

HERITAGE IMPACT ASSESSMENT

BREWERY YARD

BUILDING ASSETS

22, 23, 26 & 30

**CENTRAL PARK,
CHIPPENDALE NSW
2008**

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Project Code	SH1320		
Report Number	01	30.11.2018	Draft
	02	07.12.2018	Amended Draft
	03	21.01.2019	Final
	04	24.05.2019	Final v2
	05	22.07.2019	Final v3
	06	13.08.2019	Final v4

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EXECUTIVE SUMMARY

We have been engaged by IP Generation Pty Ltd to prepare this Heritage Impact Statement (HIS) to address the Secretary's Environmental Assessment Requirements (SEARs) for the State Significant Development Application (SSDA) – SSD 18_9374. The SEARs are outlined at Section 1.4.

The proposal pertains to the adaptive reuse of the former Irving Street Brewery Buildings (hereafter referred to as 'the Brewery Buildings'), located within the Central Park precinct on Broadway, Chippendale, south of the Sydney Central Business District (CBD).

This HIS has been prepared to satisfy the SEARs and to assess the proposal against relevant planning policies and guidelines, to assist the consent authority in their determination.

The proposal has been assessed herein and it is concluded that the proposal will not result in an adverse heritage impact to the place or the heritage listed chimney which forms part of the site.

While the proposal includes a high degree of fabric modification and alteration, the overall design is highly considered and seeks to mitigate impacts where possible and provides for sensitive design solutions, resulting in an acceptable level of heritage impact. Practical solutions to the ongoing occupation of these buildings have been carefully considered with regard to minimising adverse impacts, while looking for ways to celebrate and interpret the history of the place.

A careful balance of conservation and contemporary intervention has been achieved with the current proposal, which seeks to provide a feasible outcome for the use of the space, but also embraces and celebrates the site's history through interpretation and retention of significant fabric.

Rather than diminishing the heritage of the City of Sydney, the subject proposal seeks to enhance the heritage values of the Brewery Buildings by enabling the future occupation of the space, and providing for the adaptive reuse of the site. The proposal will allow the Brewery Buildings to be an integrated, accessible part of the Central Park precinct.

The proposal has been developed with design excellence at the forefront. The design has been undertaken by Tzannes Architects, who are responsible for the design of the tri-generation cooling tower atop Building 30 of the Brewery Buildings. This first stage of the Brewery building renewal was internationally recognised and Tzannes were the recipients of the 2016 Chicago Athenaeum International Architecture Award, and the 2016 UNESCO Heritage Award for New Design in Heritage Contexts for this work, as well as the Lachlan Macquarie Award for Heritage at the 2015 National Architecture Awards. This SSDA proposal sees the continuation of high quality architectural design and innovative approaches on the Brewery Building project.

The Brewery Buildings not only form part of the Central Park precinct, they are the historic centrepiece of this urban environment, and the last remaining physical representations of the site's significant brewing history and the former industrial buildings on the site. The buildings must be adapted for future use not only to prevent their physical deterioration, but to provide an important central element within the public domain of the Central Park precinct.

Aboriginal and Historic Archaeological potential has been assessed as low to nil and with consideration for the highly disturbed nature of the site as well as the minimal nature of the proposed excavation, the proposed works are unlikely to impact on the archaeological resource.

The proposal is supported from a heritage perspective and is recommended for approval subject to the recommendations outlined in section 8.1.

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1. INTRODUCTION

1.1. BRIEF AND PURPOSE

We have been engaged by IP Generation Pty Ltd to prepare this Heritage Impact Statement (HIS) to address the Secretary's Environmental Assessment Requirements (SEARs) for the State Significant Development Application (SSDA) – SSD 18_9374. The SEARs are outlined at Section 1.4.

The proposal pertains to the adaptive reuse of the former Irving Street Brewery Buildings (hereafter referred to as 'the Brewery Buildings'), located within the Central Park precinct on Broadway, Chippendale, south of the Sydney Central Business District (CBD) – refer to Figure 1. The purposed of the proposal is to conserve and creatively adapt the site for contemporary purposes, and to facilitate a built form outcome that is both functional and commercially viable, while being cognisant of the heritage values of the place.

This HIS has been prepared to satisfy the SEARs (refer to section 1.5) and to assess the proposal against relevant planning policies and guidelines, to assist the consent authority in their determination.

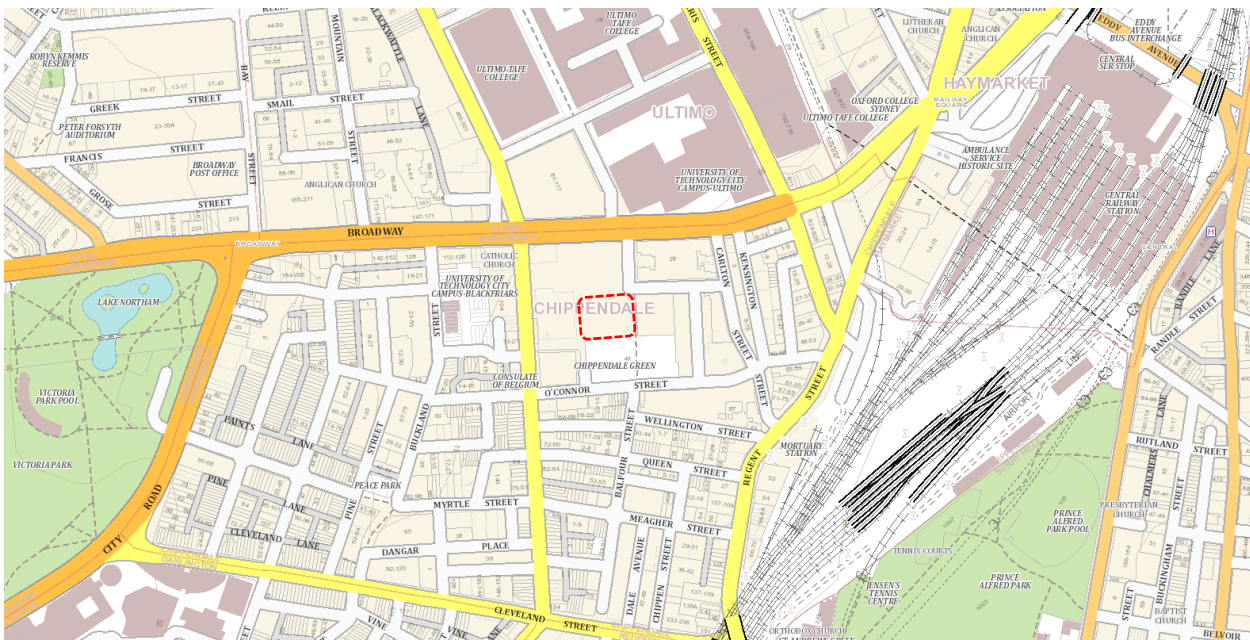


Figure 1 – Locality diagram (location of the Brewery Buildings shown outlined)

Source: SIX Maps 2018

1.2. METHODOLOGY

This HIS has been prepared in accordance with the NSW Heritage Division guidelines 'Assessing Heritage Significance' and 'Statements of Heritage Impact'. The philosophy and process adopted is that guided by the Australia ICOMOS Burra Charter 1999 (revised 2013).

The proposal has considered the following documents:

- Sydney Local Environmental Plan 2005.
- State Environmental Planning Policy (State and Regional Development) 2011.
- Special Elements Conservation Plan report, prepared for the Irving Street Brewery Buildings by Urbis in 2009.
- NSW Heritage Division guideline 'Statements of Heritage Impact'.
- NSW Heritage Council's 'New Uses for Heritage Places'.

1.3. AUTHOR IDENTIFICATION

The following report has been prepared by Fiona Binns (Associate Director) and Ashleigh Persian (Senior Heritage Consultant). Unless otherwise stated, all drawings, illustrations and photographs are the work of Urbis.

1.4. LIMITATIONS

Archaeological Assessment of the Brewery Buildings precinct has previously been undertaken by GML Heritage in 2006 (refer to discussion at Section 5). In the intervening period, the subject property (Brewery Buildings precinct) has undergone substantial disturbance in association with the construction of the tri-generation plant in 2015.

The provision of a revised / further Archaeological Assessment is outside the scope of this report.

1.5. APPLICATION OF SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

On 21 June 2018, the SEARs were issued under Section 4.12(8) of the Environmental Planning and Assessment Act 1979. The SEARs of relevance to the heritage impact assessment of the proposal are included in the following table.

Table 1 – SEARs

SEARs	Addressed at
<u>1. Statutory and strategic context</u>	
The EIS shall address the statutory provisions applying to the site contained in all relevant environmental planning instruments (EPIs), including: • State Environmental Planning Policy (State and Regional Development) 2011 • Sydney Local Environmental Plan 2005.	Refer to Section 7.2.
• Heritage Council Guidelines Assessing the Significance of Archaeological Sites and Relics	Refer to Section 5.
• Heritage Council Guideline on Heritage Curtilages 1996	Not applicable.
• Heritage Council Guideline, Design in Context – guidelines for infill development in the Historic Environment, 2005.	Not applicable.
<u>5. Heritage and historical archaeology</u>	
The EIS shall: • provide a detailed heritage impact statement (HIS), in accordance with the NSW Heritage Office publication Statement of Heritage Impact, that identifies and addresses any heritage impacts of the proposal: • on the heritage significance of the site and surrounding area, including any built and landscape items, conservation areas, and views or settings	This Heritage Impact Statement satisfies this requirement.

SEARs	Addressed at
- on places, items or relics of significance to Aboriginal and non-Aboriginal people - having regard to any endorsed conservation management plans for heritage items on the site	
identify, describe and assess the impacts of the proposal on the Aboriginal cultural heritage values that exist across the site in consultation with Aboriginal people. This may include the need for surface survey and test excavation. The identification of cultural heritage values and consultation should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW)	Refer to discussion at Section 1.4 and 5 regarding the archaeological significance of the site, and previous assessments undertaken. Refer also to the assessment of impacts in Section 7.
demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to Office of Environment and Heritage	Refer to the detailed impact assessment included at Section 7.
have regard to any relevant heritage studies or assessments of existing buildings and industrial elements on the site, such as the Special Element Conservation Plan Irving Street Brewery Buildings and Yard, by Urbis 2009	Refer to assessment against the relevant provisions at Section 7.4.
include a heritage interpretation plan to inform the detailed architectural design and adaptive reuse of the existing buildings.	Refer to interpretation strategy included at Appendix A.
<u>Plans and Documents</u>	
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the EP&A Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: heritage impact assessment (including archaeological assessment)	Refer to the detailed impact assessment included at Section 7. Refer to discussion at Section 1.4 and 5 regarding the archaeological significance of the site, and previous assessments undertaken.
heritage interpretation plan	Refer to interpretation strategy included at Appendix A.

2. SITE DESCRIPTION

The Brewery Buildings are located wholly within Lot 200 of Deposited Plan 1212253, and form part of the broader Central Park precinct on Broadway, in Chippendale.

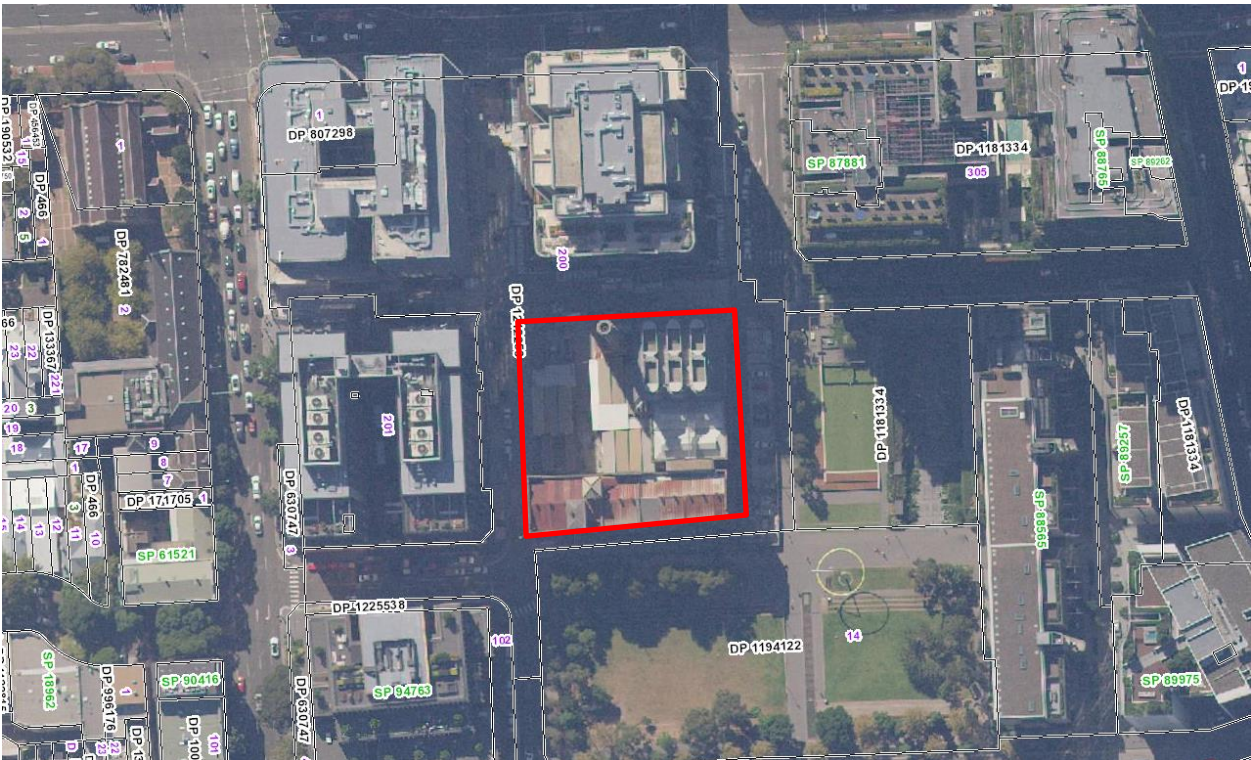


Figure 2 – Aerial diagram of the Brewery Buildings

Source: SIX Maps 2018



Figure 3 – View of the subject Irving Street Brewery Buildings (22 and 23)

Source: Urbis July 2012

2.1. IRVING STREET BREWERY PRECINCT

The following description of the Irving Street Brewery Precinct (No. 4) has been taken from the Heritage Impact Statement on the Concept Plan by Godden Mackay Logan (2006A:35-36).

The Irving Street Precinct is defined as the area bounded by Balfour, Carlton and Irving Streets, with Broadway on the northern boundary. In this precinct is the largest surviving group of early twentieth century brewery structures on the site, whose form, massing and architectural character, externally at least, provide the most visually direct link to the early brewery functions. Included in the oldest group from 1912 are the Filtration Building (22), Malt Silo (23), Substation (26), former Boiler House (30), Bright Beer Plant (35A) and Refrigeration Block (35B). Within the L-shaped yard formed by the rear of these structures is the brick-walled chimney stack (36) which originally served the boilers.

Architecturally this group of structures, constructed largely of brick with sandstone bases and/or dressing, is characteristic of the simplified and robust neo-classical industrial (and warehouse) buildings of the late Federation period in Sydney. Though varying in character, quality of detail, level of intactness and physical condition, the exteriors of the buildings provide important evidence of the physical character, functional layout and site organisation of the turn of the century brewery. Internally, however, much of the original layout and efficiency all the early equipment/fitout have been removed and replaced. The associated additions and alterations involving extensive new servicing has resulted in the present additions to the external facades of the buildings.

Demolished Buildings

Many of the former buildings and elements in the Irving Street Brewery Precinct have been subject to demolition, including the Malt Receiving Station (24), Boiler House (31), Bright Beer Plant (35A), Refrigeration Block (35B), Laboratory Block (35C), CO2 Block (33D), Toilet Block (35E), Infill Block (35F), Great Western Hotel (39) and the vacant lot (56). These buildings were assessed by Godden Mackay Logan in 2007 as having moderate significance or lower, some being intrusive, and have all been demolished.

Heritage Items

The Chimney Stack (36) is listed as a building element under Part 2 of Schedule 8 of the Sydney Local Environmental Plan 2005. None of the other Irving Street Brewery buildings are listed as heritage items under the LEP, although their heritage significance has been recognised in their retention and adaptation.

Table 2 refers to assets that are subject to this report. These assets are located within the Irving Street Brewery Precinct and were assessed by Godden Mackay Logan in 2006 and 2007.

Table 2 – Brewery heritage assets

Asset No.	Name of Asset	Significance	Concept Plan GML Assessment (2006A)	Demolition Plan GML Assessment (2007)
22	Filtration Building	High	Retained and conserved	Retained and conserved
23	Malt Silo Building	High	Retained and conserved	Retained and conserved
25	Staircase Block	Intrusive	Demolished	Retained
26	Gas Receiving Station	Moderate	Retained and conserved	Retained and conserved
30	Old Boiler House	Moderate	Retained and conserved	Retained and conserved
36	Chimney Stack	High	Retained and conserved	Retained and conserved
52	Irving Street Brewery Yard	High	Conserved	Conserved

The above assets were photographed in November 2007 by Dilapidation Surveys and reference should be made to these reports for the appearance of the buildings prior to removal of contaminated fabric and

hazardous materials. The following building descriptions are taken from the CMP by Noel Bell Ridley Smith and Partners (2005:57-59).

Site photos were taken by Urbis, typically during inspections in late 2018, although some previous images have also been used where appropriate to demonstrate past condition or works.

2.2. FILTRATION BUILDING (22) AND MALT SILOS BUILDING (23)

The Filtration Building (22) and the Malt Silo Building (23) form a five-storey (ground, first, second, third and fourth floors) face brick building with impressive facades with fine detailing in brick and sandstone. The Filtration Building does not retain its original function of brewing and presently houses a filtration plant, whereas the Malt Silos Building still retains its original function as a Malt Silo.

The building retains most of its original façades that constitute a major component of its fabric of significance including typical Irving Street Brewery elements such as engaged brick piers forming blind arches; expressed voussoirs; keystones, dentils, lintels and bracketed mouldings in sandstone; string courses; and multi paned arched and rectangular windows. The pair of arched passages together with stone plaque with 'TOOTH & CO. Ltd. / 1911 / IRVING ST' in relief lettering on the front/south façade are significant as references to building 22 & 23's function as entrance to the Irving Street Brewery.

The Malt Silos Building retains some of its original interior fabric such as exposed roof structure comprising wooden queen post truss, steel beams and timber floors. It also retains some of its original equipment such as masonry silo tanks, wooden silo bins, timber floor decks, unloading dock with connection to basement and the overall scheme/and sequence of the original Malt handling/storage process. The facades are substantially intact, although showing deterioration of stone, brickwork and windows.

Internally, the Filtration Building has undergone major alterations comprising the gutting of interior spaces whereas the Malt Silos Building interiors have undergone limited alterations. Externally the building has suffered a few intrusive alterations including the Corridor connection to building 20 [Brew House, now demolished]; roof level extension on the Irving Street façade; the reinforced concrete slab intrusions of the new staircase block (25); all later window infill (excluding windows originally closed) and services running on façades. The overall condition of original and later internal and external fabric is fair.



Figure 4 – Part view of the southern (principal) façade of building 22

Source: Urbis September 2018



Figure 5 – Part view of the southern (principal) façade of building 22 – showing the principal entry

Source: Urbis September 2018



Figure 6 – The western façade of building 23 (the malt silos)

Source: Urbis September 2018



Figure 7 – The northern façade of building 22/23 and brewery yard in the foreground

Source: Urbis September 2018

The interior of building 22, the former Filtration plant, was rebuilt in the 1980s in conjunction with the change of use. This included new concrete structure and floors. The malt silo (building 23) was the only building to retain its original use and still houses the original 8 concrete silos (hence the enclosed façade windows).



Figure 8 – The ground floor of building 23 showing the base of the silos

Source: Urbis September 2018



Figure 9 – Typical interior of the former Filtration building (22)

Source: Urbis September 2018

2.3. STAIRCASE BLOCK (25)

A staircase block was built between buildings 22 and 26 in the 1980s and functioned as the main staircase to building 26 as well as an additional staircase to building 22. The stair was rebuilt in conjunction with stage 1 works in 2014, of concrete construction, with metal clad exterior (eastern elevation pictured below). The reinforced concrete slabs intrude into the original face brickwork of the adjacent buildings.

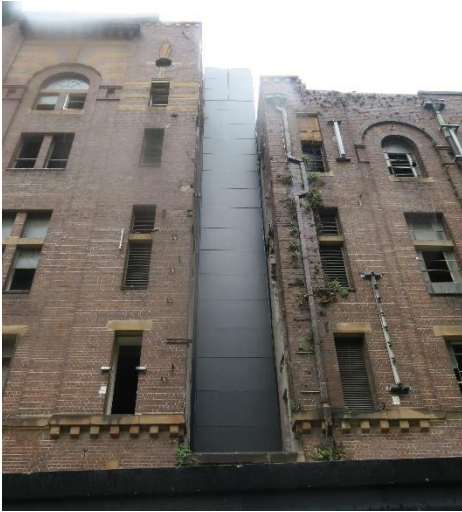


Figure 10 – The eastern façade showing the inset stair block between buildings 22 (left) and 26 (right)

Source: Urbis September 2018



Figure 11 – Interior of the stair, and interface with the adjoining building

Source: Urbis October 2018

2.4. GAS RECEIVING STATION (26)

The Gas Receiving Station (26) is a four storey face brick building with impressive façades with fine detailing... The buildings are representative of the Federation Warehouse style with typical features including engaged brick piers forming blind arches; expressed voussoirs; keystones, dentils, lintels and bracketed mouldings in sandstone; string courses, multi paned windows, round arches, etc.

The Gas Receiving Station retains very little of the original interior fabric or equipment owing to gutting of most internal spaces. Significant fabric includes original façade configuration and elements. Intrusive elements to Building 26 include the coal elevator shaft, staircase from adjacent old boiler house (30), window infills, and alterations to façades and service pipework on facades. The overall condition of exterior fabric is fair. The building facades are substantially modified but retain the overall form and character of the original group, although the interiors show low degree of intactness. The existing fabric lacks the ability to demonstrate any significance.



Figure 12 – The western façade of building 26

Source: Urbis September 2018



Figure 13 – The eastern façade of building 26

Source: Urbis September 2018

2.5. OLD BOILER HOUSE (30)

The Old Boiler House was originally a two-storey face brick building with several façade details in common with the rest of the precinct buildings. The fabric of significance comprises the original double storey façades, flue connected to the chimney and the firing floor slab. Its significance is compromised by extensive alterations to its exterior including first floor extension to the west façade; pitched roof block on second floor level, the coalbunker at roof level; all window infills and services running on the façades.

The interior has undergone several alterations, such as ground floor intrusion from the Gas Receiving Station (26) and complete gutting of upper floor space leading to loss of original structural system. No original equipment or interior fabric has been retained although the facades show a fair to low degree of intactness. The condition of external fabric is fair whereas the original first floor slab is in extremely poor condition and structurally unstable.

The building was adapted for use as the boiler house in the mid-20th century, which necessitated the vertical addition, to house the coal hoppers (which remain extant).

In addition to the above, Building 30 was adapted to house the cooling towers of the tri-generation Plant in 2015, with works including demolition of the northern façade and structural intervention to support the plant. Central Park site is now the largest site in Australia powered by its own tri-generation energy plant



Figure 14 – The eastern and northern brewery facades, with building 30 (at right) on the northern side, capped by the contemporary trigen

Source: Urbis September 2018



Figure 15 – The western façade of building 30 and base of the chimney stack (36)

Source: Urbis September 2018



Figure 16 – The northern façade (open) and hoppers

Source: Urbis September 2018

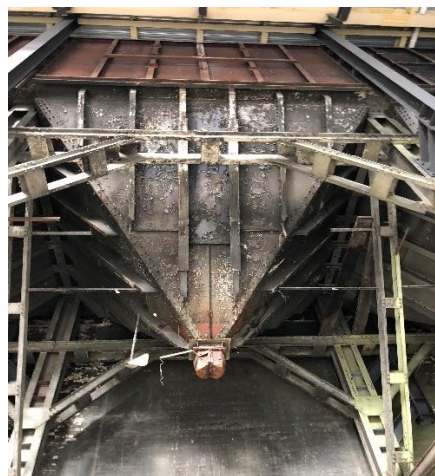


Figure 17 – Detail of one of three coal hoppers

Source: Urbis September 2018

2.6. CHIMNEY STACK (36)

The Chimney Stack is a 54 metre tall brick [structure] with a square base and a hexagonal plan tower located in the centre of the precinct, attached to the old Boiler House (30). It is no longer functional as a chimney stack. It retains most of its original fabric with little alteration.

The chimney was adapted for reuse in conjunction with the trigeneration plant and was subject to conservation works including partial reconstruction of the upper brick courses.



Figure 18 – The prominent chimney stack prior to trigen works (2012)

Source: Urbis July 2012



Figure 19 – View of the scaffolded chimney during conservation and trigen works fin 2014

Source: Urbis June 2014

2.7. IRVING STREET BREWERY YARD (52)

The yard comprises a concrete paved open area bound by the rear façades of the Irving Street Brewery buildings. It forms an irregular shape in plan and provides access to most of the buildings of the former Brewery. The yard was formed c. 1912 when the Brewery buildings were constructed, and it is an important aspect of the former Brewery group, allowing interpretation of industrial buildings in the group and views of the chimney stack.

The Yard was excavated in conjunction with the construction of the trigeneration plant (pictured below) and has been capped with a concrete slab.



Figure 20 – 2012 view of the yard under excavation for the trigen plant

Source: Urbis 2012



Figure 21 – The northern building façade and brewery yard, including trigen plant/ access at right

Source: Urbis September 2018

3. THE PROPOSAL

The following has been summarised from the Design Report prepared by Tzannes Associates and submitted with the subject Development Application.

3.1. THE CENTRAL PARK CONCEPT PLAN

The Site is located on land that forms part of the Central Park (Carlton United Brewery) Concept Plan MP 06_0171. The Concept Plan establishes the importance of the Brewery Yard site within the precinct. The Site encompasses several of the major heritage buildings in the precinct as well as the Central Park Thermal Plant trigeneration facility. The existing heritage buildings address Chippendale Green and are bounded on the east by the north-south pedestrian and cycle link connecting Chippendale to Broadway.

Within the site boundary the Concept Plan designates building heights, publicly accessible spaces and GFA. The Brewery Yard forecourt within the north-west portion of the site is planned as publicly accessible, privately owned space, whilst a publicly accessible through site link intersects the southern block.

In addition to the Concept Plan a Part 3A Project Application (MP 10_0217) was approved on 15 May 2012 for the alterations to and adaptive reuse of the Brewery Yard buildings. The approval included two construction stages, being:

- Stage 1: construction of associated plant related to the approved Central Thermal Plant including cooling towers and metal enclosure to the roof of the Old Boiler House, external chimney flues, reuse of chimney stack and stairs and air ducts in Brewery Yard.

SSD conditions of consent required conservation works to the buildings and a schedule of conservation works was prepared by Urbis, which has recently been revised.

- Stage 2: partial demolition of some existing building fabric and the adaptive reuse of the Brewery Yard buildings providing 6,386m² of GFA.

This consent has been acted upon and the first stage has been constructed in accordance with the consent, completed in 2014. Should the subject SSDA be approved, Stage 2 would be relinquished.

The current state of the buildings on the Site varies. Whilst the 2014 works are in good condition other parts of the heritage buildings are generally in fair condition and contain intrusive elements, hazardous materials and contaminants. For further detail refer to the Schedule of Conservation Works: The Former Irving Street Brewery prepared by Urbis.

3.2. THE SUBJECT PROPOSAL/ NEW WORK

The proposed new work follows conservation, restoration and adaptation principles established by the 2014 works. New elements are a direct expression of its function adapted to the particular form and character of the heritage building. The use of metalwork for new additions sympathetically contrasts the heritage masonry of the existing building and reflects the more contemporary industrial legacy of the building's adaptation over time.

The proposed new work comprises four major elements:

- a new roof form and addition comprising two new floor levels
- a new glazed northern façade (modified but similar to that previously approved)
- reorganisation of floor levels internally to allow for additional mezzanine floors
- a new entrance lobby facing onto Brewery Yard (west elevation)

The brewery buildings will be tenanted and a range of uses are being considered.

The new roof form to the south building creates additional learning space and follows the building's tradition of a landscape of roofs which was extended by the Central Thermal Plant rooftop addition. The roof form and skylights are designed to ensure sun access to Chippendale Green and act as lightwells to bring natural light to the internal spaces. The proposal is also sensitive to the heritage building form as the visual impacts are minimised from the park, with little to no visibility of the proposed roof addition.

A new glazed facade to the north ties in with the architectural language of the Central Thermal Plant above and establishes a relationship with the materiality of the adjacent residential buildings. The north east corner of the site is the first view of the Brewery Yard site on approach from Broadway. The union of the old and new is apparent, with the glazed facade on the north and heritage brickwork to the east presenting a powerful expression of the building's adaptive reuse. The new horizontal element in the north facade is designed to align with the existing parapet in the east facade to express the relationship between the new addition and the existing fabric. The integrity of the relation between the existing and the new fabric is expressed in the relationship of the new built form with the existing parapet on the east facade. Within this northern building new floors have been introduced to provide floor-to-ceiling heights suited to a university building. In the southern block (building 22) a proposed mezzanine at level 2 breaks up the former industrial space to be re-appropriated as learning spaces.

This Heritage Impact Statement considers plans and reports as follows:

Architectural Drawings and Reports

The following was prepared by project architects: Tzannes Associates

Design Report – 27 November 2018

DA0100	Area Plans	Revision C	17.05.19
DA1000	Level B2 Demo Plan	Revision B	12.12.18
DA1001	Level B1 Demo Plan	Revision B	12.12.18
DA1002	Ground Demo Plan	Revision B	12.12.18
DA1003	Level 1 Demo Plan	Revision B	12.12.18
DA1004	Level 2 Demo Plan	Revision B	12.12.18
DA1005	Level 3 Demo Plan	Revision B	12.12.18
DA1006	Level 4 Demo Plan	Revision B	12.12.18
DA1007	Level 5 Demo Plan	Revision B	12.12.18
DA1008	Level 6 Demo Plan	Revision B	12.12.18
DA1100	Level B2 Plan	Revision B	12.12.18
DA1101	Level B1 Plan	Revision B	12.12.18
DA1102	Ground Floor Plan	Revision D	17.05.19
DA1103	Level 1 Plan	Revision C	17.05.19
DA1104	Level 2 Plan	Revision C	17.05.19
DA1105	Level 3 Plan	Revision C	17.05.19
DA1106	Level 4 Plan	Revision C	17.05.19
DA1107	Level 5 Plan	Revision C	17.05.19
DA1108	Level 6 Plan	Revision C	17.05.19
DA1109	Roof Plan	Revision C	17.05.19
DA2000	Elevation East	Revision B	12.12.18
DA2001	Elevation North	Revision C	17.05.19
DA2002	Elevation West	Revision C	17.05.19
DA2003	Elevation South	Revision B	12.12.18
DA3000	Section 1	Revision C	17.05.19
DA3001	Section 2	Revision C	17.05.19

DA3002	Section 3	Revision C	17.05.19
DA3003	Section 4 and 5	Revision B	12.12.18

Services and Utility

Prepared by Wood and Grieve

01	Basement Lower Floor Plan	Revision D	03.10.2018
01	Basement Upper Floor Plan	Revision D	03.10.2018
02	Ground Floor Plan	Revision C	28.09.2018
03	Level 1 Floor Plan	Revision D	03.10.2018
04	Level 2 Floor Plan	Revision D	03.10.2018
05	Level 3 Floor Plan	Revision D	03.10.2018
06	Level 4 Floor Plan	Revision D	03.10.2018
07	Level 5 Floor Plan	Revision D	03.10.2018
08	Level 6 Floor Plan	Revision D	03.10.2018
08	Roof Plan	Revision D	03.10.2018

Structural Engineering Statement

Prepared by Wood and Grieve

38311/SK-001 Basement 2

38311/SK-002 Basement 1

38311/SK-003 Ground Floor Level

38311/SK-004 Level 1

38311/SK-006 Level 2

38311/SK-007 Level 3

38311/SK-008 Level 4

Landscape Design

Public Domain Central Park, Sydney, prepared by Jeppe Aagaard Andersen + Turf Design Studio. SSDA December 2018 (Final Draft)

Reference should be made to the submitted plans.

3.3. COMPLIANCE WITH THE CONCEPT PLAN

The proposed development complies with the Concept Plan, specifically with regard to public open space, street activation, land uses and retention of significant heritage items.

Public open space and through site connections are provided in accordance with the Concept Plan Public Domain Plan (refer to the submitted Design Report prepared by Tzannes). New elements are below the sun access plane to Chippendale Green and are designed to ensure no additional overshadowing is created to public spaces.

The placement and form and materiality of new elements ensure there is minimal impact to the view of the heritage building from Chippendale Green, yet they are clearly distinguishable as new additions from Brewery Yard. The proposal has been developed in accordance with the recommendations of Urbis heritage architects and has included retaining or reconstructing items of heritage significance.

The Concept Plan requires that street activation is maximised through casual surveillance, street frontages and minimal driveways. The proposed development includes multiple access path accessed directly off pedestrian footpaths providing passive surveillance and activation at street level. Ground floor frontages are sensitively integrated into the heritage fabric, which together with a fully operable facade to the north, create a permeable ground plane and enrich the street character. The entrance to the university is located in Brewery Yard, which activates the public space. No car parking is provided on the site and service access is limited to the south west corner of the site in order to maximise active frontages.

The proposed building exceeds the GFA for block 4B in the Concept Plan. However, the additional GFA does not negatively impact solar access to public open spaces, or detract from the heritage aesthetic of the brewery buildings. The Concept Plan allows a maximum GFA of 3,898sqm for block 4B. The proposed development has a GFA of 6386sqm. The additional GFA is provided by new floor levels within the existing envelope and the roof extension.

3.4. SITE LANDSCAPING

A brick paved forecourt is proposed to provide breakout opportunities for the new upgraded Brewery Building. This Significant Development Application (SSDA) will also include a renewed through site link, connecting from the forecourt to the southern open space. The new publicly accessible forecourt and through site link will be characterised by active building frontages, deciduous trees, planting features and a detailed brick paving palette.

The proposed design includes a simplified palette that stitch together the historic character of the building and hint of modernity reflected throughout the site. The proposed herringbone pattern stitch into the key bustling Kensington Street. Steel planters emphasises the industrial character of the Brewery building while connecting with the neighbouring public forecourt between DUO and The Steps

Deciduous trees are proposed within key planters to the centre of the forecourt, west of the building. To complement the trees and the site wide character, lush vibrant coloured under storey species were proposed.

4. HISTORY

This section of the report reviews existing documentation (such as the Conservation Management Plans prepared in 1991 and 2005) for the Irving Street Brewery Precinct, and summarises the historical background to the development of the precinct. Further research has been undertaken at the Noel Butlin and Powerhouse Museum archives.

4.1. EARLY OWNERSHIP AND DEVELOPMENT OF THE AREA

The subject site was part of a grant of land to Felix Wilson in 1841, part of the Military Gardens Subdivision.¹ The Military Garden had been set up in Parramatta Street, the major route to Parramatta, in the early years of the Colony, to enable military officers to supplement their rations by growing vegetables and keeping livestock.² The Gardens were subdivided in the 1830s into five large lots, which were soon further subdivided into residential lots.

Nearby, the western part of Major George Druitt's land grant was purchased in 1834 by John Tooth and his brother-in-law Charles Newnham, who established the Kent Brewery on it during the following year.

The Military Garden Subdivision was developed with a mix of working class housing, shops and small industries, and by the mid-19th century was considered a slum.³ Various Council enquiries led to the demolition of the cottages in Linden Lane during the 1870s. The Kent Brewery gradually expanded its operations by acquiring several adjacent sites and demolishing the houses. By 1900 its site had grown to more than 6 acres (2.4 hectares).⁴

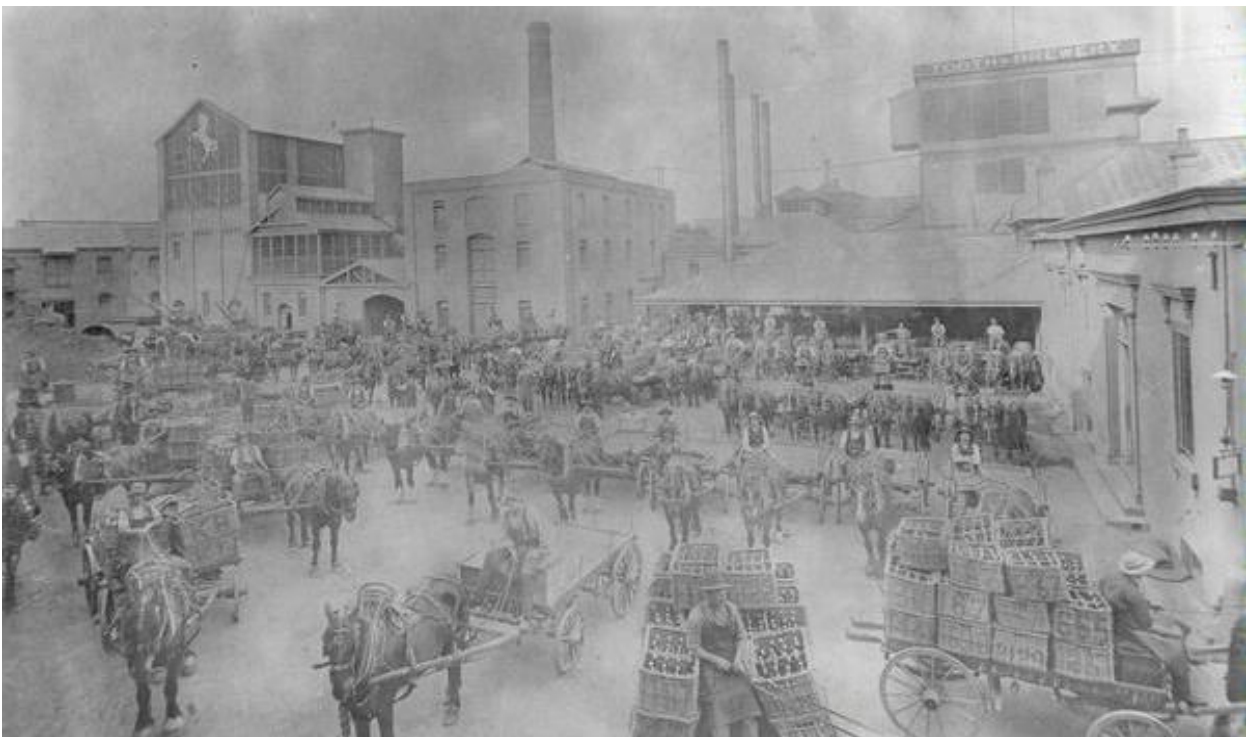


Figure 22 - Kent Brewery in the late 1800s

Source: *The Australian National University*, 46130

¹ Noel Bell Ridley Smith & Partners Pty Ltd (NBRS), *Conservation Management Plan, Volume 4 Part 5 – Inventory Sheets, Carlton Street Precinct*, May 2005, Summary p1, Inventory Sheet No 48, p3, Inventory Sheet No 46, p1.

² Godden Mackay Logan, *Former Carlton and United Brewery Site, Broadway, Heritage Impact Statement*, October 2006, p15.

³ Godden Mackay Logan, p16.

⁴ Godden Mackay Logan, p18.

The greatest expansion of the brewery occurred during the early 20th century, particularly after the Council resumptions of slum areas. Houses on the western side of Kensington Street and the northern side of Wellington Street were purchased and demolished. In 1912 the Irving Street Brewery was constructed, covering the land between Carlton and Balfour Streets.

In 1926 notice was given that properties along Parramatta Street (by then known as George Street West) were to be resumed by Sydney Municipal Council for the widening of the road. The widened road was renamed Broadway in 1933. Tooth and Company purchased the residual land on the new Broadway frontage.⁵

By the 1950s the brewery site had expanded from Carlton Street to Abercrombie Street. After the Adelaide Steamship Company took over Tooth and Company, the brewery site was sold to Carlton and United Breweries (CUB) in 1983. Diversified brewing operations continued on the site, and further property purchases were made to gradually expand the land holdings. At the time of the proposed sale of the site to Australand in 2003, the holding had grown to almost 6 hectares, and included hotels in Broadway, disused factories in O'Connor Street, and rows of terrace houses in Kensington Street and Abercrombie Street.⁶

The Kent Brewery ceased operations in 2005 but the sale of assets to Australand did not proceed. The current owners, Frasers Broadway Pty Ltd, purchased the land holdings in 2007.

4.2. DEVELOPMENT OF THE IRVING STREET BREWERY PRECINCT

The Irving Street Brewery Precinct is bounded by Balfour Street, Carlton Street, Irving Street and Broadway. After the subdivision of the Military Gardens, the area was developed with shops and hotels in Parramatta Street and rows of terrace housing in the side streets (Figure 23 and Figure 24).

