches are an integral part of the House Electrical and Auxiliary Supply System. They provide information on the operation of early tramway electrical systems and are representative of motor-driven and manual oil-immersion switches.</p> | |

8 CONTROL ROOM BUILDING



Figure 8.1 Control Room, 2024 (courtesy of Toby Peet)



The Control Room Building is located at the western side of the site and is shown in the following diagrams.

8.1 FUNCTION

The Control Room Building functions to import and export electricity used and generated by the White Bay Power Station operations.

8.2 HISTORY

The Control Room Building was built during the third phase of construction in the 1950s and began to replace the operations of the earlier 1925 Switch House following advancements in electricity reticulation technology. Finalised in 1952, the Control Room Building primarily facilitated the Power Reticulation System and the House Electrical and Auxiliary Supply System.

The last use of the Control Room Building was in 1983 before it was decommissioned. Major restoration works were carried out in 2022–24 to address structural and safety issues and are discussed further in this section.

8.3 SPATIAL REFERENCES

The Control Room Building comprises the following spaces:

| Spaces | Reference |
|---|-------------|
| 1948 Sub Floor (Centre) | CS G.1 |
| Reactor Floor (Lowest) West Cable Chamber (Raised) | CS G.2 |
| North End Room | CS G.3 |
| Cable Room | CS 1.1 |
| Bus Floor (middle) West & East Halves | CS 1.2 |
| Cable Corridors from Cable Room | CS 1.3A & B |
| Rheostat Room | CS 1.4 |
| Telephone Pot Room | CS 1.5 |
| Control Room | CS 2.1 |
| 25 Cycle Switch Floor | CS 2.2 |

Connected to the Control Room Building is the Link Building, which comprises the following spaces:

| Spaces | Reference |
|---------------------------|-----------|
| Passage from Switch House | CS 2.3 |
| Passage | CS 2.4 |
| Kitchen | CS 2.5 |
| Locker Room | CS 2.6 |
| Shower / W.C. | CS 2.7 |

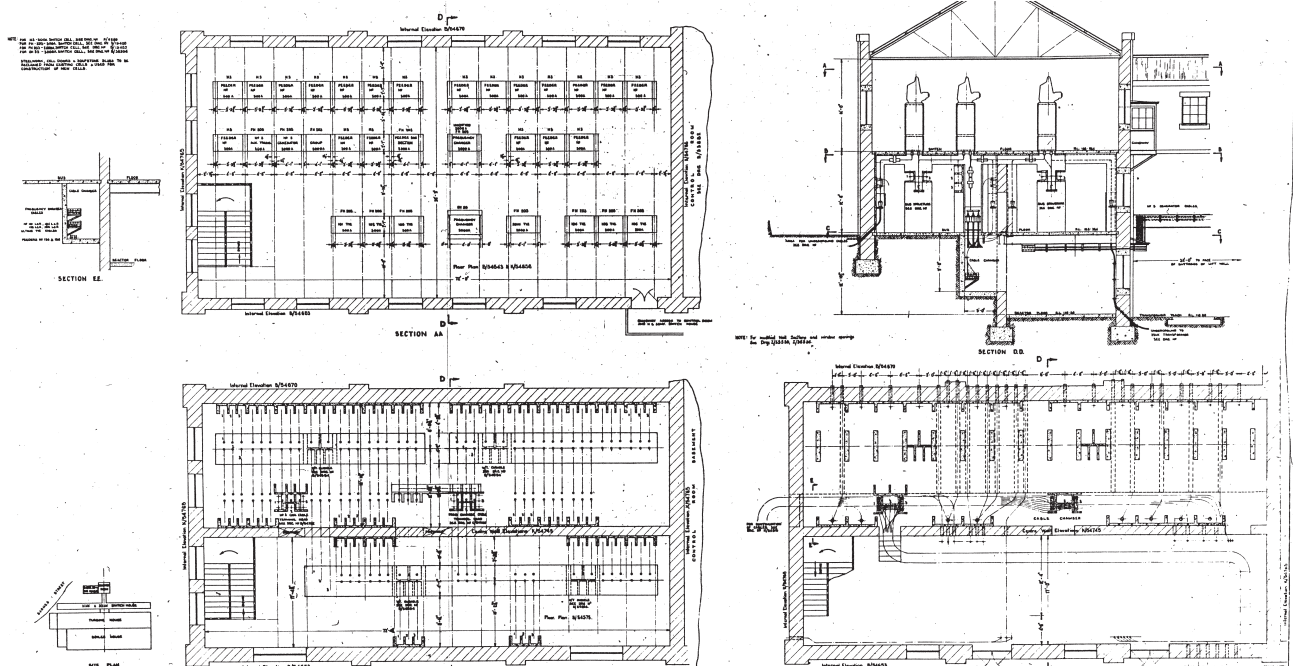
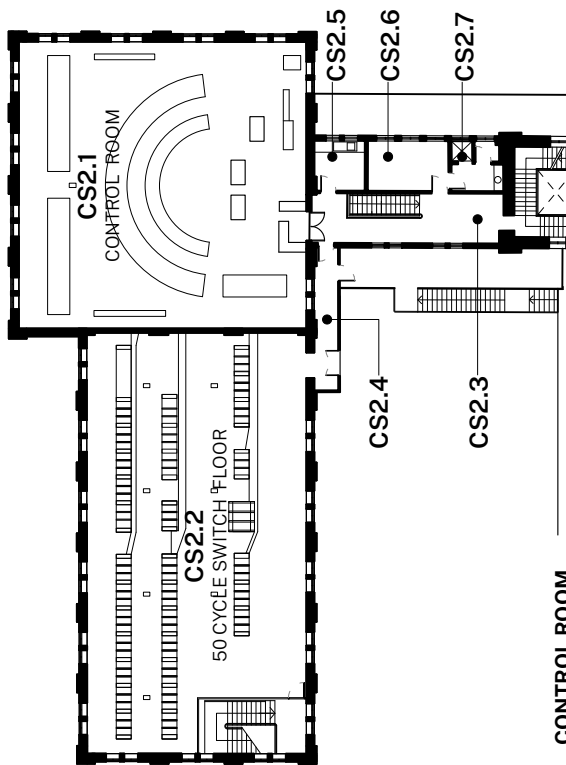
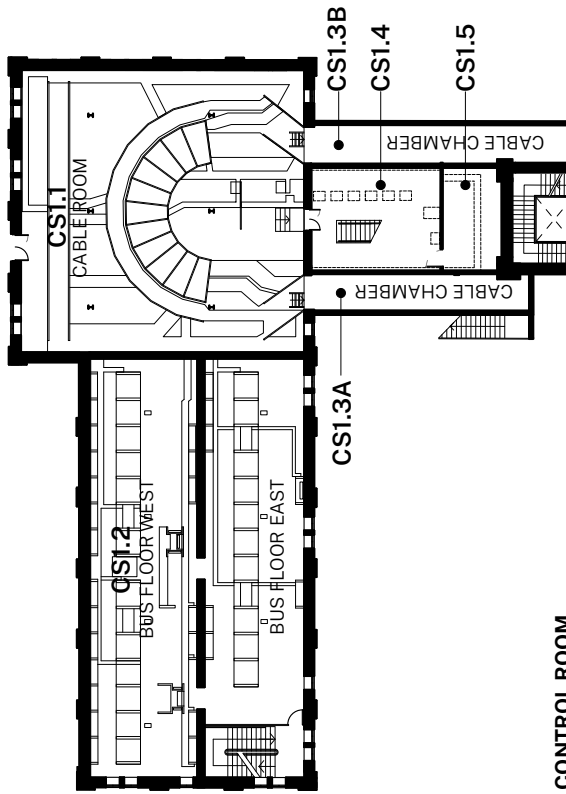


Figure 8.2 Excerpt of archival drawing showing layout of southern end part of the building, 1947, cropped (courtesy of PMNSW archive, 12027)

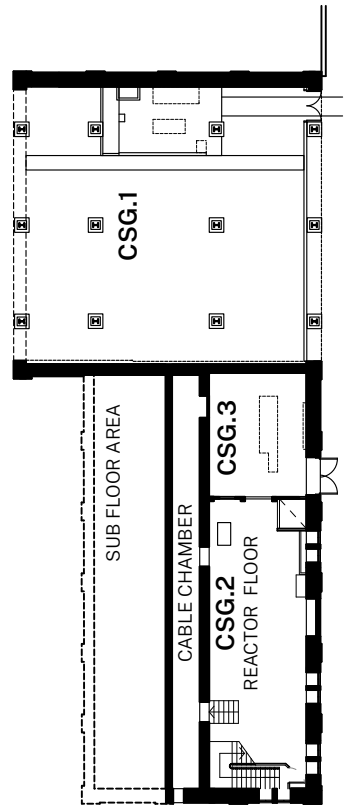
CONTROL ROOM BUILDING



**CONTROL ROOM
LEVEL 2 PLAN (+11)**



**CONTROL ROOM
LEVEL 1 PLAN (+7)**



**CONTROL ROOM
GROUND FLOOR PLAN (+3)**

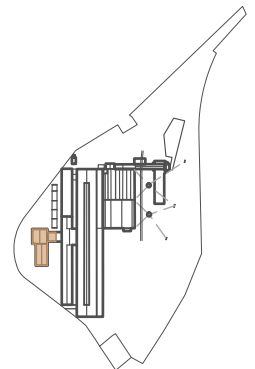


Figure 8.3 Control Room Building plans (Ground Floor, Level 1, and Level 2).

8.4 DESCRIPTION

8.4.1 General

The Control Room Building is located in the west corner of the White Bay Power Station complex. The building is a brick annex approximately thirty-eight metres (38m) long and sixteen metres (16m) wide. It is connected to the 1925 Switch House by the Link Building and contains the newer Control Room and associated cable rooms, switch gear and other ancillary equipment required for the reticulation of generated power. The Control Room Building comprises a ground floor with sub floors, Level 1 with a Cable Room, Bus Floor, and smaller rooms, and Level 2 with the 25 Cycle Switch Floor, Control Room, and Link Building spaces.

8.4.2 Ground Level

The Ground Level of the Control Room Building contains a sub floor area, a reactor floor, a cable chamber, and an open space. The ceiling of this floor comprises the underside of a concrete slab with marks of timber formwork and steel I-beams. The level is accessed via a pair of double doors halfway along the eastern elevation that lead to a room (CS G.3), and another pair of doors that lead to the main sub floor space (CS G.1). CS G.3 houses a set of cabinets with switches for various distribution areas and is connected to the raised Cable Chamber located west of it. This Cable Chamber runs along the west side of the level, and also leads to a set of stairs that step back down to the Reactor Floor (CS G.2). Along the eastern wall of the reactor floor is a bricked-up opening, a concrete trough, a sink, as well as a raised section of floor with a brick dividing wall in the northeast corner. The Reactor Floor was once separated from CS G.3 by a brick wall, but a large opening has since been crudely made.

The main subfloor space (CS G.1) in the north is separate from the other spaces. It has a grid of steel structural

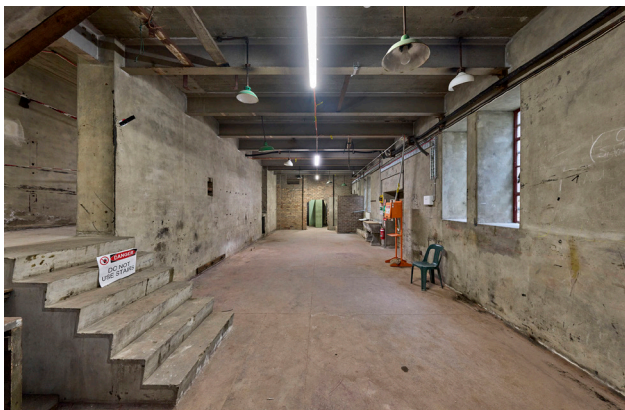


Figure 8.4 Control Room Building Ground Floor, 2024 (courtesy of Chris Bennett: Evolving Picture)

columns, and the floor is natural ground. The north, west, and south walls are brick, while the eastern wall comprises timber planks. Along the middle of the north wall is a small concrete platform with pumps and switchboards, and some cable trays coming from the south. This equipment was possibly used for fire services and included controls for an automatic sprinkler system.