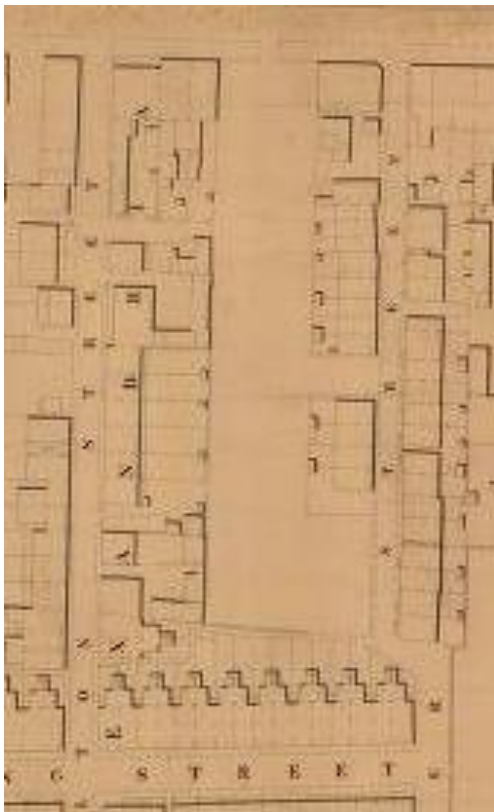


Figure 23 - Survey showing area of Irving Street Brewery Precinct, 1886

Source: *The area bounded by George Street West (top), Irving Street (bottom), Carlton Street (left) and Balfour Street (right) was developed with a mix of building types, including a row of terraces in Irving Street; [Source: Metropolitan Detail Series, Mitchell Library, Sheet F2]*

⁵ Department of Lands (2008B), Land & Property Information Book 1290 No 733.

⁶ Godden Mackay Logan, p20.



Figure 24 - Row of Terraces in Irving Street, 1908

Source: *The row of terrace houses in Irving Street. Carlton Street is on the left*; [Source: City of Sydney Archives, NSCA CRS 51/242]

In 1908 the Tooths Board approved the preparation of plans for a new bottled beer brewery, following a report by Arthur Tooth. The land to the north of Irving Street was acquired by the brewery for the expansion of their operations to cope with the increasing demand for Australian beer. The terraces and other buildings were demolished. The following year construction of the new brewery commenced. However a coal strike intervened, so bricks were difficult to obtain, and the buildings were not completed until 1912. This complex was known as the Irving Street Brewery, and was separated from the Kent Brewery by the reconfigured Balfour Street.⁷

4.3. IRVING STREET BREWERY BUILDINGS

The Irving Street Brewery was designed by the architectural firm of Halligan & Wilton, in a deviation from the brewery's long term use of architects Spain and Cosh.⁸ The builders were Moodie Brothers and the Monier System reinforced floors were built separately by Gummow Forest and Co.⁹

Most of the functional areas were housing in separate buildings, and the repetition of detailing and style on the various buildings provided a unified architectural whole, unlike the varied styles in the Kent Brewery. The materials and opening proportions were also consistent between the different buildings. The brewing tower was integrated into the design of the Irving Street Brewery, unlike in the original Kent Brewery where the structure was purely a tower to contain the brewing plant.

The new buildings had a clearly expressed base level and an emphasised main entrance in Irving Street. The windows were ordered into vertical panels in a recurrent rhythm around all facades and the building is clearly finished at the top.

⁷ Tooth & Co Ltd, *Over a Century of Brewing Tradition*, 1953, p27.

⁸ Planning Workshop, *Kent Brewery Conservation Plan*, 1991, p49, referencing ANU ABL N20/1085.

⁹ Planning Workshop, p163.



Figure 25 - Portion of March 1921 block plan by Brewery
Source: Courtesy of Powerhouse Museum

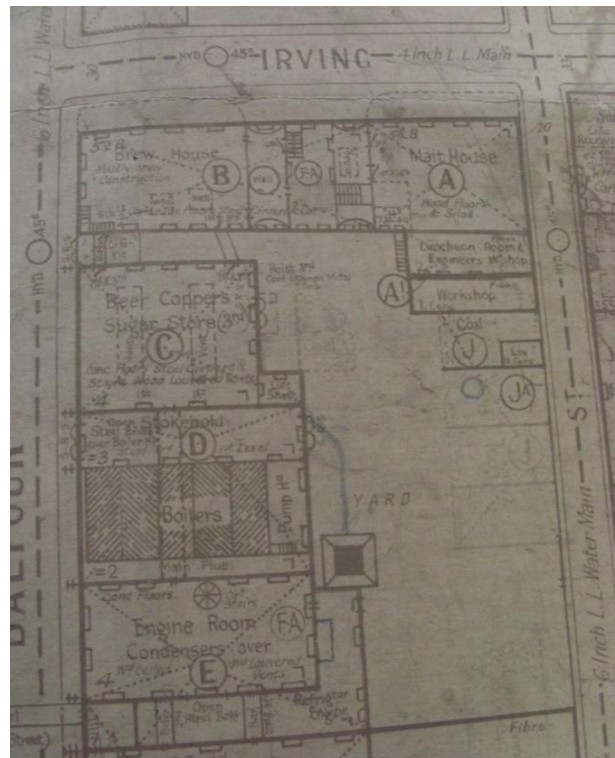


Figure 26 - Portion of 1927 Fire Underwriters Association of NSW site plan dated 27-06-27
Source: Courtesy of Powerhouse Museum

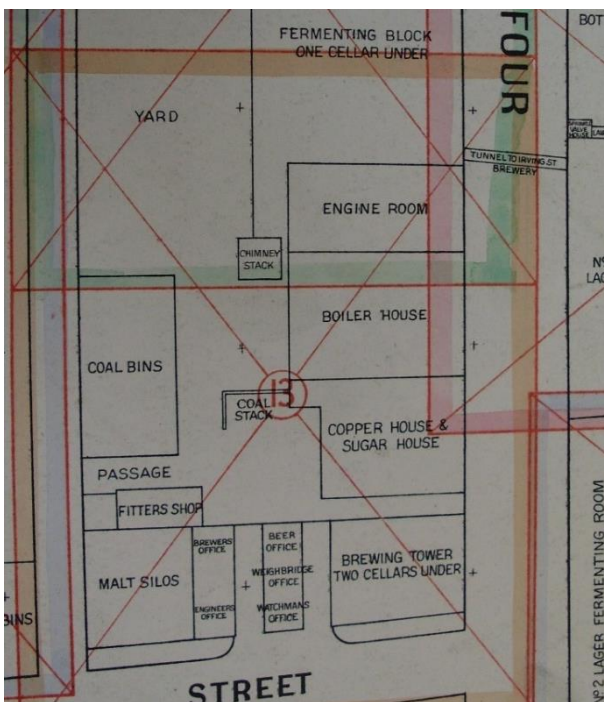


Figure 27 - Portion of 1930 block plan by Brewery
Source: Courtesy of Powerhouse Museum

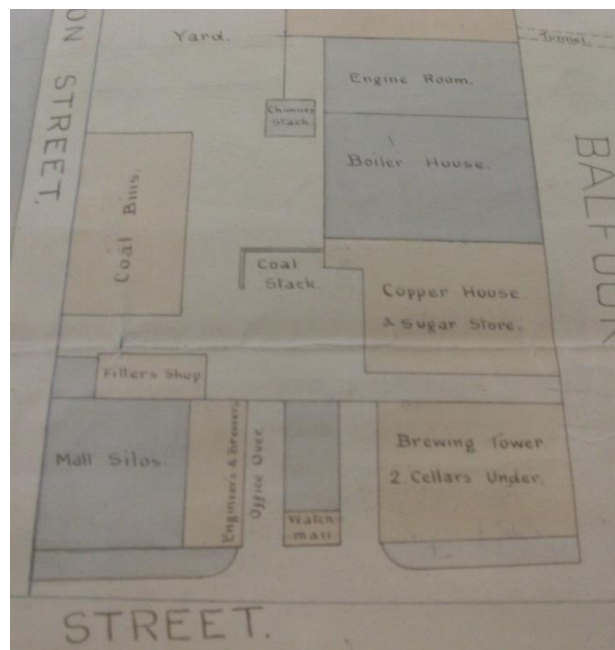


Figure 28 - Portion of 1930 block plan by Office of the Engineer in Chief, Kent Brewery, Plan No. K2 dated 22-05-30
Source: Courtesy of Powerhouse Museum

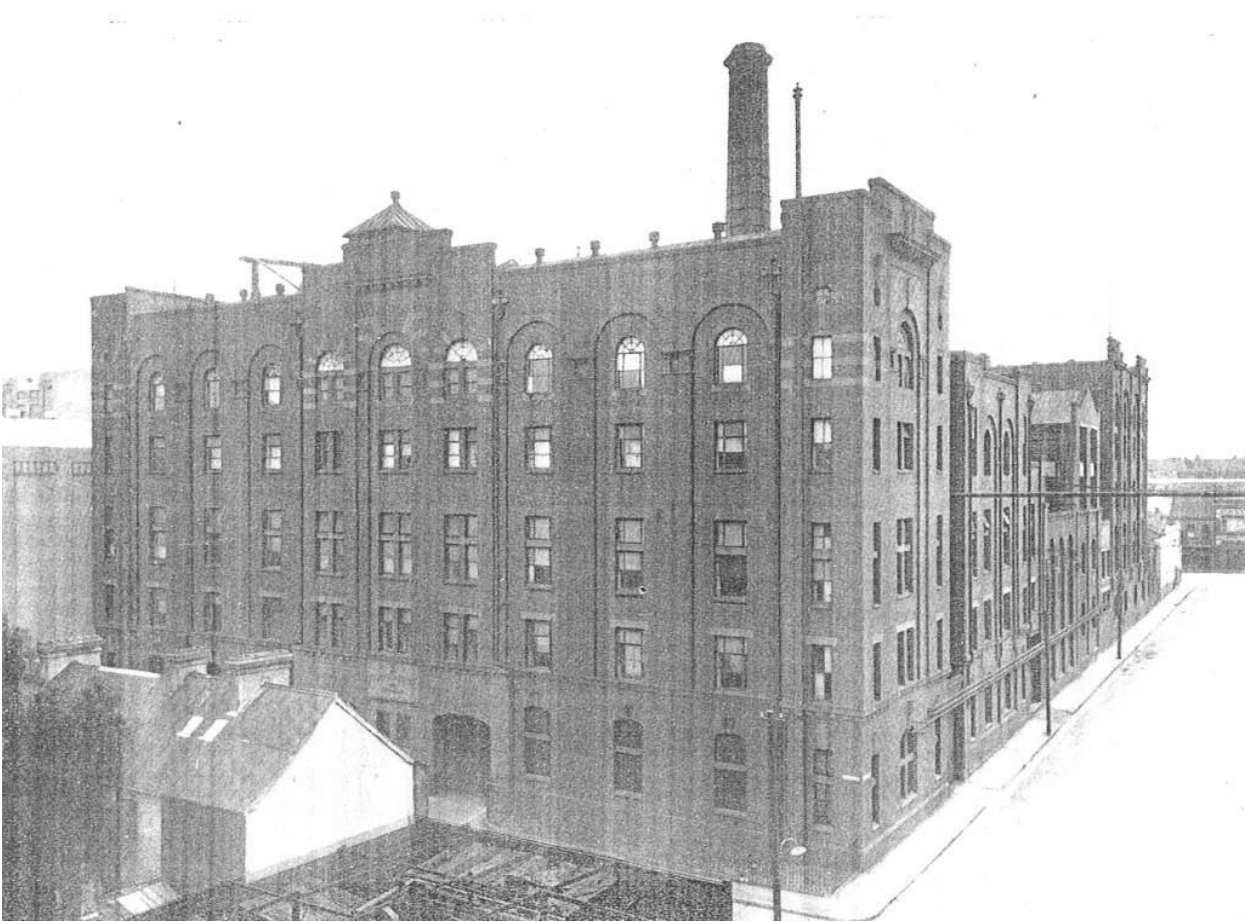


Figure 29 - Irving Street Brewery, 1935

Source: *Tooth & Co Ltd 1935:92*

In 1939 the Irving Street Brewery was upgraded and beer production on the site doubled. Sheaf Stout was brewed, as well as ales. The Fermenting and Skimming Block was extended west to Carlton Street with the addition of a Skimming, Racking, Washing and Chilling Building. Unlike the later buildings in the precinct, this addition was designed to fit in with the original architectural style of the brewery.¹⁰ The architects were Copeman Lemont and Keesing.¹¹

Minor alterations were carried out by architects Lemont Niblett and Daubney in 1959, including alterations to the yard, bar and gatekeeper's office.¹² Modification undertaken in the late 1960s included major building refitting and plant alterations.

¹⁰ This building is outside the subject area.

¹¹ Planning Workshop, p165.

¹² Planning Workshop, p167.

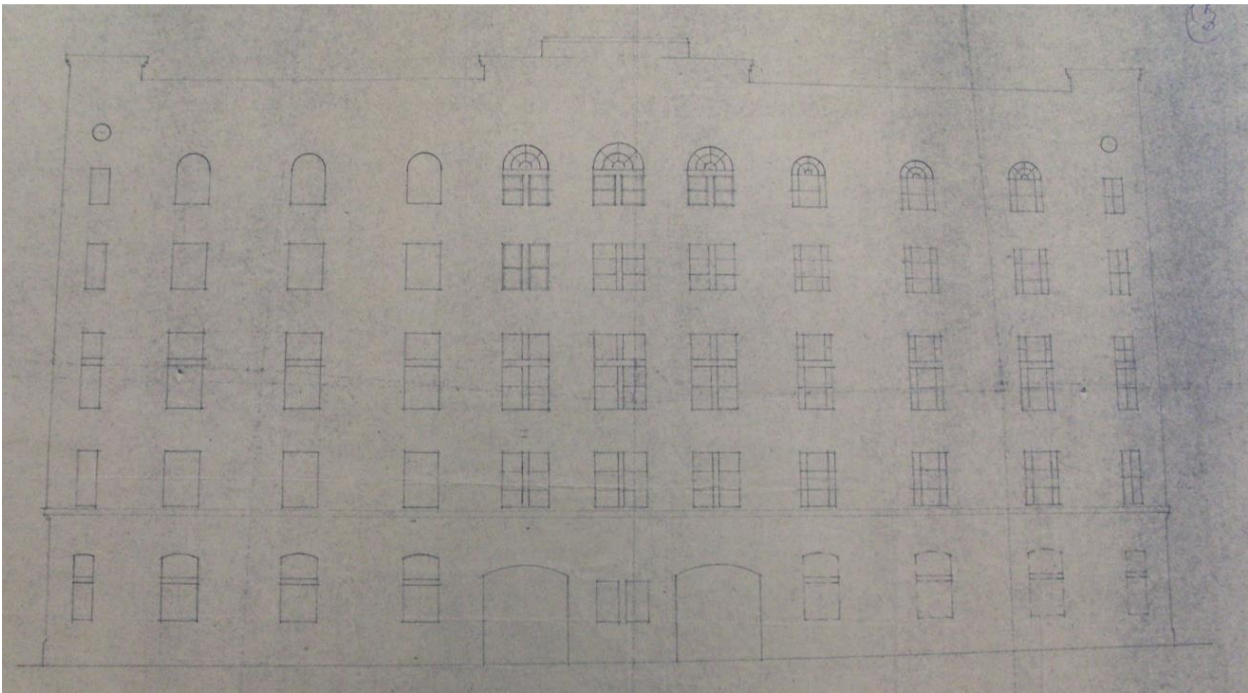


Figure 30 - Elevation drawings showing windows of Irving Street Brewery buildings: South façade of buildings 22 and 23 by the Department of Building Materials, Drawing No. M24708 dated 28-04-50

Source: Courtesy of the Powerhouse Museum archives collection

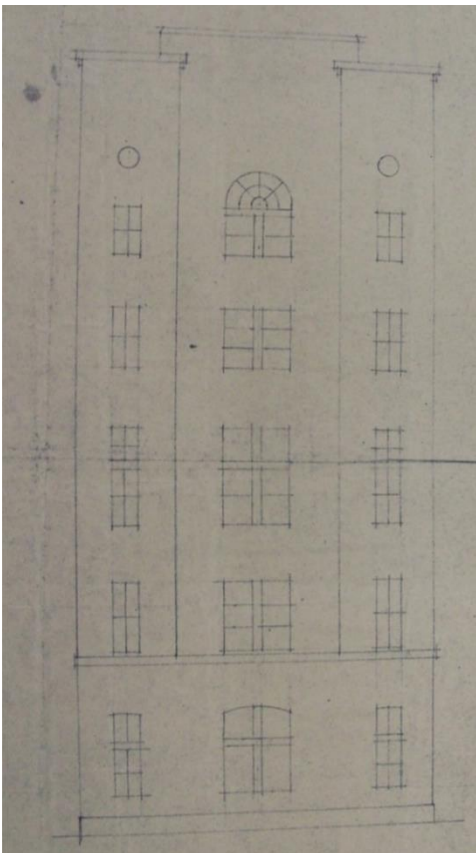


Figure 31 - Elevation drawings showing windows of Irving Street Brewery buildings: East façade of building 22 by the Department of Building Materials, Drawing No. M24708 dated 28-04-50

Source: Courtesy of the Powerhouse Museum archives collection

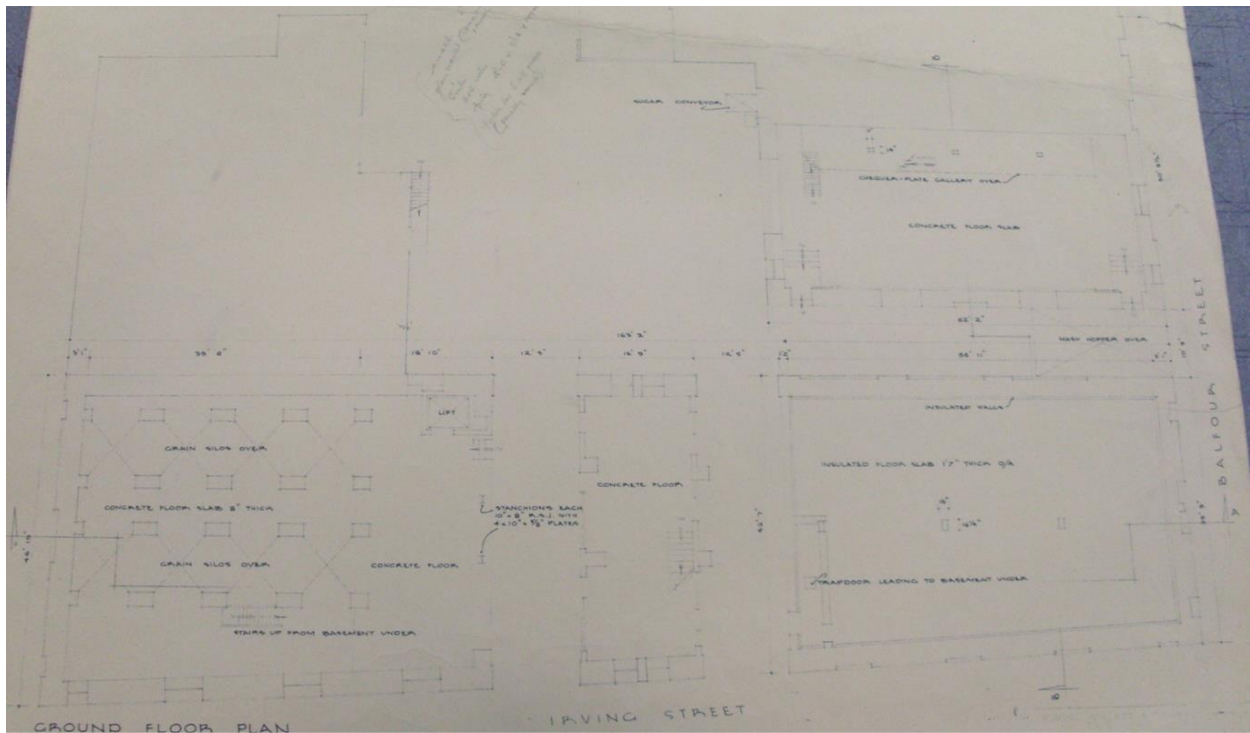


Figure 32 - Plan drawings showing windows of Irving Street Brewery buildings: Ground floor plan by Lemont Niblett and Daubney, Drawing No. 4E-852A dated 27-07-54

Source: Courtesy of the Powerhouse Museum archives collection

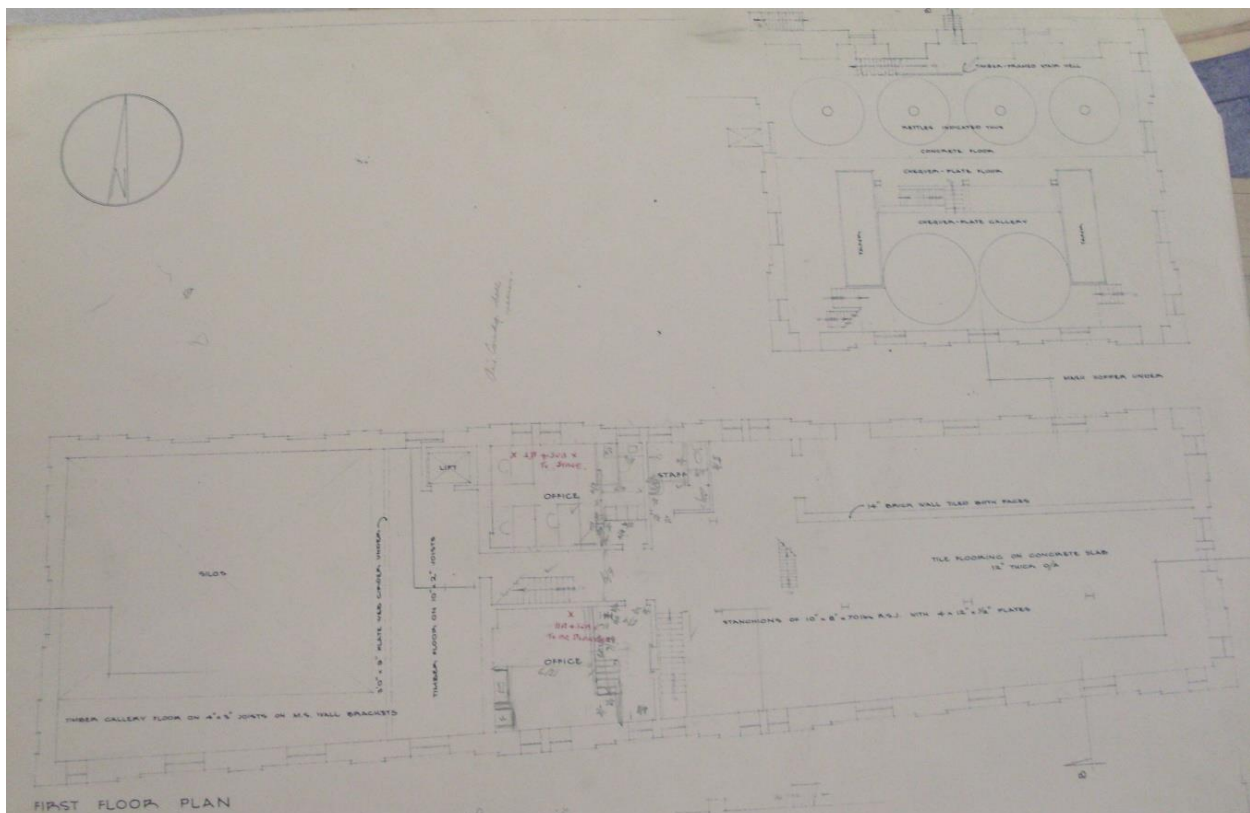


Figure 33 - Plan drawings showing windows of Irving Street Brewery buildings: First floor plan by Lemont Niblett and Daubney, Drawing No. 4E-852A dated 27-07-54

Source: Courtesy of the Powerhouse Museum archives collection

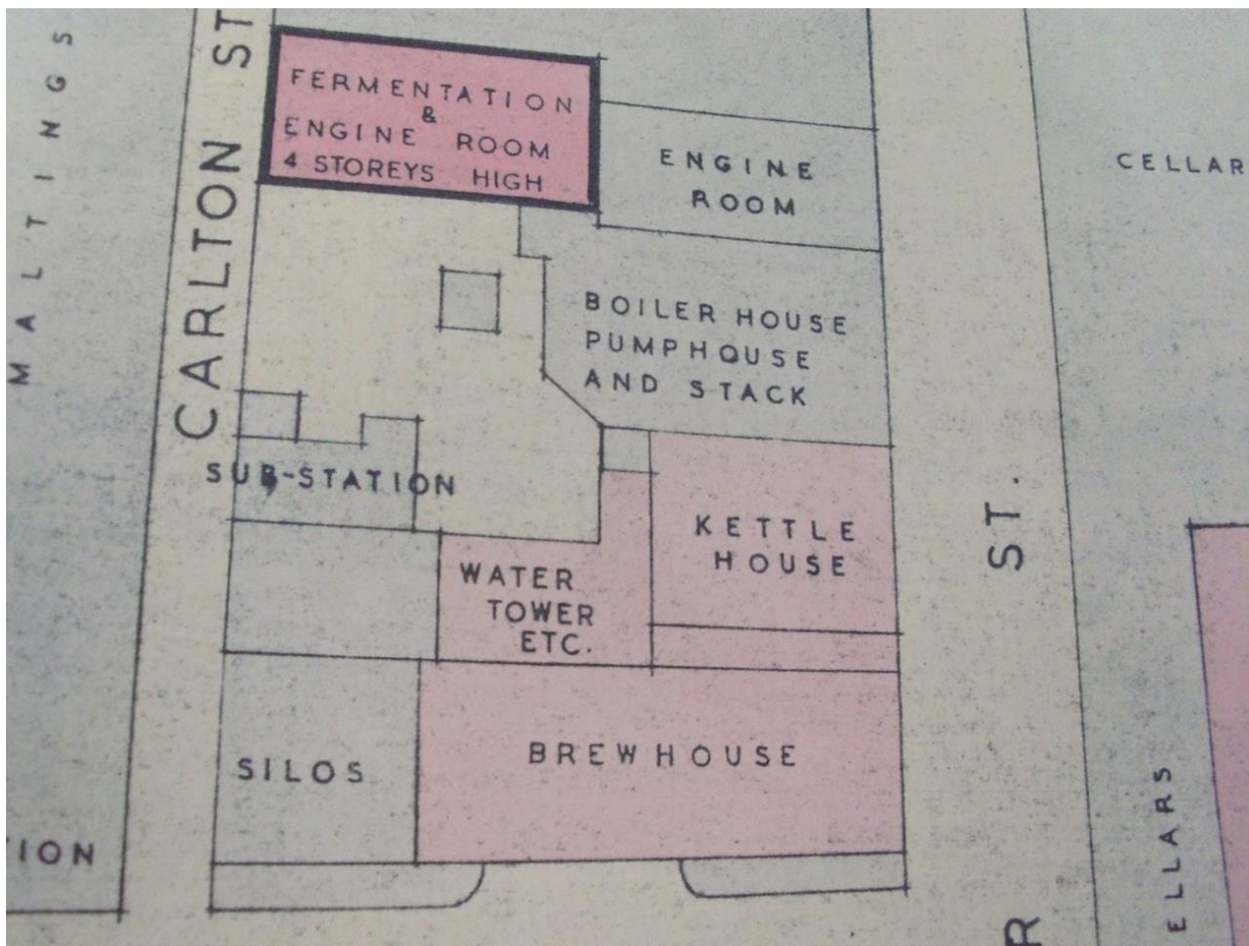


Figure 34 - Section of block plan showing Irving Street Brewery Buildings by Lemont Niblett and Daubney, Drawing No. 798, MA9691 dated 31-03-55

Source: Courtesy of the Powerhouse Museum archives collection

Major changes, including the gutting of some earlier buildings and the addition of new buildings, occurred during the early 1980s. At that time the two breweries, the original Kent Brewery and the Irving Street Brewery, were completely integrated. This required large amounts of automated pipework and access points to be constructed along the sides of the buildings and between the sites. The brewing tanks were replaced, the brewing and packaging processes had been automated and a sophisticated system of loading and unloading was in place.¹³

By the 1980s the Irving Street Brewery provided the following functions: filtration (22), bright beer storage (35A), refrigeration (35B) and carbon dioxide plants (35D), machine maintenance workshop and laboratories (35C). The boiler house was decommissioned and the power plant was replaced by an electrical substation in Building 26.

¹³ Susan O'Flahertie, *Kent Brewery: The Last Shift*, p26.



Figure 35 - Irving Street entrance to Brewery, 1991. An example of the pipework which was added to the exterior elevations.

Source: *Planning Workshop*, p170

From 2003, when it was announced that the brewery would close, tanks and equipment were gradually decommissioned and transported to the Yatala Brewery in Queensland. The brewery closed in 2005.

Despite the ongoing upgrades and additions, the exterior fabric of the original buildings is relatively intact, however nearly all of the internal machinery and fittings have been removed. Externally, most of the later additions (such as pipework) have been removed from the original buildings, while the newer buildings have recently been demolished (mid 2008).

4.4. MALT SILOS (23)

This is the only building in the complex which retained its original function until the closure of the brewery in 2005. The malt stores at the Kent Street Brewery contained bins and silos with a total capacity of 114,000 bushels (4 megalitres). The supplementary Irving Street Brewery Silos had a capacity of around 2.3 megalitres.¹⁴

The malt was the end product of the Maltings (Asset Nos 33 and 34, now demolished), where barley was cleaned and steeped in water to start germination then held for several days. At the end of the germinating process it was dried, with different drying temperatures being used to produce different types of malt. After drying, the malt was transferred to the silos ready for the Brew House (also known as the Brewing Tower).

On the eastern side of the Malt Silos were the Engineer's Office and the Brewer's Office, accessed via the entry from Irving Street. Between the two entrances were the Watchman's Office, the Weighbridge Office and the Beer Office.

Badly rusted steel-framed windows on the Irving Street frontage were replaced by bronze sashes and frames in 1950. A pneumatic plant (designed by architects Copeman Lemont and Keesing) was added to the Silos in 1935, a lift was installed by architect Reg E Grout in 1949 and a substation (now demolished) added to the north of the building in 1953.¹⁵

Most of the original internal fabric of the Silos is intact – this includes the timber trusses and ripple iron sheet lining of the internal walls and ceiling. In 1991 the Malt Silos still contained the original timber silos and cleaning socks, chutes and valve gates, some of which dated from 1912. There were also the footings for the plumbers' blocks on the internal wall, which were probably part of the original bucket elevator. A large steel angle and plate riveted original girder spanned across the building at a high level.¹⁶

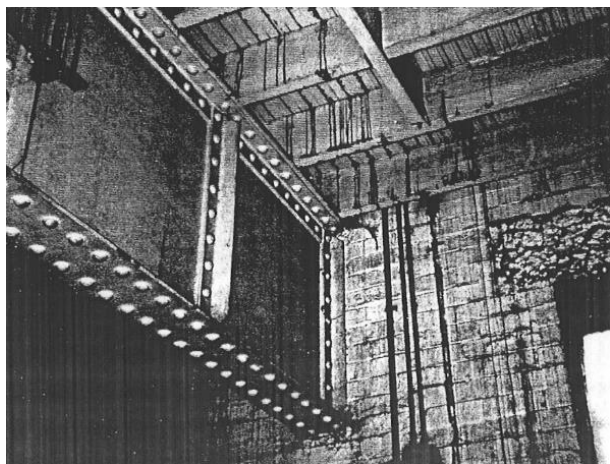


Figure 36 - Detail of riveted steel beams, timber floor structure and brickwork, 1991

Source: *Planning Workshop*, pp170-1

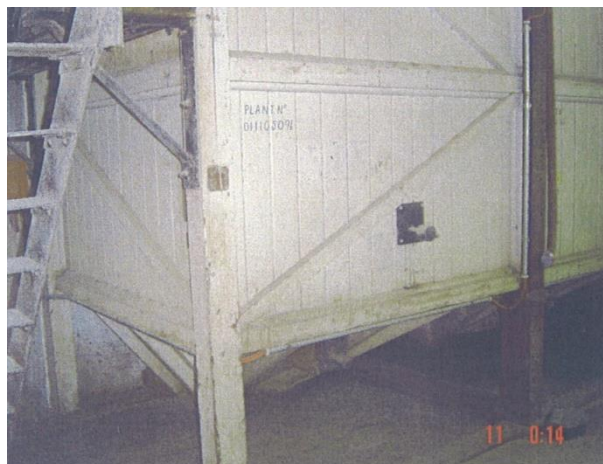


Figure 37 - Timber bins on the second floor, 2004

Source: Noel Bell Ridley Smith, *Inv44-22 & 23*, p9

¹⁴ Tooth & Co Ltd, 1953, p53.

¹⁵ Planning Workshop, p167.

¹⁶ Planning Workshop, p226.

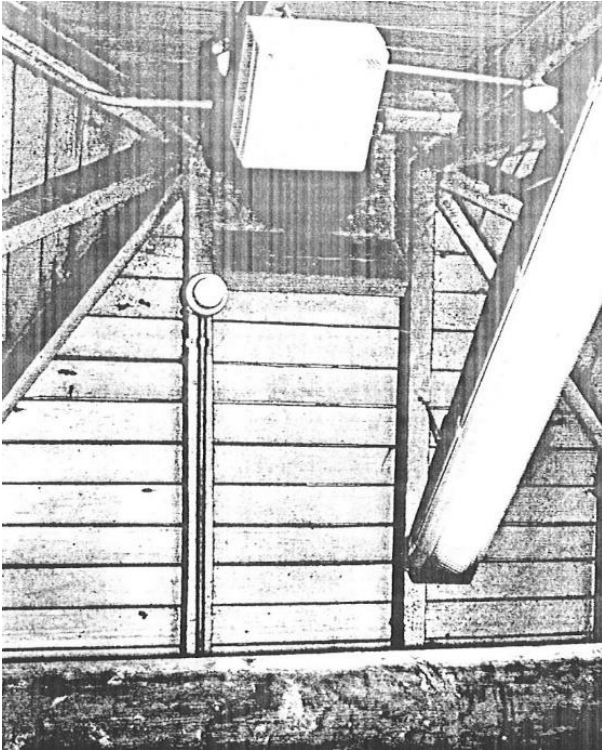


Figure 38 - Detail of roof structure and lining to turret, 1991

Source: *Planning Workshop*, pp170-1

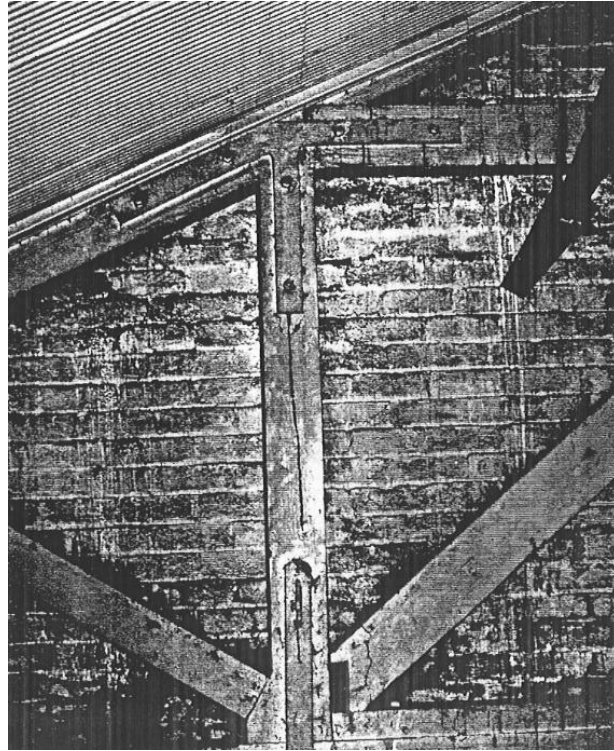


Figure 39 - Detail of roof structure & corrugated metal interior lining, 1991

Source: *Planning Workshop*, pp170-1

4.5. FILTRATION PLAN / BREW HOUSE (22)

At the top of the brewing tower, “grist” (crushed malt) cases and “hot liquor” (water) tanks contained the primary materials for the brewing process. The grist was “mashed in” with hot water then the resulting solution of sugars was separated from the grain husks in the lauter tun. The large mash-tuns were on the lower floors.¹⁷ Two cellars were located under the Brew House.

By 1976 the Brew House had ceased functioning as the new Brew House (Asset No 20 to the south) was operational. In the early 1980s the interior of the old Brew House was gutted and new concrete floors and columns were constructed. The spaces were converted to house the filtration plant (Figure 14). The external walls remained relatively intact. The works were designed by architects Peddle Thorp and Walker, and engineers Woolacott Hale Corlett and Jumikis. As part of these 1980s works, all of the original brewing machinery was removed from the building.

¹⁷ Tooth & Co Ltd, 1953, p54.

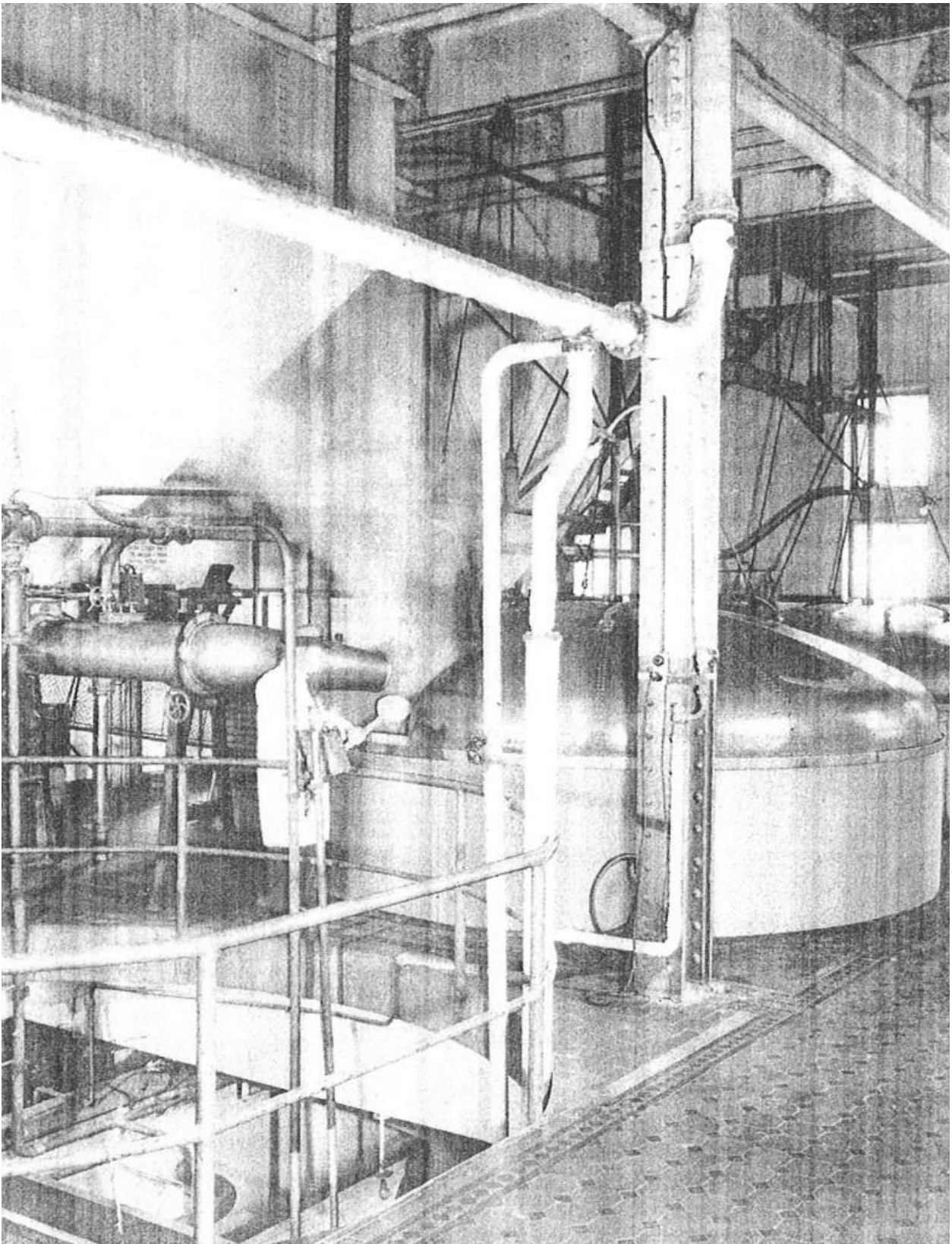


Figure 40 - Mash Tuns in Brew House (22), 1953

Source: *Tooth & Co Ltd 1953:55*



Figure 41 - Filtration Plant (22), 2004. Second floor interior showing the double height space.

Source: Noel Bell Ridley Smith, Inv44-22&23, p8

4.6. STAIRCASE BLOCK (25)

A brick and concrete stair was constructed between the old Brew House (Asset No. 22) and the old Copper and Sugar House (Asset No. 26) in the early 1980s, as part of the upgrade designed by Peddle Thorp and Walker. It provides access to the Substation (Asset No. 26) and an additional access point to the Filtration Building (Asset No 22). The reinforced concrete slabs intrude into the original face brickwork of the adjacent buildings, and original openings have been filled.

4.7. GAS RECEIVING STATION / COPPER HOUSE AND SUGAR HOUSE (26)

The second stage of the brewing process was boiling, during which the hops were added. The building contained large boiling vessels known as coppers or kettles.¹⁸ There was also a Sugar Store on the ground floor.

¹⁸ Tooth & Co Ltd, 1953, p54.

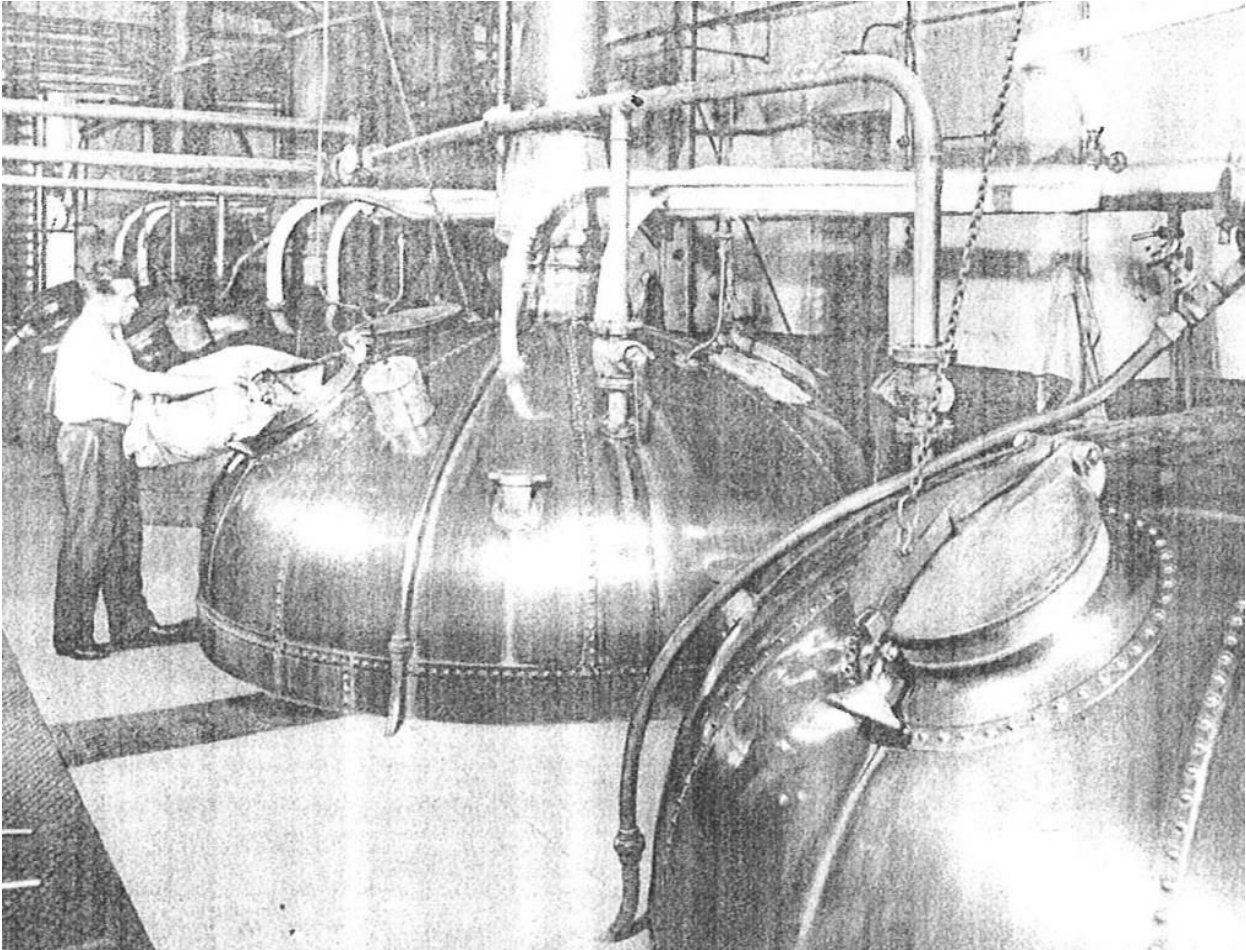


Figure 42 - Kettles in the Copper House

Source: *Tooth & Co Ltd 1953:54*

In the early 1950s, the Balfour Street openings were enlarged, and concrete lintels installed, to create bunker access through the Sugar Store to the yard.¹⁹ Similar access openings were created in the yard elevation. In addition, some of the upper level windows were blocked or bricked up, and one was enlarged with non-matching brickwork. The architect was Reg E Grout.

More recently the interior was gutted to create a space for an electricity Substation, vacuum filters, offices and other equipment. New reinforced concrete floors and columns were installed and openings on the southern facade were bricked up. When the steam raising operation (Asset No. 30) was converted from coal to gas in 1989, the gas was piped to a tank installed on the top of this building.

4.8. OLD BOILER HOUSE (30)

The boilers created steam for the brewing process and for the generation of electricity. Around 1950 the Boiler House was substantially altered when it was converted to use coal. Designed by architect Reg E Grout, the changes involved placing a coal bunker (a sheet metal shed) on the top of the building, adding inverted pyramid-shaped coal hoppers and raising the level of the adjacent roof. Concrete-framed additions obscured the yard façade on the first floor level. The steam raising function was converted from coal to gas in 1989 as part of the construction of a new Boiler House (31), and the boilers were removed from the old Boiler House.²⁰ Subsequently, electricity was provided via a Substation in the old Copper and Sugar House (26).

¹⁹ Planning Workshop, p168.

²⁰ O'Flahertie, p33.

4.9. CHIMNEY STACK (36)

Located in the centre of the brewery complex, the octagonal, brick chimney was part of the 1912 constructions, and served the Old Boiler House (30). Around 1990 it was re-strapped vertically on each corner and horizontally throughout its height.²¹

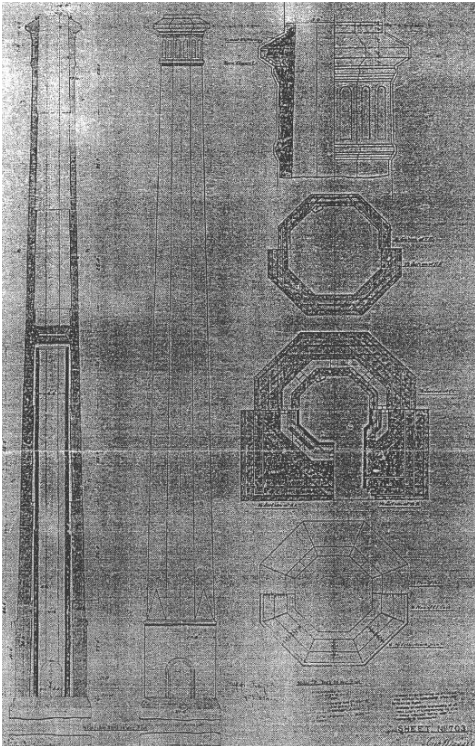


Figure 43 - Chimney Stack (36), original plans and Brewery in 1930s

Source: Noel Bell Ridley Smith and Partners
2005:V4P4:INV40-36, p.25

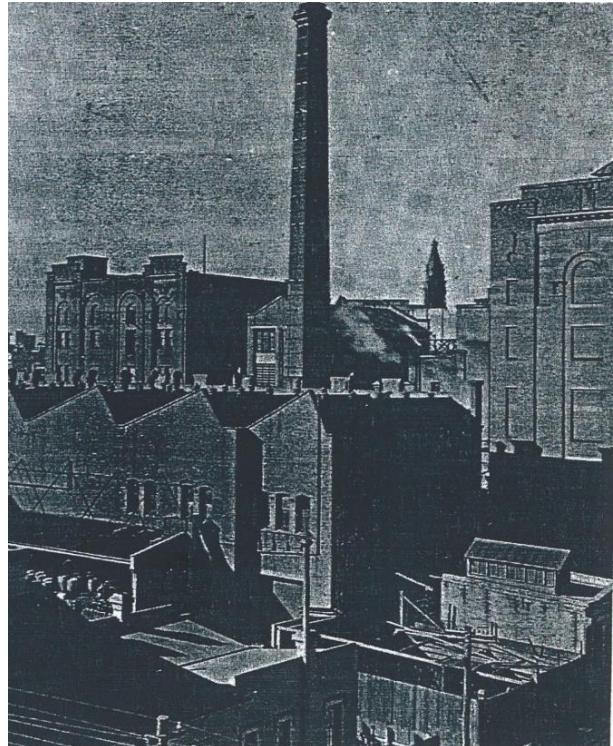


Figure 44 - Brewery buildings and chimney stack in 1930s

Source: Noel Bell Ridley Smith and Partners
2005:V4P4:INV40-36, p.26

4.10. BREWERY YARD (52)

In the design of the Irving Street Brewery complex, architectural detailing was at least as important as the brewing technology in developing the form of the buildings. This resulted in impressive elevations not only to the streets, but also in the working yard.

The yard is paved in concrete and most of the late 20th century structures within the yard have been removed. While the boilers were fuelled by coal, there was a Coal Stack adjacent to the Chimney Stack.

4.11. GRAIN HOPPER (24) AND NEW BOILER HOUSE (31)

The grain hopper has been demolished, which was located on the northern façade of building 23. It was a double height metal shelter with roller shutters on two opposite faces, allowing grain trucks to drive through. The trucks unloaded malted barley, by tipping it into a floor grating leading to the basement of the Malt Silos. Adjacent to the hopper was a Fitters Shop and later a Substation, the outline of which is still visible on the northern façade of the Malt Silos building (23).

The New Boiler House (31), constructed in the 1980s, has been demolished. It was on the site of the Coal Bins which supplied coal to the Old Boiler House.

²¹ Planning Workshop, p165.

5. ARCHAEOLOGICAL ASSESSMENT

In 2006 GML Heritage was commissioned by Carlton and United Breweries (NSW) Pty Ltd to prepare an Archaeological Assessment and Research Design (AARD) for the former Carlton and United Brewery site, Broadway, Chippendale. The report was written to accompany a submission of a 'concept plan' to the Minister for Planning pursuant to section 75M of the Environmental Planning and Assessment Act 1979 (the 'EP&A Act'). The Concept Plan proposed the redevelopment of the former Carlton and United Brewery (CUB) site and adjacent land holdings. Stakeholders from local and state government, cultural and community industries, and the local community were consulted, and their respective submissions were taken into consideration in the determination of the Concept Plan.

The AARD report assessed the archaeological potential and significance of the land within the site and statutory requirements. The report also set the framework for archaeological investigations and management to be undertaken in conjunction with the bulk excavation and redevelopment of the whole of the former CUB site. With regard to the Irving Street Brewery Precinct, the report recommended management to mitigate potential impacts of the bulk earthworks. Testing was only required on the far northern side of the precinct (on the Broadway frontage) as specific potential had been identified in this area. Archaeological monitoring was recommended in conjunction with demolition of associated brewery buildings to the north of the subject site and within the brewery yard. The objective of this monitoring program was to determine the nature and extent of any archaeological remains in these areas and whether further investigation was warranted.

Archaeological monitoring was also noted as being potentially required periodically throughout the bulk excavation program, in order to determine whether evidence associated with the paleo-environment or Aboriginal occupation of the area may survive in this area.

Following the 2006 assessment and in conjunction with the staged development of the site, extensive excavation/ investigation has been undertaken at the former Carlton United Brewery site including within the subject brewery yard. The following summarises the findings of the previous assessments and details relevant excavation/ works to date. Relevant assessments and reports are referenced below.

5.1. HISTORICAL PHASING

The Archaeological Assessment broadly summarised the history of the site into the following phasing sequence:

- Phase 1—Geology and Pre-European Environment.
- Phase 2—Aboriginal Occupation (c5000 BP—c1788).
- Phase 3—Early European Settlement: Military Gardens, Wayside Inns and Rural Activities (1788—c1834).
- Phase 4—Kent Brewery and Early Subdivisions (1834—c1845).
- Phase 5—Nineteenth Century Urban Settlement and Brewery Expansion (c1845—1900).
- Phase 6—Resumptions, Redevelopment and Expansion (1900—1955).
- Phase 7—1955 Masterplan, Redevelopment and Expansion (1955—2004). For the purposes of this summary assessment, this report extends this phase from 1955-2018 to encompass the more recent site works and development.

These phases correspond to historical information provided in section 4 of this report. The discussion of archaeological potential summarised below, relates to specific evidence to these phases.

5.2. AREAS OF DISTURBANCE

The former Brewery site has been subject to extensive development throughout its history, including periods of major redevelopment in the late twentieth century and since 2005 for the redevelopment in accordance with the SSDA. The entire site area either contains built elements or hard surfaces—no undeveloped areas remain, with extensive surface modification (including the introduction of fill deposits to create level yard and building areas) and grading/excavation works associated with various phases of redevelopment and upgrade of the site.

Development of the site throughout its history has also included the construction of various subsurface elements, including cellars/basements, building foundations (particularly for larger built elements, including chimneys and towers) and service infrastructure (including pipes, drains, channels, tanks/cisterns, tunnels, wells and privies). These underground features are associated with both former and existing site features (indeed some of them represent archaeological features themselves). In more recent years, the site has also been extensively and variously excavated with new basements provided in conjunction with the Central Park redevelopment.

As such, the 2006 GML AARD assessed the entire CUB site as having been subject to at least minor disturbance which would have affected the potential for the site to contain archaeological evidence associated with previous phases of development and occupation (including Aboriginal and historical archaeological remains and paleo-environmental evidence).

Areas where major disturbance was known to have occurred (eg where basements exist or where underground tanks have been installed) have been assessed as having no archaeological potential (except where built elements or other features may themselves represent an archaeological resource). Areas where major subsurface elements have been installed or constructed (including built elements and other infrastructure) but where the extent of disturbance has not been confirmed or where bulk removal may not have occurred, eg substantial building foundations or major services were assessed as having low potential.

The subject Brewery buildings are located within the Irving Street Brewery Buildings, and were assessed as being in an area of major disturbance.

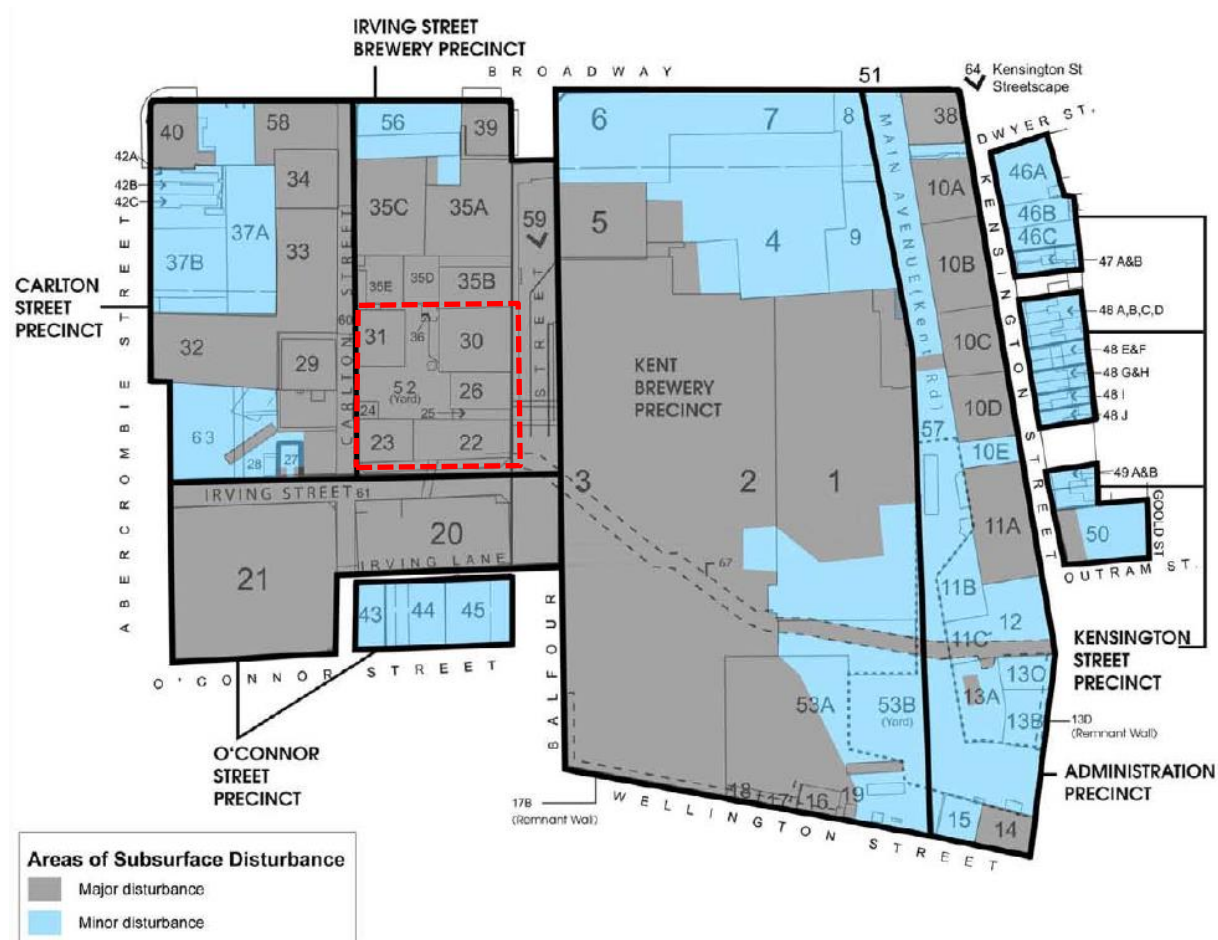


Figure 45 - Areas of Archaeological disturbance (location of the Brewery Buildings for this report shown outlined in red)

Source: GML 2006B:53 (Figure 3.1)

5.3. ABORIGINAL ARCHAEOLOGICAL ASSESSMENT AND POTENTIAL

The following is summarised from the 2006 GML AARD.²²

The CUB site forms the central section of the eastern arm of the extensive Blackwattle Creek catchment area. The creek flowed with fresh water and was not subject to tidal influence. The vegetation with the site would have consisted of an open dry sclerophyll forest dominated by Turpentine and Ironbark on the higher, better drained, areas. The lower wet areas along the creek and around Blackwattle Swamp would have supported wetlands.

Approximately 30 named Aboriginal groups are recorded in the historical literature to have occupied the broader Sydney region at Contact (marked by the arrival of Europeans arrived in Australia). At least two of these groups are also documented to have had a close association with the land that now comprises the Central Business District of Sydney and its immediate surrounds that includes the former CUB site.

Available historical information suggests that two Port Jackson Aboriginal clans were closely associated with the local landscape surrounding the subject site at Contact. These groups appear to have comprised the Cadigal and the Wan(n)gal. Available information suggests that the traditional Aboriginal owners of the Blackwattle landscape were alienated from their land rapidly following the establishment of the European settlement at Sydney Cove.

With the subject site positioned on the western edge of the developing town limits up until c1830, it is possible that Aboriginal visitation to the site continued well into the 'historic' period where the land was 'open space' and/or was used for activities such as market gardening/early industry; however, our understanding of post-Contact Aboriginal life on the 'fringes' of the developing township of Sydney is poor.

5.3.1. Assessment of Aboriginal Archaeological Potential

Analysis of nearby and previous site investigations, Site formation processes, conditions and ongoing pre- and post-Contact uses influenced the creation of the potential Aboriginal archaeological profile at the subject site, including the presence of the Blackwattle Creek and the broader location of the site between two principal marine and inland resource zones; namely, the estuarine and deepwater contexts of Rozelle, Blackwattle and Johnston's Bays and Darling Harbour (Cockle Bay) to the northeast, and the hinterland to the south towards Botany Bay and the Cooks Rivers that from around 1790 was referred to as 'the Kangaroo Grounds'. It appears likely that both of these resource zones would have been extensively and repeatedly exploited by Aboriginal people over time.

The 2006 AARD concluded that although there were no known Aboriginal Archaeological sites on the former CUB site, it was likely that the subject site was subject to intermittent but short-term visitation and use of the local landscape by Aboriginal people in the past that may have continued into the first decades of the post-Contact period.²³ The AARD further clarified however that it was unlikely that Aboriginal people would have established long-term occupation sites on the lower lying and poorly drained land.²⁴

The following range of Aboriginal archaeological and/or environmental evidence was assessed as having the potential to survive within the subsurface profiles on the former CUB site²⁵:

- Evidence for the pre-Contact environment in the form of creek sediments and palynological remains.
- Potential evidence for past Aboriginal visitation and use of the site in the form of flaked stone artefacts and possible midden deposits.
- Evidence for environmental impact in the form of vegetation clearance and replacement by introduced species, land degradation and pollution.

The AARD does not assess significance or potential specific to the Brewery Buildings, as these aspects of the site's significance are unrelated to the precinct boundaries.

²² GML 2006: Former Carlton and United Brewery Site, Broadway—Archaeological Assessment and Research Design, page 12

²³ Godden Mackay Logan 2006B:72

²⁴ Godden Mackay Logan 2006B:72-73

²⁵ Godden Mackay Logan 2006B:72

The 2006 AARD concluded the following²⁶:

- If present, Aboriginal archaeological evidence would likely to be buried relatively deep in subsurface profiles situated beneath nineteenth century fill deposits, overlying structures, and hard surfaces that now cover the site.
- Past Aboriginal use of the Blackwattle Creek landscape is likely to have comprised short-term visits by people travelling to and from favourable resource zones in the vicinity, and it seems unlikely that people would have as a result established long-term occupation sites on the low lying and poorly drained land in the vicinity of the former brewery site that would have resulted in the creation of substantial archaeological deposits.
- Potential evidence associated with past Aboriginal visitation and use of the subject site would likely consist of low-density distributions of flaked stone artefacts (or durable midden remains that may survive in favourable conditions) that would be encountered in relatively disturbed recovery circumstances as outlined below.
- It would appear that there is potential for the site to provide an opportunity to examine early paleo-environmental contexts (at depth) that could inform us about how Aboriginal people may have lived in the landscape prior to the stabilisation of current sea-levels during the period between 5,000 and up to 8,000 years ago
- Large areas of the subject site have minimal archaeological potential as a result of significant impacts that have occurred through multiple phases of construction that will have extensively disturbed the original topography and sub surface soil profiles across the site.
- The channel and banks of the original watercourse that traversed the site (located to the south of the subject brewery buildings in the main park area) have been extensively modified over time as the creek was progressively transformed from a free-flowing feature to a now formalised storm water drain.
- **The accumulated impacts associated with the ongoing post-Contact development and occupation of the site are therefore likely to have operated to extensively disturb and/or destroy much of the Aboriginal archaeological evidence that may have formerly been present on the site.**

It is noted that post the 2006 AARD, extensive excavation and redevelopment has been undertaken to complete the main park (to the south of the Brewery Buildings) and for the construction of the trigeneration plant beneath the brewery yard (refer to Figure 20). It is not known if any archaeological investigations were undertaken, however the 2006 AARD did not require any testing in the area of the brewery yard, rather it noted that *Archaeological monitoring may also be required periodically throughout the bulk excavation program, in order to determine whether evidence associated with the paleo-environment or Aboriginal occupation of the area may survive in this area*²⁷.

Any associated outcomes are unknown to Urbis.

5.3.2. Assessment of Aboriginal Significance

Aboriginal archaeological sites/places are commonly assessed in terms of three broad significance criteria that generally mirror the five key types of cultural heritage values identified in the Burra Charter that forms the basic framework for assessing significance by heritage authorities in New South Wales.

These three principal values consist of cultural (Aboriginal), public (educational/social) and scientific (archaeological) significance. These criteria embody the recognition that Aboriginal sites are valuable in a number of ways, and are all interrelated. Namely, that they are important to:

- the Aboriginal community (as representing tangible links to their past);
- the general public (for both their educational and broader heritage value); and
- the scientific community (for their potential research value that may ultimately lead to both the clarification and augmentation of the criteria above).

²⁶ Ibid 73-74

²⁷ GML 2006B: Page 119

Consultation undertaken with the Aboriginal community during previous archaeological investigations in the Blackwattle Creek catchment indicates that the area originally formed a small part of a far larger cultural landscape that was highly significant to the traditional Aboriginal owners of Sydney for thousands of years prior to the arrival of Europeans, and that the landscape of the region continues to be highly valued by the Aboriginal community today.

5.3.3. Summary Conclusion

Although no consultation was undertaken in conjunction with this report, it is likely that the Central Park site (inclusive of the subject Brewery site) is of some significance to the Indigenous community, noting that the former Brewery site formed a small part of a far larger cultural landscape that was highly significant to the traditional Aboriginal owners of Sydney. Potential for Aboriginal Archaeological remains are however assessed as low.

Having regard to the above assessment, it is concluded that the accumulated impacts associated with the ongoing post-Contact development and occupation of the site are likely to have extensively disturbed and/or destroyed the Aboriginal archaeological resource that may have formerly been present on the site. Aboriginal Archaeological potential is therefore assessed as low to nil.

Protections apply to Aboriginal artefacts or archaeological remains under the NPW Act 1974.

5.4. INDIGENOUS CONSULTATION

With consideration for the minor nature of proposed excavation works, being limited to:

- Further excavation in previously disturbed areas of buildings 22/23 (already comprising basements and previously assessed as having nil potential) and
- Minor and limited excavation for lifts and services.

And having regard for the identified low archaeological potential, the highly developed and disturbed nature of the site, as well as previous assessments, consultation with indigenous groups has not been undertaken at this time. Where required, it is recommended that consultation be undertaken as part of conditions of consent.

5.5. HISTORICAL ARCHAEOLOGICAL ASSESSMENT AND POTENTIAL

5.5.1. Historical Archaeological Potential

The following is a summary of the archaeological potential of the entire Brewery Buildings Precinct identified in GML's Archaeological Assessment (2006):²⁸

The Irving Street Brewery was built in 1912 in response to the growing demand for bottled beer. This precinct is situated partly on land that was originally within the Military Garden (established 1830s) and partly on William Chippendale's 95-acre grant. The area was subdivided in 1835 into a series of small lots with narrow lanes and developed with a mixture of workshops, cottages, stables and inns. The area degenerated throughout the mid to late 19th century into slum-like conditions, which led to wholesale resumption and clearance of much of the area by c1910. Construction of the brewery on this land the following year also required demolition of 14 terraces along the western side of Irving Street, built in the 1880s.

In its initial phase, the brewery comprised the malt silo (23) and brewing tower building (22), a copper and sugar house (26), boiler house (30) and attached chimney (36), the engine room, (35B) (now demolished) and a fermenting and skimming building (35A) (now demolished). A bottling plant was constructed around the same time in Carlton Street (demolished).

The Irving Street Brewery went through several modifications with major refitting of buildings and plant alteration in the late 1960s, 1970s and early 1980s. The plant has now been decommissioned.

In relation to the retained Irving Street Brewery Buildings and Yard (subject of this application), the archaeological potential was assessed by GML as follows: ²⁹

²⁸ Godden Mackay Logan 2006B:44-45

²⁹ Godden Mackay Logan 2006B:45-47

Table 3 – Archaeological Potential

Asset No.	Site Integrity	Potential Remains	Phase / Date	Potential
22/23	Major disturbance	-	-	Nil
25 (stair well)	Major disturbance	No former structures recorded here—rear portion of five domestic yards of houses fronting Irving Street, Post the 2006 AARD the stair was replaced which would have further disturbed any potential resource, such that the potential is now considered to be low to nil.	5: 1880s (c1910)	Low to nil
26	Major disturbance	May contain fragmentary evidence associated with the former Military Garden, including structural remains, features or deposits (unrecorded features and activities) May contain structural remains, deposits and features associated with former terrace houses fronting eastern side Linden Lane (30—32 Linden Lane—two-room timber houses; yards and outbuildings)	3: c1803 (1830s) 4: c1845 (c1910)	Low Low
30	Major disturbance	May contain fragmentary evidence associated with the former Military Garden, including structural remains, features or deposits (unrecorded features and activities) May contain fragmentary evidence associated with former terrace houses fronting eastern side Linden Lane, including structural remains, deposits and features (22, 24, 26 and 28 Linden Lane—two-room timber houses; yards and outbuildings)	3: c1803 (1830s) 4: c1845 (c1910)	Low Low
36 (chimney)	Major disturbance	-	-	Nil
52 (yard)	Part major disturbance (services/ pits/ adjacent footings)	The previous assessment noted that the Yard may contain fragmentary evidence associated with the former Military Garden and/or fragmentary evidence associated with former terrace houses fronting eastern side of Carlton Street/Abercrombie Place/Daltons Place and western side of Linden Lane, including structural remains, deposits and features (10, 12, 14 and 16 Carlton Street—two-room timber houses; yards and outbuildings; 17, 19, 23, 25, 27, 29, and 31 Linden Lane—brick houses; 15 Linden Lane—timber house). It is noted that post the 2006 AARD, extensive excavation and redevelopment was undertaken for the construction of the trigeneration plant beneath the brewery yard (refer to Figure 20) such that the archaeological potential is now considered to be nil,	3: c1803 (1830s) 4: c1845 (c1910)	Nil

Asset No.	Site Integrity	Potential Remains	Phase / Date	Potential
		where it was considered low in the previous assessment.		

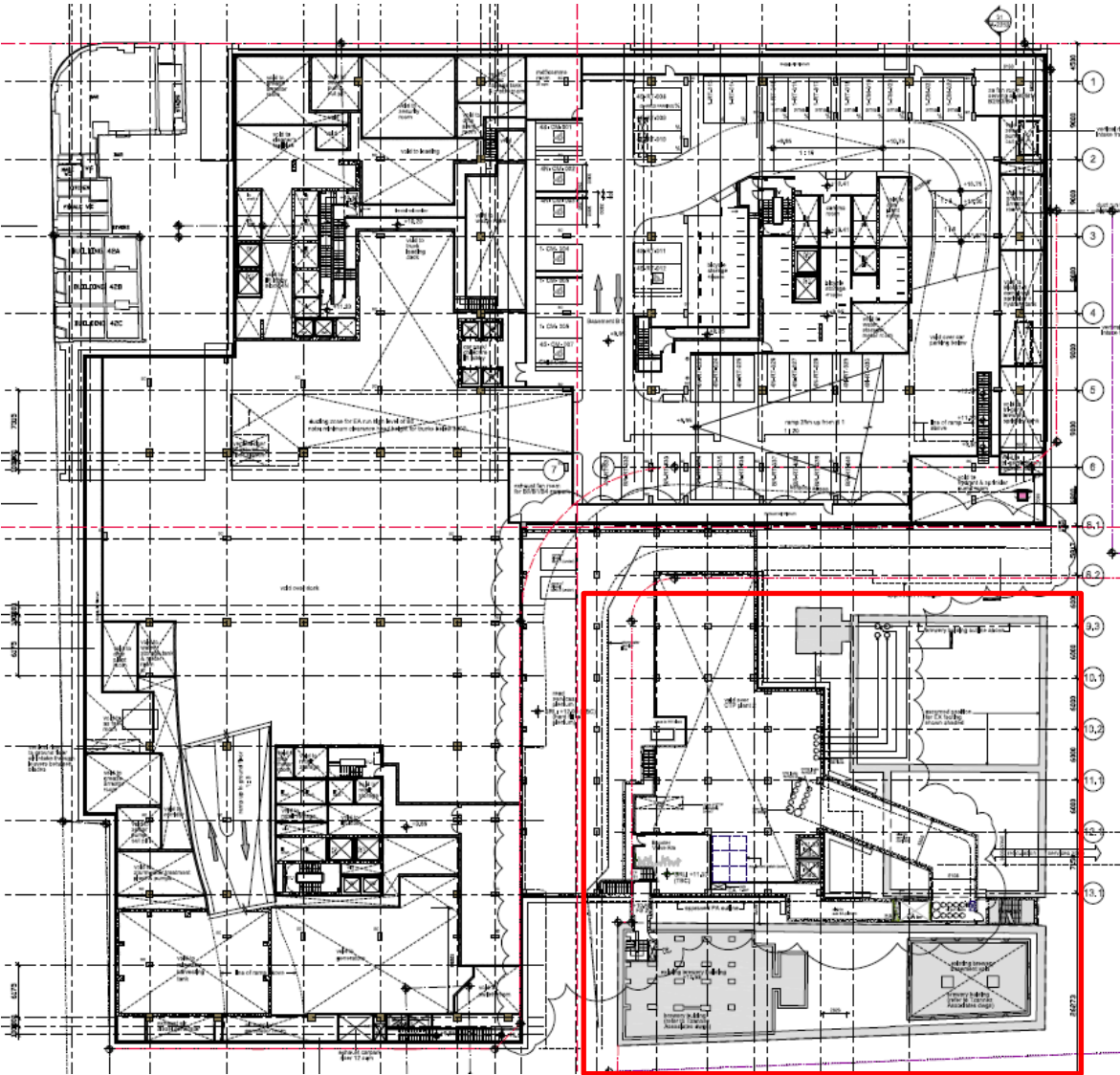


Figure 46 – Part site plan showing the basement and trigon plant in blocks 1 and 4 North. The subject brewery building and yard are indicated at the bottom right of the image

Source: PTW Architects, Drawing No. PA-A-1759

5.5.2. Historical Archaeological Significance

The 2006 AARD provided a Summary Statement of Significance for the whole of the Central Park/ former CUB site³⁰ which is provided at section 6.2. This includes discussion of the historical archaeological values.

Significance of specific archaeological remains relevant to the subject site and the Irving Street precinct is assessed as follows:

³⁰ Ibid 87-88

Table 4 – Archaeological Significance Assessment

No	Likely Remains	Significance	Research Potential
22/23	Nil	Nil	Nil
25	Late nineteenth-century residential development	Moderate	Low
26	Evidence of Military Garden	High	Moderate
	Early residential development	High	Moderate
30	Evidence of Military Garden	High	Moderate
	Early residential development	High	Moderate
36	Nil	Nil	Nil
52	Nil	Nil	Nil

6. HERITAGE SIGNIFICANCE

Section 6.1 provides the statement of heritage significance for the entire former Carlton and United Brewery (CUB) site, as well as graphically showing areas of archaeological and heritage significance throughout the site (as determined by Godden Mackay Logan in 2006).

Section 6.3 and 6.4 revises Godden Mackay Logan's 2006 assessment and statement of significance for the Brewery Buildings.

6.1. CURRENT HERITAGE LISTINGS

A summary of the statutory heritage listings applicable to the Brewery Complex and its vicinity are provided below. Whilst the heritage listing is limited to the chimney stack (item 36), the significance of the brewery buildings has been recognised in its retention in the SSDA and previous reporting, including the Special Element Conservation Plan (prepared by Urbis).

Table 5 – Statutory controls and heritage listings

Precinct	CUB Asset No. of Heritage Items	Heritage Listing
Irving Street Brewery Precinct	Chimney Stack (36)	Sydney Local Environmental Plan 2005

6.2. SIGNIFICANCE OF FORMER CUB SITE

The following statement of significance has been taken from the Heritage Impact Statement by Godden Mackay Logan for the Concept Plan (2006A:47-49), which applies to the entire CUB site. The subject Irving Street Brewery Buildings are assessed below in sections 5.3 and 5.4, however the buildings are of course a strong contributor to the values of the former CUB site as a whole.

The CUB site has Local significance as a rare surviving large industrial site on the city's edge, providing evidence of the evolution of a major brewery over 170 years. It was, until its closure, the largest and oldest continuously operating brewery in New South Wales and in its present form, demonstrates aspects of the evolutionary history of the site from the early 1890s to the present day.

The site incorporates within its boundaries the whole of the original Kent Brewery site, established in 1835, which is capable of interpretation.

The site has strong associations with the Tooth Family from the establishment of brewing in 1835 to the incorporation of Tooth and Company as a public company in the 1880s.

Individual buildings within the site have associations with the various firms of architects employed by Toths, notably Spain, Cosh and Minnett, Halligan and Wilton, Robertson and Marks, Copeman Lamont and Keesing, and Sidney Warden.

The site contains individual buildings, building groups, streets patterns and lanes, structures and industrial equipment which are significant for their individual values and for their contribution to an understanding of the broader historical evolution of the site. The site includes a rare group of terraces of historical importance, a rare Art Deco style portal gateway of exceptional aesthetic value and a rare, highly intact Federation era garage building.

The most important component elements of the site include the Main Entry Portal Gateway (51), the Main Avenue (Kent Road) (57), the County Clare Hotel, Broadway (38), the Australian Hotel, Broadway (40), the Abercrombie Street Terraces (42A, B and C), the Castle Connell Hotel (14), the Kensington Street Terraces (47A and B, 48A to J, and 49A and B), the Kensington Street Streetscape (64), the Irving Street Brewery Group (22, 23, 26, 30, 35A, 35B and 36), the Administration Buildings (10A and B), the former Motor Garage/Kensington Street Store (46A) and the former Barley Store (32). The Carpenters Workshop (13A) had been rated in the 2005 CMP and subsequent Executive Report as being of Moderate significance and that therefore it may warrant listing at the local level, but a subsequent Construction Analysis Report

(Godden Mackay Logan, July 2006) revised this assessment. The 2006 report concluded that the building does not meet the relevant threshold for listing at a local level.

As a result of its long association with brewing and its physical presence at the edge of the city, the CUB site retains an ability to demonstrate the dominant character of industrial uses that once bounded the city core. It demonstrates the importance that breweries had in the economic structure of the state and in the social lives of Australians since Colonial times.

The identified significance of the site is enhanced by extensive surviving records which are in the public domain. These demonstrate aspects of the identified historical significance of the site. Substantial documentary evidence survives in several public archives along with artefacts surviving on site and in the Sydney Powerhouse Museum, which would support interpretation of the various aspects of the significance of the site.

The site has potential to contain historical archaeological resources that may provide tangible links to significant phases in the history and evolution of the site. The site has been subject to varying degrees of disturbance and has low to medium potential to provide information about the development and occupation of the site throughout its history, which would complement the comprehensive historical information that is available. This evidence may also provide further information about poorly-understood aspects of Sydney's early history, through evidence associated with early agricultural activities, residential occupation, and development and commercial enterprises. The site is unlikely to contain extensive evidence associated with the operation of the brewery itself, owing to the dramatic impact that twentieth century investment in and redevelopment of the brewery enterprise had on the surviving archaeological resource.

The site has low potential to contain archaeological deposits and features that may contribute to our understanding of past Aboriginal use of this part of Sydney, or the paleo-environment. Any such evidence would be of High significance with Moderate research potential, given that such evidence is likely to be relatively disturbed, if it survives at all.

6.3. ASSESSMENT OF SIGNIFICANCE – IRVING STREET BREWERY BUILDINGS

The Assets listed in the following table are the Brewery Buildings that are subject to this report. The assessment of the overall assets for both built and archaeological significance were undertaken by Godden Mackay Logan (2006A:50-53) in their Heritage Impact Statement on the Concept Plan for the site's redevelopment.

Construction of the brewery buildings was completed in 1912. As brewing operations advanced the buildings' uses also changed. Their uses in 1912 and 2005 when the brewery closed are noted below. All buildings are currently vacant.

Table 6 – Brewery Assets: Use and Significance

Asset No.	Name of Asset	Building Use (2005)	Built and other Element Significance	Archaeological Significance
22	Filtration Building	Filtration Plant	High	Nil
23	Malt Silo Building	Malt Silos	High	Nil
25	Staircase Block	Stairs (built 1980)	Intrusive	Moderate
26	Gas Receiving Station	Gas Receiving Station and Offices	Moderate	High
30	Old Boiler House	Storage (1989-2005)	Moderate	High
36	Chimney Stack	Chimney	High	Nil

Asset No.	Name of Asset	Building Use (2005)	Built and other Element Significance	Archaeological Significance
52	Yard	Yard	High (for non-built significance)	Partially nil, partially moderate, partially high

The following assessment of heritage significance has been developed specifically for the Brewery Buildings, following on from GML's 2006 Heritage Impact Statement.

Table 7 – Heritage Significance Assessment – Brewery Buildings

Criteria	Description	Significance Assessment
A – Historical Significance	An item is important in the course or pattern of the local area's cultural or natural history.	<i>The [former] CUB site is significant for its demonstration of important historical evolutionary processes of growth and development from the earliest alienation and use of the land for agricultural and housing purposes through to the establishment of the colonial brewery and continuous expansion, growth and change up to the end of the 20th Century.</i> The remaining Irving Street Brewery Buildings (Assets Nos. 22, 23, , 26, 30, 36 and 52) have historical significance at a local level as the last remaining industrial buildings on the former CUB site. They provide tangible evidence of the history of the brewing process. The Malt Silo (23) is the only building in the complex which retained its original function until the closure of the brewery in 2005 with tangible evidence of the function being apparent in the retained malt silos.
B – Associative Significance	An item has strong or special associations with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history.	<i>The former CUB site at Broadway is significant for its close associations with members of the Tooth family who were prominent members of Sydney society and contributed to the social, cultural and economic life of Sydney and NSW in the mid-late 19th Century.</i> <i>The former CUB site at Broadway is significant at a secondary level for its associations with the work undertaken for the brewery by a number of prominent architects in designs for component parts of the site.</i> The remaining Irving Street Brewery Buildings have associative significance at a local level as significant industrial buildings designed by architects Halligan and Wilton.
C – Aesthetic Significance	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.	The remaining Irving Street Brewery Buildings have aesthetic significance at a local level, as they are good albeit altered examples of Edwardian warehouse buildings. They are remnants of the site's former distinctive industrial character and function. The chimney (36) retains its aesthetic significance as a recognisable and prominent element on the site and landmark of the Chippendale area.