8.4.3 Level 1

Level 1 of the Control Room Building is an L-shaped level that is accessed via the southeast staircase and from doors leading from the outside area of the site into the Cable Room. It comprises a concrete floor, a concrete slab ceiling supported by steel I-beams, and rendered masonry walls. The Cable Room (CS 1.1) is located in the northwest section of the floor and houses an extensive series of cables and switchboards. The room has an operating desk near its centre, and the switchboards and frames with cables affixed to them arranged in a radial, semi-circular arrangement towards the west of the desk. Parallel to the western wall are two rows of steel frames and boards with cables fixed to them. The floor comprises several cable trays carved out of



Figure 8.5 First Floor Cable Room, 2024 (Design 5 - Architects)



Figure 8.6 First Floor Cable Corridor, 2024 (Design 5 - Architects)

the concrete slab – most of which are covered by steel plates. Halfway along the western wall of the Cable Room is a pair of steel doors that lead outside to the western end of the White Bay Power Station site. At the eastern wall are two small sets of timber steps leading up to the Cable Corridors (CS 1.3A–B) from the Cable Room. These corridors have walls of rendered masonry with hardwood battens supporting rows of cables – with their original configuration maintained – from the Control Room. The south corridor (CS 1.3A) ends under a vertical shaft which carries cables up into the Switch House, while the north corridor continues further east and ends beside an opening along the wall of the Switch House where the cables have been cut. Directly east of the Cable Room and flanked by these Cable Corridors is the Rheostat Room (CS 1.4), which is accessed via a small set of stairs to a pair of timber louvre doors and houses six Rheostats used for adjusting and controlling current flow. Near the centre of the room is a set of concrete stairs leading to the Link Building above. At the south end of the eastern wall is a battery charger and a timber panelled door leading to the Telephone Termination Room (CS 1.5), with extant telephone exchange equipment along its eastern wall.



Figure 8.7 First Floor Bus Floor (CS1.2) with white taping method, 1958 (courtesy of ECNSW Archive, 02360C)



Figure 8.8 First Floor Bus Floor (CS1.2), 2024 (Design 5 – Architects)

Separate to this northern section of Level 1 and south of the Cable Room are the East and West Bus Floors (CS 1.2). The Bus Floor is accessed via the southeast stairwell, which has a woven wire cage around it. Throughout the bus floors are corridors of concrete boxings and cut multi-cable as well as painted labelling noting the different electricity distribution areas.

8.4.4 Level 2

Level 2 of the Control Room Building is an L-shaped level that includes the Link Building. The level comprises a concrete floor with mostly rendered masonry walls and is accessed via the southeast staircase, from the 1925 Switch House via the Link Building, and from the stairs in the Link Building connected to Level 1. The other southeast staircase is contained within a woven wire cage and leads to the 25 Cycle Switch Floor (CS 2.2) which occupies the south half of the Control Room Building. This space contains three rows of housing for the 25 Cycle Switches, though the switches themselves have been removed. It has steel-framed windows evenly spaced on the east,



Figure 8.9 Second Floor Switch Floor (CS2.2) with oil circuit-breakers, 1951 (courtesy of Department of Railway Archive, E2603)



Figure 8.10 Second Floor Switch Floor (CS2.2), 2024 (Design 5 – Architects)

west, and south walls, and all walls have been painted. The fibre cement sheeting that once lined the ceiling has been removed, exposing the timber trusses and underside of the insulated gabled roof. In line with some of the housing boxes are cable trays that are flush with the floor and have steel plate covers. The 25 Cycle Switch Floor has an opening at the north end of the western wall which leads to a Passage (CS 2.4). This space protrudes from the main volume of the Control Room Building and connects to the main Passage from the Switch House (CS 2.3). At the southern end of its eastern wall is a boarded pair of timber doors with a beam protruding from just below the lintel – likely used to hoist up equipment directly to Level 2 from the Southwest Yard below. Further north is another door that opens onto an outdoor balustraded concrete platform adjacent to the Link Building. This platform has a set of steel-framed stairs along its southern side which connects down to Switch House Level 1 Cable Tunnel Roof. North of these stairs is a ladder leading to the roof of the Link Building, which also has a ladder along its south that leads to the roof of the Control Room Building.

The 1948 Control Room (CS 2.1) is located in the northwest section of the floor and houses the main semi-circular Control Panel and control switches, two set timber desks, as well as a series of electric cabinets both behind and adjacent to the Control Panel. It has a similar arrangement to the Cable Room directly beneath it on Level 1. It has a fibre cement sheet ceiling, linoleum floor tiles, and painted walls with steel-framed windows on its north, east, and west walls. Near the centre of the eastern wall is a pair of timber double doors that lead to CS 2.3. This passage is part of the Link Building and has an opening at its eastern end that connects to the 1925 Switch House's lift shaft and stairwell. Along the north of this passage, from west to east, are a Kitchen (CS 2.5) and a room (CS 2.6) which connects to a shower and W.C. (CS 2.7). All the Link Building spaces have painted rendered walls and the fibre cement ceiling sheets have been removed, exposing the underside of the gabled roof.

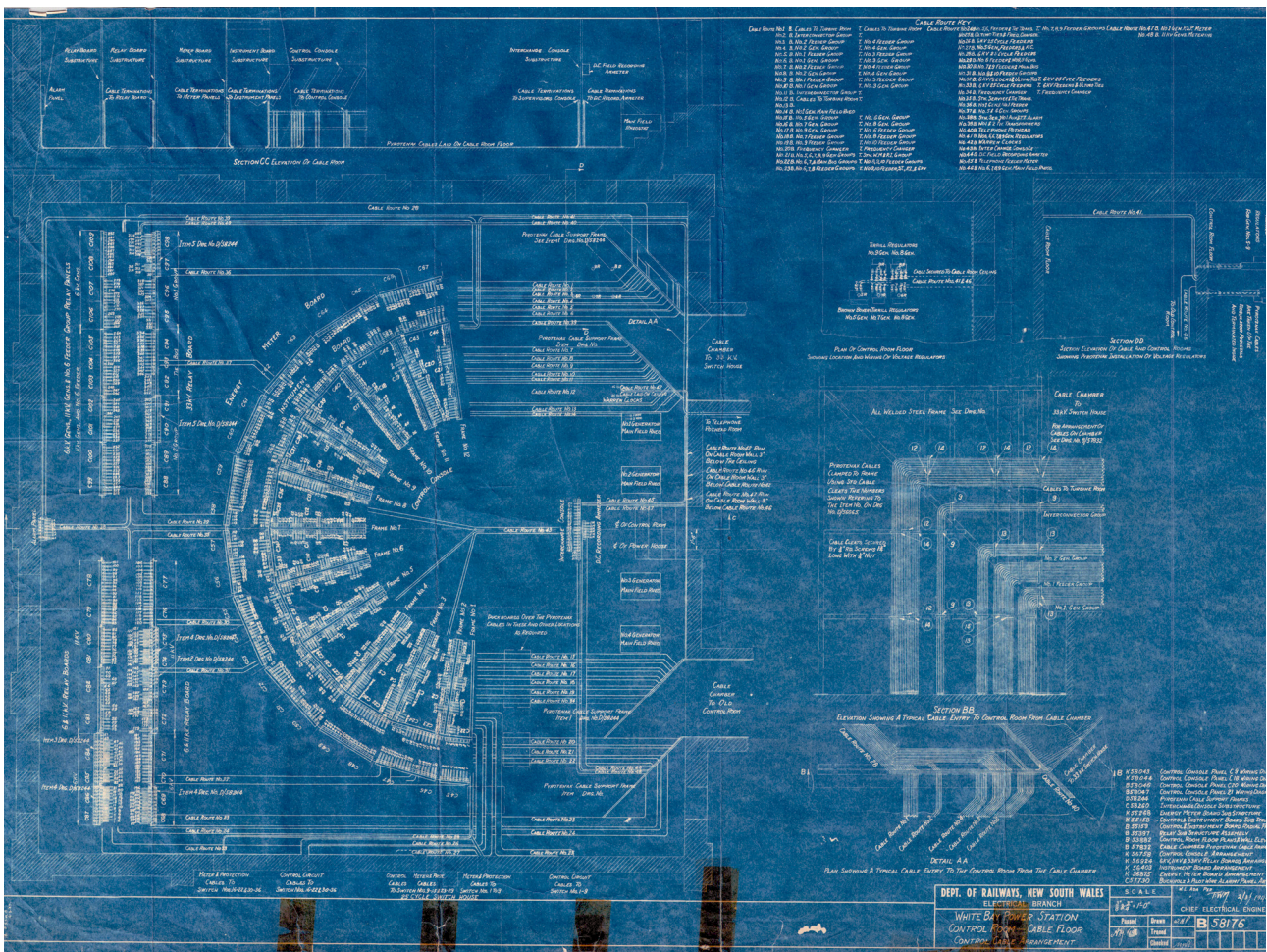


Figure 8.11 Archival drawing of First Floor Cable Floor cable arrangement, 1949 (courtesy of PMNSW archive, 12163)

8.5 ALTERATIONS & CONDITION

Following the decommissioning of White Bay Power Station in 1983, the Control Room Building fell into dilapidated state. The paint on walls peeled heavily, and the building suffered from water damage. Broken windows and damaged openings and other threats to the space included pigeon and pest entry and to a lesser extent, vandalism.