Criteria	Description	Significance Assessment
D – Social Significance	An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons.	The former CUB site at Broadway (particularly in its redeveloped form) does not strongly demonstrate this criterion based on available information studies. However, the Irving Street Brewery Buildings were at the heart of the site physically, they represented the core of the industrial processes taking place on the site, and had significance for the working population at the brewery from 1912 to 2005.
E – Research Potential	An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.	<i>The potential archaeological resource at this site is very complex, with various phases of construction, expansion and demolition across the site which occurred throughout the site's history.</i> It is likely that the Central Park site (inclusive of the subject Brewery site) is of some significance to the Indigenous community, noting that the former Brewery site formed a small part of a far larger cultural landscape that was highly significant to the traditional Aboriginal owners of Sydney. Potential for Aboriginal Archaeological remains are however assessed as low to nil. It is concluded that the accumulated impacts associated with the ongoing post-Contact development and occupation of the site are likely to have extensively disturbed and/or destroyed the Aboriginal archaeological resource that may have formerly been present on the site. The archaeological evidence for the Irving Street Brewery Buildings is likely to be historical in nature, considering the major disturbance of the site. It may contain fragmentary evidence associated with the former Military Gardens and former residential development phases. The site is however noted as being highly disturbed; including deep excavation of the brewery yard for the trigen plant and redevelopment of the site for the brewery buildings, which included provision of basements to buildings 22/23. Potential is therefore assessed as low. Any remains associated with the military garden and early residential development where surviving is likely to be of moderate or high heritage significance. The research potential of the Irving Street Brewery Buildings is likely to be associated with evidence of their construction. The Malt Silos (23) and the coal hoppers in the Boiler House (30) have high significance for their ability to demonstrate the industrial processes occurring on the site.

Criteria	Description	Significance Assessment
F – Rarity	An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history.	The remaining Irving Street Brewery Buildings are rare within the City of Sydney LGA, and are likely to be rare at a State level (particularly buildings 23 and 30), noting the extent of the industrial fabric and unique design. Their integrity as elements of a rare industrial complex has been diminished by the removal of other buildings from the former CUB site. <i>Archaeological remains associated with the early agricultural and residential use of the site (1788-c1850) would be rare, representing a poorly documented and understood aspect of Sydney and New South Wales' history. Archaeological remains associated with an early brewery complex are also rare, especially one that had continuous occupation for over 170 years.</i> Archaeological potential has however been assessed as low.
G – Representative	An item is important in demonstrating the principal characteristics of a class of NSWs (or the local area's): cultural or natural places; or cultural or natural environments.	The remaining Irving Street Brewery Buildings are now stand-alone former industrial elements rather than part of an industrial complex. The retained buildings are no longer representative of large scale industrial sites however they are representative of Edwardian industrial architecture and the early 20th century development of the CUB site.

6.4. STATEMENT OF SIGNIFICANCE – IRVING STREET BREWERY BUILDINGS

The following statement of significance for the Brewery Buildings has been revised by Urbis, based on changes to the site and the Heritage Council's seven assessment criteria (above).

The remaining Brewery Buildings (Assets Nos. 22, 23, 26, 30, and 36) have rarity at a state level, particularly the Malt Silos (23) and Old Boiler House (30). They also have research potential and historical, associative aesthetic and representative significance at a local level.

The former CUB site is significant for its demonstration of important historical evolutionary processes of growth and development from the earliest alienation and use of the land for agricultural and housing purposes through to the establishment of the colonial brewery and continuous expansion, growth and change up to the end of the 20th Century. The remaining Irving Street Brewery Buildings have historical significance as the last remaining industrial buildings on the former CUB site. They provide tangible evidence of the history of the brewing process. The Malt Silo (23) is the only retained Brewery building that retained its original function (until the closure of the brewery in 2005).

The remaining Brewery Buildings have aesthetic significance, as they are good albeit altered examples of Federation warehouse buildings. They are remnants of the site's former distinctive industrial character and function. The Chimney Stack (36) retains its aesthetic significance as a recognisable element on the site and landmark in the Chippendale area.

The former CUB site at Broadway is significant for its close associations with members of the Tooth family who were prominent members of Sydney society and contributed to the social, cultural and economic life of Sydney and NSW in the mid-late 19th Century. The former CUB site at Broadway is significant at a secondary level for its associations with the work undertaken for the brewery by a number of prominent architects in designs for component parts of the site. The remaining Irving Street Brewery Buildings have associative significance as they were designed by Halligan and Wilton.

The Irving Street Brewery Buildings were at the heart of the site physically, and represented the core of the industrial processes taking place on the site. As such, it is likely that the brewery buildings demonstrate social significance for the working population at the brewery from 1912 to 2005.

The research potential of the Brewery Buildings is likely to be associated with evidence of their construction. The reinforced concrete malt silos with the Malt Silos Building (23) and the coal hoppers within the Old Boiler House (30) have high significance for their ability to demonstrate the industrial processes occurring on the site.

It is likely that the Central Park site (inclusive of the subject Brewery site) is of some significance to the Indigenous community, noting that the former Brewery site formed a small part of a far larger cultural landscape that was highly significant to the traditional Aboriginal owners of Sydney. Potential for Aboriginal Archaeological remains are however assessed as low. The potential historical archaeological resource at the former CUB site is very complex, with various phases of construction, expansion and demolition across the site which occurred throughout the site's history. The archaeological evidence for the Irving Street Brewery Buildings is likely to be historical in nature, considering the major disturbance of the site. It may contain fragmentary evidence associated with the former Military Gardens and former residential phases, however the potential is assessed as low to nil.

The remaining Irving Street Brewery Buildings are rare within Sydney's Central Business District, and likely to be rare at a State level (particularly buildings 23 and 30) given their unique design. Their integrity as elements of a rare industrial complex has been diminished by the removal of other buildings from the former CUB site.

The remaining Irving Street Brewery Buildings are now stand-alone former industrial elements rather than part of an industrial complex. As such the subject retained brewery buildings are no longer representative of large scale industrial sites but they are representative of Edwardian industrial architecture and the characteristic early 20th century development of the CUB site.

6.5. SIGNIFICANT ELEMENT DIAGRAMS

The following plans by Tzannes Associates dated October 2008 illustrate the significance grading of elements throughout the Brewery Buildings.



SIGNIFICANCE OF ELEMENTS - IRVING STREET BREWERY BUILDINGS & YARD - BASEMENT FLOOR PLAN - 0300



Figure 47 – Significance Diagram – Basement Floor Plan

Source: Tzannes, 2008

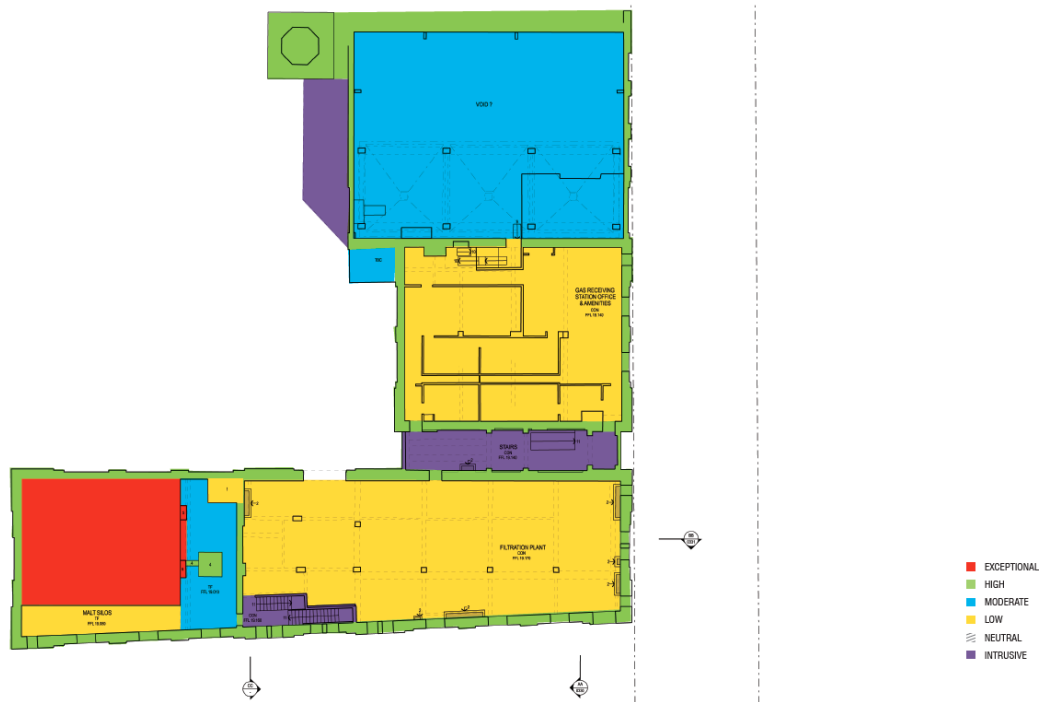


SIGNIFICANCE OF ELEMENTS - IRVING STREET BREWERY BUILDINGS & YARD - GROUND FLOOR PLAN - 0301



Figure 48 - Significance Diagram – Ground Floor Plan

Source: Tzannes, 2008



SIGNIFICANCE OF ELEMENTS - IRVING STREET BREWERY BUILDINGS & YARD - FIRST FLOOR PLAN - 0302



Figure 49 - Significance Diagram – First Floor Plan

Source: Tzannes, 2008



SIGNIFICANCE OF ELEMENTS - IRVING STREET BREWERY BUILDINGS & YARD - SECOND FLOOR PLAN - 0303



Figure 50 - Significance Diagram – Second Floor Plan

Source: Tzannes, 2008

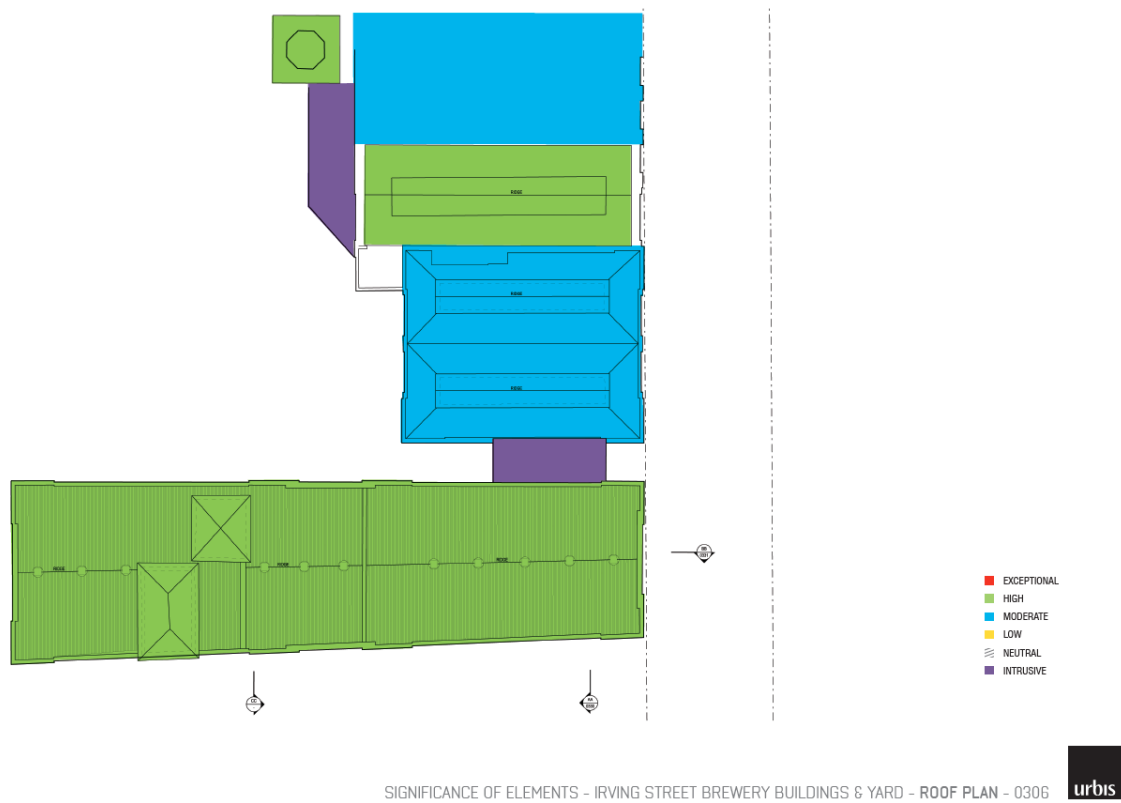


Figure 53 - Significance Diagram – Roof Plan

Source: Tzannes, 2008

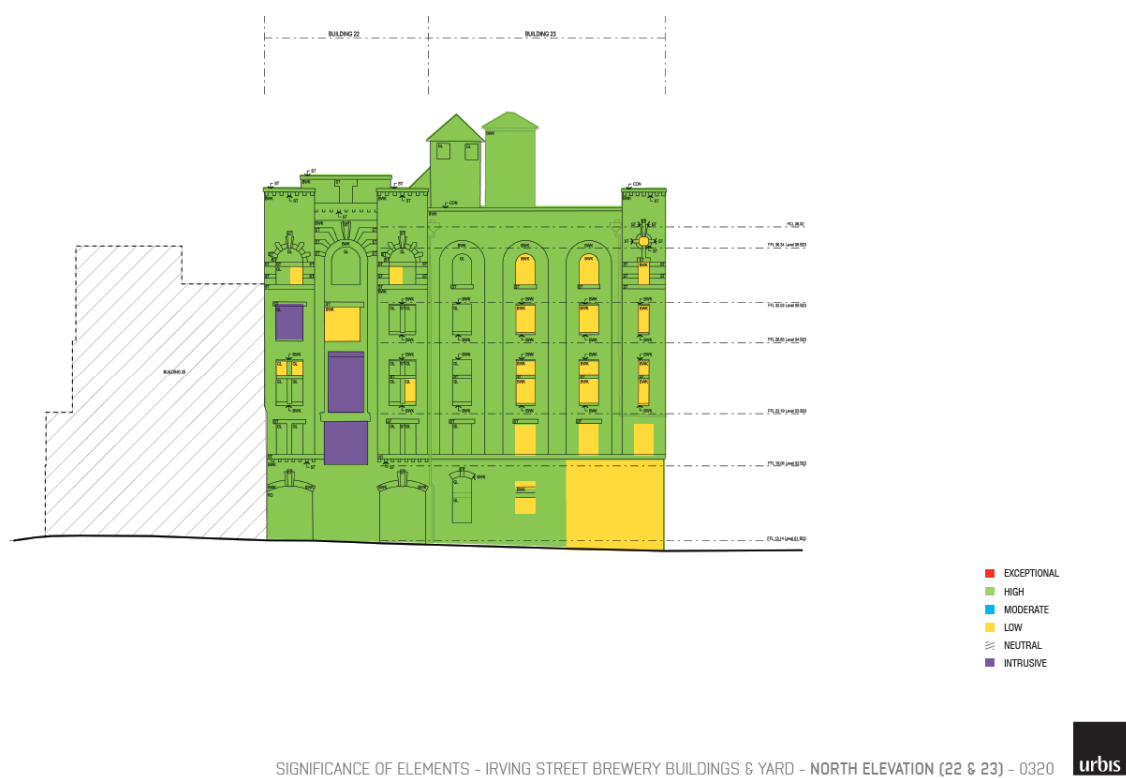


Figure 54 - Significance Diagram – North Elevation

Source: Tzannes, 2008

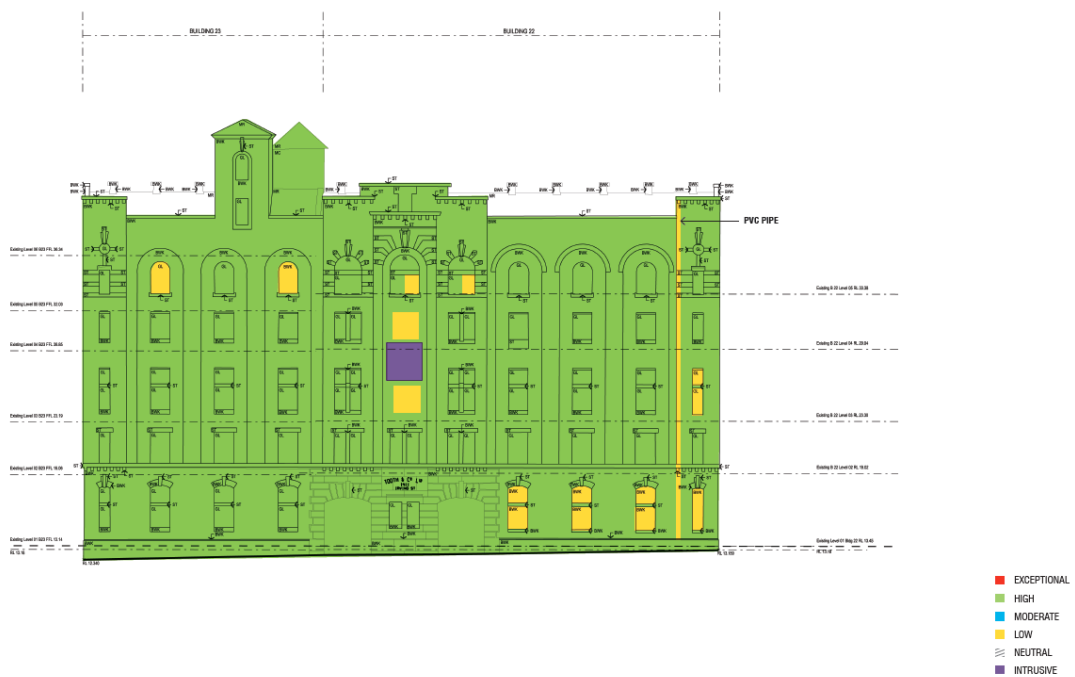


SIGNIFICANCE OF ELEMENTS - IRVING STREET BREWERY BUILDINGS & YARD - EAST ELEVATION - 0321



Figure 55 - Significance Diagram – East Elevation

Source: Tzannes, 2008



SIGNIFICANCE OF ELEMENTS - IRVING STREET BREWERY BUILDINGS & YARD - SOUTH ELEVATION - 0322



Figure 56 - Significance Diagram – South Elevation

Source: Tzannes, 2008

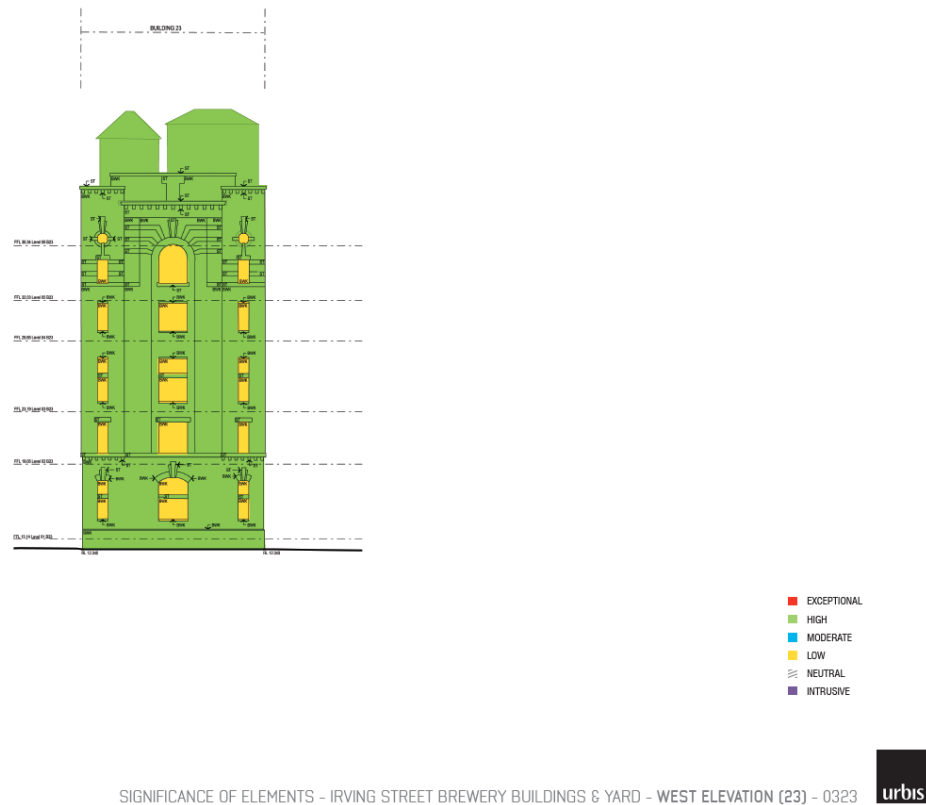


Figure 57 - Significance Diagram – West Elevation (23)

Source: Tzannes, 2008

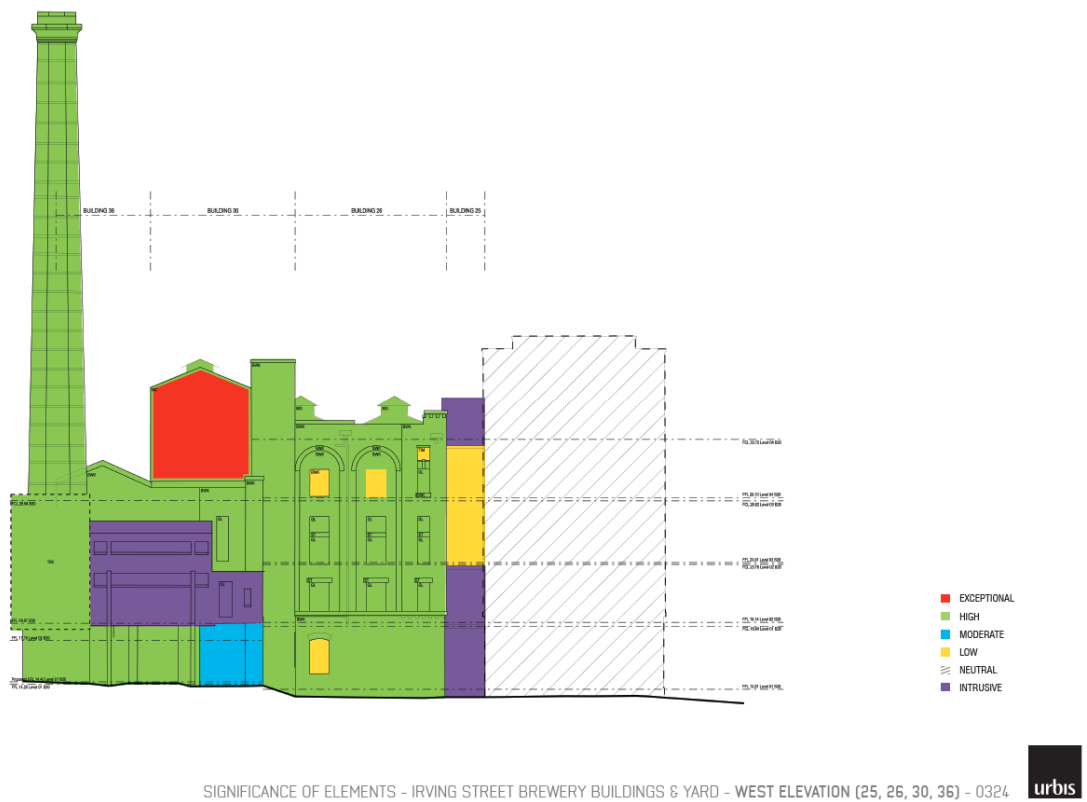


Figure 58 - Significance Diagram – West Elevation (25, 26, 30, 36)

Source: Tzannes, 2008

7. IMPACT ASSESSMENT

7.1. KEY ELEMENTS OF THE PROPOSAL

Proposed works are set out in section 3 of this report. The proposed new work follow conservation, restoration and adaptation principles established by the 2014 works. New elements are a direct expression of its function adapted to the particular form and character of the heritage building. The use of metalwork for new additions sympathetically contrasts the heritage masonry of the existing building and reflects the more contemporary industrial legacy of the building's adaptation over time. The proposed new work comprises four major elements:

- a new roof form and addition comprising two new floor levels
- a new glazed northern façade (modified but similar to that previously approved)
- reorganisation of floor levels internally to allow for additional mezzanine floors
- a new entrance lobby facing onto Brewery Yard (west elevation)

The brewery buildings will be tenanted and a range of uses are being considered.

Key elements of the proposal are assessed below in section 7.1. Proposed works are also assessed against the relevant provisions of the LEP, Heritage Division guidelines and the sites own Conservation Plan (SECP) as set out in sections 7.2 to 7.4. Potential Archaeological Impacts are assessed in section 7.5.

7.1.1. External Façade Works and Additions

As detailed above, new work and proposed additions include a new roof form and addition comprising two new floor levels (assessed in section 7.1.2 below), amendments to the glazed northern façade of building 30 (approved under the previous scheme), modifications to the infill stair (block 25) between building 22 and 26 and extension of the stair to accommodate the upper floor additions, and provision of a new entry off the western façade at the ground level.

Proposed modifications to window and door fenestration are generally consistent with those approved under the former SSDA including provision of new ground floor openings and replacement of windows which have been infilled or highly modified. New works to the facades include modifications for services, predominantly providing for louvres (assessed in section 7.1.6).

Proposed conservation works are subject to a separate schedule of conservation works, in conjunction with the SSDA conditions of consent and do not form part of this proposal. A separate schedule has been prepared by Urbis and requires façade renewal including (but not limited to) removal of plants, repointing and patching of brickwork, repair/ replacement of sandstone, replacement of windows (in accordance with the previous consent) and reinstating windows to match the original, where they have been infilled, removing identified intrusive elements and refurbishment of rainwater goods.

Select works are assessed below.

Modifications to window and door fenestration

As detailed above, proposed modifications to window and door fenestration are generally consistent with those approved under the former SSDA including provision of new ground floor openings and replacement of windows which have been infilled or highly modified. These works therefore have not been assessed. Additional modifications to fenestration include:

- Replacement of infilled windows to the western façade at the ground floor of building 23
- Modification of the existing door to the north of the new entry foyer on the western façade of building 26 – the previous proposal sought to reinstate a window in this location.
- Removal of the intrusive central window to the southern façade (between the second and third floors) (this is incorporated in the schedule of conservation works) and reinstatement of altered or infilled windows to the northern façade of building 22.
- Provision of a new metal gate to the eastern arched entry on the southern façade

The above works will have no heritage impact and are consistent with the previous approved works to fenestration. The proposed replacement of the infilled windows with new glazed windows on the western façade replaces the original infilled condition, however enhances the amenity min line with the change of use. The proposed windows will be designed to match the appropriate window typology, in terms of break up and design. Proposed removal of the central window and reinstatement of the original two windows (typology to match the original) to the southern façade and proposed reinstatement of altered windows to the northern façade of building 22 will have an improved heritage impact and includes removal of an identified intrusive element, in line with best heritage practice. The final design of the replaced windows and typologies should be subject to further heritage advice in the detailed design development phase. The proposed gate to the eastern portal entry of the southern façade is consistent with the new use and will not detract from the original fabric, with the original function remaining able to be interpreted. Materials, method of fixing etc should be subject to further heritage advice in the detailed design development phase. The proposed retention of the entrance door on building 26 (west façade) will have no significant further heritage impact – the door was previously modified from a window opening and this remains able to be interpreted. Significant features such as the arch detail are able to be retained and conserved.

Reconstruction of the stair tower between Building 22 and 26.

It is proposed to reconstruct the stair (building 25) between buildings 22 and 26. The reconstruction is proposed for efficiencies and to facilitate access and correspond to level changes in building 22 and further to extend stair access to the proposed rooftop addition to building 22/23.

Reconstruction of the stair tower in between Building 22 and Building 26, in the location of the existing stairwell, is considered to be sympathetic to the significant fabric of the buildings and does not have a significant further impact than the present stair. The proposed addition will be clad in a recessive metal cladding (material to be determined) distinguishing between old and new fabric, and similar to the existing, is setback to enable the return facades of buildings 22 and 26 to be read. Whilst the footprint of the stair is extended, this is only minimal and does not impact on significant façade features such as windows or decorative sandstone elements on the return sections of the façade.

Whilst the new stair will be higher in scale than the existing stair well, accessing the new roof addition, materiality and setbacks will mitigate this visual impact. The use of metal cladding to the proposed new stair well visually separates it from the strong masonry materiality of the original buildings. The metal cladding will be placed with horizontal banding, which intentionally contradicts the verticality of the original Brewery buildings. These aspects of the proposal will ensure that the new stairwell is easily identifiable as new work, and is recessive to the principal building forms.

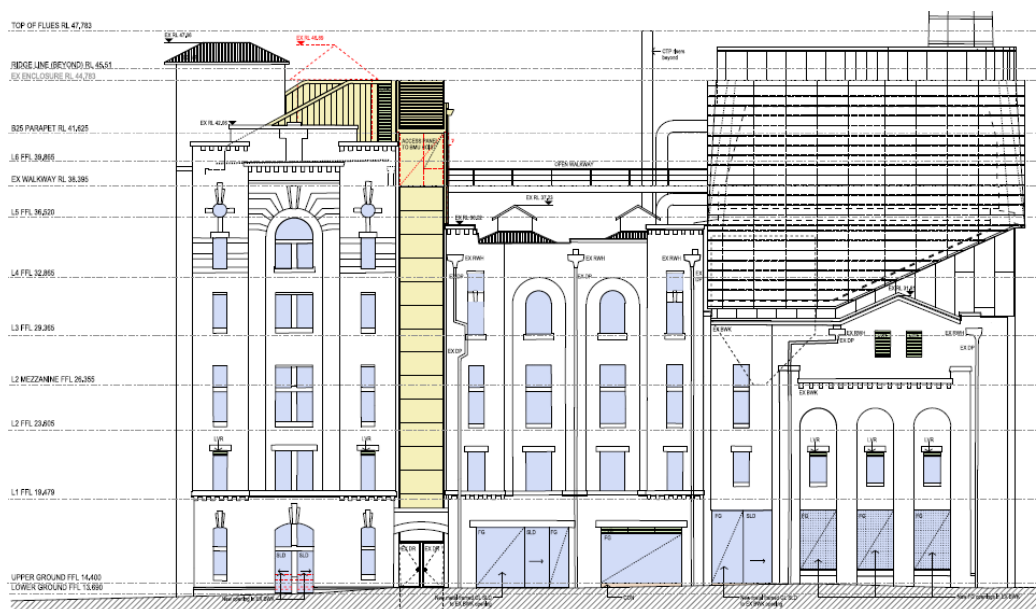


Figure 59 – Extract of Proposed Eastern Elevation

Source: Tzannes, 2018

Proposed additions

Proposed new works include external works to the northern façade of Building 30, and the proposed new entry to the western façade of building 26. The building is able to be viewed in the round and proposed additions will be apparent in views of the northern and western facades and within the brewery yard. Proposed additions are located to the rear of the building and will not obscure significant view lines to the Brewery Buildings from the main public domain within Central Park (i.e. views of the principal southern and eastern facades). These works facilitate the future use and occupation of the place, and have been carefully considered and designed in such a way as to mitigate impacts on significant fabric where ever possible. The proposed additions are contemporary in their form and materiality and respond to the contemporary and industrial character of the addition for the trigen plant atop building 30. These works include the following:

- Creation of a contemporary, full-height glazed wall to the northern façade of Building 30. This glazed wall acts as a contemporary response to the tri-generation cooling towers located directly above, whilst also having the benefit of enabling visual access into Building 30's interior and therefore views of the extant coal hoppers. This elevation will be the most contemporary of the Brewery Buildings', and celebrates an aspect of the place which already integrates old and new elements. The glazing is an acceptable solution to a currently open void space, which allows for visual appreciation of the industrial character of the internal spaces, whilst connecting it and activating the façade within the vibrant urban environment within which it sits. The proposed façade modifies the previous approval for a glazed façade, however takes into account the structural amendments required for the extended internal floor plates. The proposed façade will have no significant further impact than the previous approval.
- A new entrance is being created to Building 26, along its western façade, through the adaptation of an existing opening. A contemporary structure will be added to this entrance, as a foyer, to direct pedestrians into the building from within the Brewery Yard precinct. The structure will be subservient to the main form, materiality and scale of the original Brewery Buildings, by employing light-weight glazing and metal cladding in its exterior elements. The structure is only single storey, and will not dominate any elements of significance on the site. The structure will provide the benefit of a clear defined entrance route, again providing a physical and philosophical connection between the surrounding urban environment and the historic Brewery Buildings.
- The proposal quite deliberately focuses new work and additions on the northern and western facades within the brewery yard. Principal facades to the south and east are retained and conserved and allow for the interpretation of the original form and facades. The western and northern brewery yard facades have been previously altered and have a lesser level of integrity.

It is noted that the additions are apparent and clearly contemporary in their materiality, responding to the contemporary form, design and materiality of the award winning rooftop trigen plant. Consistent with the trigen, the materiality also responds to the robust and industrial character of the place. Generally, when adding to a heritage building, additions should be subservient, however the extant plant addition very clearly demonstrates that unapologetic contemporary architecture can be elegantly integrated with a heritage building, celebrating the new, while not dominating and still enhancing the old. What could easily have dominated the heritage building, instead gracefully furberishes the roof with a sculptural form. Similarly, the proposed additions are robust, however its does not follow that this must negatively impact on the significant heritage form and facades.

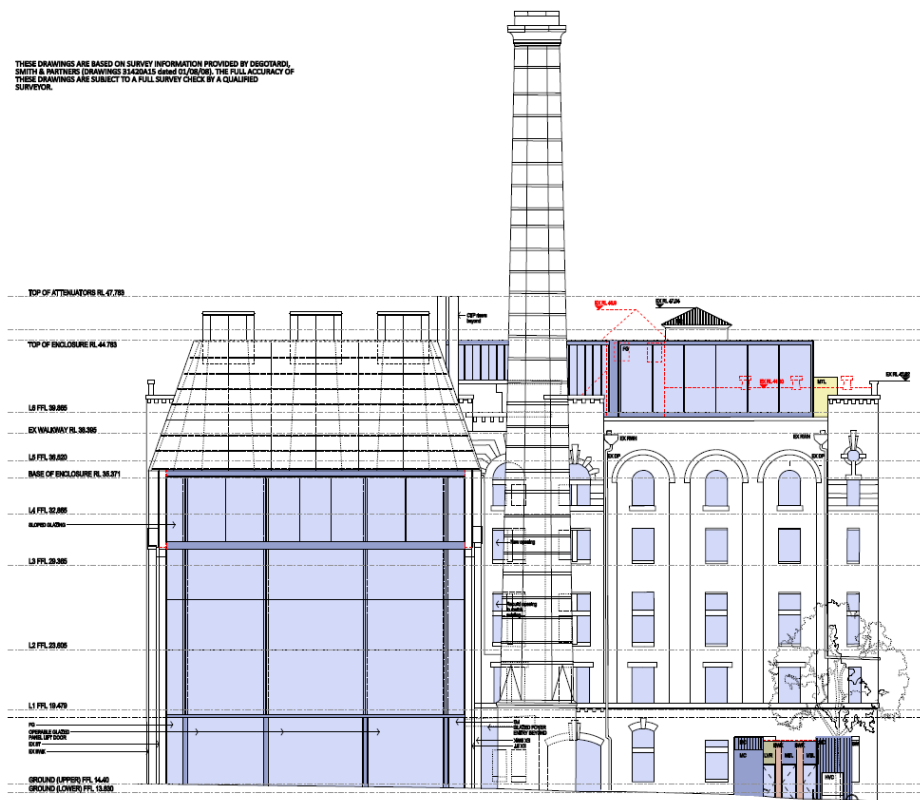


Figure 60 – Extract of Proposed Northern Elevation

Source: Tzannes, 2019

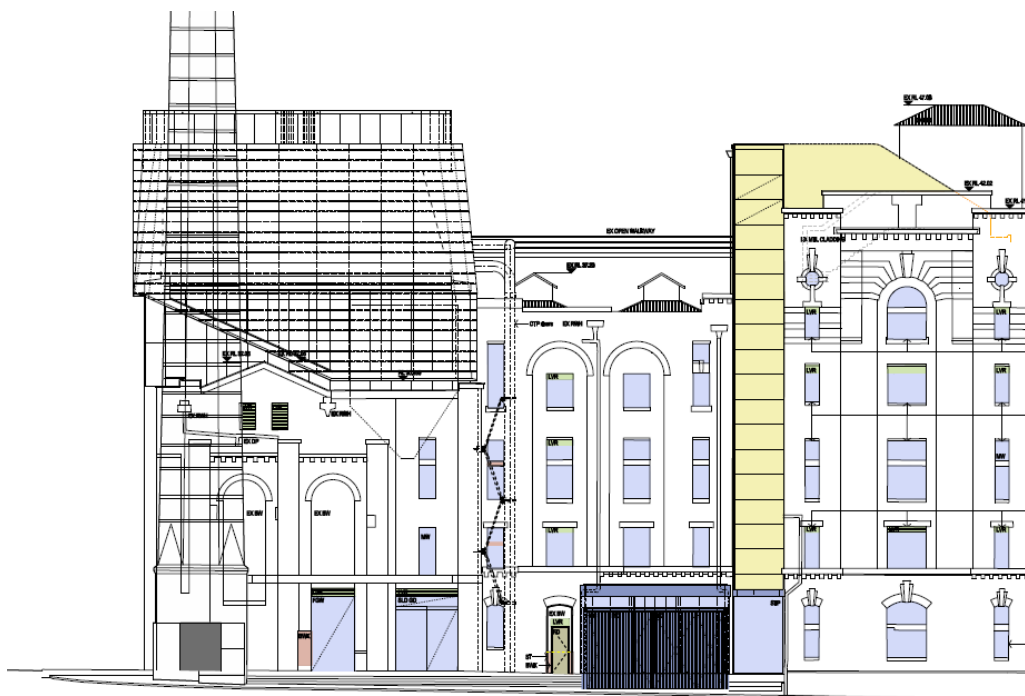


Figure 61 – Extract of Proposed Western Elevation

Source: Tzannes, 2018

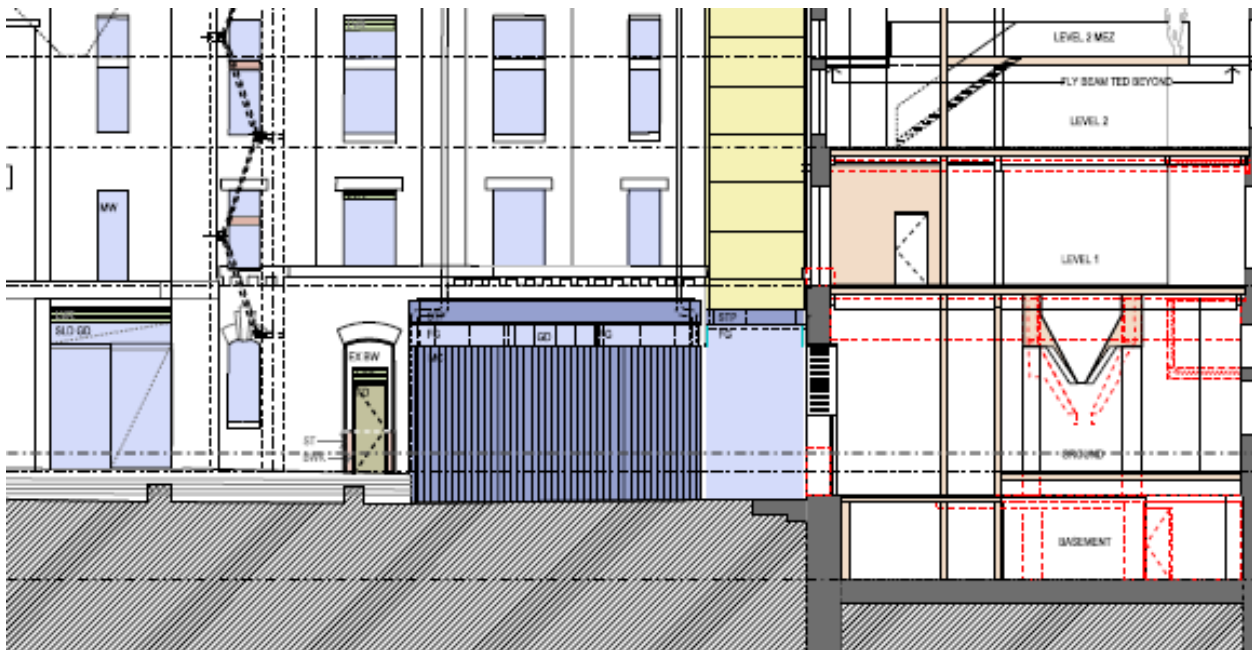


Figure 62 – Extract of Proposed Western Elevation (showing new ground floor entrance attached to the western elevation of Building 26)

Source: Tzannes, 2018

7.1.2. Additional Floor Space

The proposal maximises the potential floor space of the Brewery Buildings through adaptation of existing spaces and introduction of new levels. This includes provision of an additional mezzanine floor within building 23 and infill of the former void to building 30 with further floors, as well as the proposed roof top addition to building 22/23. These modifications have been designed in such a way to mitigate impacts on the significant fabric of the building, and to prevent visual impacts. The overall design solution has sought to mitigate impacts by incorporating the following:

- The previous approval incorporated a large void at the northern section of building 30, above the first floor. The current proposal partially infills this void, to allow for much needed additional floor space including extension of levels 2 and 3 to the glazed northern façade and provision of a mezzanine floor on level 4 (setback from the glazed northern façade). The proposal necessitates the removal of the central coal hopper (assessed in section 7.1.4) however retains the remaining 2 hoppers, and still provides for the interpretation of these elements, arguably in an improved form than the original scheme, as the scheme allows for closer interaction with the heritage fabric. The hoppers also remain able to be viewed from below.
- The proposed additional mezzanine to building 23 is offset from the windows and hence has no visual impact on the exterior of the building. It is similarly offset from the western wall to mitigate impacts on remnant fabric of the silos, to be retained on the wall. As a floating mezzanine within level 2, it is apparent as a contemporary insertion.
- Floor-to-floor heights in building 22 have been reduced to enable an overall reduction in the height of additional floors above, whilst responding to façade elements including window openings. This is achieved through the off-setting of floor slabs to large arched windows instead of altering or bisecting them, thereby preventing intervention to the façade fabric. It is noted that the extant concrete structure to building 22 was replaced and is not of heritage significance. New floor levels are proposed to building 23 in conjunction with the removal of the silos.
- A roof top addition is proposed to the length of Buildings 22 and 23, the southern-most building in the Brewery Buildings complex. The proposed addition provides for an additional 2 floors allowing additional required floor space to make this adaptive re-use project financially and practically feasible. Visual impacts have been mitigated through the built form, with the addition partly obscured behind the parapet and the form of the upper floor addition modulated with a splayed roof form to protect principal views

from the south to the principal southern and eastern elevations. Setbacks to the east and west of the addition similarly protect these views and ensure that the addition is obscured by the parapeted facades.

The additional floors will be apparent in views from the north towards the northern elevation of Building 22/23 – however these are secondary, ‘rear’ views and this will not have a detrimental impact on the heritage values of the site. The addition will be distinct from the original masonry form of the building, and will comprise glazing and metal materiality to distinguish between the old and new and also to respond to the contemporary materiality of the trigon plant/ cooling towers. This materiality complements the industrial character of the original Brewery buildings and therefore is considered appropriate. This approach has been taken with all of the proposed additions. Removal of the existing gabled truss roof is unavoidable to facilitate this outcome, however this is mitigated by the retention and conservation of the gabled truss roof at Building 26. Overall the proposed addition is considered reasonable with consideration for the facilitation of future occupiable space, and the design efforts taken to mitigate visual impacts.

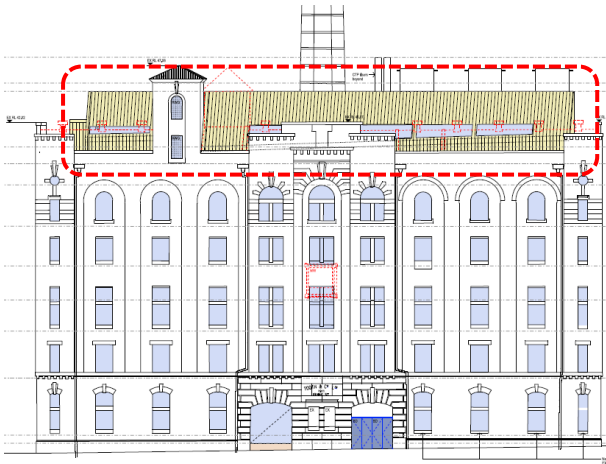


Figure 63 – Proposed Level 6 when viewed from the south (facing southern elevation)

Source: Tzannes, 2018

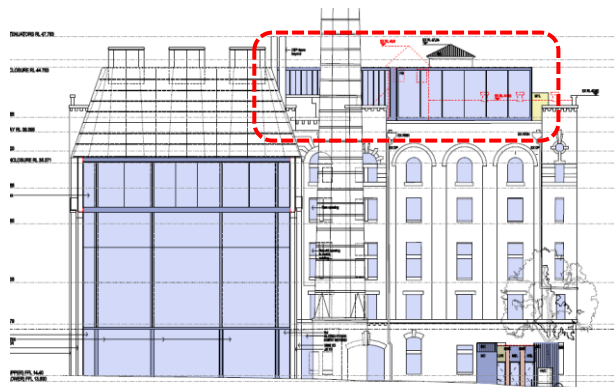


Figure 64 – Proposed Level 6 when viewed from the north (facing northern elevation)

Source: Tzannes, 2019

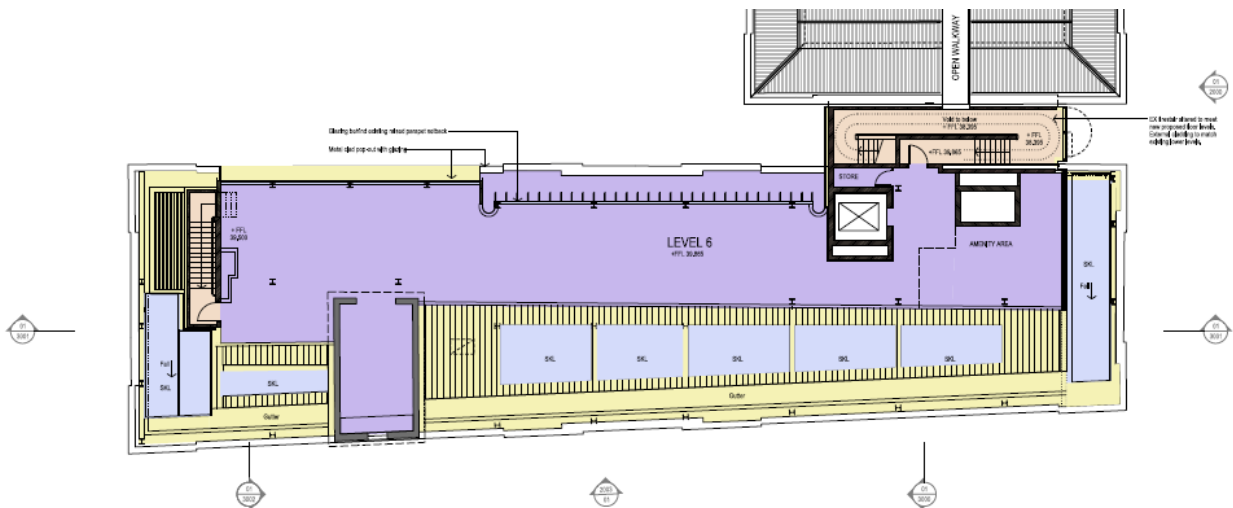


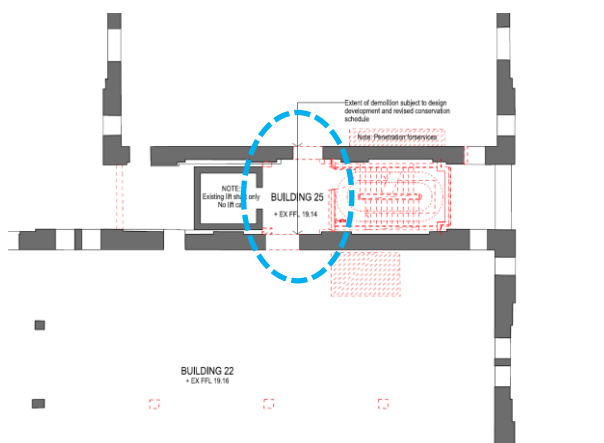
Figure 65 – Extract of Proposed Level 6 Plan

Source: Tzannes, 2019

Generally internal works comprise of the removal of existing structure and construction of new floors. The majority of the internal structure is later and / or modified concrete structure, of no heritage significance, and is not required to be retained on heritage grounds. Its removal and replacement with new 'floating floors' as proposed, will not have a detrimental heritage impact. The exception is building 23, the former maltings, which retained the original structure, comprising of concrete silos which run through the building. The previous approval allowed for the removal of 6 of the 8 silos, retention and adaptation of the remaining 2. This is assessed in section 7.1.5.

Further modifications to existing openings are proposed on each level above, within Building 25 – the new stair well. These modifications are being undertaken to existing openings which have been created from previous window / blind window features (as these walls were previously external walls prior to the construction of the existing stair well). The openings are proposed to be modified to provide for pedestrian access from the stair well and lifts to the buildings. Each level has been carefully considered with regard to mitigating heritage impacts, and it is recommended that final detailed design resolution be subject to consultation with the project heritage consultants. Demolition and rebuilding of the Building 25 stair allows for the opportunity to better resolve the staircase in terms of intervention to the formerly external façades Brewery Buildings, which cuts significant façade details. The new stair will mitigate impacts where possible.

Source: Tzannes, 2018



Source: Tzannes, 2018

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The proposal also includes modifications to the two open former cart drives within building 22. These were the original ‘in’ and ‘out’ vehicular access points for the Brewery Buildings. It is proposed retain these openings as is, with the western-most cart drive being glazed to create an interior space, and the eastern-most cart drive being glazed and ramped internally, to provide a main point of entry for the building. This adaptation is considered reasonable as vehicular access is no longer a viable use for these spaces, and it will allow the users of this space to experience this significant feature of the building, while retaining the ability to interpret the original form and function.



Figure 68 – Photograph of existing cart drive openings
Source: Urbis

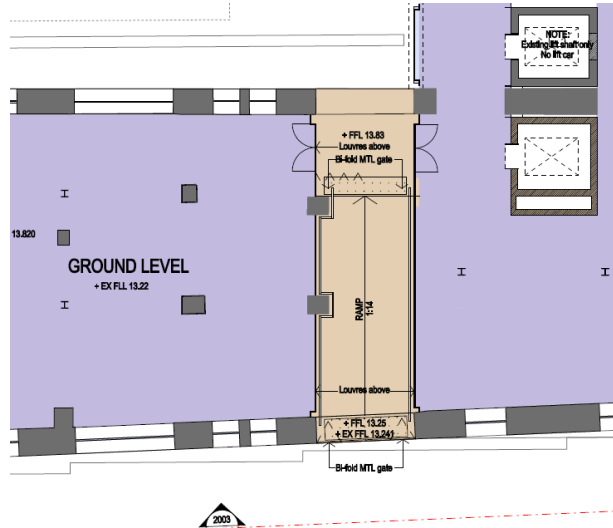


Figure 69 – Proposed ground Floor entry to Building 23 through former cart drive
Source: Tzannes, 2019

Overall, with consideration for the modified or replaced nature of the existing internal structures, the proposed internal works are considered to have no adverse impact on the heritage values of the place. The significant elements of the buildings will be retained or adequately interpreted, while enabling the development of a functional space for future occupation. The proposed internal works are supported from a heritage perspective. Detailed design development should be undertaken in conjunction with a qualified heritage consultant to ensure fabric removal is undertaken appropriately.

7.1.4. Coal Hoppers – Building 30

There are three existing former coal hoppers extant within the shell of Building 30, the northern-most building within the Brewery Buildings group. These hoppers are located in a row with an east-west alignment, on the southern side of the building at the roof level. The central hopper is required to be demolished to enable practical occupation of this space, and allow for the adaptive re-use of this building through the provision of additional floor space as set out in section 7.1.2.

The hopper being removed is of high significance. However, the remaining two hoppers will be retained in situ, and will facilitate the meaningful interpretation of this significant element. The new floor levels being inserted within Building 30 will allow for users of this space to have a close interaction with the remaining hoppers, and provides for continued interpretation. A bridge is proposed spanning between building 26 and the new extended floor level within building 30 and running between the two remaining hoppers. The proposed bridge is glazed and should be subject to detailed design in conjunction with heritage advice to best provide for interpretation of the remaining silos.



Figure 70 – View of the bottom of the Hoppers in Building 30

Source: Urbis

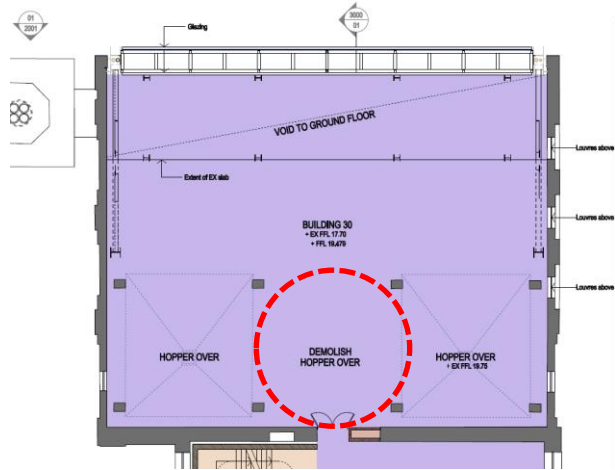


Figure 71 – Extract of Level 1 Proposed Plan – proposed hopper to be removed shown circled

Source: Tzannes, 2019

7.1.5. Silos – Building 23 Structure

Building 23 is the only building to have an original internal structure and was the only building to retain its original function as part of the malt silos/ plant. All of the other Brewery Buildings had their structures rebuilt in the 1980s, and as such there is no heritage significance ascribed to these concrete structures. However, Building 23's structure is tied to the eight silo structures which extend vertically throughout the building. Without the removal of these silo structures, this building is not able to be adaptively re-used and has no purpose or function for occupation. The previous approval allowed for the demolition of 6 of the 8 concrete silos, with the 2 easternmost silos being retained, along with the retention of the pyramidal funnel forms at the base of all 8 silos on the ground floor. It was also further proposed to retain the associated plant equipment on the two easternmost silos as a complete picture of the former structure and providing interpretation of the function. It was proposed in the stage 1 scheme to adaptively reuse upper concrete silo sections of the retained pair for a fire stair, however further structural investigations have determined that this use is not feasible for structural reasons.

The current proposal seeks to further reduce the extent of the silos, retaining the two concrete silos on the first floor only and removing the silos on the upper floors. Structural engineers have advised that the silos are not able to be retained from a construction perspective and it is proposed to rebuild part of this silo structure on the new Level 1 to provide accessible and meaningful interpretation of this former use. Adjoining this rebuilt structure will be an interpretation display of salvaged items associated with the history and use of this building. On the ground level, the pyramidal form of the funnels at the base of the silos will be rebuilt, at a slightly raised ceiling height to facilitate use of the floor (the present floor to ceiling heights restrict the use and occupation of the space). The proposed fire stair and lift at the northwest corner of the space will mean that only 5 of the 8 funnels will be interpreted, however the full extent remains legible, communicated by the retention of the full extent of the southern funnels and the extent of the interpretation of the two easternmost funnels, which were replicated across the remaining 6 silos.

Further, an interpretation area will be provided on the Basement Level containing elements of the silos' built form and equipment, which will be visible through a glass walkway at ground level. This Basement Level interpretation space, together with the faithful reconstruction of part of the silo structure at the ground floor and Level 1, will enable the understanding and interpretation of this building's former use. It is appreciated that the proposal further impacts on fabric that is acknowledged as being of high heritage significance and which is regarded as rare, however the proposed adaptive reuse of the building is critical for its ongoing conservation and the proposal still provides for a meaningful heritage interpretation and built form response.

Without these measures being taken, and the level of fabric removal being proposed, there would be no viable use solution for this building, which would otherwise remain unoccupied and underutilised.

With consideration for the future use and occupation of this building, the proposed interpretation measures are considered sufficient to mitigate the impact of internal fabric loss in this building, and the proposal is supported from a heritage perspective.

It is recommended that concrete sections / walls of the silo structure be retained on internal walls to assist interpretation of the original extent of the silos structure

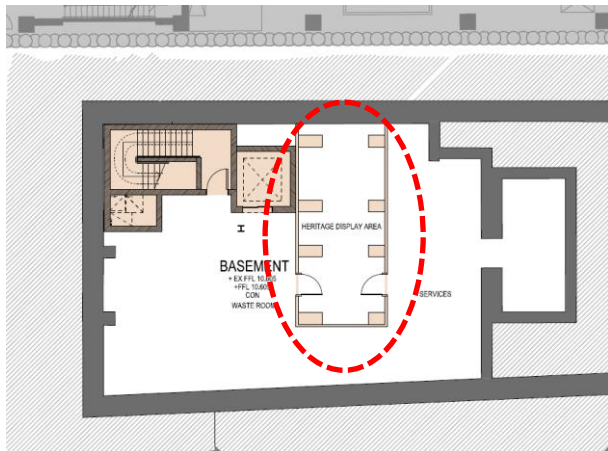


Figure 72 – Extract of Basement Level Proposed Plan – heritage display area at base of silos circled

Source: Tzannes, 2018

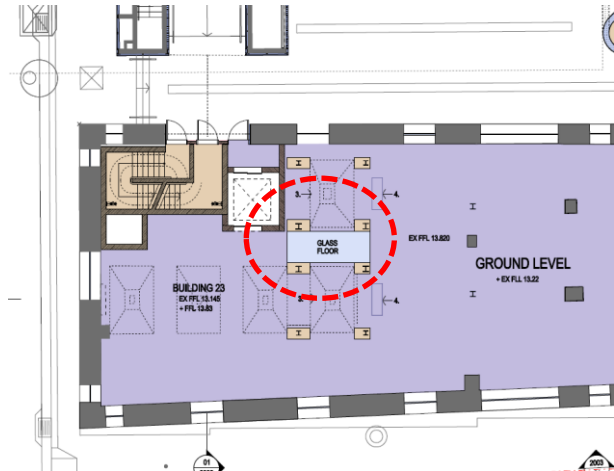


Figure 73 – Extract of Ground Floor Proposed Plan – proposed glazed walkway to view Basement interpretation is circled and the remaining 5 funnels are indicated

Source: Tzannes, 2019

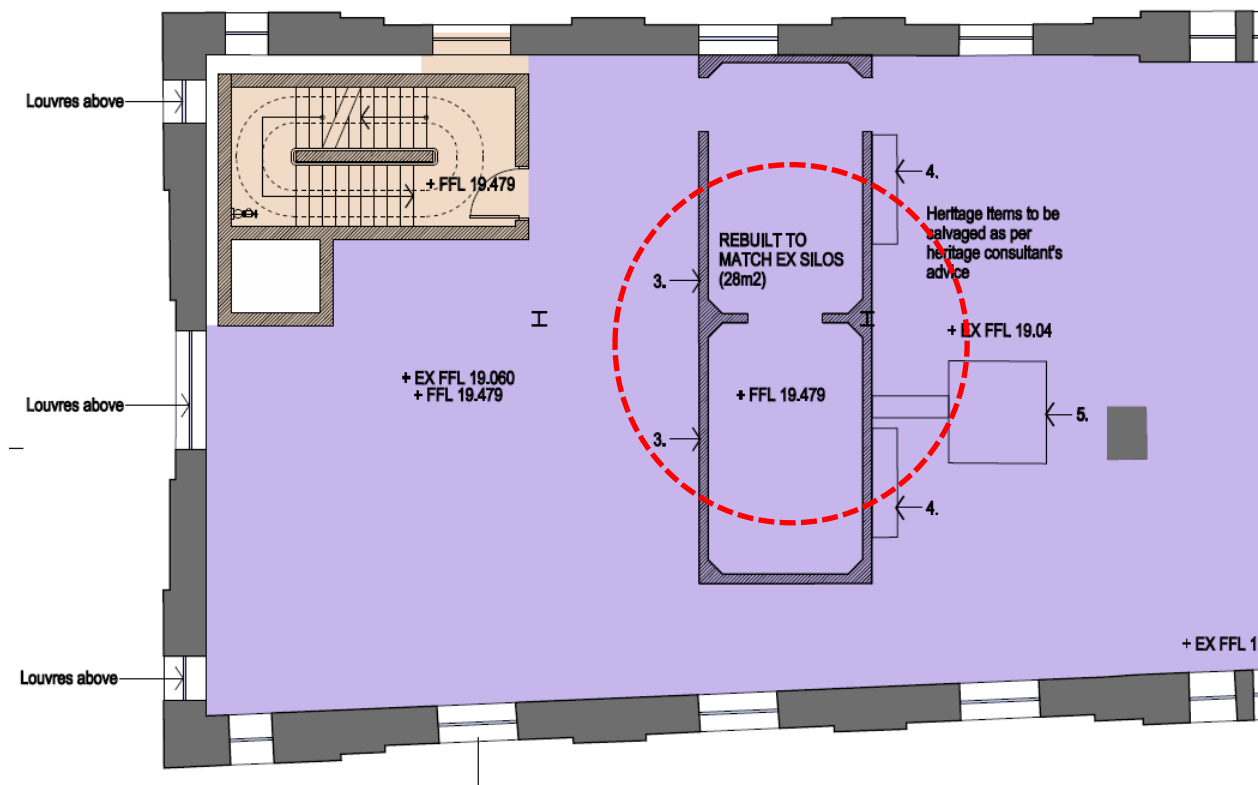


Figure 74 – Extract of Level 1 Proposed Plan – proposed silo reconstruction / interpretation circled

Source: Tzannes, 2019

7.1.6. Services

The proposed services in this application are applicable to a base-build standard for a commercial use tenant. This assumes an occupation rate of 8 square metres per person. Any deviation from this commercial use may trigger future services upgrade requirements and will require a separate and additional development application.

The services proposed in this application have been designed to respond to the industrial and heritage character of the building. This has been achieved through the following design resolutions:

- Installation of the required louvres / ducts are limited to the eastern and western facades. No louvres are to be installed on the principal southern façade to prevent intervention to this significant elevation. Louvres / ducts on remaining façades will be balanced to achieve an overall consistent approach and to enhance the symmetry of the façade and window typologies. All louvres have been designed to fit within existing window openings to minimise visual impacts and further intervention to the façades.
- Internally services are generally exposed throughout including ducting, which aligns with the industrial use and character of the space and means that much of the services are reversible.
- The existing basement level will be used for new / adapted services, such as replacement of the existing tank. The re-use of the basement for services requires removal of some existing equipment, and does not allow for public access to this level. However, the proposal provides for heritage interpretation, with proposed heritage displays incorporating conservation / retention and display or remnant basement level equipment, visible through the glass floor at ground level. This further enhances interpretation of the ground floor silo elements and malting process as a whole.
- The proposal provides for base services provided for future bathrooms, with final fitout subject to the future tenant application. The locations of the bathrooms do not impact on heritage significance. The open plan character of the place remains.
- Services on the roof will not be visible from the public domain and will be concealed behind parapet walls.
- Proposed internal lifts have been off-set from masonry walls to minimise intervention to facades where possible. Windows in these locations will remain able to be interpreted within the core.

7.1.7. Interpretation Elements

The Brewery buildings are of heritage significance as the only remaining industrial buildings from the former Carlton United/ Kent Brewery. The proposal recognises and celebrates the sites unique heritage values by integrating a number of interpretative elements. Detail of these is included at the Interpretation Plan included at **Appendix A**. To summarise, these elements include the following:

- Interpretation of part of the malt silos structure including provision of a heritage display area on the Basement Level, visible through a glazed walkway on the Ground Floor, ground floor interpretation of the base of the funnels and partial retention of two silos on level 1, as well as retention of remnants of the silos on the western and northern walls (where possible)
- Provision of dedicated interpretation areas throughout the building to enable the display of salvaged equipment or artefacts relevant to the significant history of the place including identification of an interpretation zone on level 1 adjoining the area of the interpreted silos
- Retention of significant elements such as the former coal hoppers in Building 30. Construction of a 'mezzanine' style floor around the hoppers to enable users of the space to interact with these significant features.
- Conservation and restoration of significant facades and fabric.

7.2. SYDNEY LOCAL ENVIRONMENTAL PLAN 2005

The subject property being the Brewery Buildings within the 'Fraser's Broadway' at Central Park in Chippendale, is the only site that is still subject to the provisions of the Sydney Local Environmental Plan (LEP) 2005.³¹ This piece of legislation has been otherwise repealed from use for the remainder of the Sydney Local Government Area, which is instead subject to the more recent Sydney Local Environmental Plan 2012.

Table 8 – Assessment against Sydney Local Environmental Plan 2005

Clause	Discussion
PART 6 HERITAGE PROVISIONS	
67 Objectives The objectives of the heritage provisions are: (a) to conserve the heritage of Central Sydney, and (b) to integrate heritage conservation into the planning and development control processes, and (c) to provide for public involvement in heritage conservation, and (d) to ensure that any development does not adversely affect the heritage significance of heritage items, and (e) to provide greater certainty in the management of the heritage of Central Sydney, and (f) to encourage high quality design and the continued use or adaptive re-use of heritage items.	Overall the proposal addresses the objectives of the Sydney LEP 2005. The proposal seeks to retain and conserve the heritage values of the site, through the adaptation of the Brewery Buildings for a new use and future occupation. The design development of the proposal as outlined in this report has been guided by the involvement of heritage experts at Urbis, to ensure that the proposal achieves a balanced outcome of providing a functional and adaptable space, without compromising on the heritage values and integrity of the place. The subject proposal has been designed by Tzannes, who are responsible for the design of the tri-generation cooling tower atop Building 30 of the Brewery Buildings. Tzannes were the recipients of the 2016 Chicago Athenaeum International Architecture Award, and the 2016 UNESCO Heritage Award for New Design in Heritage Contexts for this work, as well as the Lachlan Macquarie Award for Heritage at the 2015 National Architecture Awards. This SSDA proposal sees the continuation of high quality architectural design and innovative approaches on the Brewery Building project. Urbis have had extensive involvement in the site, having collaborated with Tzannes on stage 1 and also authoring a number of reports for the site, including the conservation plan. The proposal has been assessed herein and it is concluded that the proposal will not result in an adverse heritage impact to the place. While there are a number of fabric modifications and alterations being undertaken, (some of which are potentially controversial) the overall design and mitigation of impact has resulted in an acceptable level of heritage impact. Practical solutions to the ongoing occupation of these buildings have been carefully considered with regard to minimising adverse

³¹ City of Sydney 2018, Local Environmental Plans, webpage, accessed 29 November 2018 at <https://www.cityofsydney.nsw.gov.au/development/planning-controls/local-environmental-plans>

Clause	Discussion
	impacts, and looking for ways to celebrate and interpret the history of the place.
68 Consent required for certain development (1) The following development may be carried out only with development consent: (a) demolition of a heritage item or building in a heritage streetscape, (b) structural or non-structural alterations to the exterior or interior of a heritage item, (c) structural or non-structural alterations to the exterior of a building in a heritage streetscape that is not a heritage item, (d) erection of a sign or advertising structure on a heritage item, (e) erection of a building on the site of a heritage item or building in a heritage streetscape, (f) subdivision of a site of a heritage item.	While the majority of the Brewery Buildings site is not listed as a heritage item, the heritage significance of the place has been acknowledged. Therefore, in order to protect the heritage values of the place, consent is required for any structural works to the place, in accordance with this provision. The chimney is listed as an individual heritage item under the Sydney LEP 2005 although no works are proposed to the chimney as part of the subject proposal.
69 Consent authority must have regard to heritage conservation The consent authority must not grant consent to a development application involving a heritage item unless it has taken into consideration: (a) the heritage significance of the heritage item concerned, and (b) the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item and any historic subdivision pattern in the locality, and (c) the heritage inventory assessment report prepared in relation to the heritage item, and (d) any conservation management plan or heritage impact statement required by the consent authority, and (e) any plan of management required by the consent authority, and (f) the provisions of any relevant development control plan or policy adopted by the Council, and (g) the heritage significance of the interiors of any heritage item concerned.	Again, the subject site (apart from the former chimney) is not a listed heritage item. The heritage significance of the place has however been assessed through previous studies including the Special Elements Conservation Plan prepared by Urbis in 2009, and previous heritage reports for the place. Section 5 of this report outlines the heritage significance of the Brewery Buildings subject to this proposal. The subject brewery buildings have acknowledged heritage significance, demonstrated by its retention in the overall precinct redevelopment and hence the control has been assessed here. In order to protect these heritage values, the proposal has been designed in consultation with Urbis as heritage consultants, who have provided guidance and input throughout the design development phase. Further, the proposal has been assessed herein with regard to relevant heritage-related planning principles, as well as conservation policy, to ensure that the proposal does not result in an adverse heritage outcome. Whilst there are considerable interventions to the building, including reorganisation of the internal structure to provide for additional floor levels and mezzanines; proposed additions including a roof top addition, extension of the

Clause	Discussion
	existing stair tower (building 25); and works to significant internal fabric, notably the reduction in the retention of the silos and proposed removal of one of the 3 coal hoppers, overall the proposed works are considered to achieve an appropriate balance between conservation of the heritage values, and providing for the required adaptive reuse of the site. The proposed works are assessed in more detail in section 7.1 above and sections 7.3 and 7.4 below.
70 Definition of “materially affects” for the purposes of clauses 71–73 (1) For the purposes of clauses 71–73, development on land that comprises or includes the site of a heritage item materially affects the item only if: (a) it will reduce or increase the building envelope occupied by the item, or (b) it will be carried out within the airspace above the building envelope occupied by the item. (2) However, development does not materially affect a heritage item if, in the opinion of the consent authority, the proposed development will not adversely affect the heritage significance of the heritage item concerned.	See below discussion. The proposed works increase the building envelope however it is considered that the proposed works will not adversely impact on the identified heritage significance and/ or heritage fabric of the place as set out above and below.
71 Floor space ratio of heritage items (1) The maximum floor space ratio for a heritage item is the floor space ratio of the item when this plan commenced, except as provided by subclauses (2), (3) and (4). (2) After considering the matters specified in clause 69, the consent authority may consent to development that will result in that maximum floor space ratio being exceeded, only if: (a) the proposed development will not materially affect a heritage item, and (b) the proposed development involves mainly internal building work or minor additions, and (c) the proposed development is on part of the site not occupied by any existing building of heritage significance, and (d) the floor space ratio complies with clause 54. (3) The consent authority, after considering the matters specified in clause 69, may consent to development that will materially affect a heritage item and that will result in	As discussed above, the subject site, apart from the chimney, is not a listed heritage item, however has been treated as such in terms of the assessment, in acknowledgement of the recognised heritage values of the place. The proposal is seeking an increase in floor space to deliver a viable future use for the subject Brewery Buildings. The subject site occupies a central location within a thriving urban environment, and modification of the buildings is required to facilitate the practical future use of the buildings. Design of internal floors and additions has been carefully considered to mitigate physical and visual impacts to significant fabric, and has been undertaken in consultation with qualified heritage consultants. Overall, the proposed increased floor space is considered acceptable with consideration for the revitalisation of the precinct and the facilitation of future use. Without providing a functional space and viable future use, the subject Brewery Buildings would remain unoccupied, underutilised, and this would likely result in the degradation of significant fabric. It is noted that the buildings have been vacant since the closure of the brewery in 2005. The brewery is the most significant

Clause	Discussion
that maximum floor space ratio being exceeded, but only if the consent authority complies with clauses 72 and 73. (4) However, subclauses (2) and (3) do not apply so as to allow consent to be granted for development of land that consists of or includes the site of a heritage item that will result in the floor space ratio specified for the land elsewhere in this Chapter being exceeded.	building on site yet also remains the only building still in derelict condition (other than the works for the trigen) and which does not have a defined adaptive reuse. Various proposals have been considered and have not proceeded for economic reasons. Whilst there is some intervention to heritage elements in the scheme (most notably affecting the remnant industrial brewery elements, being the silos and coal hoppers) a careful balance of conservation and modern intervention has been achieved with the current proposal, which seeks to provide a feasible outcome for the use of the space, but also embraces and celebrates the site's history through interpretation and retention of significant fabric and mitigating design. The proposal for further floor space is therefore supported from a heritage perspective.
72 Development that would materially affect a heritage item The consent authority must not grant consent for development that will materially affect a heritage item unless it is satisfied that: (a) the item, or the part of the item, affected is not of such heritage significance or landmark value that the proposed development would diminish the heritage of the City of Sydney, and (b) the proposed development exhibits design excellence and is superior in quality to the existing heritage item, and	(a) The Brewery is the centrepiece and the jewel in the crown of the Central Park redevelopment. Rather than diminishing the heritage of the City of Sydney, the subject proposal seeks to enhance the heritage values of the Brewery Buildings by enabling the future occupation of the space, and providing a new phase of use for the site. The proposal will allow the Brewery Buildings to be an integrated, accessible part of the Central Park precinct which is representative of and provides for the innovative interpretation of the former brewing function of the precinct. (b) The proposal has been developed with design excellence at the forefront. The design has been undertaken by Tzannes Architects, who are responsible for the design of the tri-generation cooling tower atop Building 30 of the Brewery Buildings. The success of the previous stage was internationally recognised and Tzannes were the recipients of the 2016 Chicago Athenaeum International Architecture Award, and the 2016 UNESCO Heritage Award for New Design in Heritage Contexts for this work, as well as the Lachlan Macquarie Award for Heritage at the 2015 National Architecture Awards. This SSDA proposal sees the continuation of high quality architectural design and innovative approaches on

Clause	Discussion
(c) the proposed development would make a contribution to the quality of the public domain of the City of Sydney superior to that made by the existing heritage item, and (d) in the case of partial demolition, the proposed development would conserve the heritage significance (and would not prejudice the continued heritage item status) of the item, would facilitate its continued use or adaptive reuse, and would contribute to the ongoing conservation of the heritage item, or the affected part of the item that will be retained, and (e) in the case of complete demolition, the retention of the heritage item would render the site on which it is located incapable of viable continued use or adaptive reuse.	the Brewery Building project. The design responds to the heritage values and fabric of the place, whilst integrating high quality contemporary insertions. (c) The Brewery Buildings not only form part of the Central Park precinct, they are the historic centrepiece of this urban environment, and the last remaining physical representations of the site's significant brewing history. The buildings must be adapted for future use not only to prevent their physical deterioration, but to provide an important central element within the public domain of the Central Park precinct. The proposal builds on the architectural language of the stage 1 trigeneration plant which makes an incredibly dynamic contribution to the urban environment. (d) As discussed at Section 7.1.3, the proposal involves major internal demolition of the existing structure of building 22, however this is not considered to adversely impact on the heritage values of the site. The internal structure is generally modified or later fabric, and is not of heritage significance. Significant structure including the former malt silos, is being reconstructed in part and interpreted. The significant external fabric and form is generally being retained and conserved, with new additions cleverly designed to mitigate visual impacts and limit new work to secondary facades presenting to the brewery yard. As detailed above, the adaptive reuse opportunity presented by the scheme is of critical importance to the ongoing conservation of the buildings. (e) Not applicable.
73 Process for major changes to heritage items (1) This clause applies to development that will materially affect a heritage item, but only if the development involves: (a) demolition that will result in a reduction by more than 35% of the building envelope of the heritage item, or (b) increasing the size of that building envelope by more than 20%, or (c) building over more than 20% of the footprint of that building envelope within the airspace above the item, but not within the airspace next to the item.	Detailed assessment of the proposal is included at Section 7.1 of this report. Reference should also be made to the submitted Statement of Environmental Effects (SEE).
74 Development within the vicinity of a heritage item	The potential heritage impacts of the proposal are discussed throughout Section 7 of this report. In regards to

Clause	Discussion
The consent authority, when considering an application for development within the vicinity of a heritage item, must take into account the impact of the proposed development on the heritage significance of the heritage item.	potential impact on the former chimney (the only formally listed heritage item within the Brewery Buildings), the proposal will have no impact on the significance of this element. The proposal seeks to refurbish and revitalise the whole of the Brewery Buildings precinct, and therefore open up accessibility and interpretation opportunities throughout the buildings. This will act to enhance the recognition and understanding of the chimney heritage item as part of a larger group of former brewery buildings.
75 Development of potential archaeological sites The consent authority may grant a consent required by this Part for the carrying out of development on a potential archaeological site only if it has considered an archaeological assessment of how the proposed development would affect the conservation of the site and any relic known or reasonably likely to be located at the site.	GML heritage undertook an Archaeological Assessment of the site in 2006 (refer to discussion at Section 5). That assessment has been reviewed in light of recent site development and it is concluded that the Brewery Buildings precinct had low to nil archaeological potential. The assessment determined that the potential Aboriginal archaeological resource on the site was most likely destroyed by the varied and subsequent European site development. Notably, the Brewery Yard is considered to be substantially disturbed following the construction of the tri-generation plant below ground level in 2015. Buildings 22 and 23 were previously regarded as disturbed due to the construction of the maltings and filtration buildings, which included excavation for substantial basements. Presumably there has also been further disturbance to building 30, in conjunction with the construction of the trigen plant. The subject proposal will not involve substantial amounts of excavation, requiring works typically in conjunction with services such as for lift pits and localised excavation for services and stairs. Having regard to GML's previous assessment, and the limited excavation required, the proposal is unlikely to result in adverse impacts to the potential archaeological resource.

7.3. NSW HERITAGE DIVISION GUIDELINES

The proposed works are addressed in relation to relevant questions posed in the NSW Heritage Division's 'Statements of Heritage Impact' guidelines.

Table 9 – Heritage Division Guidelines

Question	Discussion
The following aspects of the proposal respect or enhance the heritage significance of the item or conservation area for the following reasons:	The proposal has been assessed herein and it is concluded that the proposal will not result in an adverse heritage impact to the brewery buildings or the heritage listed chimney which forms part of the site. While the proposal includes a high degree of fabric modification and alteration, the overall design and applied mitigation measures has resulted in an acceptable level of heritage impact. Practical solutions to the ongoing occupation of these buildings have been carefully considered with regard to minimising adverse impacts, and looking for ways to celebrate and interpret the history of the place. Although some significant interventions are proposed, a careful balance of conservation and modern intervention has been achieved with the current proposal, which seeks to provide a feasible outcome for the use of the space, but also embraces and celebrates the site's history through interpretation and retention of significant fabric. Rather than diminishing, the subject proposal seeks to enhance the heritage values of the Brewery Buildings by enabling the future occupation of the space, and providing a new phase of use for the site. The proposal will allow the Brewery Buildings to be an integrated, accessible part of the Central Park precinct, with public access being unprecedented for the subject buildings. The proposal has been developed with design excellence at the forefront. The design has been undertaken by Tzannes Architects, who are responsible for the design of the tri-generation cooling tower atop Building 30 of the Brewery Buildings. Tzannes were the recipients of the 2016 Chicago Athenaeum International Architecture Award, and the 2016 UNESCO Heritage Award for New Design in Heritage Contexts for this work, as well as the Lachlan Macquarie Award for Heritage at the 2015 National Architecture Awards. This SSDA proposal sees the continuation of high quality architectural design and innovative approaches on the Brewery Building project. The Brewery Buildings not only form part of the Central Park precinct, they are the historic centrepiece of this urban environment, and the last remaining physical representations of the site's significant brewing history. The buildings must be adapted for future use not only to prevent their physical deterioration, but to provide an important central element within the public domain of the Central Park precinct. Much needed conservation and restoration of facades is provided for under the previous SSDA conditions of consent, subject to the Schedule of Conservation Works prepared by Urbis.

Question	Discussion
The following aspects of the proposal could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:	As detailed above, the proposal does incorporate some considerable interventions to the brewery buildings and significant elements such as the silos and coal hoppers. This is proposed however to facilitate a viable use and the proposal seeks to mitigate impacts wherever possible through sympathetic design. Specific situations are detailed below. The proposal incorporates some further intervention to a limited area of the facades to facilitate interconnectivity and create openings between the buildings. Demolition of some internal fabric is proposed to create openings between buildings. These openings have been carefully considered with reference to their location and scale. These have been determined in consultation with Urbis as heritage consultant to this project, to ensure that the openings are proposed in areas of previous modification, or are designed in such a way as to prevent extensive intervention to significant fabric. The largest internal openings are located on the ground floor to connect Building 22 and Building 26. These openings are vital to ensure building connectivity and pedestrian flow throughout the space, and are centred on the core lift wells providing access to all levels of the building. Openings will involve the removal of brick masonry within these sections. This is considered reasonable to facilitate access between the site and with consideration for previous modifications most notably to insert the stair (building 25). Further modifications to existing openings are proposed on each level above, within Building 25 – the new stair well. These modifications are being undertaken to existing openings which have been created from previous window / blind window features (as these walls were previously external walls prior to the construction of the existing stair well). The openings are proposed to be modified to provide for pedestrian access from the stair well and lifts to the buildings. Each level has been carefully considered with regard to mitigating heritage impacts, with final design resolution to be achieved through consultation with Urbis heritage consultants. These openings are considered minor in the context of the broader development and are necessary for the functional operation of the space, and are therefore supported from a heritage perspective. The proposal also includes demolition of the gabled truss roof to buildings 22/23 to facilitate the proposed roof top addition and additional floor levels. The loss is considered mitigated by the retention of the truss in building 26 and with consideration for the need to create a viable adaptive reuse. The proposal also involves partial demolition of significant interpretation elements, most notably the silos (building 23) and the coal hoppers (building 30). Refer also to the assessment in section 7.1.4 and 7.1.5 above. There are three existing former coal hoppers extant within the shell of Building 30, the northern-most building within the Brewery Buildings group. These hoppers are located in a row with an east-west alignment. The central hopper is required to be demolished to enable practical

Question	Discussion
	occupation of this space, and allow for the adaptive re-use of this building through the provision of additional floor space. The hopper being removed is of high significance. However, the remaining two hoppers will be retained in situ, and will facilitate the meaningful interpretation of this significant element. The new floor and bridge between the hoppers will allow for users of this space to have a close interaction with the remaining hoppers, and provides for continued interpretation. The configuration with the third hopper will also be legible. The previous approval allowed for the substantial demolition of the silos within building 23 and the subject proposal seeks a further reduction in the retention of the remaining two silos within building 23, limiting retention and interpretation of the silos to the basement, ground and first floors and demolishing the remainder of the silos on the second floor and above. Similarly, further intervention to the ground floor for the introduction of the stair and lift, will necessitate the removal of 3 of the 8 funnels on the ground floor. Whilst this constitutes a considerable further intervention, it is considered that the remaining fabric will still allow for a meaningful and innovative interpretation of the significant fabric and function whilst facilitating the adaptive reuse.
The following sympathetic solutions have been considered and discounted for the following reasons:	Refer to above discussion regarding the reasons for fabric removal, and mitigation approaches. Overall it is considered that the proposal achieves an appropriate balance between retention of fabric, conservation and interpretation and necessary adaptive reuse.
Partial Demolition Is the demolition essential for the heritage item to function? Are important features of the item affected by the demolition (e.g. fireplaces in buildings)? Is the resolution to partially demolish sympathetic to the heritage significance of the item? If the partial demolition is a result of the condition of the fabric, is it certain that the fabric cannot be repaired?	See above discussion in Sections 7.1.3, 7.1.4 and 7.1.5 regarding demolition of internal structure and features within the buildings to facilitate the new use.
Minor additions How is the impact of the addition on the heritage significance of the item to be minimised? Can the additional area be located within an existing structure? If no, why not?	The proposal includes a number of minor additions, including a roof top addition to Buildings 22/23 (Level 6), and a new lobby entrance in the Brewery Yard. Further discussion regarding these elements is included at Section 7.1 of this report.