The 2022–24 remediation works for the Control Room Building have focused on essential maintenance, restoration, and preservation. This includes structural remediation, bird proofing, repainting, and stabilising and treating for damage and corrosion. Other works have included safety, security, and lighting. These are discussed in general terms below:

| Element / Room | Reference |
|-----------------------|--|
| Flooring | Concrete floors were retained and not altered for public access. Holes and penetrations were covered and patched for safety. Some existing vinyl tiles in the main Control Room were loose. They were tested for hazardous materials and re-adhered. |
| Internal walls | Walls and surfaces that were originally painted were repainted to encapsulate lead paint in colours that closely match the original. |
| Windows | Steel window frames and glass were retained in place and treated for rust. Most windows were covered externally with clear acrylic sheets fixed to timber battens. |
| Metal roof | The roof and box gutter over the control room was replaced with new Colorbond. Copper rainwater heads and downpipes were either repaired or replaced to match the original copper New safe roof access systems were installed, including ladders, platforms and static lines. |

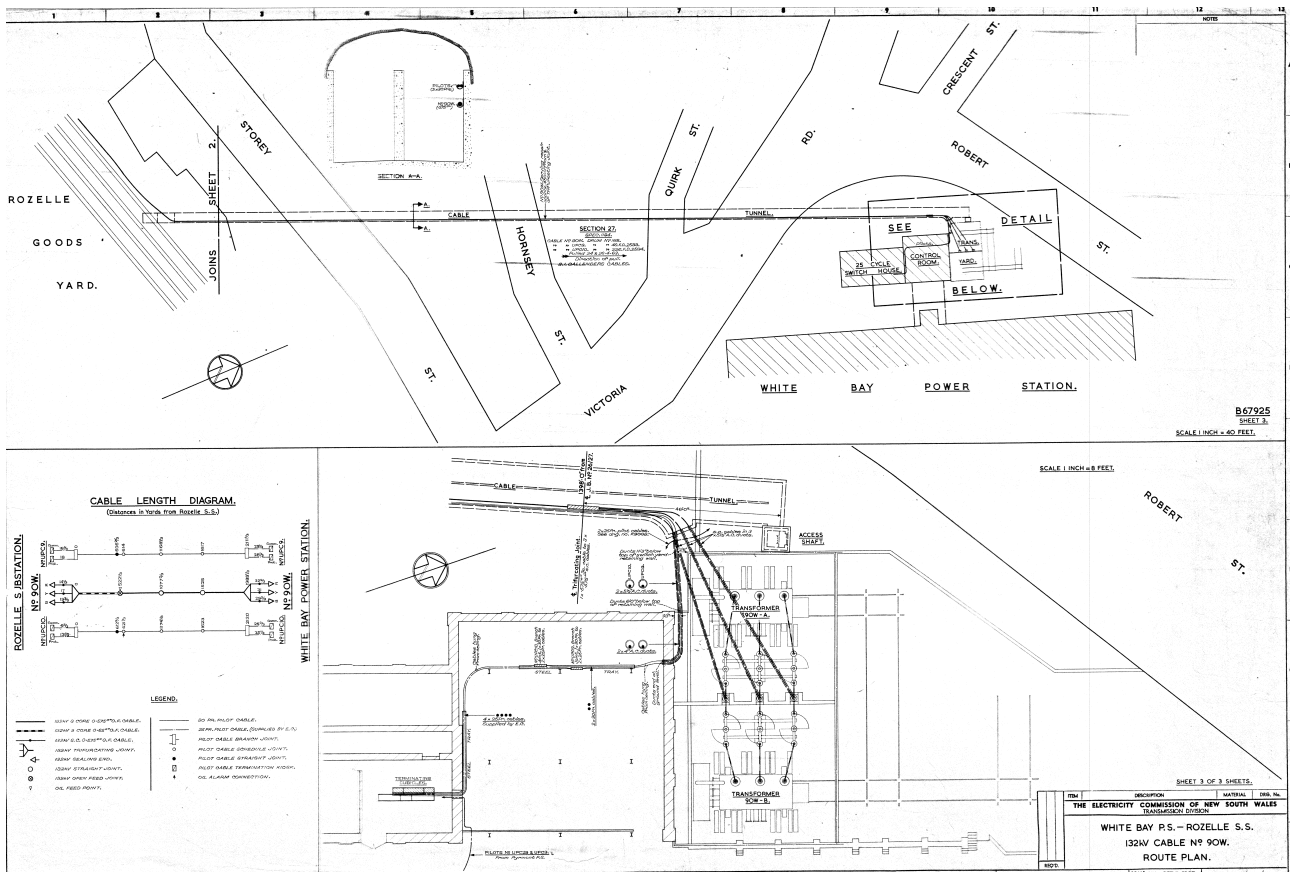


Figure 8.12 Archival drawing showing underground cable tunnel from Control Room Building, 1966 (courtesy of PMNSW Archive, 12186)

8.6 SIGNIFICANCE

The Control Room Building is an integral part of the White Bay Power Station and has historical associations with the electrification of the Sydney rail and tramways systems. The building and its rare collection of extant equipment and machinery are demonstrative of engineering design principles, and are representative of the Power Reticulation System. When considered alongside the Switch House, the Control Room Building contributes to an understanding of the changes in electricity reticulation during the second half of the twentieth century.

The Control Room Building contains an evocative set of spaces that demonstrate a strong industrial aesthetic.

In particular, the panels and switchboards in the Control Room, the Cable Corridors, and the remnant housing and cable channels of the Bus Floor and 25 Cycle Switch Floor offer strong interpretability of the scale of the power station's operations and the processes of the reticulation of electricity. Externally, the Control Room Building contributes to the overall landmark presence of White Bay Power Station.

The Control Room Building is symbolic of the industrial history of Sydney Harbour. For both former workers and locals, the extant machinery and equipment evidence operative processes and changes in technology over time in a way that is integral to the past and identity of the locality.



Figure 8.13 Control Room West Elevation, 2024 (courtesy of Chris Bennett: Evolving Picture)

8.7 REFERENCE TO POLICIES


The Control Room Building is an integral part of the White Bay Power Station. The following policies from the White Bay Power Station CMP are relevant to the Control Room Building and should guide its ongoing care and management, including decisions about conservation, future use, and development.

Refer to Volume 1 of the White Bay Power Station CMP (2025) for full details and an explanation of each policy.

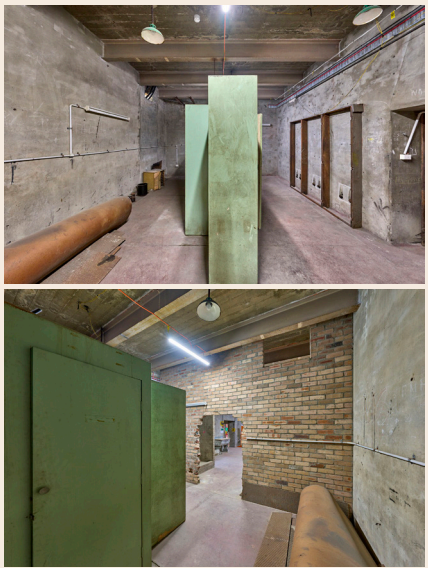
| Policy | Description |
|---|--|
| Overarching Policy | |
| 1–4 | Purpose & Framework, Client’s Requirements & Use, Cultural Significance, Conservation Principles |
| The Site & Its Fabric | |
| 5 | Context and Setting, Visual Identity |
| 6.1–6.8 | Broad Framework / Building Fabric |
| 6.9–6.12 | Heritage Machinery |
| 6.39 | Control Room Building |
| 6.40 | 1948 Control Room |
| Tolerance for Change Table 6.6.12.8 and Opportunities for Change Table 6.6.12.9 | |
| 7 | Landscape and Site Generally |
| 8 | Moveable Heritage |
| 9 | Archaeology |
| Future Use & Development | |
| 10 | Future Use & Development – Activation |
| 11.1 | New Structures Generally |
| 12 | Signage |
| 13 | Services – Mechanical, Electrical, Lighting, Vertical Transport, Hydraulic, Fire, Security |
| Operations & Management | |
| 14 | Code & Statutory Compliance |
| 15 | Access & Accessibility |
| 16 | Condition & Care of Fabric |
| 17 | Documents & Records |
| 18 | Climate Change |
| 19 | Heritage Interpretation Plan |
| 20 | Management & Maintenance |
| 21 | Adoption, Implementation & Review of CMP |

8.8 INVENTORY OF SPACES


This section aims to provide an overarching understanding of the spaces, as well as their role in the operational systems at the White Bay Power Station.

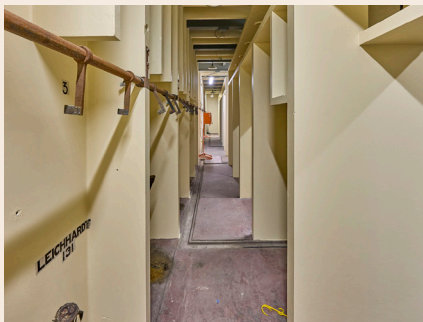
| | | | |
|--------------------------|---|--|--|
| Room / Item | 1948 Sub Floor (Centre) | | |
| Building | Control Room Building |  <p>(Design 5 – Architects)</p> | |
| Room No. | CS G.1 | | |
| Significance | 4 – Little / Neutral | | |
| Description | The main sub floor space is accessed via a door at the north end of its eastern elevation. It houses an extant set of pumps and switchboards connected to fire services, including a sprinkler system. | | |
| Elements | General Description | | |
| Floor | Natural ground with evidence of earlier structures. Concrete slab at middle of north wall for services. | | |
| Walls | Brick wall on north, south and west sides. Timber plank wall with hatches on east side, with evidence of use as a storage space. Steel columns throughout space rivetted to pad footings. New chainwire fence on east side installed in 2022–24. | | |
| Ceiling | Off-form concrete with evidence of timber formwork supported by steel I-beams. | | |
| Doors and Windows | Ledged, braced, and sheeted timber double door at north end of east wall. New door leaf replacing missing one, existing worn door leaf made operable in 2022–24. Hatches in east wall are top hinged. | | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | | |
| Other | Pumps, valves, conduits and switchboard cabinet connected to fire services located along middle of north wall. Various pipes and conduits running along ceiling and wall in this area. | | |

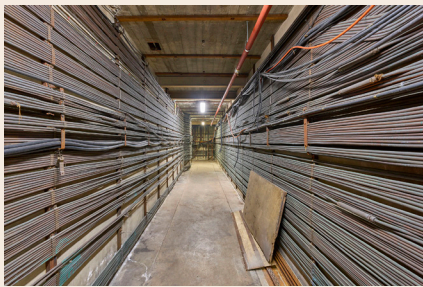
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|--------------------------|--|--|
| Room / Item | Reactor Floor (Lowest) West Cable Chamber (Raised) | |
| Building | Control Room Building |  <p>(Design 5 – Architects)</p> |
| Room No. | CS G.2 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>Accessed via stairs from Level 1, these spaces occupy the southern half of the Control Room Building ground level. Though now empty, the Reactor Floor likely once housed equipment and machinery related to the Power Reticulation System, while the West Cable Chamber would have had an extensive set of cables running through it and secured to its walls.</p> | |
| Elements | General Description | |
| Floor | Concrete, Reactor Floor space has scribed margins and a raised section in the northeast corner. Concrete stairs leading up from the Reactor Floor to the West Cable Chamber at south end, and high step-up at north end. | |
| Walls | <p>Reactor Floor: Rendered masonry walls on east, south, and west sides. Bricked up opening on east wall.</p> <p>Brick wall on north side of Reactor Floor with central opening and openings near the top corners. Small brick dividing wall near northeast corner.</p> <p>West Cable Chamber: rendered masonry walls with some protruding cable holders and steel rods, some patched penetrations. Southern end has bricked up opening and a section of small cavity filled with stacked masonry.</p> <p>Stairwell: rendered masonry, half painted. To north of stair, open timber boarded frames with woven wire mesh on upper half. Upper half of masonry wall in stairwell repainted in 2022–24.</p> | |
| Ceiling | Off-form concrete with evidence of timber formwork supported by steel I-beams. Some open circular penetrations and steel rods on the raised West Cable Chamber. | |
| Doors and Windows | <p>Concrete threshold to West Cable Chamber at north and south ends of the Reactor Floor west wall.</p> <p>Six upward sliding windows with frosted wired glass (some clear) along east wall of the Reactor Floor.</p> <p>Pair of 4 pane, frosted, and wired windows on east end of south wall at stairwell.</p> <p>Timber boarded braced and ledged door at the bottom of southeast stairwell, opening to west side. Barrel bolt lock installed on stair side in 2022–24.</p> | |
| Lighting | <p>Former pendant dish lights and exposed lightbulbs from ceiling in Reactor Floor.</p> <p>Lights along walls in West Cable Chamber, missing covers.</p> <p>New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | <p>Concrete water trough and sink along north end of east wall in Reactor Floor space.</p> <p>Steel brackets and fixtures on walls of the West Cable Chamber.</p> <p>Concrete stair to stairwell, with tubular steel handrail.</p> | |
| Movable heritage | <p>Various items stored under stairs, including timber boards, timber trolley.</p> <p>Various steel covers</p> <p>Timber cable conduits under the raised West Cable Chamber.</p> <p>Various steel tubes and brackets placed at north end of the West Cable Chamber.</p> | |