Question	Discussion
Will the additions visually dominate the heritage item? Is the addition sited on any known or potentially significant archaeological deposits? If so, have alternative positions for the additions been considered? Are the additions sympathetic to the heritage item? In what way (e.g. form, proportions, design)?	
Change of use Has the advice of a heritage consultant or structural engineer been sought? Has the consultant's advice been implemented? If not, why not? Does the existing use contribute to the significance of the heritage item? Why does the use need to be changed? What changes to the fabric are required as a result of the change of use? What changes to the site are required as a result of the change of use?	The proposed new work follows conservation, restoration and adaptation principles established by the 2014 works. New elements are a direct expression of its function adapted to the particular form and character of the heritage building. The proposed application provides for a base-build standard for a commercial use tenant. This assumes an occupation rate of 8 square metres per person. Any deviation from this commercial use may trigger future services upgrade requirements and will require a separate and additional development application. As detailed above, considerable intervention is required to facilitate a new use, however the brewery function has been redundant since 2005 and it has been difficult to establish a viable and practical ongoing use. It is considered that the scheme achieves an appropriate balance between the new use and retention of heritage values.
New development adjacent to a heritage item How does the new development affect views to, and from, the heritage item? What has been done to minimise negative effects? How is the impact of the new development on the heritage significance of the item or area to be minimised? Why is the new development required to be adjacent to a heritage item? How does the curtilage allowed around the heritage item contribute to the retention of its heritage significance? Is the development sited on any known, or potentially significant archaeological deposits? If so, have alternative sites been considered? Why were they rejected?	The potential heritage impacts of the proposal are discussed throughout Section 7 of this report. In regards to potential impact on the former chimney (the only listed heritage item within the Brewery Buildings), the proposal will have no negative impact on the significance of this element. Rather the proposal seeks to refurbish and revitalise the whole of the Brewery Buildings precinct, and therefore open up accessibility and interpretation opportunities throughout the buildings. This will act to enhance the recognition and understanding of the chimney heritage item as part of a larger group of former brewery buildings. No works are proposed to the chimney as part of the current stage of works. It was previously adapted for use as part of the trigen plant. The proposed new additions will not dominate the chimney or compromise its status as a Chippendale landmark. Impacts on the potential archaeological resource are assessed in section 7.5.

Question	Discussion
Is the new development sympathetic to the heritage item? In what way (e.g. form, siting, proportions, design)? Will the additions visually dominate the heritage item? How has this been minimised? Will the public, and users of the item, still be able to view and appreciate its significance?	
New services (e.g. air conditioning, plumbing) How has the impact of the new services on the heritage significance of the item been minimised? Are any of the existing services of heritage significance? In what way? Are they affected by the new work? Has the advice of a conservation consultant (e.g. architect) been sought? Has the consultant's advice been implemented? Are any known or potential archaeological deposits (underground and under floor) affected by the proposed new services?	A detailed discussion regarding new services within the Brewery Buildings is included above at Section 7.1.6.
New landscape works (including car parking and fences) How has the impact of the new work on the heritage significance of the existing landscape been minimised? Has evidence (archival and physical) of previous landscape work been investigated? Are previous works being reinstated? Has the advice of a consultant skilled in the conservation of heritage landscapes been sought? If so, have their recommendations been implemented? Are any known or potential archaeological deposits affected by the landscape works? If so, what alternatives have been considered? How does the work impact on views to, and from, adjacent heritage items?	The proposal includes provision of soft landscaping in the brewery yard, designed by Turf Design, to complement and enhance the new entry and provide a forecourt to the brewery buildings. No significant original landscape features remain. As set out in section 3.4, the proposal includes provision of a brick paved forecourt to provide breakout opportunities for the new upgraded Brewery Building. This Significant Development Application (SSDA) will also include a renewed through site link, connecting from the forecourt to the southern open space. The new publicly accessible forecourt and through site link will be characterised by active building frontages, deciduous trees, planting features and a detailed brick paving palette. The proposed design includes a simplified palette that stitches together the historic character of the building and modern elements reflected throughout the site. The proposed forecourt incorporates a herringbone pattern. Steel planters emphasises the industrial character of the Brewery building and the architectural language of the new additions, while connecting with the neighbouring public forecourt between DUO and The Steps. The Deciduous trees are proposed within key planters to the centre of the forecourt, west of the building. To complement the trees and the site

Question	Discussion
	wide character, lush vibrant coloured under storey species were proposed. Archaeological potential for the yard has been assessed as nil, noting the extensive excavation of the former yard for the underground basement/ trigen plant and associated shoring of the brewery buildings.

7.4. SPECIAL ELEMENTS CONSERVATION PLAN

The proposal has been assessed with regards to the relevant policies contained in the Special Elements Conservation Plan report, prepared for the Irving Street Brewery Buildings by Urbis in 2009.

Table 10 – Assessment against Special Elements Conservation Plan

Policy	Discussion
Policy 5. Significant views to the Chimney stack (Asset 36) and the group of Irving Street Brewery Buildings should be retained.	The proposal will not obstruct views to the heritage listed chimney stack. Views to this element are primarily from the north and west, however, the top of the stack is just visible over the Brewery Buildings from the south and is more apparent in views from the east. It is also apparent in precinct and district views. The proposal does not propose any major additions which would impact on the scale of this chimney stack, and therefore no significant views will be obstructed or dominated. The stack is only just visible above the site from the south and does not make a significant contribution to this view. Given the rooftop addition has been modulated to ensure it has no or negligible views from the south, it is considered that the view will not be impacted significantly.
Policy 6. The Brewery Yard (Asset 52) should always be discernible as open space. Appropriate interpretation should be included in this area to identify its function as part of the former brewery operations and potential archaeological remains of the Military gardens and earlier periods in the vicinity.	There are minor additions proposed to the Brewery Building that extend into the Brewery Yard space, including a new ground floor lobby structure. These additions will not prevent the understanding of the Brewery Yard as open space. Site landscaping is proposed to complement the brewery buildings and to create a forecourt to the buildings.
Policy 7. The remaining Irving Street Brewery Buildings (Assets 22, 23, 26, 30 and 36) should be retained and conserved as a significant group. The curtilage of this group should be respected and new buildings should not directly abut these buildings.	The proposal has considered the Brewery Buildings assets as a whole, and the design has been developed to reinforce their significance as an important and intrinsically linked group of buildings. There are no new buildings proposed as part of this proposal, only minor additions assessed above. The existing curtilage of the Brewery Buildings is being retained.
Policy 8. Impact on areas identified by Godden Mackay Logan (2006B) in their archaeological assessment of the entire CUB as having high archaeological significance should be avoided. If proposed works involve excavation for new buildings, structures or services, the archaeological potential of the area and potential	GML heritage undertook an Archaeological Assessment of the site in 2006 (refer to discussion at Section 5). Although the site was identified as having archaeological potential (high or moderate levels) for potential remains associated with the Military Gardens and the early residential site development, the report concluded that the Brewery Buildings precinct had low to nil archaeological potential due to the extent of disturbance.

Policy	Discussion
impact on archaeological relics should be assessed by a qualified archaeologist. The appropriate consent authority should be consulted and the appropriate permits obtained.	Further to this, the Brewery Yard is substantially disturbed following the construction of the tri-generation plant below ground level in 2015. The subject proposal will not involve substantial amounts of excavation, requiring only for lift pits and localised excavation for services and stairs. Having regard to GML's previous assessment, and the limited excavation required, the proposal is unlikely to result in adverse impacts to the potential archaeological resource.
Policy 11. All fans and vents fitted to windows and doors on the external façades should be removed from all Irving Street Brewery buildings, which will coincide with their adaptive reuse. Windows should have elements reinstated to match those existing on the façade, including form, size and materials of glazing, sills, bars and lintels. Reinstatement of doors where elements are removed, should complement those existing in fabric, size and location.	The schedule of conservation works includes replacement of infilled or altered windows. The subject proposal also includes insertion of louvres into a small number of existing window openings for the provision of ventilation and other services. The location of louvres is limited to the secondary facades and no louvres/ services are proposed within the principal southern façade. The proposed louvres will fit wholly within window sections and will be balanced so as not to impact on the symmetry of the façade. The proposed louvres have an industrial quality consistent with the heritage character of the place and will not impact on the buildings.
Policy 13. Any openings in building facades as a result of removal of metal or concrete external additions, such as the concrete walkway on the south façade of building 22 or the metal walkway on the east façade of buildings 22, 25 and 30, should have openings made good with brickwork and windows to match those on the façade.	A separate conservation schedule has been prepared in conjunction with SSDA conditions of consent. Façade renewal includes removal of identified intrusive elements and reinstatement of the original fenestration where it has been infilled or significantly altered. This includes removal of the central opening to the southern façade between the second and third floors, and reinstatement of 2 windows and reinstatement of central windows and details to the northern façade of building 22, as shown on the submitted architectural drawings. Samples are to be provided to the project heritage consultant to approve profiles and finishes.
Policy 14. Bricked-up windows on all building façades should be reinstated to match elements of existing openings. These should match in regards to size, materials and form.	As detailed above (refer policy 11 discussion) the conservation works include reinstatement of infilled or lost windows in accordance with the window typology set in the schedule of conservation works. In accordance with the previous consent, new windows will be constructed of aluminium. Samples are to be provided to the project heritage consultant to approve profiles and finishes.
Policy 18. Face brickwork to the external brewery buildings and chimney should not be painted or covered with any finish.	The external brickwork and stonework will remain unpainted.
Policy 26. Corrugated metal additions on the exterior roof of buildings 23 and 30 (both two-storey	The roof additions to Building 30 have been subsequently replaced with the tri-generation plant cooling towers.

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in height) should be retained and conserved along with all internal brewery equipment. These additions can be painted to complement building façade or roof if required. The building and the additions should retain their industrial character.	The roof of Building 23 is proposed to be demolished to facilitate additional floor space and levels. This will result in the loss of the gabled roof truss frame and cladding, corrugated roof additions and any internal remnant equipment. This is not consistent with the CMP however the loss is necessitated by the proposed roof addition
Policy 27. The roof of buildings 22 and 23 should not be changed in regards to its form and should not have any additional floors.	The proposal has been developed to enable a viable adaptive reuse and function for the place. Without the addition of floor area to the upper levels of Buildings 22/23, the overall viability of the project would be degraded, and there would be no mechanism for the adaptive re-use, conservation and future use of the place. The roof addition has been designed to mitigate visual impacts, with the addition partly obscured behind the parapet and with the form modulated to limit visibility in principal eastern and southern elevations, such that views are negligible or nil. Whilst the addition will be apparent in views to the northern façade, this is a secondary elevation and the proposed addition will not dominate the building or compromise the significant character. Further detail regarding the proposed new roof additions is contained at Section 7.1.2.
Policy 28. The roof of buildings 26 and 30 can be changed in regards to its form and can have additional floors. Additions should be no more than two-storeys in height and should not adversely impact on any significant fabric. Additions on the roof of building 30 should allow the roof housing of the hoppers to be read as a separate addition, and should be set back on the west elevation.	No additions to the roof form of Building 26 are proposed and the original gabled truss roof is retained. The retention serves to mitigate the loss of the building 22/23 roof form. As discussed above, the roof of Building 30 was replaced with the construction of the tri-generation plant cooling towers.
Policy 31. All floors and columns within buildings 22 and 26 were altered in the 1980s with the new fitout. The existing concrete floors and columns can be removed and replaced if required without adversely impacting upon any significance fabric.	The proposal aligns with this policy. It is proposed to remove the existing internal concrete structure and replace with floating floors to enable future occupation consistently across all buildings.
Policy 33. All eight malt silos (nos. 1-8) and equipment nos. 9, 10, 11, 12 and 13 on the ground floor and associated equipment in the basement of building 23 should be retained, conserved, interpreted and visible as part of any new works.	As set out in section 7.1.5, the previous approval allowed for the demolition of 6 of the 8 concrete silos, with the 2 easternmost silos being retained, along with the retention of the pyramidal funnel forms at the base of all 8 silos on the ground floor. It was also further proposed to retain the associated plant equipment on the two easternmost silos as a complete picture of the former structure and providing interpretation of the function. It was also proposed in the stage 1 scheme to adaptively reuse upper concrete silo sections of the retained pair for a fire stair,

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	however further structural investigations have determined that this use is not feasible for structural reasons. The current proposal therefore seeks to further reduce the extent of the silos, retaining the two concrete silos on the first floor only and removing the silos on the upper floors. Structural engineers have advised that the silos are not able to be retained from a construction perspective and it is proposed to rebuild part of this silo structure on the new Level 1 to provide accessible and meaningful interpretation of this former use. On the ground level, the pyramidal form of the funnels at the base of the silos will be rebuilt, at a slightly raised ceiling height to facilitate use of the floor (the present floor to ceiling heights restrict the use and occupation of the space). The proposed fire stair and lift at the northwest corner of the space will mean that only 5 of the 8 funnels will be interpreted, however the full extent remains legible, communicated by the retention of the full extent of the southern funnels and the extent of the interpretation of the two easternmost funnels, which were replicated across the remaining 6 silos. Interpretation zones are also provided on the basement, ground and first floors incorporating display of significant objects. It is appreciated that the proposal further impacts on fabric that is acknowledged as being of high heritage significance and which is regarded as rare, however the proposed adaptive reuse of the building is critical for its ongoing conservation and the proposal still provides for a meaningful heritage interpretation and built form response.
Policy 35. The reinforced concrete silos (nos. 1-8) on the first, second, third and fourth floor of building 23 are encased by concrete walls. These eight silos are repetitive in regards to their form and fabric. Not a lot will be achieved by keeping all eight of the reinforced concrete malt silos. Malt silos nos. 4 and 8 are directly associated with equipment nos. 9-12 and 13 on these floors and these two silos in their entirety should be retained as a group as a minimum to interpret the exceptional fabric (as shown in Figure 18 below). This will allow for the adaptive reuse of the space within malt silos nos. 1-3 and 5-7 within building 23.	See above discussion (policy 33 and section 7.1.5). Silos no.s 4 and 8 are the easternmost silos and are reinterpreted in the subject proposal. Equipment designated numbers 9-12 on the plan at left are retained and interpreted.

Figure 18 – Retention of malt silos and associated equipment (as shaded)

1	2	3	4	12
				11
5	6	7	8	10
				9

13

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Policy	Discussion
Policy 37. If all eight malt silos are not able to be retained, conserved and interpreted as part of the adaptive reuse of this building (which is the preferred heritage option), then reinforced concrete silos 1, 2, 3, 5, 6 and 7 in building 23 may be removed without damaging or affecting the elements of the silos to be retained on the ground floor and basement. Following removal of these elements, this space can be adaptively reused.	Refer above discussion. Removal of these silos was subject to the previous SSDA.
Policy 38. If reinforced concrete silos 1, 2, 3, 5, 6 and 7 on all levels of building 23 are removed, the windows on these levels can be reinstated to match those on the façade.	The windows on this façade are being reinstated as per this policy. Reinstatement was subject to the previous consent and the subject proposal is consistent with this.
Policy 39. The former office space on the ground floor of building 23, between the two driveways, can be adaptively reused. New window openings can be reinstated on the north façade of the ground floor where this office space is located if required, however any non-original openings should be contemporary and not match those existing on the façade.	Complies. This former office space is being adaptively reused, and the northern windows reinstated.
Policy 42. All equipment in the basement of building 23 should be retained as it is of exceptional significance. However, if change is proposed in the basement, such as new services, the most significant equipment should be retained (following a professional assessment). Any removed equipment should be interpreted. Changes in the basement should not adversely impact upon or visually obscure any of the retained brewery equipment or road hopper.	The previous consent allowed for the majority of fabric in the basement level of Building 23 to be removed. However, it is proposed to provide a heritage display area on the Basement Level, visible through a glazed walkway on the Ground Floor, looking down into the lower former structure of the malt silos. The basement interpretation will be able to be read in conjunction with the ground floor funnels and continues these elements. The remainder of the Basement Level will be used for services and plant. With consideration for the proposal as a whole, this is considered the most appropriate location for the storage of services and plant equipment, and the impact on equipment and existing fabric is therefore considered acceptable. The proposal also frees up the ground floor for public uses.
Policy 43. The entrance to the basement of building 23 is original but the metal stairs and door have little significance and can be altered. Any changes to the stair or door should allow ongoing access to any retained significant machinery in the basement. Consideration should be given to allowing some of the basement equipment to be visible.	This fabric is proposed to be removed and access to the Basement Level will be via a new stairwell. Level changes are proposed, including lifting the height of the funnels to make the ground floor a habitable space. However, the machinery associated with the two easternmost silos is retained and conserved and will be elevated on a small plinth. The glass floor to the basement will ensure that the funnel and plant will be able to be read in association with the basement conveyor and associated elements.

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Policy 44. On the second floor, equipment nos. 9, 10, 11 and 12 incorporates the timber malt silo bins that should be retained in their entirety, conserved and interpreted as part of any changes to building 23. Adaptive reuse of any adjacent space should not visually obscure retained elements.	The timber bins are likely to be unable to be retained and interpreted due to hazardous materials and to facilitate the adaptive reuse. Where possible, samples of some equipment and plant will be salvaged and reused within the building in accordance with the Interpretation Strategy and further detailed design development.
Policy 45. On the first, third and fourth floors, equipment nos. 9, 10, 11 and 12 incorporates metal chutes that should be retained in their entirety, conserved and interpreted as part of any changes to building 23. Adaptive reuse of any adjacent space should not visually obscure retained elements.	Where possible, samples of some equipment and plant will be salvaged and reused within the building in accordance with the Interpretation Strategy and further detailed design development.
Policy 46. On the first floor of building 23 equipment no. 13 consists of a metal probe, which should be retained, conserved and interpreted as part of any changes to the building. Adaptive reuse of any adjacent space should not visually obscure retained elements.	Where possible, samples of some equipment and plant will be salvaged and reused within the building in accordance with the Interpretation Strategy and further detailed design development.
Policy 47. On the second floor of building 23 the green dust control equipment, adjacent to the timber bins (nos. 9-12), should be retained, conserved and interpreted as part of any changes to the building. Adaptive reuse of any adjacent space should not visually obscure retained elements.	Where possible, samples of some equipment and plant will be salvaged and reused within the building in accordance with the Interpretation Strategy and further detailed design development.
Policy 48. The brewery machinery above the existing goods lift in building 23 has moderate significance. If the goods lift is proposed to be removed, it is unlikely this machinery could be interpreted separately, and should be considered for removal also.	The lift and machinery are proposed to be removed, consistent with this policy.
Policy 49. The original timber beams above the fourth floor in building 23 should be retained, conserved and remain visible as part of the building's adaptive reuse.	The proposed roof additions and internal structural works do not permit the retention of the timber beams. The additional floor area is required to facilitate a viable reuse and it is considered that the proposed works strike an appropriate balance between conservation of heritage fabric and allowing for an appropriate and viable long term adaptive reuse.
Policy 50. Brewery machinery and equipment on upper levels 5A, 5B and 5C of building 23 (above the fourth floor) should be retained, conserved, visible and interpreted as part of the building's adaptive reuse. This includes the original timber stairs and railing, timber floors and ceilings. Adaptation may be required to meet BCA standards and should be undertaken with further heritage advice.	Where possible, samples of some equipment and plant will be salvaged and reused within the building in accordance with the Interpretation Strategy and further detailed design development. As detailed above, the proposal does not permit insitu retention due to the proposed roof addition and alterations to the internal structure.

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Policy 63. Future uses of the Irving Street Brewery buildings should not have an adverse effect on the overall heritage significance of the place and should not adversely impact or visually obstruct any elements or archaeology identified as having exceptional or high significance in Table 5 of this report.	The proposal provides for a base-build standard for a commercial use tenant. Any deviation from this commercial use may also trigger future services upgrade requirements and will require a separate and additional development application. The former brewery function was made redundant with the 2005 closure of the brewery and adaptive reuse is critical to the ongoing conservation of the significant building. It is noted that the proposed reuse necessitates intervention to the significant building and fabric (including some elements of high significance such as the silos and hoppers), however, this is to provide for a viable reuse. The proposal has been designed to respond to the industrial and heritage character of the building.
Policy 65. Alterations and additions internally to the existing buildings are allowed where it will not have an adverse impact on the overall significance of the place or on fabric identified as having exceptional or high significance in Section 5 of this report. Changes that reduce the significance of the place should be reversible and be reversed when circumstances permit.	Generally internal works comprise of the removal of existing structure and construction of new floors. The majority of the internal structure is later and / or modified concrete structure, of no heritage significance, and is not required to be retained on heritage grounds. Its removal and replacement with new 'floating floors' as proposed, will not have a detrimental heritage impact. The proposal does impact on significant fabric, with works including further removal of the silos and associated plant, removal of one of the three coal hoppers and works to the façades in conjunction with modifications to the stair hall and revision to floor levels. The proposal has been assessed in more detail in section 7.1 and reference should be made to that section in addition to assessment above. The significant elements of the buildings will be retained or adequately interpreted, while enabling the development of a functional space for future occupation. The proposed internal works are supported from a heritage perspective. Detailed design development should be undertaken in conjunction with a qualified heritage consultant to ensure fabric removal is undertaken appropriately.
Policy 66. New work such as additions or alterations to the existing Irving Street Brewery buildings should not detract from the place's overall heritage significance and should be identifiable as new work. Restoration of existing elements, such as removal of vents from windows and replacement with new materials to match, should still be identifiable as new works. Minimal replacement of original fabric should occur and it should be repaired if possible.	A careful balance of conservation and modern intervention has been achieved with the current proposal, which seeks to provide a feasible outcome for the use of the space, but also embraces and celebrates the site's history through interpretation and retention of significant fabric. Rather than diminishing the heritage of the City of Sydney, the subject proposal seeks to enhance the heritage values of the Brewery Buildings by enabling the future occupation of the space, and providing a new phase of use for the site. The proposal will allow the Brewery Buildings to be an integrated,

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	accessible part of the Central Park precinct. Proposed additions are apparent as new work, responding to the architectural language and materiality of the tri-gen plant addition and the robust industrial character of the heritage item.
Policy 69. Any new buildings proposed on the site should not intrude on the integrity the existing Irving Street Brewery buildings. The original (c. 1912) Brewery buildings, chimney and yard should be read as a significant group.	There are no new buildings proposed, only minor additions which have been designed to be subservient to the original buildings. As such, the proposal will not obscure the presentation of the Brewery Buildings as a unified group of buildings.
Policy 70. The two driveways on the ground floor of buildings 22 and 23 should not be enclosed with a solid non-transparent surface. They are original access ways from Irving Street to the brewery yard, and should either be retained as open access points or enclosed with a contemporary finish that allows views from Irving Street to the brewery yard.	On the ground floor, within Building 23, there are currently two open former cart drives. These were the original 'in' and 'out' vehicular access points for the Brewery Buildings. It is proposed retain these openings as is, with the western-most cart drive being glazed to create an interior space, and the eastern-most care drive being enclosed by a bi-fold metal gate and ramped internally, to provide a main point of entry for the building. This adaptation is considered reasonable as vehicular access is no longer a viable use for these spaces, and it will allow the users of this space to experience this significant feature of the building. Proposed glazing and gate enclosures allow the former open character of the cart-ways to be interpreted. Details of the proposed fixing and interface of new materials and the significant stonework should be considered in the detailed design and provided to the project heritage consultant for approval.
Policy 71. The existing openings from Balfour Street to the brewery yard on the ground floor west and east façade of building 26 can be modified, however removal of further original brickwork should not be undertaken. Following removal of metal roller doors, new openings can be contemporary if their design does not detract from the significance of the group of Brewery buildings. Any new brickwork should match existing and original bricks should be reused where possible.	The larger openings are being retained, with fixed and operable glazed insertions to provide for access and light. This is a sympathetic solution to these former access openings, and has been adopted along the whole of the eastern façade. Proposed new openings are sympathetic to the proportions of original fenestration.
Policy 72. The access points on the ground floor west and east façade of building 30, one to the brewery yard and the other to Balfour Street, are later additions to this building and can either be enclosed by contemporary materials or retained as openings.	The larger openings are being retained, with fixed and operable glazed insertions to provide for access and light. This is a sympathetic solution to these former access openings, and has been adopted along the whole of the eastern façade. Proposed new openings are sympathetic to the proportions of original fenestration.
Policy 73. New openings may be added on the west and east facades of building 30, so long as they complement the form and size of other openings along the east and west façades of buildings 22 and	The proposal retains the larger openings approved with stage 1. This is a sympathetic solution and has been adopted along the whole of the eastern façade. Proposed new openings are

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26. Contemporary doors and windows may be considered if their design does not detract from the significance of the buildings. The building archaeology illustrating the height increase and change in use should not be affected and should be interpreted as part of any changes. There is more flexibility to provide new openings on the new north façade of building 30, as this was never an external wall.	sympathetic to the proportions of original fenestration and façade bays. The northern façade does not currently exist, and is an open shell. The former internal wall was demolished in conjunction with the construction of the trigen plant. The proposal modifies the full height glazed façade approved with the stage 1 application, for structural reasons, associated with the extension of the floor plates. The proposed façade has no further impact than the present façade approval. This is proposed to be full-height glazing, allowing a contemporary approach to this side of the building, and providing façade activation and views into the building.
Policy 74. Any consideration for mezzanine levels on the fourth floor of building 23 should not obstruct the view or remove any of the original timber roof trusses or original corrugated metal interior roofing. These original building elements should be visible and interpreted as part of any redevelopment of the site.	See previous discussion regarding the removal of Building 23's internal structure and proposed roof additions.
Policy 75. Additional floors may be added within the internal space of building 30 so long as the overall significance of the building or any internal elements are not adversely affected and the scale of the three coal hoppers remains visible and legible.	Floating floors are proposed throughout Building 30 to align with the floor levels throughout the remainder of the place. These new floors provide additional floor space to facilitate a viable new use, but also provide for interpretation of and interaction opportunities with the former coal hoppers being retained. The hoppers are able to be viewed from below and immediately adjacent, on the proposed bridge. The proposed removal of the central hopper has been assessed above.
Policy 78. Additions on the roof of buildings 23 and 22 should be limited to new services setback from the roofline and not additional floor space (unless within existing roof structure). These buildings have been altered internally as brewing operations changed, however their façades and height have remained relatively intact.	Roof additions are proposed to the length of Buildings 22 and 23, as assessed in section 7.1.2 and above. Additions are proposed to facilitate a viable reuse and have been designed to mitigate impacts to fabric and significant views and also to respond to the contemporary architectural language of the trigen addition. The proposed addition is considered sympathetic in its form and materiality and enables retention of principal views to the southern elevation as the addition is almost wholly concealed.
Policy 79. The offices at the western end of the ground floor of building 22 can be altered. These offices have been altered with changes to brewing operations and no longer function as office spaces. Any alterations or additions in this area should not encroach on the two driveway access points from Irving Street to the brewery yard (Asset 52), and should not adversely affect the heritage significance	This area has been stripped and is proposed for adaptive reuse, with a new floating floor, and also accommodates one of the proposed new internal lifts. There are no heritage impacts identified in relation to this work. The proposed adaptation of the cart ways allows the original external form and character to remain legible.

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of buildings 22 or 23 or any elements assessed having exceptional or high significance.	
Policy 80. The goods lift within building 23 has low significance and can be recorded and removed. Consideration can be given to installing a new lift within this space, however new lifts and stairs should be avoided within other areas of building 23 due to the significant fabric to be retained.	A new fire stair and lift is proposed to the north west corner of Building 23. Refer to previous discussion regarding the location of these additions and internal works generally throughout Building 23 at Section 7.1.1, 7.1.3 and 7.1.3 of this report.
Policy 81. The brick stairwell (25) with concrete reinforced slabs keying into original face brickwork of adjacent buildings 26 and 22 should be recorded and removed as it has been assessed as an intrusive element. The original brick and sandstone arch on the eastern façade, adjoining buildings 22 and 26 should be retained. The stairwell addition does not abut or join with this arch.	The existing stairwell will be replaced with a new structure to facilitate access to the proposed roof addition and having regard to the alterations to the floor levels. As assessed in section 7.1, the external form and materiality is consistent with the original, retaining the inset form, which enables the original facades and return elements to be read. Detailed design of the stair should be undertaken in conjunction with heritage advice and with careful consideration for heritage fabric within the stair, to minimise intervention to significant elements and where possible to allow for reinstatement of lost detailing. The new stair should be offset from the wall where possible to mitigate impacts on fabric. Whilst it will be higher in scale than the existing stair well, materiality and setbacks will mitigate this visual impact.
Policy 82. The requirement for new lifts, stairs or plant equipment within the existing Irving Street Brewery buildings should be limited to buildings 22 and 26, and the north section of building 30, so as to avoid the impact on fabric of exceptional or high significance. If required, building 25 could be considered for retention to provide space for new services.	Refer to Sections 7.1.3 and 7.1.6 of this report regarding the insertion of new services throughout the Brewery Buildings, including stairs and lifts. Proposed stairs and lifts largely comply with this policy, with new stairs being located within buildings 22 and 26. A new stair is also proposed at the northwest corner of building 23, which does impact on the extent of interpretation of the silos on the ground floor. This is assessed in section 7.1.5. It is considered that the extent of the retained funnels allows for the interpretation of the original extent, particularly when coupled with other interpretation elements.
Policy 83. The requirement for new services should not impact upon significant fabric of the Irving Street Brewery buildings, both internally and externally. New services proposed to be located on the roof of any existing building should be setback from the edge and should not adversely impact significant fabric or views.	See above discussion (refer to section 7.1 above). Roof services are limited, with consideration for the proposed roof additions.
Policy 85. The site should have an interpretation strategy prepared prior to development of the site. The interpretation strategy should be applied across the entire former CUB site, including retained and new buildings and other site elements.	Urbis prepared a Heritage Interpretation Strategy for the whole of the former Carlton United Brewery site (July 2009) and a subsequent strategy was prepared for the subject Brewery Buildings: <i>Heritage Interpretation Strategy: Irving Street</i>

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	<i>Brewery Buildings and Yard, Former Carlton and United Brewery site, 26 Broadway, Chippendale, NSW, July 2012.</i> That latter document was prepared with consideration for a former use and is no longer applicable. A preliminary interpretation strategy has been prepared for this application, in accordance with the SEARs, and building on the previous strategies. This report is included in this report at Appendix A.
Policy 86. All signage should to be retained and conserved in-situ on all retained Irving Street Brewery buildings. This applies to internal and external signage both relating to brewery operations and other site operations (e.g. painted signs, parking signs, operational signs, safety signs), as it is considered to be one of many effective interpretation means.	Any significant historic painted signage associated with the brewery function will be retained and conserved. Any movable signage will be salvaged for reuse in conjunction with the heritage interpretation strategy and further detailed design. Signage should be used to best effect and may be installed within the proposed interpretation zones.
Policy 89. The open space at the southern end of the ground floor of building 23 should not have any structural additions that would visually obscure any retained malt silos and associated elements. It is strongly recommended that space on the ground floor of building 23 is used for interpretation of the former function of these buildings, and the adjacent equipment of exceptional significance to be retained.	See discussion regarding the malt silos at Section 7.1.5 of this report and further discussions above.
Policy 90. With the adaptive reuse of building 30, internal space should adequately allow for interpretation of the retained three coal hoppers.	See discussion regarding the hoppers at Section 7.1.4 of this report.

7.5. SUMMARY ARCHAEOLOGICAL IMPACT ASSESSMENT

Reference should be made to the historical and Aboriginal Archaeological Assessments in section 5 of this report.

7.5.1. Aboriginal Archaeological Impact Assessment

It has been concluded that the accumulated impacts associated with the ongoing post-Contact development and occupation of the site are likely to have extensively disturbed and/or destroyed the Aboriginal archaeological resource that may have formerly been present on the site. Aboriginal Archaeological potential is therefore assessed as low to nil.

The subject proposal will not involve substantial amounts of excavation, requiring works typically in conjunction with services such as for lift pits and localised excavation for services and stairs.

Having regard to the highly disturbed nature of the site and the limited nature of the proposed excavation, the proposal is unlikely to result in adverse impacts to the Aboriginal archaeological resource.

7.5.2. Historical Archaeological Impact Assessment

The Brewery Yard is considered to be substantially disturbed following the construction of the tri-generation plant below ground level in 2015 and potential is assessed as nil. Buildings 22 and 23 were previously regarded as disturbed due to the construction of the maltings and filtration buildings, which included excavation for substantial basements. There has also been further disturbance to building 30, in conjunction with the construction of the trigen plant.

The subject proposal will not involve substantial amounts of excavation, requiring works typically in conjunction with services such as for lift pits and localised excavation for services and stairs.

Having regard to GML's previous assessment, and the limited excavation required, the proposal is unlikely to result in adverse impacts to the potential historical archaeological resource.

8. CONCLUSION AND RECOMMENDATIONS

The proposal has been assessed herein and it is concluded that the works will not result in an adverse heritage impact to the place or the heritage listed chimney which forms part of the site.

While the proposal includes a high degree of fabric modification and alteration, the overall design and mitigation of impact where possible has resulted in an acceptable level of heritage impact. Practical solutions to the ongoing occupation of these buildings have been carefully considered with regard to minimising adverse impacts, whilst looking for ways to celebrate and interpret the history of the place. A careful balance of conservation and modern intervention has been achieved with the current proposal, which seeks to provide a feasible outcome for the adaptive reuse of the space, but also embraces and celebrates the site's history through interpretation and retention of significant fabric.

Rather than diminishing the heritage of the City of Sydney, the subject proposal seeks to enhance the heritage values of the Brewery Buildings by enabling the future occupation of the space, and providing a new phase of use for the site. The proposal will allow the Brewery Buildings to be an integrated, accessible part of the Central Park precinct.

The proposal has been developed with design excellence at the forefront. The design has been undertaken by Tzannes Architects, who are responsible for the design of the tri-generation cooling tower atop Building 30 of the Brewery Buildings. This first stage of the Brewery building renewal was internationally recognised and Tzannes were the recipients of the 2016 Chicago Athenaeum International Architecture Award, and the 2016 UNESCO Heritage Award for New Design in Heritage Contexts for this work, as well as the Lachlan Macquarie Award for Heritage at the 2015 National Architecture Awards. This SSDA proposal sees the continuation of high quality architectural design and innovative approaches on the Brewery Building project.

The Brewery Buildings not only form part of the Central Park precinct, they are the historic centrepiece of this urban environment, and the last remaining physical representations of the site's significant brewing history and the former industrial buildings on the site. The buildings must be adapted for future use not only to prevent their physical deterioration, but to provide an important central element within the public domain of the Central Park precinct.

Aboriginal and Historic Archaeological potential has been assessed as low to nil and with consideration for the highly disturbed nature of the site as well as the minimal nature of the proposed excavation, the proposed works are unlikely to impact on the archaeological resource.

The proposal is supported from a heritage perspective and is recommended for approval subject to recommendations as outlined below.

8.1. RECOMMENDATIONS

- A heritage consultant should be engaged to provide input and advice throughout the detailed design development of the proposal for construction and implementation. The heritage consultant should be involved in the resolution of works affecting significant facades and fabric including (but not limited to):
 - Conservation and Maintenance works.
 - Detailed design of Interpretation elements and reuse of salvaged items.
 - Materials and finishes for new work and alterations.
 - Detailed design of windows to ensure consistency with the window schedule and typologies defined in the schedule of conservation works.
 - Detailed design of new door openings and gates and interface with significant stone and brickwork.
 - The interface between the significant facades and new additions (including the new stair and heritage facades of buildings 22 and 26)
 - Any demolition/ removal of significant elements (such as the central coal hopper).
 - Detailed design of rainwater goods.

- Opportunities for reinstatement of details on the former facades which are now encased by Building 25 (stairwell) should be explored in conjunction with a qualified heritage consultant, and should be subject to further design development.
- Where appropriate, the form and concrete walls of the malt silos should be retained against the internal face of the external walls of Building 23 to assist with the interpretation of this element. This should be subject to further detailed design in conjunction with a qualified heritage consultant.
- Conditions of consent should require the implementation of an Interpretation Strategy in accordance with the preliminary strategy in Appendix A and relevant previous strategies.
- Conditions of consent should require the implementation of the revised Schedule of Conservation Works prepared by Urbis.

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APPENDIX A INTERPRETATION PLAN

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HERITAGE INTERPRETATION PLAN BREWERY BUILDINGS

13 AUGUST 2019
PREPARED FOR IP GENERATION PTY LTD

URBIS

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Project Code	SH1320		
Report Number	01	30.11.2018	Draft
	02	10.12.2018	Amended Draft
	03	08.01.2019	Amended Draft
	04	13.08.2019	Final

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1. INTRODUCTION

1.1. BACKGROUND

Urbis has been engaged by IP Generation Pty Ltd to prepare the following Heritage Interpretation Plan. The Strategy is appended to a Heritage Impact Statement prepared for a State Significant Development Application. Reference should be made to that document for further background on the site, specifically section 2 Site Description and section 3 Historical Overview.

1.2. METHODOLOGY

This Interpretation is intended to inform and guide collaborative Interpretation planning with stakeholders and relevant parties. The Strategy has been prepared in accordance with relevant guidelines and relevant policy as outlined below.

1.2.1. Heritage Guidelines and the Burra Charter

Heritage conservation seeks to sustain the values of heritage landscapes, places and objects, individually and collectively, so that the community and visitors can continue to appreciate, experience and learn from them and about them, and so that they can be passed on to future generations.¹ Interpretation is an integral part of the experience of significant heritage places and the conservation and management of heritage items and is relevant to other aspects of environmental and cultural management and policy. Interpretation also incorporates and provides broad access to historical research and analysis.²

This Interpretation Plan has been prepared in accordance with the *NSW Heritage Manual*, the NSW Heritage Branch *Interpreting Heritage Places and Items: Guidelines* (August 2005) and the NSW Heritage Branch's *Heritage Interpretation Policy* (endorsed by the Heritage Council August 2005). The general philosophy and process adopted is guided by the Australia ICOMOS *Burra Charter 1999*.

The Burra Charter defines interpretation as “all the ways of presenting the *cultural significance* of a place” and it may be a combination of the treatment of the fabric; the use of and activities of the place; and the use of introduced material (Article 1.17).

Interpretation should provide and enhance understanding of the history, significance and meaning of the building. Interpretation should respect and be appropriate to the cultural significance of the building (Article 25).

The NSW Heritage Branch *Interpreting Heritage Places and Items: Guidelines* lists the following best practice “ingredients” for interpretation:

- 1) Interpretation, People and Culture – Respect for the special connections between people and items
- 2) Heritage Significance and Site Analysis – Understand the item and convey its significance
- 3) Records and Research – Use existing records of the item, research additional information and make these publicly available (subject to security and cultural protocols)
- 4) Audiences – Explore, respect and respond to the identified audience
- 5) Themes – Make reasoned choices about themes, stories and strategies
- 6) Engaging the Audience – Stimulate thought and dialogue, provoke response and enhance understanding
- 7) Context – Research the physical, historical, spiritual and contemporary context of the item, including related items, and respect local amenity and culture
- 8) Authenticity, Ambience and Sustainability – Develop interpretation methods and media which sustain the significance of the items, its character and authenticity

¹ NSW Heritage Branch, Department of Planning, Heritage Information Series, Heritage Interpretation Policy, August 2005, pg 2.

² Ibid 3

- 9) Conservation Planning and Works – Integrate interpretation in conservation planning and in all stages of a conservation project
- 10) Maintenance, Evaluation and Review – Include interpretation in the ongoing management of an item; provide for regular maintenance, evaluation and review
- 11) Skills and Knowledge – Involve people with relevant skills, knowledge and experience
- 12) Collaboration – Collaborate with organisations and the local community

1.2.2. Relevant Policies and Recommendations

There have been a variety of reports prepared for the site and this report is informed by previous policy and documentation as outlined below.

1.2.2.1. Heritage Interpretation Strategy 2009

This report details the recommendations of the 2009 Interpretation Strategy prepared by Urbis for the whole of the Carlton United Brewery site.

In addition to identifying interpretive themes (refer Section 3.2) the 2009 report made a number of recommendations with regard to potential interpretation in the Brewery Buildings. The intent of the 2009 report was that the buildings would form a focal point for the interpretation over the whole site. It acknowledged however that the scheme and use of the buildings had not yet been finalised and the previous scheme (2009) dedicated space for community uses/ library link and interpretation on the ground level which is no longer proposed.

The strategy recommended inclusion of the following interpretive media:

- Creation of an Interpretive Centre/ Exhibition Space. The Centre should aim to:
 - Chart the history of brewing on the site and site expansion. Identify and interpret the original Kent Brewery and Yard.
 - Interpret the process of brewing and the production process at various points around the site (e.g. the malting precinct, laboratory, administrative precincts etc.).
 - Interpret the social/ workers history including the variety of work (brewing, admin and all associated trades) and the changing production and technologies in brewing, workplace reforms/ unions/ strike action- workplace safety/ staff bars, the concept of the “honeypot” and the wet and dry workplace and the more recent history of the take over and subsequent break up of the site.
 - Incorporate audio and video – day broken by whistles, oral histories and sounds of brewery utilised on the oral history sound track and video of tank and audio from the PHM of coopers working (from the 1980s).
 - Incorporate significant archaeological finds associated with the Brewery Yard where available and where appropriate.
 - Incorporate salvaged objects.
 - Opportunity to incorporate objects borrowed from the Powerhouse Museum (in consultation).
 - Provide storage for copies of past reports (including archaeological, archival and conservation reports) perhaps in association with library link?
 - “Haunted maltings” (from oral history).
 - “Workers wall” – recording names and/ or messages from the former Brewery workers
 - Scan books so they can be “read” electronically.
- Interpret the use and function of retained significant internal fabric, such as the coal hoppers and malt silos, as part of the brewing process. Interpretation could be quite minimal and undertaken in association with the proposed interpretation in the ground floor Interpretive Centre. Other retained fabric, including original instructional signage in the brewery buildings is regarded as self interpreting.

- There is potential to use salvaged materials in other ways, for example there is an opportunity to reuse salvaged tanks in interpretation perhaps as an info / interpretation kiosk, either outside or in the interpretation centre (dependent upon size and scale of the salvaged objects).
- It is recommended that the Lighting Strategy should consider specialist lighting of the Irving Street Brewery to highlight the buildings as the heart and focus of the redeveloped Brewery site. Lighting could focus on the tower element, which has been an identifiable element in the Ultimo/ Chippendale skyline.

The report also made the following more general recommendations relevant to the Brewery Buildings and Yard, which are excluded from the brief of this report:

- Create a Heritage Walk that:
 - Interprets key sites and remaining heritage buildings and features as well as the evolution of the site and the process of brewing around the site. At a minimum, the Heritage walk should interpret key sites. The heritage walk should also identify and interpret the former Kent Brewery and Yard as well as archaeological features (in particular the ovoid drain and underground tank under former building 13A). The walk should also interpret the former street patterns on the site and the alignment of Broadway. There is an opportunity for laneways and streetscapes to accentuate former spatial arrangements, subdivisions and settings. Opportunity to incorporate images of lost street views (e.g. views of Broadway prior to the road widening and former terraces on Irving Street.) The heritage walk may also tie into the public art and architectural aspects of the new development. More than one “walk” may be devised in association with different themes.
 - Incorporates plaques/ signage on associated sites.
 - Incorporates traditional and contemporary media, utilising signage, soundscapes and podcasts and/ or WiFi technology.
 - Provides downloadable heritage brochures/ walking map available on the website.
- Recommend participation in specific open days throughout the year and in association with heritage groups. This may include but should not be limited to:
 - Sydney Open, the bi-annual festival that unlocks the doors of some of Sydney’s most prestigious locations and showcases the best of Sydney’s architecture.
 - Support for a program of temporary art events, coinciding with Sydney festivals such as the Festival of Sydney, the Sydney Film Festival, the Live Lanes Project and the new Vivid Sydney.
 - Open days in association with ongoing archaeological program of works.

1.2.2.2. Heritage Interpretation Strategy: Irving Street Brewery Buildings and Yard, Former Carlton and United Brewery Site, Chippendale, NSW, July 2012

The strategy was prepared in conjunction with consent for the application for adaptive reuse of the Brewery Buildings (MP10_0217). The application was approved by the Minister for Planning and Infrastructure subject to conditions of consent, including provision of the Heritage Interpretation Strategy.

Condition B5 - Heritage Interpretation Plan states:

A Heritage Interpretation Plan for the Block 4B Brewery Buildings and Yard must be prepared and submitted to and approved by Council, prior to any Construction Certificate being issued.

The Heritage Interpretation Plan must detail how information on the history and significance of the Brewery Buildings and yard will be provided for the public and make recommendations regarding public accessibility, signage and lighting. Public art, details of the heritage design, the display of selected artefacts are some of the means that can be used.

Condition E10 for MP10_0217 further required the full implementation of the strategy prior to the issue of the Occupation Certificate.

Condition E10 - Heritage Interpretation Plan states:

Prior to the issue of an Occupation Certificate, the Interpretation Plan for the Block 4B Brewery Buildings and Yard must be implemented to the satisfaction of the City of Sydney Council’s own Heritage Specialist.

The Strategy the strategy sought to enhance the enjoyment and understanding of the site, its history and significant values, guided by the significance of the site and having regard for its intended use, and subsequent audiences. The strategy made recommendations regarding content and media of the interpretation, as well as nominating potential locations for interpretive installations.

The strategy was limited to interpretation of the remaining Irving Street Brewery Buildings and was consistent with the identified themes and recommendations of the whole of site strategy as detailed in section 1.2.2.1. The Strategy also considered policies set out in the Special Element Conservation Plan, prepared by Urbis (2009).

1.2.2.3. Public Art Strategy

“Public Art Strategy: Expressing the Soul of the past and the Spirit of the Future”, 25/05/09 was prepared by Jennifer Turpin and Michaelie Crawford for Frasers Broadway. The strategy identified public art opportunities in the Brewery Precinct as outlined below.³ Detail design and use of the Brewery buildings has evolved and the public art strategy is currently subject to review as some of the previously recommended actions are regarded as impractical. For instance, the recommended silo installation is not feasible under the current approval.

- **External Glass Façade** - The large glass façade that is proposed to replace the current internal wall on the northern face in building 30 of Block 4b presents an opportunity for a significant integrated architectural-scale artwork. This work might be inspired by the brewing process itself and develop the notion of process as an idea to consider transformative organic and industrial processes of aggregation, disintegration, fermentation and more generally of alchemical transformation, fluidity, flux and change. Interwoven with these ideas could be the trace of the Military Gardens organic cycle of growth and decay, its irrigation, crops and harvest.
- **Internal Silos** - The two remaining internal silos within building 23 fronting Irving Street run vertically through the building from the ground to the top floor and provide a wonderful opportunity for an art installation with the possible combination of light, sound and movement. The environmental design engineers Lincolne Scott are considering the adaptive reuse of these silos for a passive cooling of the building. Their requirements to puncture holes in the silo structures and create air flow could interact with an art installation to create both visibility and movement and would not be impeded by the addition of sound and light elements.
- **Brewery Yard** - The Brewery Yard is a site of significance in its relationship to both brewing processes and to the trigeneration plant located beneath it. A work here would focus on ideas related to the phenomena of energy itself and take inspiration from the processes and products of the trigeneration plant. It would not however attempt to be explanatory or educative. An art installation here would respond to the landscape and architectural design of the yard. The artist would be required to interface or collaborate with the designers of the precinct in the development of their work. The work may not be substantially material but could rather engage the more ephemeral qualities of light, sound, electro-magnetism or mist. A work here would have particular importance in the activation of the space both day and night and the flow of movement between the park, brewery yard and Blocks 1 & 4a's through-site links. This location would also have high visibility from above within the surrounding buildings.
- A number of opportunities exist for an artist to design and to collaborate with the lighting designers to develop a particular area of the lighting design as a permanent public art installation. Locations include:
 - The specialist lighting of the Irving Street Brewery and or chimney.

1.2.3. Other Background Reports

In addition to the 2009 Strategy, the following reports for the CUB site have also been reviewed:

- An Oral History of Kent Brewery, Historical Research and Oral History. Mary Ann Hamilton and Sue Andersen. For Carlton and United Breweries (NSW) Pty Ltd. August 2004.
- Conservation Management Plan by Noel Bell Ridley Smith and Partners (2005).
- Archaeological Assessment by Godden Mackay Logan (2006).

³ Jennifer Turpin Studio, 2009, Frasers Broadway Public Art Strategy, Expressing the soul of the past and the spirit of the future, pg 9 and 12

- Heritage Impact Statement – Concept Plan by Godden Mackay Logan (2006).
- Heritage Impact Statement – Site Demolition and Recycling by Godden Mackay Logan (2007).
- Salvage and Retention Survey by Godden Mackay Logan (2007).
- Heritage Impact Statement – Amended Concept Plan by Urbis (2008).
- Heritage Impact Statement – Blocks 1 and 4 by Urbis (2009).
- Former Carlton and United Brewery Site, Special Element Conservation Plan: Irving Street Brewery Buildings and Yard, (Asset No.s 22, 23, 25, 26, 30, 36 and 52), 26 Broadway, Chippendale, prepared by Urbis June 2009.

1.3. OBJECTIVES

Interpretation is an essential part of the heritage conservation process. The active interpretation of heritage places supports the recognition and understanding of a site's significance.

The implemented interpretation strategy will make the cultural and historic significance of the Brewery Buildings readily apparent to all who visit or are involved with the site. In accordance with the above methodology, the strategy intends to enhance the enjoyment and understanding of the site, its history and significant values. The strategy will be guided by the significance of the site, having regard for its intended use, and subsequent audiences. It is intended that the strategy will make recommendations regarding content and media of the interpretation, as well as nominating potential locations for interpretive installations.

Subsequent to the provision of this strategy, Urbis has been engaged to prepare a detailed Heritage Interpretation Brief, outlining content, text, images and/or ephemera to be utilised in the interpretation.

1.4. AUTHOR IDENTIFICATION

The following report has been prepared by Fiona Binns (Associate Director). Unless otherwise stated, all drawings, illustrations and photographs are the work of Urbis.

The historical content provided in Section **Error! Reference source not found.** of the report has largely been compiled from the 2005 Conservation Management Plan and the 2006 Concept Plan HIS. Site description and Statements of significance have been adapted from the previous Urbis documentation.

1.5. LIMITATIONS

The brief of this strategy was to interpret only the remaining Irving Street Brewery Buildings. This report follows provision of an Interpretation Strategy for the whole of the Frasers Broadway site, and is consistent with the identified themes and recommendations of that report.

This Strategy forms part of a staged program of works to deliver the interpretation of the Irving Street Brewery Buildings. Urbis has been engaged to provide detailed design of interpretive media as part of stage 2 works for compliance with the conditions of the Occupation Certificate (as detailed in Section 1.1 above) and also to assist with production and finally, installation of the interpretive media in conjunction with graphic and other designers.

Some archaeological works have been undertaken at the site, however only a limited area has been excavated and details of finds have not been made available. It is recommended that finds be utilised in interpretation however this is subject to the availability and significance of finds.

Where images have been recommended for use in interpretive media, permission to use the images must first be obtained from the copyright holder. This is to be undertaken prior to implementation of works.

2. THE PROPOSAL

This strategy has been prepared to accompany a State Significant Development Application (SSDA) for works to the Irving Street Brewery Buildings and Yard. The Strategy considers the proposed works and the proposed use of the site in the development of Interpretation media, themes and content. The Proposal includes conservation and retention of significant brewery-specific elements and reuse of salvaged items and specific interpretation zones have been nominated in the SSDA (refer to plans provided in section 3). It is intended that interpretation will be subject to further detailed design and development as set out in section 4.1.

2.1. THE CENTRAL PARK CONCEPT PLAN

The Site is located on land that forms part of the Central Park (Carlton United Brewery) Concept Plan MP 06_0171. The Concept Plan establishes the importance of the Brewery Yard site within the precinct. The Site encompasses several of the major heritage buildings in the precinct as well as the Central Park Thermal Plant trigeneration facility. The existing heritage buildings address Chippendale Green and are bounded on the east by the north-south pedestrian and cycle link connecting Chippendale to Broadway.

Within the site boundary the Concept Plan designates building heights, publically accessible spaces and GFA. The Brewery Yard forecourt within the north-west portion of the site is planned as publically accessible, privately owned space, whilst a publically accessible through site link intersects the southern block.

In addition to the Concept Plan a Part 3A Project Application (MP 10_0217) was approved on 15 May 2012 for the alterations to and adaptive reuse of the Brewery Yard buildings. The approval included two construction stages, being:

- Stage 1: construction of associated plant related to the approved Central Thermal Plant including cooling towers and metal enclosure to the roof of the Old Boiler House, external chimney flues, reuse of chimney stack and stairs and air ducts in Brewery Yard.

SSD conditions of consent required conservation works to the buildings and a schedule of conservation works was prepared by Urbis, which has recently been revised. Conditions also required preparation of an Interpretation Strategy, which is superseded by this strategy.

- Stage 2: partial demolition of some existing building fabric and the adaptive reuse of the Brewery Yard buildings providing 6,386m² of GFA.

This consent has been acted upon and the first stage has been constructed in accordance with the consent, completed in 2014. Should the subject SSDA be approved, Stage 2 would be relinquished.

2.2. THE SUBJECT PROPOSAL/ NEW WORK

The following has been summarised from the Design Report prepared by Tzannes Associates and submitted with the subject Development Application.

The proposed new work follows conservation, restoration and adaptation principles established by the 2014 works. New elements are a direct expression of its function adapted to the particular form and character of the heritage building. The use of metalwork for new additions sympathetically contrasts the heritage masonry of the existing building and reflects the more contemporary industrial legacy of the building's adaptation over time.

The proposed new work comprises five major elements:

- a new roof form and addition comprising two new floor levels
- a new glazed northern façade (modified but similar to that previously approved)
- reorganisation of floor levels internally to allow for additional mezzanine floors
- a distinct new egress stair to the west (off the northern façade) and
- a new entrance lobby facing onto Brewery Yard (west elevation)

The brewery buildings will be tenanted.

The new roof form to the south building creates additional learning space and follows the building's tradition of a landscape of roofs which was extended by the Central Thermal Plant rooftop addition. The roof form and skylights are designed to ensure sun access to Chippendale Green and act as lightwells to bring natural light to the internal spaces. The proposal is also sensitive to the heritage building form as the visual impacts are minimised from the park, with little to no visibility of the proposed roof addition.

A new glazed facade to the north ties in with the architectural language of the Central Thermal Plant above and establishes a relationship with the materiality of the adjacent residential buildings. The north east corner of the site is the first view of the Brewery Yard site on approach from Broadway. The union of the old and new is apparent, with the glazed facade on the north and heritage brickwork to the east presenting a powerful expression of the building's adaptive reuse. The new horizontal element in the north facade is designed to align with the existing parapet in the east facade to express the relationship between the new addition and the existing fabric. The integrity of the relation between the existing and the new fabric is expressed in the relationship of the new built form with the existing parapet on the east facade. Within this northern building new floors have been introduced to provide floor-to-ceiling heights suited to a university building. In the southern block (building 22) a proposed mezzanine at level 2 breaks up the former industrial space to be re-appropriated as learning spaces.

The new egress stair in the Brewery Yard integrates existing structures in the yard, including escapes from and ventilation to the below ground plant spaces, into the one built form element and directly expresses its function as a stair in the space. It utilises a simple industrial detail language of metalwork which again connects the architecture to its more contemporary industrial legacy.

The proposal retains significant elements of fabric which are critical to the interpretation of the sites former brewing function and allow for built form interpretation, including remnants of the malt silos and associated malting equipment, and coal hoppers. The proposal also identifies interpretation zones within main foyer and public zones which may include interpretation signage, display of salvaged items, signage and/ or display of archaeological artefacts as guided by the strategy set out in section 3 and subject to detailed design development.



Figure 1 – Photomontage showing proposed stair and roof additions to building 22/23

Source: Tzannes Associates Dec 2018



Figure 2 – Photomontage showing the principal southern façade and demonstrating the negligible visibility of the proposed rooftop additions to building 22/23

Source: Tzannes Associates Dec 2018



Figure 3 – Photomontage showing the view of the northeast corner from Broadway, with the new northern façade and openings to the ground floor eastern façade. The trigen plant is existing.

Source: Tzannes Associates Dec 2018

3. INTERPRETATION PLAN

3.1. AUDIENCE PROFILE

Interpretation aims to reveal meanings and connections. To effectively achieve this, interpretation is predicated on identifying audiences and using appropriate media. It is important to identify specific audiences so that interpretation responds to audience needs and motivations and also takes into consideration literacy levels, disability, gender, ethnicity and age. The 2009 Interpretation Strategy provided audience analysis for the broader strategy and the whole of site development.

The Irving Street Brewery Buildings have historical significance as the last remaining industrial buildings on the former CUB site, providing tangible evidence of the history of the brewing process. The proposed adaptive reuse of the buildings will provide a focal point for the redeveloped site and provide previously unprecedented public access to the former industrial buildings.

It is envisioned that the main visitors to the site may fall into the following categories:

- Tenants/ owners/ occupants of the Brewery Buildings.
- Residents/ owners and occupants of the various commercial and residential Central Park towers.
- Visitors for commercial purposes.
- Visitors for recreational purposes including retail users.
- Recreational / tourism (international, interstate, and metropolitan visitors).
- General public, workers and residents of nearby suburbs, particularly Chippendale, Ultimo and Haymarket and people who work in and around the CBD/ Essential city workers.
- Special interest groups such as heritage, art and architecture enthusiasts and learning audiences including primary, secondary, tertiary, life-long learners.
- Commuters (pedestrian) / through traffic (pedestrian).
- Former Brewery employees.

The site's proximity to education and employment centres and transport hubs including Central Station will encourage a broad visitor base. Visitors to Sydney predominantly stay in the Sydney LGA and much of the City's visitor accommodation is located within the CBD and Ultimo Pyrmont.⁴

The Brewery has a high profile with local Sydney residents and workers and the redevelopment of the site has been the subject of much media coverage, public interest and comment. However, while people may be familiar with the site and its former use, the majority of users (perhaps with the exception of special interest groups and former employees) will probably not be familiar with the detailed history and functions. It is important that the interpretation facilitate an understanding of the site's significance, use and history, on a variety of levels.

The interpretation also needs to consider the permanent residents and regular users/ occupants, it should not be visually or otherwise intrusive and should permit residents to discover and interact with the interpretation over time and on various levels.

⁴ Ibid 3

3.2. THEMATIC ANALYSIS

3.2.1. NSW Historical Themes

The following themes were recognised in the CMP 2005 as being represented by the whole of the former Carlton and United Brewery site. They are listed in the table below.

Table 1 – Historical Themes recommended in the CMP 2005.

Theme	Description
Environment (naturally evolved)	The site is located across the former Blackwattle Creek, now contained within a storm water channel. The creek provided a critical resource to early activities, in the area. The installation of the storm water system drastically changed the local environment of the 'Blackwattle Swamp'.
Aboriginal Cultures and Interaction	Aboriginal cultural interaction may be evident, but the Archaeological Assessment finds that the site is unlikely to contain substantial evidence of Aboriginal occupation based on predicated model of short term visitation, ie. low-lying boggy mud flats surrounding creek line.
Land Tenure	The site is associated with early non-urban uses of Sydney and the subsequent suburbanisation of Chippendale, prompted by its proximity to Sydney and Parramatta Road. Its housing is associated with residential speculation in the first decades of the nineteenth century. The site provides evidence of early subdivision patterns, roads and lanes, including those subsequently incorporated within the site.
Townships	The site provides evidence of expansion of the perimeter of Sydney's earliest settlement for industrial and suburban development and the subsequent expansion of large scale industries into surrounding suburban areas, including a microcosm of streets, lanes, houses and pubs plus early industrial bridges.
Transport	The site provides evidence of the importance of locating industry in close proximity to transport routes, being located on the main colonial transport route between Sydney and Parramatta.
Industry	The site demonstrates the sequence of constant change within the brewing industry in New South Wales from 1834 to the present, as the brewery grew from a small colonial business to an international company. The site is an example of one of the last remaining large scale industrial sites in Sydney.
Labour	The site provides evidence of processes of industrialisation, labour and working conditions, and how these have changed throughout the nineteenth and twentieth centuries.
Agriculture	The site has associations with early agricultural activities, including the Military Gardens, Coopers Paddock and other early land grants/large estates.
Domestic Life	The expansion of the brewery absorbed numerous residential properties, which developed in this area following subdivision of the large land grants in the c1830s.
Commerce	The brewery was itself a commercial enterprise but the site also incorporates a number of former commercial enterprises, eg hotels/shops.

Theme	Description
Technology	The site has been continuously used for brewing since the first half of the nineteenth century, and its buildings and machinery have changed and been replaced in line with technical, statutory and consumer requirements and with changes to the production, packaging and sale of beer.
Defence	The site has early associations with the Military Garden and was used for food processing for the armed forces in the Second World War.
Housing	The site provides evidence of the evolution of terrace housing from early Victorian to the Edwardian period in the Chippendale area.
Leisure	The local hotels on the site are associated with leisure activities, being used as meeting places and a focus for workers and residents in the area.
Persons	The site has strong associations with the Tooth family over three generations. Individual precincts and buildings have associations with prominent architectural firms of the early to mid-twentieth century including Spain and Cosh, Robertson and marks, Halligan and Wilson, and Copemen, Lemont and Keesing.

3.2.2. Interpretation Themes

The significance of the Kent / Carlton United Brewery site is certainly multifaceted and the 2009 Interpretation Strategy identified a number of themes relevant to the site, based on the extant built fabric, the documented history of the site and available resources and its identified significance. The thematic analysis was also informed by the NSW State Historical themes.

The following themes were identified:

- Aboriginal Cultures and Interaction (c.5000BP-c.1788).
- Pre Contact Landscape – the natural environment (pre European environment).
- The Pre-Brewery Landscape (1788-1834).
- Residential Development, Industries, Slums and Resumptions.
- The Kent Brewery - the Brewing Giant/ Expansion and Redevelopment. (1835-2004).
- Industrial Sydney.
- Contemporary architecture.
- Sustainability.

With consideration for the identified significance of the Brewery Buildings and the broader recommendations of the 2009 strategy⁵, it is intended that the Irving Street Brewery Buildings provide a focal point for the interpretation of the significant brewing history and functions of the site. Accordingly, the 2012 Irving Street Brewery Strategy recommended that heritage interpretation in this area principally consider the nominated themes defined below.

The Kent Brewery – The Brewing Giant/Expansion and Redevelopment (1835-2004).

Prior to its closure, the Carlton United Brewery (former Kent Brewery) was the oldest and longest running brewery in Sydney and the significant 170-year span of the sites operation should be interpreted, including the historic development and expansion of the site and brewing processes and technology through to the decommissioning of the Brewery. The Irving Street Brewery Buildings reflect expansion of the plant in the

⁵ Urbis 2009:Table 1: pp29-36

early 20th century (constructed in 1912) and stand as the only remaining buildings directly related to the industrial function of the site. As such, it is important that they interpret the function of the site as a whole. The site should also be considered within the broader context of industry in the colony, competition in the brewing industry, the introduction of the tied house system and the effects of legislation and the Liquor Act.

Any interpretation should also consider the site's association with the prominent Tooth family and the strong social and working history of the site in association with former CUB workers. Research suggests that this was a family oriented company, with many employees giving long service. The information obtained during the site's operation provides evidence of processes of industrialisation, labour and working conditions, and how these have changed throughout the nineteenth and twentieth centuries.



Figure 4 – Kent Brewery Yard.

Source: MAAS, 86/3501



Figure 5 – Broadway before the street widening, c. 1930. Illustrating the location of the Irving Street Brewery Building.

Source: MAAS, 86/3262-1

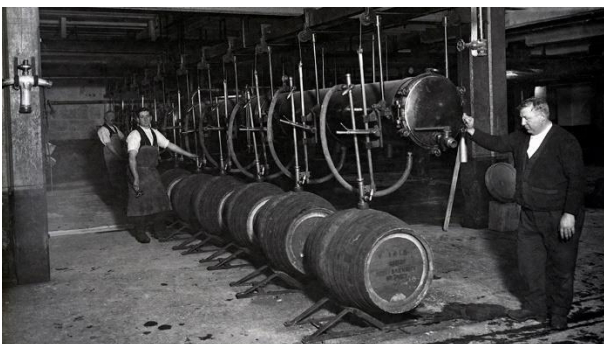


Figure 6 – Barrels in the Kent Brewery in 1922.

Source: Australian National University, Tooth and Company Exhibition.



Figure 7 – Delivery motors parked in Kent Brewery 1922.

Source: Australian National University, Tooth and Company Exhibition.



Figure 8 – Vats of beer at Kent Brewery.

Source: Kent Brewery Workers, *Kents Early Days*,
http://kentbreweryworkers.com/Photoalbum_contents.aspx?Albumid=5.

Industrial Sydney

The site demonstrates the sequence of constant change within the brewing industry in New South Wales from 1834 to the present, as the brewery grew from a small colonial business to an international company. The site is an example of one of the last remaining large scale industrial sites in Sydney.

The site provides evidence of the importance of locating industry in close proximity to transport routes, being located on the main colonial transport route between Sydney and Parramatta.

The site should be considered in the context of other industrial development including the Brisbane Distillery to the west of the Kent Brewery site, and industry in Chippendale and nearby Ultimo and Pyrmont including the CSR, the city iron works and Fife's Iron Foundry, the Anchor and Flour Mills and the Wool Stores.



Figure 9 – Part of the City of Sydney & Suburbs, 1855. Illustrating the brewery site.

Source: City of Sydney Archives, Map 1.



Figure 10 – Aerial view over Chippendale c.1940s.

Source: City of Sydney Archives, 045\045289

Residential Development, Industries, Slums and Resumptions

The site is associated with the suburbanisation of Chippendale, prompted by its proximity to Sydney and Parramatta Road. Its housing is associated with residential speculation in the first decades of the nineteenth century and as noted above in the discussion of the State heritage themes, the site also provides evidence of expansion of the perimeter of Sydney's earliest settlement for industrial and suburban development, and the subsequent expansion of large scale industries into surrounding suburban areas, including a microcosm of streets, lanes (including those subsequently incorporated within the site), houses and pubs.

The subject brewery buildings replaced residential terraces and other smaller scale commercial development along Irving Street. Interpretation should document and illustrate the former residential context of the subject site and surrounds, the history of change and expansion on the site and the evolution of terrace housing from early Victorian to the Federation period in the Chippendale area. This should include, though not be limited to, the 1830s' subdivision of the obsolete Military Garden, the subdivision of Drutt's land and the 1840s' development of the Kensington Estate, Cooper's paddock and Cooper's Rookery and the subsequent development of Cooper's paddock in the 1870s, Council's early 20th century slum resumptions and the resumption of land along the Parramatta road frontage for road widening on Broadway. The purchase of adjoining properties in the surrounding area of Chippendale and along Broadway by the Brewery, as a land bank for future development, continued up into the last decades of the twentieth century and the gradual subsuming of the residential areas by the expanding Brewery should also be interpreted.

Any significant archaeological findings associated with the residential and early industrial components of the site should be incorporated into the interpretation.



Figure 11 – Cnr Kensington and Regent Street, Chippendale, 1910.

Source: City of Sydney, Archives NSCA CRS 51/2836



Figure 12 – Cnr Outram and Kensington Streets Chippendale, 1910.

Source: City of Sydney, Archives NSCA CRS 51/2839



Figure 13 – Road Resurfacing on Irving Street with Kent Brewery in the distance.

Source: City of Sydney 069/069719

3.3. RESOURCES

This report and subsequent detailed development of Interpretation briefs should consider the following resources and repositories:

- The site itself, including its extant built fabric, salvaged artefacts and ephemera.
- The extensive archaeological resource. Various archaeological excavations have been undertaken across the CUB site, including the Brewery Yard, and have revealed remains of the former site occupation and artefacts have been recovered and catalogued.
- The Powerhouse Museum Archive (the Museum are the custodians of the former Tooth and Co. Museum which was on the site until the 1980s).
- The Noel Butlin Archive, (which includes business records spanning from 1841-1985).
- The City of Sydney Archives Collection (which includes plans, rates and assessment books, published materials and more than 100 Development and Building Application files).
- Published materials.
- Oral history undertaken by Mary Anne Hamilton and Susan Anderson for Carlton and United Breweries prior to the closure and sale of the site (August 2004).
- Published materials.
- Various professional reports prepared for the site, incorporating Conservation Management Plans, Archaeological Assessments, Heritage Impact statements, Demolition and Dilapidation reports, and archival recordings.

3.4. STAKEHOLDER ENGAGEMENT

In developing content of the heritage interpretation as part of further detailed design, there is an opportunity to liaise with former Brewery Workers (should a representative group be able to be identified) to enhance and build on interpretation and social history narratives.

3.5. HERITAGE INTERPRETATION

This framework has been prepared to facilitate the integration of interpretation into the forward planning, management and conservation of Brewery Buildings and as an indication of the general proposed media. The following recommendations are intended as a precursor to developing detailed interpretation briefs.

3.5.1. Built Form Interpretation

“Every built form is a system of connecting links. Architecture, in this context, is the application of a number of spatial and temporal metaphors projected from bodily based experiences.”⁶ Interpretation in the built form thus refers to the treatment of the built form (being existing and adaptively reused buildings, new structures and streetscape elements) to interpret the sites significant values. A built form interpretive strategy is generally a subtler response which emphasises and compliments the more overt interpretive media. Built form interpretation can be used to interpret specific events, uses, former structures and subdivision patterns as well as cultural uses and activities including Aboriginal narratives.

The proposed adaptive reuse of the Brewery Buildings has involved initial design development to facilitate interpretation of significant built elements and features. This provides an opportunity to directly interpret the previous industrial function of the buildings and their operational equipment. The proposal includes retention of identified significant elements and built form interpretation responses including:

- Retention and display of two of the extant three coal hoppers within building (30) (pictured at Figure 17 and indicated on the plan at Figure 22) and provision of associated signage/ and or other explanatory interpretation media

⁶ Snodgrass and Coyne, pg 201

- Retention and conservation of fixed “Tooth and Co” signage on the principal southern façade and any early/ original painted signage elements.
- Display of signage relating to brewery operations and other site operations (e.g. operational and safety signs).

The proposal also includes partial retention of the silo structures and malt processing equipment within building 23, including:

- reconstructive interpretation of two of the eight original malt silos (level 1) (refer Figure 20) and associated plant (to be determined, e.g. the probe). The reconstructed silos will be rebuilt to match the original,
- partial retention of remnant fabric and finishes from the demolished silos on the western and northern walls of building 23,
- reinterpretation of the chamfered rectangular form of the silos at the ceiling level on levels 3 and 4 (refer to Figure 21),
- reconstruction and reinterpretation of five of the former eight funnels on the ground level (refer to the part plan at Figure 19) ,
- retention of the associated chutes/ equipment on the two easternmost silos (refer to Figure 14),
- partial retention of the conveyor and associated funnels in the basement area (refer to Figure 16) and construction of a glass floor on the ground level to enable views of the basement equipment and interpretation in conjunction with the ground floor elements (refer to plans shown at Figure 18 and Figure 19).
- provision of associated signage and explanatory media



Figure 14 – Malt Silos 1, 2, 3, 4, 5, 6, 7 and 8 (metal equipment and base of reinforced concrete silos) (all) in building 23 (ground floor/ level 1).

Source: Urbis, 2018



Figure 15 – Associated plant adjacent to the silos (to be retained and displayed in situ) (building 23 level 1/ ground floor)

Source: Urbis, 2018



Figure 16 – The basement conveyor and associated plant, part of which is to be retained and displayed via the viewing panel in the ground floor

Source: Urbis, 2018



Figure 17 – One of the three coal hoppers within Building 30.

Source: Urbis, 2012

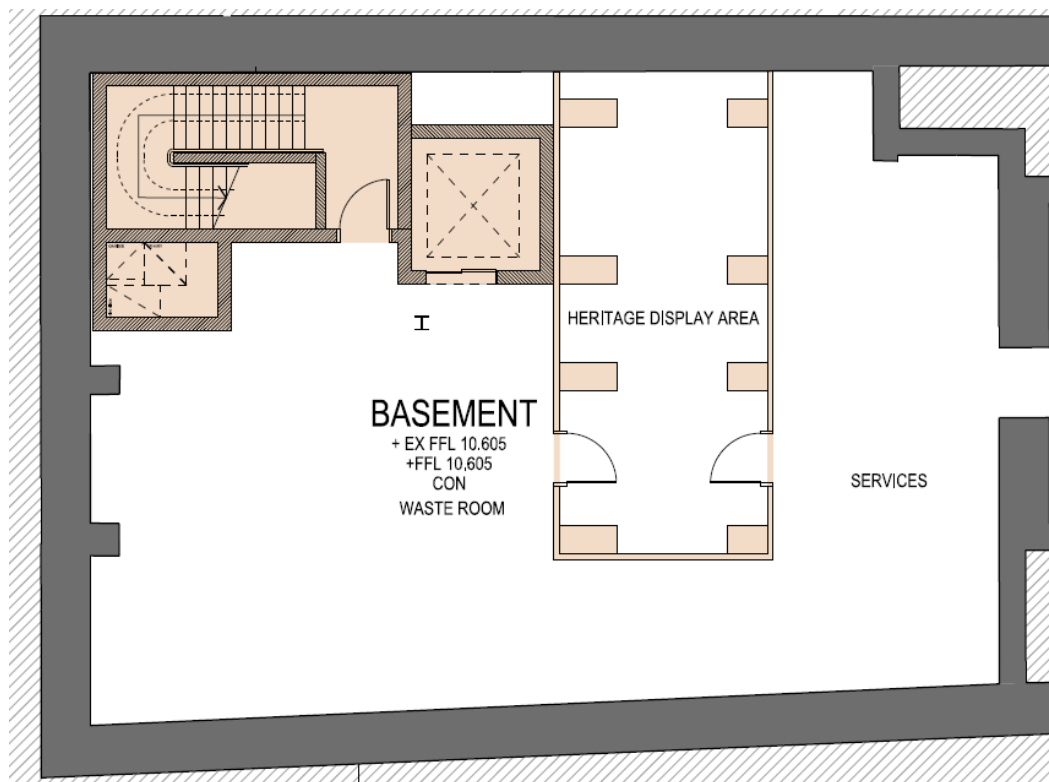


Figure 18 – Part plan of the proposed basement level showing heritage display area (visible through glass floor on ground level pictured at Figure 19)

Source: Tzannes, "Basement 1 Floor Plan", Drawing no. DA 1101, Revision A.

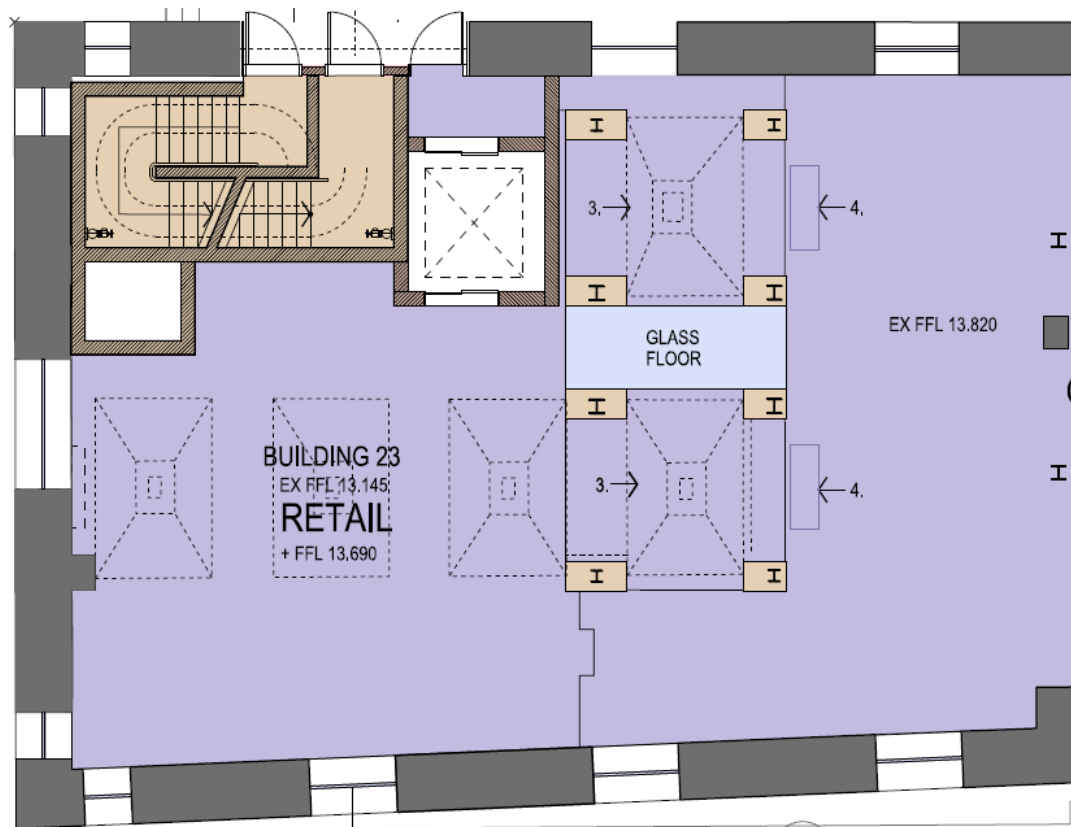


Figure 19 – Part plan of proposed ground floor showing glass floor (enabling views to the associated basement plant) and indicating 5 of the reconstructed silo funnels

Source: Tzannes, "Ground Floor Plan", Drawing no. DA 1102, Revision A.

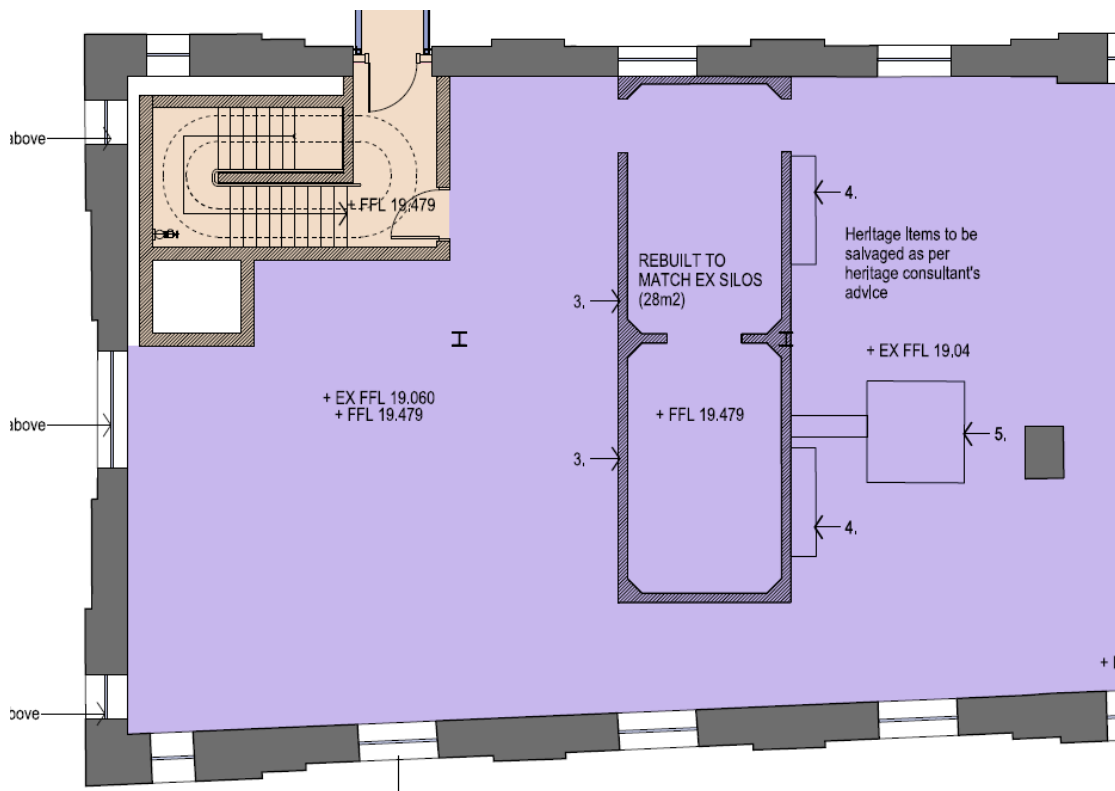


Figure 20 – Part plan of proposed level 1 illustrating reconstruction of malt silos and location of interpretative equipment.

Source: Tzannes, "Level 1 Floor Plan", Drawing no. DA 1103, Revision A.