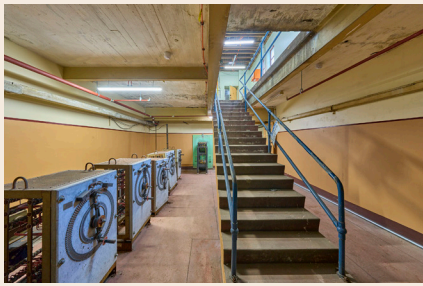
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|--------------------------|--|---|
| Room / Item | North End Room | |
| Building | Control Room Building |  |
| Room No. | CS G.3 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>This room is located in the central-east area of the Control Room Building ground level. It houses a set of cabinets containing switch gear pertaining to the Power Reticulation System.</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Walls | <p>Rendered masonry walls on north, east, and west sides. Extant equipment and steel brackets on east wall for machinery. Bricked up opening to West Cable Chamber on west wall (partially left open for conduits). Brick wall on south end with opening (as described in CS G.2).</p> | |
| Ceiling | Off-form concrete with evidence of timber formwork supported by steel I-beams. | |
| Doors and Windows | Timber framed, braced and ledged double doors at south end of east wall. Barrel bolt lock added externally in 2022–24. | |
| Lighting | <p>Original fluorescent lights on walls. New temporary lighting and catenary wires installed 2022–24.</p> | |
| Other | Terminating Cubicle in the centre of the room containing switch gears. | |

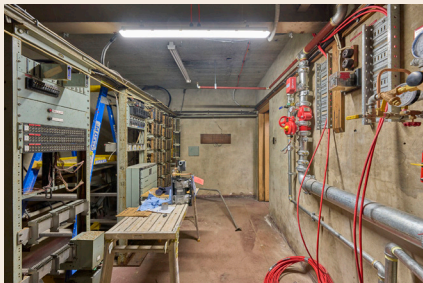
(courtesy of Chris Bennett: Evolving Picture, 2024)

| | | |
|--------------------------|---|--|
| Room / Item | Cable Room | |
| Building | Control Room Building |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | CS 1.1 | |
| Significance | 1–Exceptional | |
| Description | The Cable Room is located in the northwest part of the Control Room Building Level 1. It houses vast amounts of pyrotenax cables and switchboards arranged radially and connecting to the cable tunnels as part of the Power Reticulation System. | |
| Elements | General Description | |
| Floor | Concrete with scribed margins and numerous cable trenches covered with steel checker plates flush with floor. Concrete stairs at middle of east wall leading up to CS 1.4, and timber stairs near north and south ends of east wall leading to CS 1.3A and B. | |
| Skirting | Painted red. West side repainted as part of the 2022–24 works. | |
| Walls | Rendered masonry. West side painted red up to dark red dado strip, and cream above. West side repainted as part of the 2022–24 works. Bricked up openings on north walls, all rendered except eastern ones exposed. Steel columns throughout space. Columns in center area painted grey over original colour. | |
| Ceiling | Painted off-form concrete with evidence of timber formwork supported by steel I-beams. | |
| Doors and Windows | Steel double doors on west wall, glazing has been replaced with steel sheets. Steel doors repainted in 2022–24. Timber double doors with louvre panels on east wall. Steel framed 4 pane pivot windows (two middle panes pivot): three pairs on west wall, and two on the east wall. Inner window pair of windows adjacent to door has exhaust on the top panels. On the west side, northern one is covered with timber framed clear acrylic screen externally, other two are direct fixed, all as part of 2022–24 works. | |
| Lighting | Former pendant dish lights and fluorescent lights from ceiling. New temporary lighting and catenary wires installed 2022–24. | |
| Machinery | Control Room (a, b, and c) (6.1) Cables and Chasers (6.3) | |


| | | |
|--------------------------|--|--|
| Room / Item | Bus Floor (Middle) West & East Halves | |
| Building | Control Room Building |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | CS 1.2 | |
| Significance | 2-High | |
| Description | <p>The Bus Floor is located in the southern half of the Control Room Building Level 1 and is accessed by the concrete stair in the southeast corner. It contains the remains of electrical equipment, concrete boxing, and cable elements. The distribution areas are noted on each of the concrete housings.</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins and slots to floor below under former equipment locations. | |
| Skirting | Painted dark red at stairwell. Repainted in 2022-24. | |
| Walls | <p>Rendered masonry walls. Woven wire cage to stair in southeast corner. Dividing wall runs longitudinally through the middle of the space and has two large openings (near the middle and towards the south). Repainted in 2022-24.</p> <p>Southeast stairwell: woven mesh wire to north side with painted red steel framing.</p> | |
| Ceiling | <p>Painted off-form concrete supported by steel I-beams.</p> <p>Stairwell: painted underside of concrete stair, repainted in 2022-24.</p> | |
| Doors and Windows | <p>Steel frame woven wire door to stairwell at southeast corner of the Bus Floor East.</p> <p>Steel framed 4 pane pivot windows (two middle panes pivot): seven on east side, five on south side. Covered externally with timber framed clear acrylic screen on the south side, and on the fifth and sixth windows from north side on the east side.</p> | |
| Lighting | <p>Former pendant dish lights and fluorescent lights from ceiling.</p> <p>New temporary lighting and catenary wires installed 2022-24.</p> | |
| Other | Concrete boxing for machinery with remains of electrical equipment and cable elements, repainted as part of 2022-24 works. | |
| Movable heritage | Various sizes of timber ladders and platforms | |


| | | |
|---------------------|---|--|
| Room / Item | Cable Corridors from Cable Room | |
| Building | Control Room Building |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | CS 1.3A & B | |
| Significance | 1–Exceptional | |
| Description | <p>The two Cable Corridors run from east to west in the eastern part of the Control Room Building Level 1. They are accessed from the Cable Room (CS 1.1) through timber stairs and house the extensive series of cables for the Power Reticulation System that run to the 1925 Switch House.</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Walls | <p>Rendered masonry with hardwood battens supporting pyrotenax cables. Opening to Cable Room (CS 1.1) at west end of each tunnel. Brick wall (wall of the 1925 Switch House) at east end of north tunnel.</p> | |
| Ceiling | Off-form concrete with evidence of timber formwork supported by steel I-beams with hardwood battens for cables. | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | |
| Other | Steel checker cover plates resting along wall. | |
| Machinery | Cables and Chasers (6.3) | |

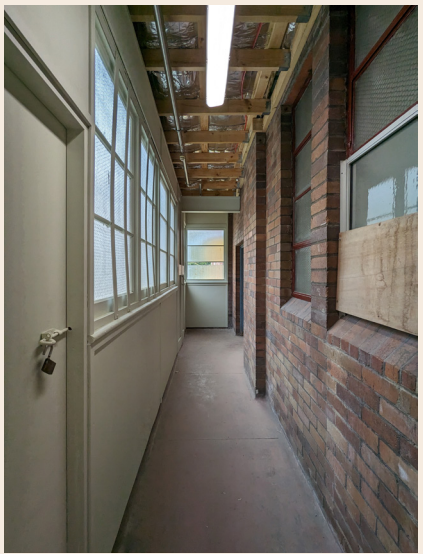
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|--------------------------|--|--|
| Room / Item | Rheostat Room | |
| Building | Control Room Building | |
| Room No. | CS 1.4 | |
| Significance | 2-High | |
| Description | <p>Accessed by stairs from Level 2 or via the Cable Room (CS 1.1), this space houses six rheostats that were used to adjust electric current flow, as well as a PacificGrid battery charger.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Coved skirting painted dark red. Repainted as part of 2022-24 works. | |
| Walls | Rendered masonry walls, painted brown to 1600mm (approx.) with 30mm dark red dado strip and cream above. Repainted as part of 2022-24 works. | |
| Ceiling | Painted off-form concrete with evidence of timber formwork supported by steel I-beams. | |
| Doors and Windows | <p>Timber double doors on west wall with louvre panels to CS 1.1.</p> <p>Painted orange timber framed and ledged door with three figured glass panels at south end of east wall to CS 1.5.</p> | |
| Lighting | <p>Former fluorescent lights from ceiling.</p> <p>New fluorescent lights, temporary lighting and catenary wires installed 2022-24.</p> | |
| Other | <p>Concrete stairs with tubular steel handrails going up the middle of the space.</p> <p>Wires and conduits along walls.</p> <p>PacificGrid 50 Volt Battery Charger along east wall.</p> <p>Extant electrical equipment.</p> | |
| Machinery | Rheostats (6.2) | |


| | | |
|--------------------------|--|--|
| Room / Item | Telephone Pot Room | |
| Building | Control Room Building |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | CS 1.5 | |
| Significance | 2 – High | |
| Description | The room houses a twentieth-century main distribution frame (MDF) that connected the equipment inside the plant to cables and subscriber carrier equipment outside the plant. | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Coved skirting painted dark red. | |
| Walls | Rendered masonry walls. timber batten running around above doorframe height supporting cables. | |
| Ceiling | Off-form concrete with evidence of timber formwork supported by steel I-beams. | |
| Doors and Windows | Painted orange timber framed and ledged door with three figured glass panels at south end of west wall to CS 1.4. | |
| Lighting | Former fluorescent lights from ceiling. New temporary lighting and catenary wires installed 2022–24. | |
| Other | Main distribution frame running throughout the space, secured to the floor by steel plates. Extant cables and electrical equipment. Fire sprinkler pipe connection to main board installed in 2022–24. | |
| Movable heritage | Steel cabinets | |


| | | |
|--------------------------|---|--|
| Room / Item | Control Room | |
| Building | Control Room Building |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | CS 2.1 | |
| Significance | 1-Exceptional | |
| Description | The Control Room was used to manage the Power Reticulation System throughout the power station via the Control Panel and various cabinets, | |
| Elements | General Description | |
| Floor | Linoleum tiles. | |
| Skirting | Black, repainted in 2022-24. | |
| Walls | Painted rendered masonry: green. A patch of earlier paint has been kept on the eastern wall south of the door, showing the very original colour scheme of brown to 1600mm (approx.), a dark red dado strip, and cream above until doorframe height. Repainted in 2022-24. | |
| Ceiling | Fibre cement sheets with timber battens and batten lights (arranged radially above Control Panel). Asbestos lined ceiling removed and repaired in 2022-24. Hatch opening on the west side around midway. | |
| Doors and Windows | Painted panelled timber double doors half glazed and boarded over on east side. Metal frame 4 pane figured glass windows with middle pair pivot. Some are wired and replaced with aluminium. Four pairs on north and west walls, and two pairs on east wall. Windows are covered with timber framed clear acrylic externally on the west side. One bottom panel on the most west side on the north end is covered with acrylic sheet. | |
| Lighting | New batten lights replacing inoperable existing lights. Catenary wires installed 2022-24. | |
| Other | Two set timber desks near the east end of the room surrounded by the radially control panel. Various electrical cupboards and cabinets located on east and west sides of the room. Yellow steel ladder to open ceiling hatch | |
| Machinery | Control Room (a, b, and c) (6.1) | |
| Movable heritage | Removed machinery light caps stored in timber desk drawer | |