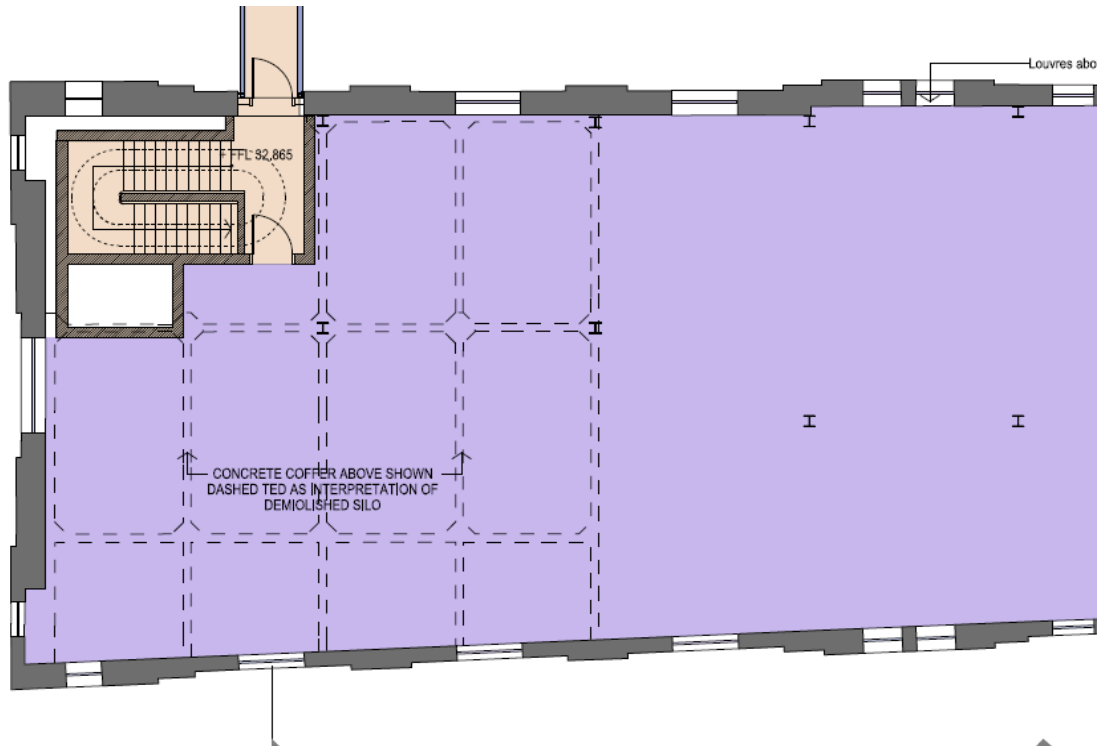


Figure 21 – Part plan of proposed level 4 illustrating the reinterpretation of 5 of the 8 former hoppers in the ceiling (proposed on levels 3 and 4)

Source: Tzannes, "Level 4 Floor Plan", Drawing no. DA 1106, Revision B.

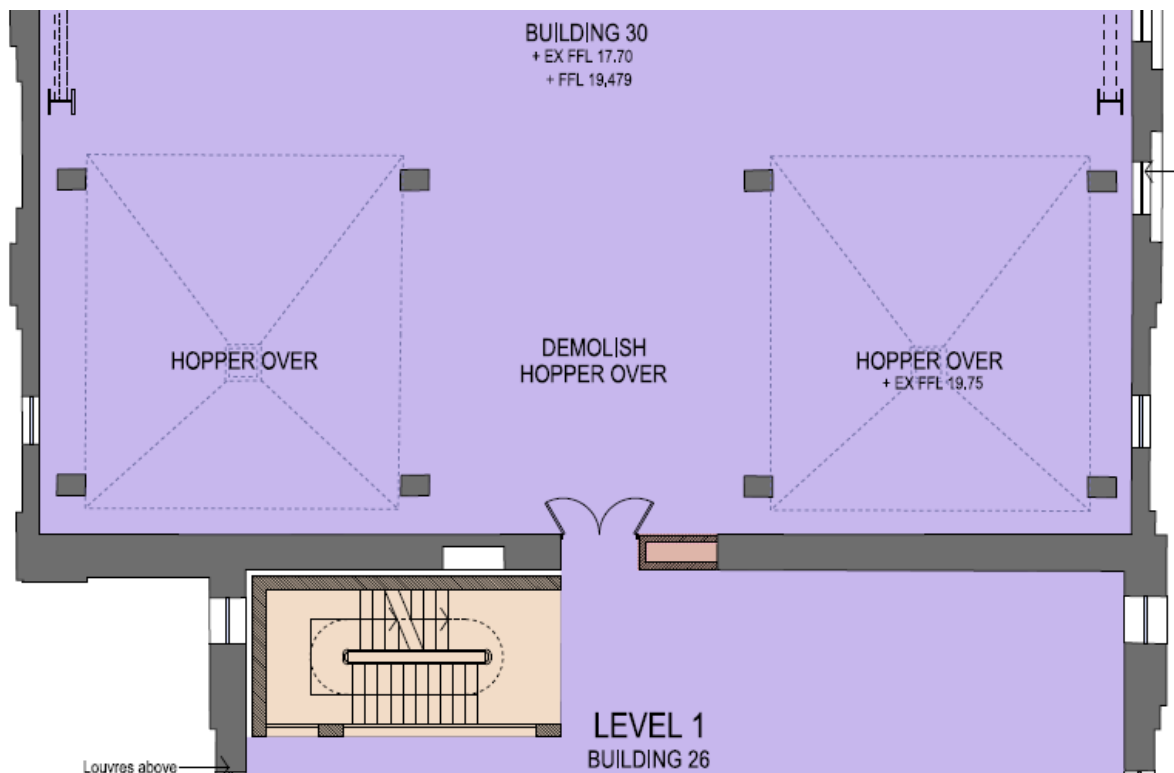


Figure 22 – Part plan of proposed level 1 illustrating retention of two of the three hoppers.

Source: Tzannes, "Level 1 Floor Plan", Drawing no. DA 1103, Revision A.

As set out in section 2.1 above, the previously approved stage 1 of the SSDA (MP 10_0217) also incorporates conservation of the significant facades and features which enhances passive interpretation of the buildings and their former industrial function. Conservation works are defined in the Schedule of Conservation works (revised in 2018) and include:

- General repair and restoration of facades, including face brickwork and sandstone elements, as well as copper rainwater goods
- General repair and conservation of original Tooth and Co signage elements (including building signage and logos)

3.5.2. Interpretation Display/ Signage Zones

Prior to its closure, the Carlton United Brewery (former Kent Brewery) was the oldest and longest running brewery in Sydney and the significant 170-year span of the site's operation should be interpreted. As the only remaining industrial buildings on the site, the Brewery Buildings provide a poignant reminder of that former function. It is proposed to include interpretive display areas throughout the buildings to facilitate retention and display of salvaged artefacts and obsolete equipment as well as relevant archaeological remains. A primary interpretation zone has been included on the ground floor adjacent to the entrance foyer (as shown on the plan at Figure 23 with secondary zones identified on the upper floors, including level 5 (refer to the plan at Figure 24). Additional zones may be located within lobby and tenancy areas, or in conjunction with significant in-situ items (such as the coal hoppers as detailed above), subject to detailed design.

The interpretation zones will address the nominated themes as set out in section 3.2.2 and may include:

- The significant expansion and development of the whole of the Brewery site (1835-2005), identifying the original Kent Brewery and Yard.
- Interpret the process of brewing and the production process at various points around the site (e.g. the malting precinct, laboratory, administrative precincts etc.).
- Specific interpretation of the former functions of the extant buildings 22, 23, 26, 30 & 36 and the function of retained equipment (e.g. the malt silos).
- Changing brewing processes and technology.
- The broader context of industry in the colony, competition in the brewing industry, the introduction of the tied house system and the effects of legislation and the Liquor Act.
- The site's association with the prominent Tooth family.
- The strong social and working history of the site in association with former brewery workers including changing work practices (e.g. the concept of the "honeypot" and the wet and dry workplace).
- Former residential occupation of the Irving Street Brewery site.

Content and media for the interpretation zones are subject to detailed design however may include:

- Fixed signage.
- Incorporation of audio and video (where available and subject to copyright provisions) and other mixed media, utilising the oral history of the site and other resources as set out in section 3.3 above and considering further stakeholder liaison (refer also to section 3.5.2.1).
- Incorporation and display of significant archaeological finds associated with the Brewery Yard (or other relevant interpretation themes) where available and where appropriate.
- Incorporation and display of salvaged objects (refer to section 3.5.2.2 below).

It is recommended that public access be provided to the ground floor display area (as the primary interpretation zone) to facilitate access to the interpretation. Interpretation on the upper floors may be restricted to tenancy users, however still serves to interpret the former brewing function of the place.

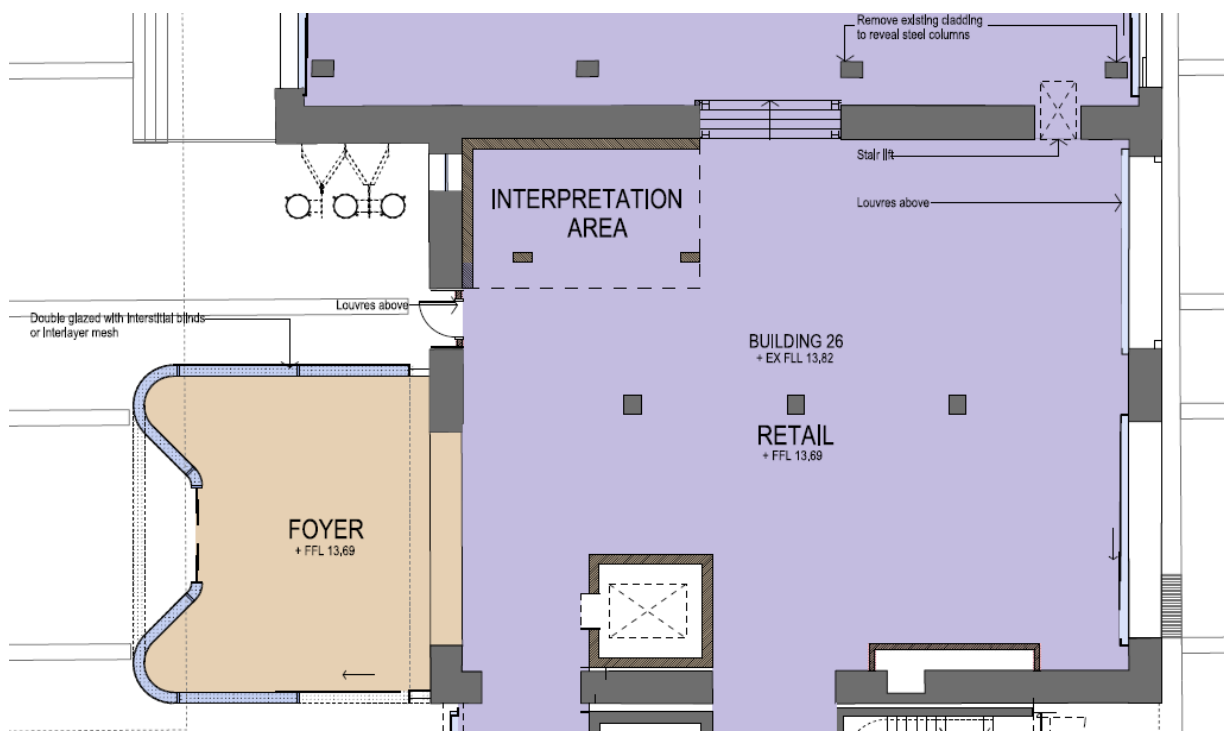


Figure 23 – Part plan of proposed ground floor illustrating potential interpretation area.

Source: Tzannes, “Ground Floor Plan”, Drawing no. DA 1102, Revision A.

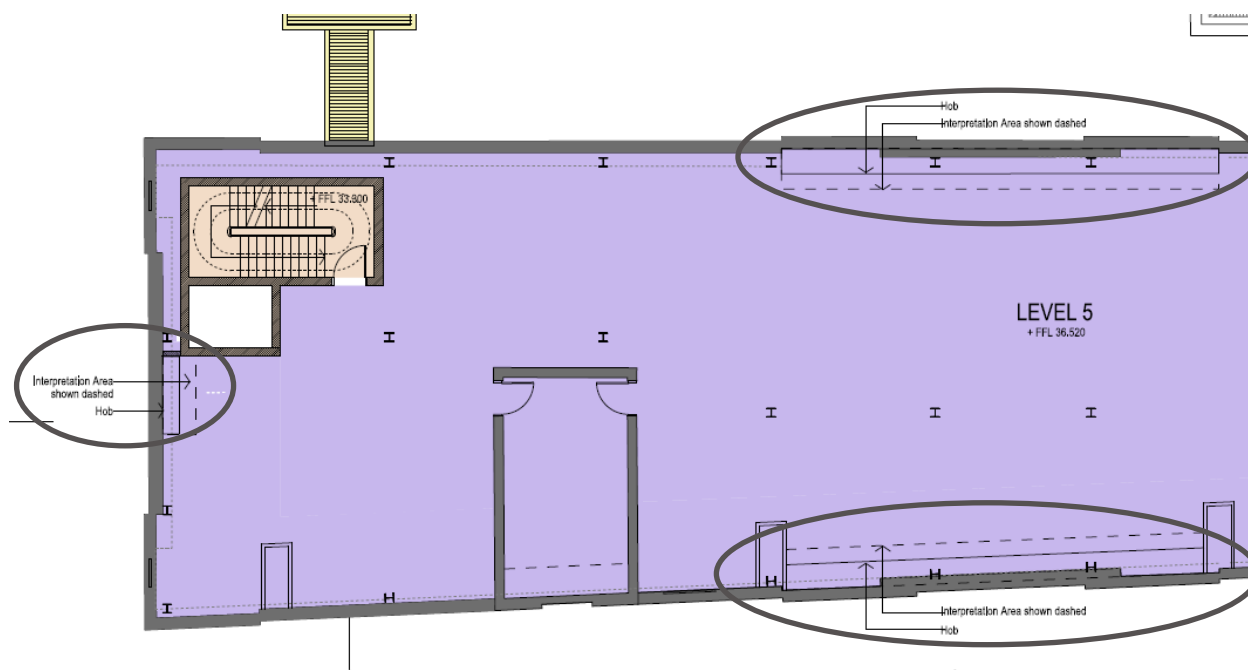


Figure 24 – Part plan of proposed level 5 illustrating three of four identified potential interpretation zones.

Source: Tzannes, “Level 5 Floor Plan”, Drawing no. DA 1107, Revision B.

3.5.2.1. Provision of Audio Visual Interactive display/touchscreens

Due to the volume of available content and the limitations of the interpretation zones (being within a public foyer space), interpretation may consider incorporating interactive multimedia display. This may include including touchscreen technology and passive or interactive audio (push button or motion sensor). The media provides for inclusion of a larger volume of information while enabling an interactive and individual interpretation experience. The medium allows for a less obtrusive form of sharing information than standard signage and further provides for a more targeted level of interaction between the content and the user.

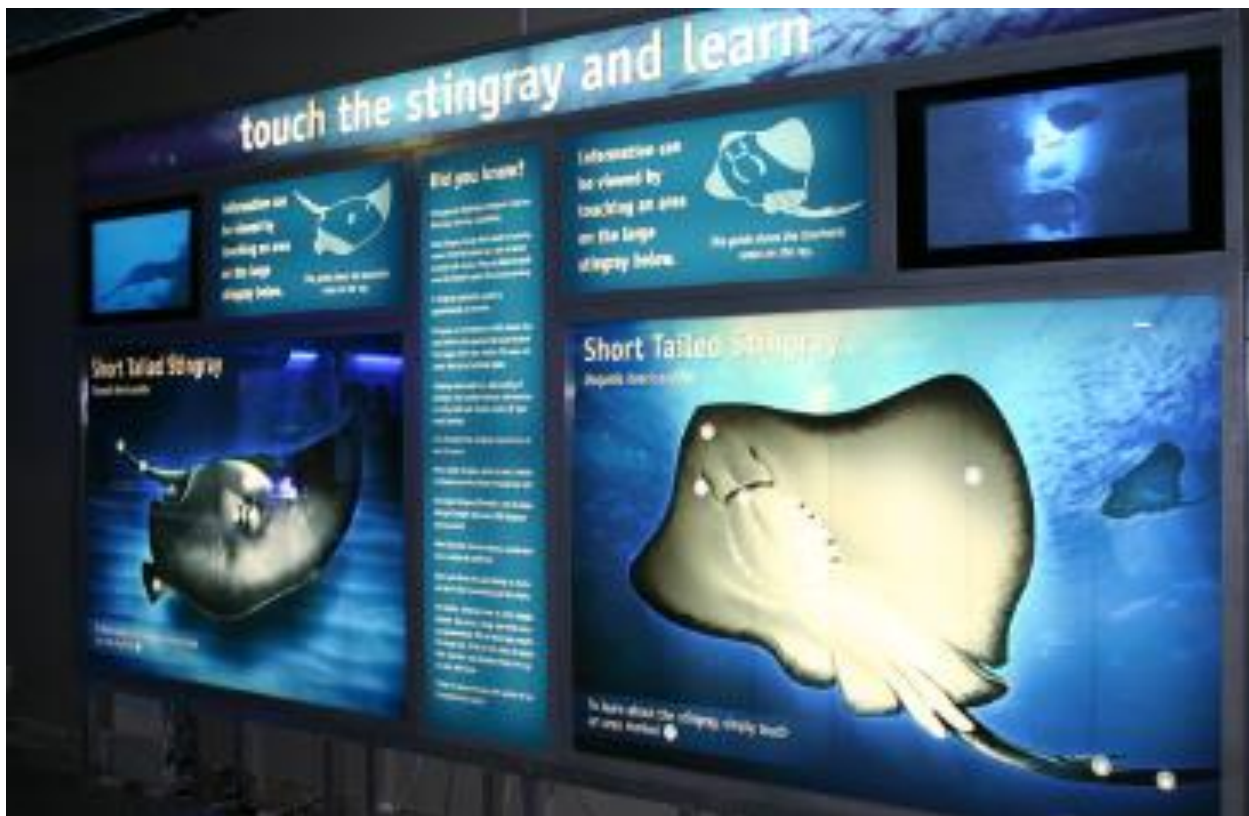


Figure 25 – Sample touchscreen showing interactive display

Source: *The complete package*, <http://www.pac.co.nz/pages/sermuseum.htm>.

3.5.2.2. Reuse of salvaged objects and artefacts

A Salvage Report was undertaken by Godden Mackay Logan (CUB Frasers Broadway Demolition and Recycling- Salvage and Retention Survey Dec 2007) which identified and nominated a number of objects to be salvaged including internal and external fixtures, fittings and movable elements for salvage and/ or retention. Items were selected based on heritage significance, interpretive value and potential for inclusion in an Arts Plan⁷.

The salvaged objects are from various site buildings and incorporate, though are not limited to, small objects and ephemera from signage (warning, operational and safety), doors, windows, architectural elements (including ceramic tiling, copper rainwater heads, sandstone kerbing, sandstone and brick arches, steel railings, spiral stairs and timber roof trusses), machinery (including stoves, bottle labelling machines, motorised plate bending press, sheet metal shears and small sheet metal rolls) and machinery parts (cogged wheel and spindles, conveyor belting, fan blades, barley feeder nozzles, malt kiln damper controls, valve actuator wheels, switchboards and lineshafts) to larger objects such as storage tanks/ cylinders and skeletons for storage tanks and hoppers. Salvaged objects also include remnants associated with staff and staff activities such as bundy clock, pigeon holes, staff tipping board, and graffiti. There are also a number of items nominated for salvage in situ in buildings that are being retained.

There is an opportunity to incorporate salvaged artefacts in conjunction with signage and media within the interpretation display areas. Objects should also be made available for use by artists and in conjunction with the Public Art Strategy. Inclusion of the following items within the display areas should be considered (subject to availability):

- A selection of signage (warning, operational and safety signage salvaged from various buildings on the site).

⁷ Godden Mackay Logan, CUB Frasers Broadway Demolition and Recycling – Salvage and Retention Survey, report prepared for Frasers Broadway Pty Ltd December 2007, pg 1.

- KB mirrors/ paintings and or posters salvaged from Building 11A.
- Archaeological artefacts relevant to the significant brewing function or recovered from the former Yard (where appropriate).
- The former building 26 bundy clock (in conjunction with the proposed workers wall).



Figure 26 – Signage and archaeological artefact display in warehouse (Kent Street).

Source: Urbis



Figure 27 – Signage and artefact display at the former Parramatta Barkers Mews.

Source: Urbis

It is proposed to include historic marker(s) to aid in the interpretation of the site. The plan shown below (Figure 28) nominates two potential locations for historic markers.



The design of historic markers should be consistent with other such markers on the site and markers for the Brewery Buildings should be incorporated into a heritage walk for the whole of the site as recommended by the 2009 Interpretation Strategy. The plaques may also consider the incorporation of digital interpretation to enhance interaction. Materials for signage may include brass, stainless steel, anodised aluminium, other sheet metals or glass, subject to detailed graphic design and heritage advice and compliance with conservation advice and the Conservation Management Plan for the building group.

It is intended that the markers interpret the significance and use of the buildings as well as the redevelopment and adaptive reuse of the Brewery Buildings (e.g. use of the chimney and yard areas for trigeneration plant).



Figure 29 – Plaque at Paramount Studios Surry Hills incorporating the corporate logo and text

Source: Photograph taken by Urbis.

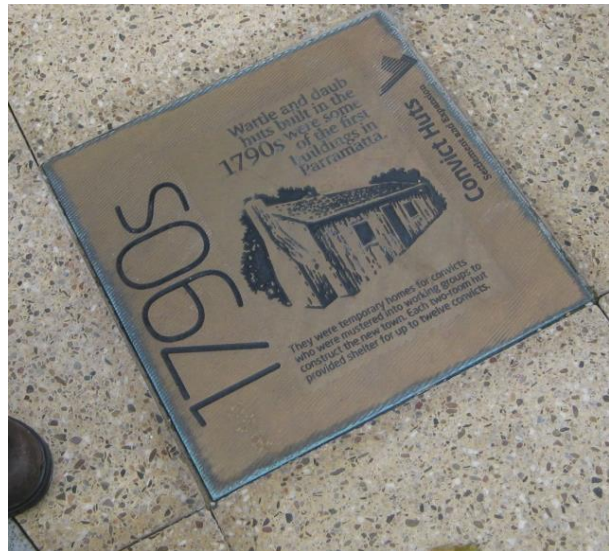


Figure 30 – Plaque in ground signage at Parramatta Justice Precinct.

Source: Photograph taken by Urbis.

3.5.4. Provision of a “Workers’ Wall”

The Brewery Buildings were at the heart of the site physically; they represent the core of the industrial processes taking place on the site, and have significance for the working population at the brewery from 1912 to 2005. Beyond that, the buildings are representative of the site’s 170-year brewing history.

The Brewery workforce was made up of skilled and unskilled people from Brewers, Laboratory staff and Engineers to tradesman, Electricians, Plumbers and Fitters and Turners as well as craftsmen working on site, such as Coppersmiths, Blacksmiths and Coopers. Trades Assistants, Storemen, Drivers and Security personnel were integral to the production and distribution of beer. Very little work had to be outsourced and the Kent Brewery according to accounts was a very active workplace, very much a city within a city⁸.

Tooth and Co. had a long tradition of being a family oriented company that looked after its employees. Several generations of the same family often worked for the Brewery and a good percentage of the Tooth ‘family’, especially in production, were migrants.

It is proposed to incorporate a ‘workers’ wall’ at the site to commemorate the strong social history of the Brewery. It is proposed to locate the wall within the entry from Irving Street. The location interprets the former entry point for the workers to the former Brew House and Silos.

Detailed design of the ‘workers’ wall’ should consider the following:

- Inclusion of names of former site workers.
- Inclusion of historical images depicting workers.
- Inclusion of quotes and audio from the Oral History.
- Reuse of the former building 26 bundy clock which has been salvaged.

⁸ Hamilton and Anderson, 2004: 27

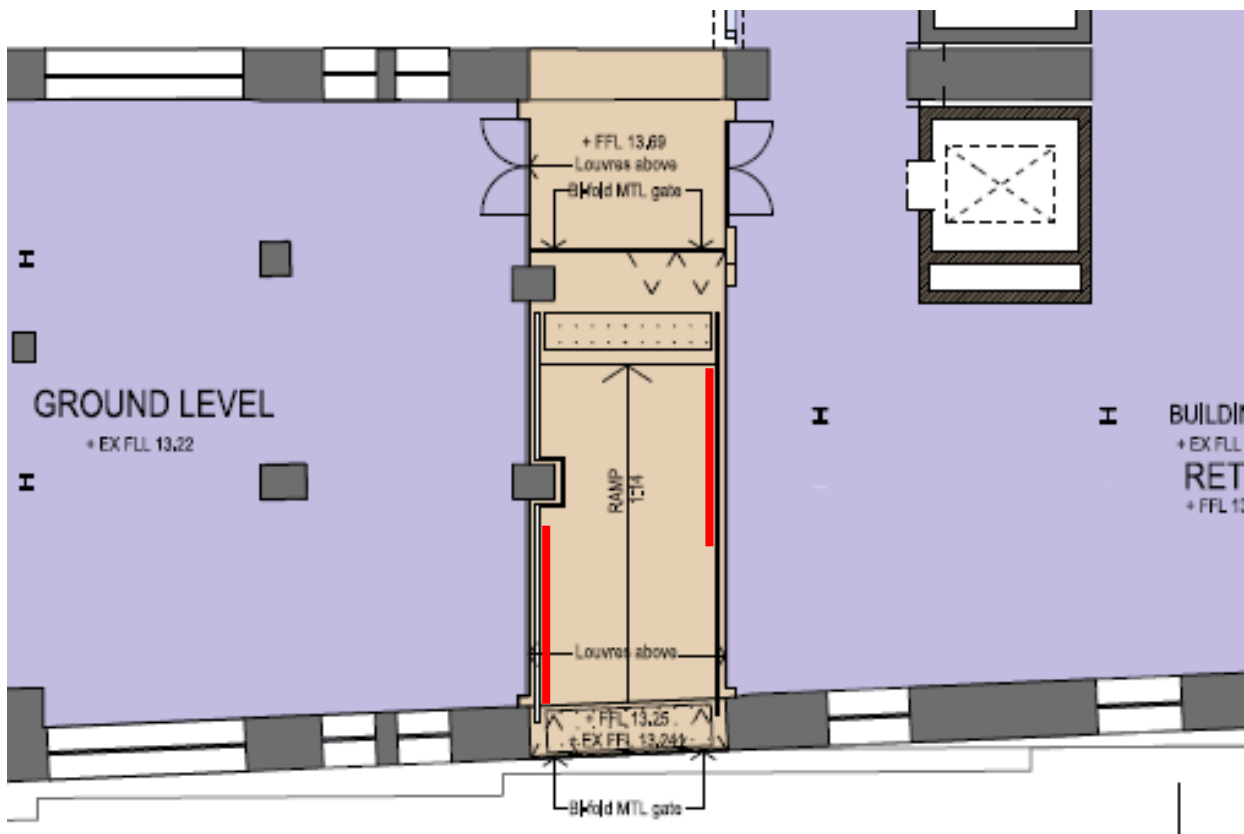


Figure 31 – Part of ground floor plan illustrating in red potential location for worker's wall.

Source: Tzannes, "Ground Floor Plan", Drawing no. DA 1102, Revision A.



Figure 32 – The National Maritime Museum "Welcome Wall".

Source: Department of Immigration and Citizenship, http://www.immi.gov.au/about/reports/access-equity/2008/html/case_studies/welcome_wall.htm.

3.5.5. Inclusion of historic information on the Central Park website

Additional historical information has already been included on the Central Park website, facilitating access to a broader audience. The website includes historical information and images in conjunction with the existing heritage link.

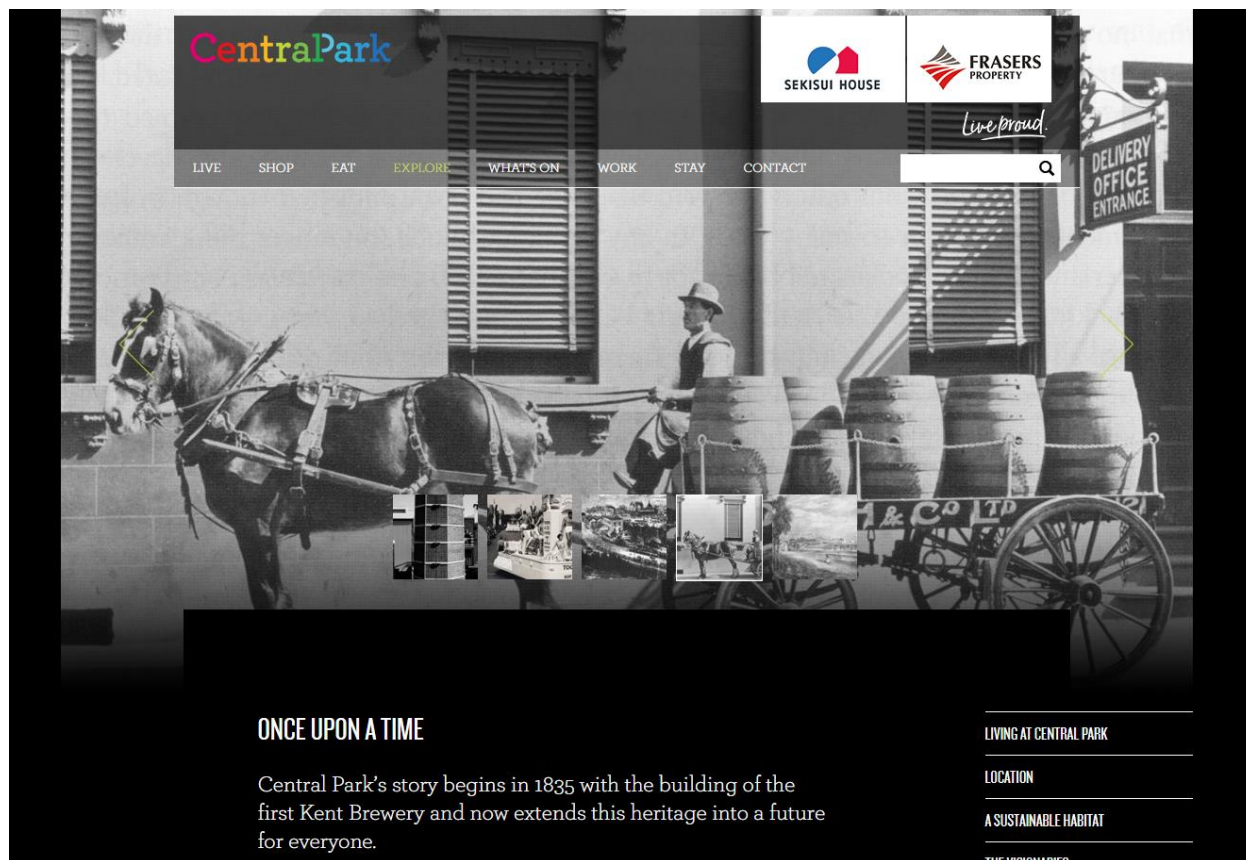


Figure 33 – The Central Park website.

Source: Central Park, <https://www.centralparksydney.com/explore/chippendale-a-rich-heritage>.

3.5.6. Lighting Strategy

The 2009 Interpretation Strategy recommended specialist lighting be undertaken for the Brewery Buildings to highlight the buildings as the heart and focus of the redeveloped Brewery site. Specialist lighting may consider the following elements:

- The Chimney Stack, which has been an identifiable element in the Ultimo/ Chippendale skyline.
- Spot lighting of significant signage, e.g. the Tooth and Co Irving Street signage and/ or significant façade features.
- Spot lighting of significant internal features such as the coal hoppers (30) and silos (23).

Any fixtures for lighting should be subject to conservation advice and be consistent with the recommendations of the SECP (2009).

3.5.7. Public Art

Frasers Broadway engaged Australia's pre-eminent public artists Michaelie Crawford and Jennifer Turpin (Jennifer Turpin Studios) to provide a Public Art Strategy for the whole of the site ("Frasers Broadway Public Art Strategy: Expressing the Soul of the past and the Spirit of the Future", 25/05/09). The strategy recommended a number of permanent artworks intended to artistically interpret such themes as the process and phenomena of the precinct's exemplary sustainable energy strategy, the memory and expansion of the brewing empire and the ongoing influence of fluids and liquids in its transformative water stories. The first of the permanent artworks has been installed in the Main Park. 'Halo' is a wind activated kinetic sculpture by two of, Jennifer Turpin and Michaelie Crawford.



Figure 34 – "Halo" by Jennifer Turpin and Michaelie Crawford – installed in the Main Park.

Source: City of Sydney, <http://www.cityartsydney.com.au/artwork/halo/>.

In addition to the permanent works, the Brewery buildings have provided a focal point for a program of temporary artworks during the building works. The 'Artists In Residence' program has operated since March 2011 and incorporated works such as 'Local Memory' by Brook Andrew, which documented some of the people who have lived, worked and witnessed change on the brewery site and Mikala Dwyer's 'Windwatcher', the kinetic sculpture which used the heritage-listed Irving Street Brewery's iconic 54-metre tall chimney as a plinth.

The Irving Street Brewery Buildings provide a prime location for place making interpretive public art and the provision of further works within and affecting the brewery Buildings is currently subject to development. The following recommendations are noted:

- Works to heritage buildings, infrastructure and salvaged items should be undertaken in conjunction with heritage advice.
- Any proposal for large scale artworks to the northern façade of building 30 should consider the proposed lighting/ interpretation of the interior coal hoppers.

Salvaged items should be made available for use by artists where required and where appropriate.

3.5.8. Education and Community Programs

The 2009 Interpretation Strategy recommended commitment to participation in specific open days and festivals throughout the year and in association with heritage groups including;

- Sydney Open, the bi-annual festival that unlocks the doors of some of Sydney's most prestigious locations and showcases the best of Sydney's architecture;
- Support for a program of temporary art events, coinciding with Sydney and other festivals such as the Festival of Sydney, the Sydney Film Festival, the Live Lanes Project, the new Vivid Sydney and the National Trust heritage festival;
- Support for open days or tours in association with organisations such as the National Trust, The Australian Institute of Architects and other heritage interest groups;
- Involvement in education and community programs; and
- Open days in association with ongoing archaeological program of works.

There is an opportunity to include access to the former malt silos building (23) including the basement and level 5 floors, in any program of tours within the Brewery Buildings, as the area is of exceptional significance and has only limited public access on the upper floors due to the proposed commercial uses.

4. CONCLUSION AND RECOMMENDATIONS

The recommended strategy provides for a variety of active and passive forms of interpretive media including;

- Built form interpretation and conservation of fabric;
- Development of interpretative display areas within the Brewery Building, incorporating signage, display and multimedia;
- Provision of a “Workers’ Wall” to commemorate and acknowledge the social history of the site;
- Provision of historic markers (in conjunction with development of a “heritage walk”);
- Specialist lighting of iconic and significant built features;
- Public Art; and
- Involvement in community open days and Sydney festivals.

It is recommended that this Strategy is implemented as part of staged development of the Brewery Buildings. It is further recommended that the Strategy is approved by the consent authority and its recommendations incorporated into consent conditions.

The report follows the provision of the 2009 Interpretation Strategy for the whole of the Frasers Broadway site, the provisions of which should also be implemented as part of the staged development and incorporated into consent conditions.

This Strategy forms part of a staged program of works to deliver the interpretation of the Irving Street Brewery Buildings.

4.1. NEXT STEPS

Interpretation is an integral part of delivery of the site and further work is required to develop and implement interpretation as detailed below:

- 1) Confirm appropriate media and locations for interpretation.
- 2) Develop content and detailed briefs for specific interpretation media, as part of the staged delivery of the site in consultation with relevant designers, architects, engineers, archaeologists and other consultants and stakeholders to ensure media that is integrated into the overall design response to the site and public domain.
- 3) Undertake liaison with the City of Sydney to achieve final approval prior to implementing the strategy.
- 4) Implement Interpretation in conjunction with interpretive designer and manufacturer/fabricator.

The above will need to be incorporated into project and construction programming.

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APPENDIX A FURTHER RECOMMENDATIONS AND POLICIES RELATING TO HERITAGE INTERPRETATION OF THE BREWERY BUILDINGS AND YARD

CONSERVATION MANAGEMENT PLAN BY NOEL BELL RIDLEY SMITH AND PARTNERS (2005).

The 2005 CMP (adopted by the Heritage Council of NSW) contains a large number of policies devised to guide the management of interpretation at the former CUB site. Relevant policies are listed below.

(25) Interpretation of Original Kent Brewery and Brewery Yard

Any future site development should include adequate and appropriate identification and interpretation of the original Kent Brewery site and Brewery Yard (c1865 configuration).

(40) Former Kent Brewery Yard

Development in the vicinity of the former Kent Brewery Yard (c1865 configuration) should provide appropriate interpretation as an historic reminder of the early brewery complex.

(50) Interpretation of Industrial Artefacts

Appropriate samples of industrial artefacts should be retained, appropriately conserved and used to interpret the industrial history of the site as part of future adaptation works.

E.7 Interpretation

(63) Preparation of an Interpretation Strategy

An Interpretation Strategy for the site should be prepared based on the identified resources, analysis, assessment of significance and policies of this CMP and associated documents.

(64) Interpretation of Social Values

The Interpretation Strategy for the site should include measures for interpreting and presenting the social values and associations of the site and its various components.

(65) Interpretation Methods

The Interpretation Strategy should identify the nature and location of interpretative material, features, and related measures for the site and items, as well as the principles for determining appropriate content and media.

(66) Interpretation of Research Material

Research material used for and/or referred to in this CMP should be collected and referenced to facilitate its further use, including in the Interpretation Strategy.

HERITAGE IMPACT STATEMENT – CONCEPT PLAN BY GODDEN MACKAY LOGAN (2006)

The heritage impact statement notes the following:

10.5 Interpretation

Opportunities should be provided within the proposed redevelopment for the interpretation of the site's history, built fabric, industrial heritage and archaeology. An Interpretation Strategy/Plan should be developed as part of the first stage of the design development process.

Selective retention and re-use of a number of significant heritage buildings, streets and other elements that express the industrial heritage of the site and its associated fine grained residential edges should be undertaken to engage with residents, workers and visitors to the site. The proposed interpretation strategy should focus on 'clusters' of retained buildings (particularly the Irving Street Brewery complex) as interpretation and possibly activity centres, and should also utilise opportunities for the interpretation of vanished or obscured elements within the landscape (eg the Blackwattle Creek stormwater channel).

The Interpretation Strategy/Plan for the site would utilise a range of media and other devices, including signage, brochures, plaques, and other, more innovative media. The interpretative approach should also consider information or other resources (eg physical remains, components of brewery plant and other artefacts) that may become available as a result of physical investigation of the site.

10.6.6 Interpretation

An Interpretation Strategy/Plan is to be developed for the site, and implemented through the development stages of the project. The topics will include (but not be restricted to):

- brewery workers' experiences;*
- the Irving Street Brewery complex and the brewery yard;*
- the origins and historic evolution of retained buildings and their settings;*
- significant built elements that have been removed and/or substantially modified;*
- retained items of industrial heritage significance and how these related to past processes;*

and

- retained items of movable heritage, particularly furniture, fittings (etc) retained in their original/existing locations.*

- Interpretation of the site is to focus on 'clusters' of retained heritage buildings (particularly the Irving Street Brewery complex and yard) as interpretation centres, and the development of these buildings is to provide for interpretation media and installations as a key component of their reuse.*

- As part of any archaeological investigation of the site, provision is to be made for interpretative signage, media releases and information leaflets to coincide with physical investigation of the site. During the investigations, open days and guided tours (by trained interpreters) are to be arranged to provide insight into the history of the site and process of archaeology.*

- A range of publications, both paper-based and digital (available from a website), is to be prepared to provide further insight into the history and heritage of the site, including a simple illustrated brochure for prospective resident and other interested visitors.*

- Development of the site is to be preceded by, and undertaken in concert with, focused tours, open days and other events that are accessible to the public.*

Specific interpretation recommendations for the Irving Street Brewery Yard by Godden Mackay Logan (2006:137) included:

The yard of the Irving Street Brewery offers an important opportunity for engaging & innovative interpretation of the history and processes of brewing at the site. In this new 'public' space, conservation and interpretation requirements should be the primary focus. The interpretation should be 'hard-edged', large scale & confronting to visitors—so as to convey notions of the size and industrial activity on the site. Original building fabric and real artefacts from the site should feature prominently. Interpretative lighting & projection of digital media might be considered.

FORMER CARLTON AND UNITED BREWERY SITE, BROADWAY ARCHAEOLOGICAL ASSESSMENT AND RESEARCH DESIGN BY GODDEN MACKAY LOGAN (2006)

The Archaeological Assessment recommends the following:

7.3.3 Interpretation

Provision should be made for the interpretation of known archaeological features and other archaeological features if or when they are revealed. The site's Interpretation Strategy/ Plan should consider (and incorporate, where relevant) the results of any physical investigation of the site.



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