| | | |
|--|--|---|
| Room / Item | 25 Cycle Switch Floor | |
| Building | Control Room Building |  |
| Room No. | CS 2.2 | |
| Significance | 3 – Moderate | |
| Description | <p>The 25 Cycle Switch Floor is located in the southern half of the Control Room Building Level 2, and once housed the motor-driven oil bath cycle switches for the power station's Power Reticulation System. It retains the three rows of concrete housing for these cycle switches.</p> | |
| <small>(courtesy of Chris Bennett: Evolving Picture, 2024)</small> | | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. The tops of the structural steel I-beams are exposed under the concrete housings. Cable trays are flush with the floor and covered by steel checker plate covers. | |
| Skirting | Painted dark red. Repainted in 2022–24. | |
| Walls | Painted rendered masonry walls: painted brown to 1600mm (approx.) with 30mm dark red dado strip and cream above. Rendered masonry walls repainted in 2022–24. | |
| Ceiling | Southeast stairwell: woven mesh wire to north side with painted red steel framing. Timber battens and underside of building roof: corrugated galvanised steel and sarking supported by steel trusses. Original fibre cement sheets were removed in 2022–24 due to water damage. | |
| Doors and Windows | Steel frame woven wire door to stairwell at southeast corner of the Bus Floor East. Blue door frame (doors missing) at north end of east wall. Steel framed 4 pane pivot windows (two middle panes pivot) with figured (and some wired) glass: five pairs on east wall, three on south wall, six pairs on west wall. | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | |
| Other | Concrete housing for cycle switches. Graffiti removed and housing cleaned and repainted in 2022–24. Concrete stair to southeast corner. | |
| Movable heritage | Various timber ladders and steps | |

| | | |
|--------------------------|--|--|
| Room / Item | Passage from Switch House | |
| Building | Link Building |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Room No. | CS 2.3 | |
| Significance | 2-High | |
| Description | The passage connects the Control Room –and by extension, the rest of the Control Room Building – to the amenity spaces in the Link Building. The passage also connects to Switch House. | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Painted dark red. Repainted in 2022–24. | |
| Walls | Painted rendered masonry: green (not rendered and painted above timber battens). Repainted in 2022–24. | |
| Ceiling | Timber battens and underside of building roof: corrugated galvanised steel and sarking supported by steel trusses. Original fibre cement sheets and lights were removed in 2022–24. | |
| Doors and Windows | <p>Painted timber double doors with glazed panels (boarded up) to Control Room at west end of passage.</p> <p>Panelled door on north wall to kitchen (CS 2.5) and to Locker Room (CS 2.6).</p> <p>Panelled door to passage (CS 2.4) on west end of south wall.</p> <p>Panelled door to 1925 Switch House stairwell (SH 2.11) at east end of wall.</p> <p>Two pairs of steel frame 3 pane wired glass window on south wall.</p> | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | |
| Other | Concrete stairs with tubular steel handrail along west side of north wall. | |

| | | |
|--------------------------|--|--|
| Room / Item | Passage | |
| Building | Link Building | |
| Room No. | CS 2.4 | |
| Significance | 3 – Moderate | |
| Description | <p>The passage is accessed from the 25 Cycle Switch Floor (CS 2.2) and connects to the Link Building passage from Switch House (CS 2.3). It also has a hoist beam that was used to lift equipment and machinery up and down to the South West Yard. The east wall suggests that this passage was constructed later than the main Control Room Building and attached onto its side.</p> | |
| |  | |
| | (Design 5 – Architects) | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Walls | Brick wall on north and west sides – both formerly exterior walls. Fibre cement sheet walls on east and south walls with timber battens. Fibre cement cleaned and repainted in 2022–24. | |
| Ceiling | Timber battens and underside of building roof: corrugated galvanised steel and sarking supported by steel trusses. Original fibre cement sheets and lights were removed in 2022–24. | |
| Doors and Windows | <p>Blue door frame at south end of west wall from Cycle Switch Floor.</p> <p>Timber double doors to external on south end of east wall, repainted in 2022–24.</p> <p>Single door on north end of east wall to external, replaced in 2022–24.</p> <p>Single timber door on north wall.</p> <p>Steel frame figured wired glass windows on east, south, and west walls. Some panes on west wall are figured only. Steel framing and bars on the east wall windows repainted in 2022–24. Windows on south and east walls covered with acrylic screen direct fixed to existing frames. Northern window on west side has aluminium frame at the lower half, with lowest panel boarded.</p> | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | |
| Other | Hoist beam protruding through timber double doors, repainted in 2022–24. | |

| | |
|--------------------------|--|
| Room / Item | Kitchen |
| Building | Link Building |
| Room No. | CS 2.5 |
| Significance | 4 – Little / Neutral |
| Description | The kitchen is one of the amenity spaces in the Link Building connecting the Control Room Building to the 1925 Switch House. |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| Elements | General Description |
| Floor | Concrete with scribed margins. |
| Walls | Painted rendered masonry: cream (not rendered and painted above timber battens). Repainted in 2022–24. |
| Ceiling | Timber battens and underside of building roof: corrugated galvanised steel and sarking supported by steel trusses. Original fibre cement sheets were removed in 2022–24. |
| Doors and Windows | Single painted panelled door on south wall. Pair of 4 pane wired glass pivot (middle two panels pivot) windows on north wall. Covered with timber framed clear corrugated sheeting externally in 2022–24. |
| Other | Kitchen bench with sink along north wall. White splashback tiles. Large metal cabinet. Tap in northeast corner on top of splashback. |
| Movable heritage | Various documents, papers and stationery inside cabinet |

| | | |
|--------------------------|---|--|
| Room / Item | Level 2 – Room | |
| Building | Link Building | |
| Room No. | CS 2.6 | |
| Significance | 4 – Little / Neutral | |
| Description | <p>This room formerly served as a locker room for the workers of the Control Room Building during the active years of the power station.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. | |
| Skirting | Painted dark red 100mm (approx.). Repainted in 2022–24. | |
| Walls | Painted rendered masonry: cream (not rendered and painted above timber battens). Repainted in 2022–24. | |
| Ceiling | Timber battens and underside of building roof: corrugated galvanised steel and sarking supported by steel trusses. Original fibre cement sheets were removed in 2022–24. | |
| Doors and Windows | <p>Five panel door (top three glazed, figured) on east end of south wall to passage from 1925 Switch House (CS 2.3).</p> <p>Single panelled door on south end of east wall to Shower/W.C. (CS 2.7).</p> <p>Two pairs of louvred windows (fixed) high up on north wall with figured glass. Windows covered with timber framed clear corrugated sheeting externally in 2022–24.</p> | |
| Lighting | New temporary lighting and catenary wires installed 2022–24. | |
| Movable heritage | Pendant dish lamp lampshades from 1948 Control Room, various steel plates, panels, door leaves from 25 Cycle Switch Floor (CS 2.2) to Passage (CS 2.4). | |

| | | |
|--------------------------|---|--|
| Room / Item | Shower / W.C. | |
| Building | Link Building | |
| Room No. | CS 2.7 | |
| Significance | 4 - Little / Neutral | |
| Description | The Shower / W.C. is one of the amenity spaces in the Link Building connecting the Control Room Building to the 1925 Switch House. | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |
| Elements | General Description | |
| Floor | Concrete with scribed margins. Shower floor is tiled. | |
| Skirting | Painted dark red concrete coving. Repainted in 2022-24. | |
| Walls | White tiles to 2000mm (approx.), painted rendered masonry above: cream (not rendered and unpainted above timber battens). Tiles cleaned and wall painted in 2022-24. | |
| Ceiling | Timber battens and underside of building roof: corrugated galvanised steel and sarking supported by steel trusses. Original fibre cement sheets were removed in 2022-24. | |
| Doors and Windows | Single panelled door on south end of west wall to adjacent room (CS 2.6). Ledged and boarded timber door to toilet cubicle. Two pairs of louvred windows (fixed) high up on north wall. Windows are covered externally with timber framed clear corrugated polycarbonate sheeting from 2022-24. | |
| Lighting | New temporary lighting and catenary wires installed 2022-24. | |
| Other | Bathroom vanity in southeast corner with sink and cupboards. Toilet and shower in cubicle. | |

8.9 INVENTORY OF MACHINERY


This section aims to provide an overarching understanding of the extant machinery concerning the buildings and spaces, as well as their role in the operational systems at the White Bay Power Station. The information below is based on the White Bay Power Station: Historic Machinery Inventory & Conservation Strategies report prepared by Godden Mackay Logan (May 2003) for the first edition of the Conservation Management Plan. Refer to Volume 3, Appendix D for the full GML report.


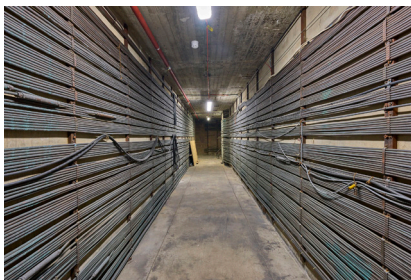
The machinery located within the Control Room Building is listed below:

Summary of Machinery

| Machinery | Location | System | Vol. 3 Ref. |
|---------------------------------|--|---------------------------|-------------|
| Main Control Room (a, b, and c) | Cable Room (CS 1.1), Control Room (CS 2.1) | Power Reticulation System | 6.1 |
| Rheostats | Rheostat Room (CS 1.4) | Power Reticulation System | 6.2 |
| Cables and Chasers | Cable Room (CS 1.1), Cable Corridors from Cable Room (CS 1.3A & B) | Power Reticulation System | 6.3 |

Machinery Descriptions Use and Significance

| Machine / Ref. | Main Control Room (a, b, and c) – 6.1 | |
|----------------|---|--|
| Location | Cable Room (CS 1.1), Control Room (CS 2.1) | |
| System | Power Reticulation System | |
| Significance | 1–Exceptional | |
| Description | <p>The primary equipment in the Control Room consists of the main semi-circular Control Panel and switchboard, electrical cabinets, and telephone exchange board. A series of meters, relays, links, fuses, dials, switches, and mechanisms allowed for this space to monitor, communicate with, and control the rest of the Power Station.</p> <p>Significance</p> <p>The Main Control Room is an integral part of the Power Reticulation System. It is representative of the transition from the early phase of power reticulation to the increasingly sophisticated developments in electrical distribution in the mid-twentieth century.</p> | |
| |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> | |

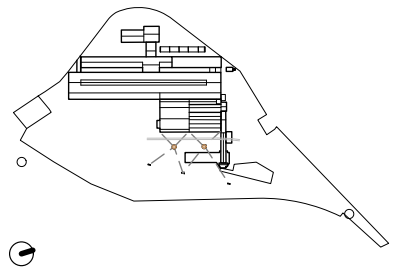
| | | |
|-----------------------|--|---|
| Machine / Ref. | Rheostats – 6.2 | |
| Location | Rheostat Room (CS 1.4) |  <p>(Design 5 – Architects)</p> |
| System | Power Reticulation System | |
| Significance | 2 – High | |
| Description | <p>The Rheostats are contained in cabinets and were used to regulate current and advance it as the speed of the Turbo-Alternator was advanced.</p> <p>Significance</p> <p>The Rheostats are an integral part of the Power Reticulation System. They are among the few surviving relics directly associated with the early Turbo-Alternator sets and are rare examples that are representative of the operations of earlier, low pressure Turbo-Alternators.</p> | |
| Machine / Ref. | Cables and Chasers – 6.3 | |
| Location | Cable Room (CS 1.1), Cable Corridors from Cable Room (CS 1.3A & B) |  <p>(courtesy of Chris Bennett: Evolving Picture, 2024)</p> |
| System | Power Reticulation System | |
| Significance | 2 – High | |
| Description | <p>The Cables and Chasers run in groups along the sides of the Cable Tunnels, with main power cables set into chasers against the walls. They formed linkages between the Control Room and Switch House and provided the reticulation of electricity to the wider community.</p> <p>Significance</p> <p>The Cables and Chasers are an integral part of the Power Reticulation System. They are representative of mid-twentieth century electrical distribution equipment and are among the few relics directly associated with the original Switch House.</p> | |
| | | |

9 EXTERNAL SPACES



Figure 9.1 Chimney Stacks, 2024 (courtesy of Toby Peet)

| | | |
|---|--|--|
| Space | 9. Chimney Stacks | |
| Spatial Reference (where applicable) | – | |
| Significance | 1–Exceptional | |
| History | <p>Construction on the Chimney Stacks began in 1949 and was completed by 1958. During the mid-1960s, as attitudes towards power station emissions became more criticising, tests were conducted to increase the precipitation of Boiler output and reduce emissions. This included the introduction of small quantities of chemicals such as sulphuric acid –which increased the corrosion and deterioration of the Stacks and precipitators.</p> <p>The last use of the Chimney Stacks was in 1983 before it was decommissioned. During the years after the closing of the power station, the electrostatic Ash Precipitators and Induced Draft Fans that were a part of the functioning of the Chimney Stacks were removed. Archival photographs prior to their removal reveal that there were four Ash Precipitators that were connected to the Boiler House and connected to the Chimney Stacks via flues.</p> | |
| Description | <p>The Chimney Stacks are located towards the northeast corner of the White Bay Power Station complex, and are considered a landmark feature of the power station. They are riveted steel plate chimneys approximately eighty metres (80m) high and taper from the base to approximately nine metres (9m) above ground and is cylindrical to the top. Each stack has internal bracing, but this does not extend to the top of each stack. A steel ladder runs up the eastern side of each stack.</p> <p>Four guy wires are attached to the top of each stack, with two secured to the roof of the Boiler House, and two secured on concrete plinths at ground level towards the eastern edge of the site. The concrete footings and plinths for the induced draft fans are located on the ground on the north and south sides of each stack but no machinery remains. The electrostatic Ash Precipitators through which the fans sucked the gases and microparticles from the Boiler House for emission via the Stacks have also been removed.</p> | |



Chimney Stack during construction, 1949 (courtesy of Railways Department Archives, A5115; E1391)



Chimney Stack base, 1957 (courtesy of NSW State Archives, NRS 20347-1-001210_B)

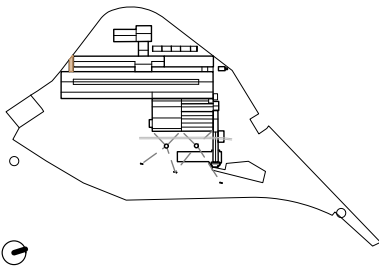


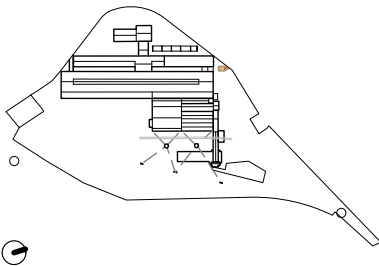
View north of Boiler House, precipitators and Chimney Stacks, 1994 (courtesy of ECNSW Archive, CN7.0016-F)

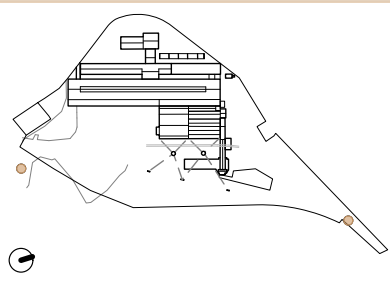


The pair of Chimney Stacks as seen from the south, 2024 (courtesy of Toby Peet)

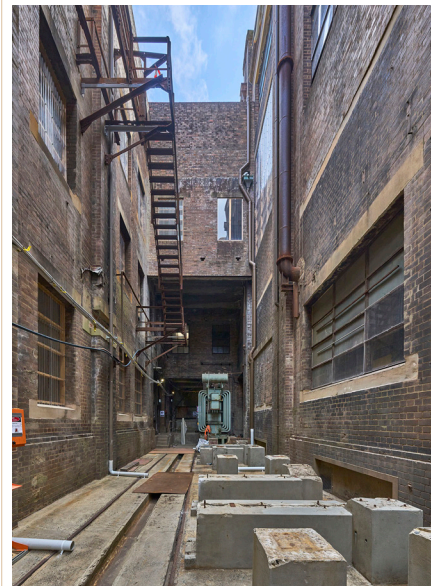
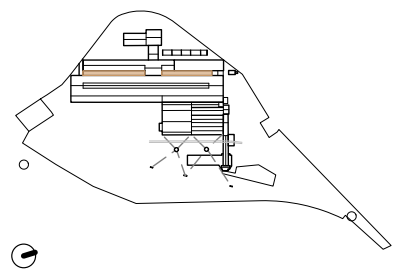
| | |
|---------------------------------------|---|
| Space | 9. Chimney Stacks (cont.) |
| Alterations & Condition | Major restoration works were carried out in 2022–24 to address corroded cladding, structural and safety issues. The steel ladders were removed, and repaired and majority was replaced before reinstalled. The outer walls of the chimneys were treated for rust, minor patching and repair and repainted using an epoxy paint system. The internal areas were cleaned, and some strengthening and bracing installed. An access system was also installed with new galvanised sheets, including flashing to prevent water entry. |
| Reference to Specific Policies | <p>Policy 5.4 – Visual Identity</p> <p>Policy 5.6 – Barangaroo, Observatory Hill, and Harbour Bridge</p> <p>Policy 5.7 – ANZAC Bridge</p> <p>Policy 5.8 – Glebe Point Road and Foreshore</p> <p>Policy 5.9 – Johnston Street, Annandale and Foreshore</p> <p>Policy 5.10 – Victoria Road</p> <p>Policy 5.11 – Mullens Street</p> <p>Policy 5.12 – Robert Street</p> <p>Policy 5.18 – Views within the place</p> <p>Policy 6.6 – West elevation</p> <p>Policy 6.7 – South elevation</p> <p>Policy 6.17 – Chimney Stacks</p> <p>Policy 6.18 – Chimney Stacks – guy ropes</p> <p>Policy 11.1 – New structures</p> <p>Policy 12.2 – Use of chimneys for decorative purposes</p> <p>Policy 13.9 – Feature lighting</p> |

| | | |
|---|---|---|
| Space | 10. Victoria Road Access Bridge | |
| Spatial Reference (where applicable) | AS 3.10 |  |
| Significance | 1-Exceptional | |
| History | The Victoria Road Access Bridge served as the front of house and administrative entry to the White Bay Power Station during its active years. It also served as the path of entry to the Entertainment Hall. | |
| Description | The access bridge is located to the west of Level 3 of the Administration and Staff Accommodation. It connects the Main Lobby and Stair (AS 3.1) to Victoria Road, and also provides access to the Switch House Entertainment Hall (SH 3.18). The bridge has a tubular steel balustrading on the south side and fence framing on the north side. The original access bridge is concrete, and a steel-framed ramp with fibre-reinforced glass panel flooring has been installed on top to allow for accessibility. | |
| Alterations & Condition | <p>In 2022-24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Steel structure: extensive corrosion treatment, repair and strengthening to the steel frame supporting the concrete deck. The steel frame was also coated and painted with protecting coatings. • Concrete deck: Concrete repairs mainly focused on the soffit and sides, including removing spalling and failed concrete and render, treating reinforcement (concrete cancer), and patching. The concrete deck was graded with a levelling screed to direct surface water to drainage outlets, then lined with a waterproof membrane. Drainage outlets and new downpipes were added. • Existing balustrade: The steel balustrades were treated for corrosion, and some posts and rails were replaced. All wire mesh was removed, treated for rust, painted, and reattached. Some sections were replaced. • New additions: A steel-framed ramp, balustrade, and handrail installed to meet current code. Additionally, a new hydrant was added to the west end. | |
| Reference to Specific Policies | <p>Policy 5.18 –Views within the place Policy 6.32 –Administration and Staff Accommodation Policy 6.34 –Victoria Road Access Bridge and entrance Policy 6.38 –Switch House Transformer Alley Policy 10.11 –Entry to the White Bay Power Station</p> | |

| | | |
|---|--|---|
| Space | 11. Amenities Block | |
| Spatial Reference (where applicable) | - |  |
| Significance | 2 –High (within the context of the site); 3 –Moderate (as an individual structure) | |
| History | The Amenities Block was built in the early 1950s, and provided amenities and storage for use by the workers at the White Bay Power Station. | |
| Description | <p>The Amenities Block is located near the northeast edge of the White Bay Power Station complex, north of the Switch House, in the North Forecourt. It comprises of two-storey brick services building with a flat concrete roof, and a brick incinerator on the north side of the main building volume. Above it is a steel bracket screwed to the north elevation that once supported the incinerator chimney. The east elevation consists of external steel-framed stairs with steel grate treads providing access to first level braced and ledged timber door. The south elevation is a timber-framed metal mesh door providing access to the ground floor. On the external west elevation are a series of small windows with concrete lintels and external plumbing to each of the internal toilet cubicles on first floor.</p> <p>Internally, the floors are off-form concrete, and the walls are painted brick. The ground level comprises seven toilet cubicles along the eastern wall with rendered masonry partition walls. The first level comprises an identical mirrored layout, with the toilet cubicles along the western wall. Each cubicle has a small timber framed window with glass louvres.</p> | |
| Alterations & Condition | <p>In 2022–24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Internal spaces: The internal spaces were cleaned and decontaminated. Moveable heritage was retained and stored neatly. • Concrete roof: Remedial repairs around the perimeter edge of the concrete slab, including treatment for concrete cancer. The entire roof was lined with a waterproof membrane, and drainage outlets were added. • External Walls: Partial reconstruction and brick stitching of the incinerator on the north elevation. • Other: The stairs on the east elevation were strengthened, painted and an access gate and railing were installed. The door on the first floor was replaced. Ground floor door and openings repaired or blocked where required. | |
| Reference to Specific Policies | Policy 7.7 –North Forecourt | |

| | | |
|---|---|---|
| Space | 12. North & South Penstocks | |
| Spatial Reference (where applicable) | - |  |
| Significance | 2 - High | |
| History | The penstocks were built in 1917 when the White Bay Power Station was first constructed. | |
| Description | The penstocks are two circular brick-lined vents to the cooling water channels. Each have associated motor-driven sluice gates which opened or closed to control the flow of water to and from the steam condensers of the turbine generators. Archival drawings show the penstocks are also referred to as Silt Wells or Manholes. | |
| Alterations & Condition | No works were carried out to the north and south Penstocks during the 2022-24 remediation works. | |
| Reference to Specific Policies | Policy 5.16 – Connection to water Policy 5.18 – Views within the place Policy 14.3 – SHR listing | |

| | | |
|---|---|--|
| Space | 13. Transformer Alley | |
| Spatial Reference (where applicable) | TA1 – North Transformer Alley TA2 – South Transformer Alley | |
| Significance | 1 – Exceptional | |
| History | The Transformer Alley in its current arrangement was formed when the full extent of the Switch House was completed in 1928. It once housed a set of transformers, of which only one remains today. | |
| Description | <p>The Transformer Alley (TA1 in the north and TA2 in the south) is located between the Turbine Hall and the Switch House. This tall, long, and narrow space is bridged by large pipes, ducts, and gangways at different heights. It is accessed via the lift and stairwell from the Switch House at its northern end, a door halfway along the east elevation of the Switch House and west elevation of the Turbine Hall, and via a roller door from both the Turbine Hall and the Switch House at the south end of the alley. Two shallow, parallel channels sunken into the concrete run along the entire length of the Transformer Alley and were once part of the rail tracks that were used to move the Transformers through the Alley. A series of concrete plinths once used to support the transformers are located throughout the Transformer Alley, and a single extant transformer is supported by these concrete plinths and is located at the north end of the Alley. Adjacent to this transformer is a small set of stairs leading up to a raised concrete level with the Switch House’s northeast lift and stairwell.</p> <p>Halfway along TA1 on the eastern side is a small, covered area with brick walls and a steel-framed hardwood roof. The middle of the Transformer Alley is a covered space (due to the Switch House Lavatory on Level 1). The ceiling of this space is vaulted corrugated galvanised steel and hardwood formwork. Further south, along TA2, there are a series of brick walls protruding from the western wall, forming a series of cells that once housed the transformers. Opposite these cells along the eastern wall is an elevated concrete trough used to house cables. The south end of the Transformer Alley is a tall concrete bank that runs up to meet the bridge connecting the Administration and Staff Accommodation lobby to Victoria Road.</p> | |

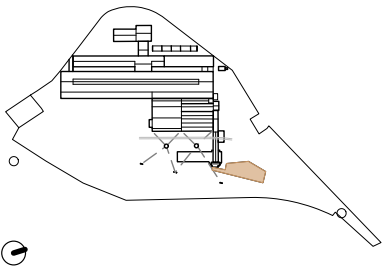


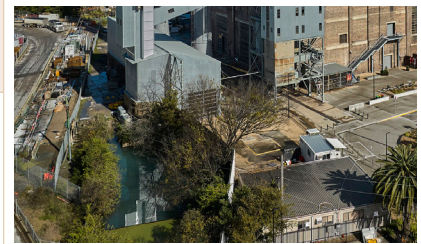
Transformer Alley looking north, 2024 (courtesy of Chris Bennett: Evolving Picture)



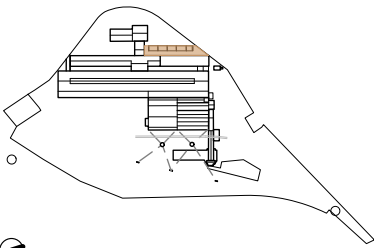
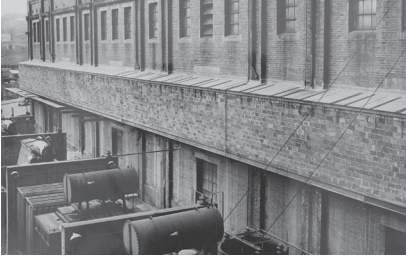

Transformer Alley looking south, 2024 (courtesy of Chris Bennett: Evolving Picture)

| | |
|---------------------------------------|---|
| Space | 13. Transformer Alley (cont.) |
| Alterations & Condition | <p>In 2022–24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Walkways: The high-level steel-framed walkways, attached to the east elevation of the Switch House, were treated for corrosion, reinforced and painted with clear protective coatings. To minimise the load on the steel frames, the concrete decks were removed from the walkways in the northern half of the Transformer Alley, while only some of the concrete decks were removed from the southern side. • Drainage: The surface water drainage was cleaned. Subsurface drainage was cleaned and flushed. Downpipes on the Switch House and Turbine Hall were repaired. • External walls: External walls (brick and render) were repaired to remove spalling and loose materials. • External openings: The external walls of the Switch House and Turbine Hall, which contain mainly steel-framed window openings, were mostly retained and covered with clear acrylic. The steel-framed windows at the south end of the Turbine Hall were removed, and the openings covered. • Soffit of the Switch House and Lavatory (middle of Transformer Alley): Extensive concrete remediation and patching (concrete cancer). Large pipes and hanging equipment were strengthened or reinforced. • Other: The concrete cable duct at the south end, next to the Turbine Hall, was removed due to its poor condition. A small section was repaired and retained. |
| Reference to Specific Policies | <p>Policy 5.18 – Views within the place Policy 6.35 – Switch House Policy 6.38 – Switch House Transformer Alley Policy 13.11 – Existing lift shafts</p> |

| | | |
|---|--|---|
| Space | 14. Coal Wash Pit | |
| Spatial Reference (where applicable) | - |  |
| Significance | 3 – Moderate | |
| History | <p>It is unknown when the Coal Wash Pit was built since no archival images and drawings have been discovered at the time of writing. It is likely to have been built after 1964 as the aerial map shows the rail tracks termination where the pit is supposed to be. It was used to wash the coal transported by the rail before carried via the Coal Elevators in Coal Handling Shed.</p> | |
| Description | <p>The Coal Wash Pit is located to the north east of the Coal Handling Shed. As the name suggests, it was used to wash coal before it was sent to the Coal Handling Shed. The wash pit is currently filled, with likely stagnant water.</p> | |
| Alterations & Condition | <p>No works were carried out to the Coal Wash Pit during the 2022–24 remediation works.</p> | |
| Reference to Specific Policies | <p>It is recommended that the area is safely barricaded.</p> | |

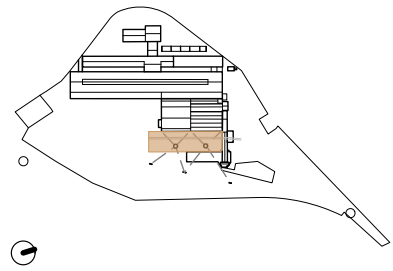


Coal Washing Pit to the left, 2024 (courtesy of Chris Bennett: Evolving Picture)

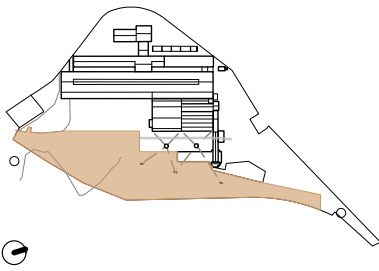

| | | |
|---|---|--|
| Space | 15. Transformer Yard | |
| Spatial Reference (where applicable) | - | |
| Significance | 2 - High | |
| History | The Transformer Yard once housed several transformers: two to the north of the Control Room Building, and four to the west of the Switch House. | |
| Description | <p>The Transformer Yard is located on the western side of the White Bay Power Station complex, west of the Switch House and north of the Control Room Building. There were formerly two transformers north of the Control Room Building, and four on the west of the Switch House. No extant machinery and equipment remains; only masonry blast walls and concrete plinths remnants provide evidence of the cells where the Transformers used to be. Transformers were also located within the existing masonry walls at the north end of the Pump House, in the northern courtyard, and in the southern courtyard, next to the south Penstock. Evidence for transformers near the south penstock is based on photographs, but no physical evidence remains.</p> |   <p>Transformers that once populated the Transformer Yard, with Switch House in the background, 1949 (courtesy of Railways Department Archive, A5115:E1641)</p>  <p>Transformer Yard looking south, 2024 (courtesy of Chris Bennett: Evolving Picture)</p> |
| Alterations & Condition | <p>In 2022–24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Blast walls: The blast walls were retained and underwent minor repairs. • Drainage: Surface drainage channels and underground drains were cleared and improved. • Other: Some of the concrete slabs between the north-south rail lines have been replaced or reinforced. These slabs span over a subsurface culvert, which aligns in between the rail lines. | |
| Reference to Specific Policies | <p>Policy 5.18 – Views within the place Policy 7.2 – Hard landscaping Policy 11.5 – Transformer Yard</p> | |

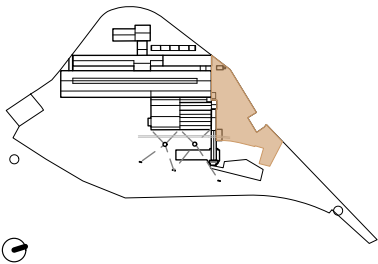

Drawings and Additional Photos

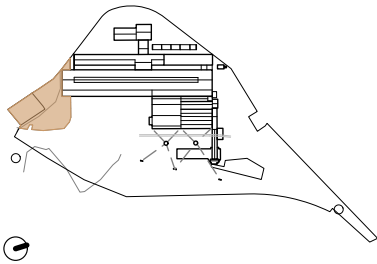
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|---|--|--|
| Space | 16. Ash Handling Yard | |
| Spatial Reference (where applicable) | - | |
| Significance | 1-Exceptional | |
| History | <p>The Ash Handling Yard once housed the precipitators and induced draft fans that connected the Chimney Stacks to the Boiler House and were a key part of the Ash Handling System. Coal trucks travelled along the rail tracks to and from the Ash Handling Tower.</p> | |
| Description | <p>The Ash Handling Yard is located to the south of the Ash Handling Tower and External Conveyor, between the Coal Handling Shed and the Boiler House. It is a hard landscaped area where the pair of Chimney Stacks are located. The yard also retains evidence of the rail tracks used to transport carts from the Ash Handling Tower.</p> | |
| Alterations & Condition | <p>In 2022-24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Drainage: Surface drainage channels and underground drains were cleaned and improved. • Drainage covers: Some drainage covers were replaced to mitigate potential trip hazards. • Rail tracks: Recesses along the rail tracks were filled to mitigate potential trip hazards. • Concrete Plinths: Plinths covered with timber decking to form seating and benches. | |
| Reference to Specific Policies | Policy 10.9 -Public access | |



Ash Handling Yard with extant Chimney Stacks and rail tracks in the foreground, 2024 (courtesy of Chris Bennett: Evolving Picture)

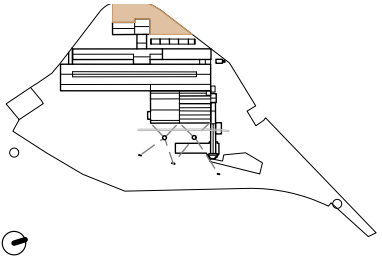

| | | |
|---|--|--|
| Space | 17. South & East Yards | |
| Spatial Reference (where applicable) | – | |
| Significance | 2 – High; 3 – Moderate; 4 – Little / Neutral | |
| History | <p>Historically, the place immediately east of the Coal Handling Shed was used to store vast amounts of coal before it was sent to the Coal Handling Shed. In the early twentieth century, the external spaces further east of the Coal Handling Shed were used for unrelated industrial purposes before becoming a coal export terminal from the 1950s to the early 1990s.</p> <p>For the south yard, the space was initially associated with former Boiler House 2 and accommodated infrastructure for the former coal handling (demolished) and rail delivery. Until recently, the area retained spur rail lines that formerly serviced the industrial activities at Glebe Island, White Bay and the White Bay Power Station.</p> |   <p>View of South and East Yards looking northwest, 2024 (courtesy of Chris Bennett: Evolving Picture)</p> |
| Description | The South and East Yards are located generally to the east of the building complex and occupy a large portion of the eastern side of the site. The majority of the South and East Yards comprises hard landscaping. | |
| Alterations & Condition | <p>In 2022–24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Drainage: Some surface drainage channels and underground drains were cleaned and improved, particularly those adjacent to the Coal Handling Shed. • Other: Some changes have been made to the land form and grading of surfaces. • Fences and barriers have been installed for public safety. | |
| Reference to Specific Policies | Policy 5.18 – Views within the place | |

| | | |
|---|---|---|
| Space | 18. North Forecourt | |
| Spatial Reference (where applicable) | – | |
| Significance | 2 – High | |
| History | Throughout the active years of the White Bay Power Station, the North Forecourt has been occupied by various lightweight structures for workshops and amenities for use by the industrial workers. | |
| Description | <p>The North Forecourt is located to the north of the main complex of buildings and is predominantly a hard landscaped area with some soft landscaped areas recently added. It retains evidence of the former rail tracks that were used to transport coal onto the site. On the east side, there is a concrete plinth and raised terrace, which formerly housed the rail line from the Coal Handling Shed. A demountable office and a security shed currently occupy the space. A small brick Amenities Block is located at the western end of the forecourt.</p> <p>The North Forecourt is currently used as the public entrance to the site. Up until recently, the space contained a number concrete slabs, which were evidence of the former structures associated with the power station. Other underground features include the water coolant channel and railway lines from the Turbine Hall, both of which are buried underground.</p> |   <p>North Forecourt with north elevation of the White Bay Power Station building complex in the background, 2024 (courtesy of Chris Bennett: Evolving Picture)</p> |
| Alterations & Condition | <p>In 2022–24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Pavement surfaces: Substantial changes to hard surfaces and landscaped areas to accommodate public space courtyards, pedestrian and vehicle movement and parking. • Security: Replacement of fences and new gates. A new prefabricated security shed was installed close to the northeast entry gate accessed from Robert Street. • Drainage: Surface drainage channels and underground drains were cleared and improved. • Other: new outdoor lighting and services upgrades. | |
| Reference to Specific Policies | <p>Policy 5.11 – Mullens Street Policy 5.18 – Views within the place Policy 7.1 – Landscaping and place generally Policy 7.2 – Hard landscaping Policy 7.4 – Temporary site sheds and amenities Policy 7.7 – North Forecourt Policy 10.9 – Public access Policy 10.11 – Entry to the White Bay Power Station</p> | |

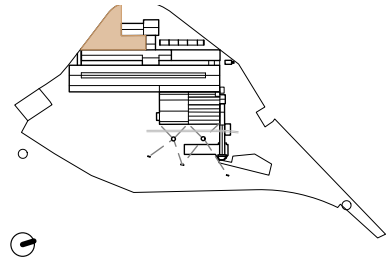
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|---|--|---|
| Space | 19. Mid & Upper South Yards | |
| Spatial Reference (where applicable) | - |  |
| Significance | 3 – Moderate | |
| History | <p>Historically, the place had several smaller staff amenity buildings, offices and possibly workshops, and some extant concrete foundations remain as evidence of this. The White Bay Hotel, which was core to the social and recreational life of the workers of the White Bay Power Station, was also located here.</p> | |
| Description | <p>The Mid and Upper South Yards are located to the south of the place at a high elevation in line with Victoria Road. They contain some vegetation and the former White Bay Hotel site is located on the Upper South Yard.</p> | |
| Alterations & Condition | <p>In 2022–24, minor remediation work was required. The space was cleaned and the access paths improved.</p> | |
| Reference to Specific Policies | <p>Policy 7.9 – Mid and Upper South Yards Policy 10.9 – Public access Policy 11.4 – Upper South Yard and White Bay Hotel</p> | |



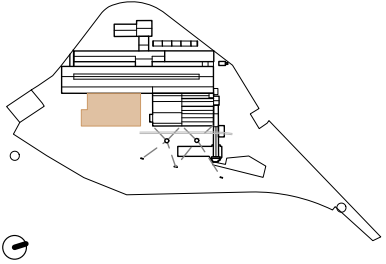

Terraced layers of the Mid & Upper South Yards viewed from the (lower) South Yard, 2022 (courtesy of Chris Bennett: Evolving Picture)

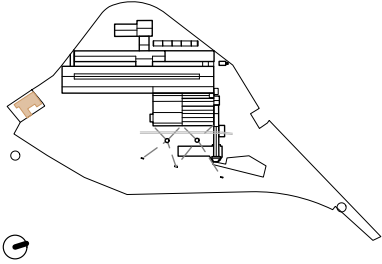


| | | |
|---|--|---|
| Space | 20. West Yard | |
| Spatial Reference (where applicable) | - |  |
| Significance | 3 – Moderate | |
| History | <p>The West Yard once housed various lightweight structures likely used as workshops and for storage. Part of the West Yard was also historically a garden. The edge of site adjacent to Robert Street was once lined with mulberry trees and other fruit planting, and workers and locals would harvest the fruit to take home to their families. There were likely additional gardens past this initial line of trees further inside site, although no specific records of this have been found.</p> | |
| Description | <p>The West Yard is located at the western edge of the place adjacent to Robert Street and comprises the areas to the north, west, and south of the Control Room Building. It is partially overgrown with trees and vegetation at its south end along the edge adjacent to Victoria Road.</p> |  <p>West Yard looking east towards the building complex of the White Bay Power Station, 2024 (courtesy of Chris Bennett: Evolving Picture)</p> |
| Alterations & Condition | <p>In 2022–24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Invasive trees close to the Control Room were removed. • Some of the spaces adjacent to the Control Room were regraded to improve surface drainage. | |
| Reference to Specific Policies | <p>Policy 7.8 – West and South West Yards Policy 13.6 – Substation kiosk</p> | |

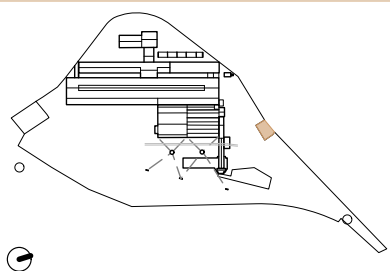
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|---|---|--|
| Space | 21. South West Yard | |
| Spatial Reference (where applicable) | - | |
| Significance | 2 - High (hard landscaping); 3 - Moderate (overgrown landscaping) | |
| History | The South West Yard once housed a series of fibro sheds and offices used by the workers of the White Bay Power Station. Like the West Yard, part of the South West Yard was used as a garden. | |
| Description | The South West Yard is located to the south of the Control Room Building and the west of the Switch House. Most of this yard comprises hard landscaping, though the south end of the yard adjacent to Victoria Road is overgrown with trees and vegetation. | |
| Alterations & Condition | In 2022-24, minor remediation work was undertaken. The area was cleaned, and some vegetation was cleared, especially around the Switch House and Control Room Building, to improve drainage. | |
| Reference to Specific Policies | Policy 5.18 - Views within the place Policy 7.8 - West and South West Yards | |



View of the South West Yard looking north towards the Control Room bridge, 2024 (courtesy of Chris Bennett: Evolving Picture)

| | | |
|---|--|--|
| Space | 22. Site of former Boiler House No. 2 | |
| Spatial Reference (where applicable) | - |  |
| Significance | 2-High | |
| History | Boiler House No. 2 was built in 1923 alongside the expansion of the Pump House, Turbine Hall, and Switch House. It utilised Low Pressure (LP) steam raising technology as part of the process of electricity generation. As new electricity generation technology developed and metropolitan power stations began to play a lesser role, the Boiler House No. 2 was eventually demolished in 1976. | |
| Description | The site of former Boiler House No. 2 is currently a hard landscaped area. The area may contain underground passages or tunnels associated with the former Boiler House and coal handling. |  <p>Boiler House No. 1 (right) and Boiler House No. 2 (left), 1927 (courtesy of ECNSW Archives, 0363-065)</p> |
| Alterations & Condition | <p>In 2022-24, the following remediation and new works were carried out:</p> <ul style="list-style-type: none"> • Stored materials unrelated to the White Bay Power Station, were relocated and the area cleaned • Drainage: Surface drainage channels and underground drains were cleared. Subsurface drainage at the northern end of the space was removed and replaced with new drainage and stormwater pits. • Fences and barriers were installed for public safety. • New public toilets, constructed with prefabricated demountable buildings, were installed to facilitate events and public use. | |
| Reference to Specific Policies | <p>Policy 6.4 – East elevation Policy 11.2 – New structure – No. 2 Boiler House</p> | |

| | | |
|---|---|---|
| Space | 23. Former White Bay Hotel | |
| Spatial Reference (where applicable) | - |  |
| Significance | 3 – Moderate | |
| History | <p>The White Bay Hotel was built in 1916. It underwent alterations in 1925 and 1933 to increase capacity. Throughout the active years of the power station, it was frequented by the workers of the White Bay Power Station, both during and outside of breaks, and was a key aspect of their social and recreational lives. The White Bay Hotel fell into decline following the closure of the White Bay Power Station. On 5th September 2008, a fire destroyed the White Bay Hotel. In June 2010, SHFA purchased the White Bay Hotel and cleared the site of debris.</p> <p>For further information on the history of the White Bay Hotel and its social significance, refer to Volume 1 of this CMP.</p> |  <p>The White Bay Hotel as viewed from the South Yard with Administration and Staff Accommodation on the right, 2002 (Design 5 – Architects)</p> |
| Description | <p>The site of the former White Bay Hotel is located at the southwest of the site in the Upper South Yard. Little evidence of the building remains.</p> |  <p>Approximate former site of White Bay Hotel with White Bay Power Station in the background, 2024 (Design 5 – Architects)</p> |
| Alterations & Condition | In 2022–24, minor remediation work was undertaken. Since 2020, the space has been substantially altered due to road, active transport and pedestrian improvements in the area. | |
| Reference to Specific Policies | Policy 11.4 – Upper South Yard and White Bay Hotel | |

| | | |
|---|---|---|
| Space | 24. Sewage Pumping Station No. 7 (outside property boundary) | |
| Spatial Reference (where applicable) | - |  |
| Significance | -(outside boundary of the site) | |
| History | <p>The Sewage Pumping Station No. 7 was part of a network of sewage pumping stations towards the end of the nineteenth century, prior to the construction of the White Bay Power Station. The pumping station played a key role in the development of public health protection and hygiene.</p> | |
| Description | <p>The Sewage Pumping Station No. 7 comprises a small scale brick building built in the Federation Queen Anne style, and is located adjacent to the northern boundary of the White Bay Power Station site on Roberts Street. It has a terracotta tile gable roof and uniquely, elliptical shaped gable end walls.</p> | |
| Alterations & Condition | <p>The Sewage Pumping Station No. 7 is located outside the boundary of the subject site. Consequently, no work has been carried out on the building as part of the 2022–24 remediation works.</p> | |
| Reference to Specific Policies | -(outside boundary of the site) | |



Sewage Pumping Station No. 7, 2024 (courtesy of Chris Bennett: Evolving Picture)

| | | |
|---|---|--|
| Space | 25. Cooling Water Channel | |
| Spatial Reference (where applicable) | - | |
| Significance | 1-Exceptional | |
| History | <p>The Cooling Water Channel was built in two stages in 1912 and 1913. It provided a constant flow of seawater to the Condensers. Regular inspections of the channel was conducted by workers during the active years of the power station. A new deviation was constructed by 1951 at the edge of White Bay.</p> | |
| Description | <p>The Cooling Water Channel runs underground through the White Bay Power Station site. It passes through the Turbine Hall, is connected to both the North and South Penstocks, and joins Rozelle Bay to White Bay. The Cooling Water Channel is brick-lined with concrete and steel water inlet and outlet canals.</p> | |
| Alterations & Condition | <p>In 2022-24, work related to the Cooling Water Channel involved sealing all access points to ensure public safety and secure access to the tunnels.</p> | |
| Reference to Specific Policies | <p>Policy 5.16 – Connection to water Policy 5.17 – Water cooling channel Policy 6.30 – Turbine Hall Policy 18.2 – Flooding and connections to water</p> | |

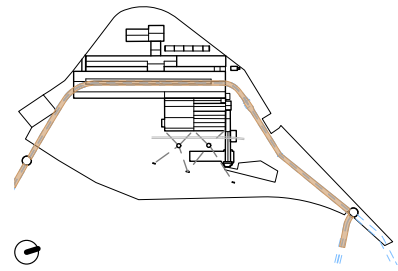




Figure 9.2 White Bay Power Station from east, 2024 (courtesy of Toby Peet)

