Heritage Interpretation Plan

University of Sydney, Faculty of Arts and Social Science (RD Watt Building) and Substation No.54

June 2016

urbis

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Executive Summary

Urbis has been engaged by Lend Lease (on behalf of Sydney University), to prepare the following Heritage Interpretation Strategy of the RD Watt Building and the Substation No.54 and Switchroom ('Substation') located within the University of Sydney, Camperdown Campus.

The University of Sydney proposes to construct a new Faculty of Arts and Social Sciences (FASS) building. Modifications to the adjacent RD Watt building are also proposed in conjunction with the works. Approval for the works will be subject to assessment and determination of the State Significant Development Application (SSD 7081) to the Department of Planning. Demolition of the substation is required and removal of this and associated ancillary buildings was subject to an Early Works package (REF 3-2016 Early Work Package Stage 2, Camperdown Campus) to enable the FASS works and heritage impacts have been previously assessed (Urbis March 2016).

The RD Watt building is located on Science Road, to the north of University Oval number two and to the west of the Heydon Laurence Building. It is a Local heritage listed item on Sydney Local Environment Plan (LEP) 2012 (Item I74) and is also located in the vicinity of local heritage listed items, including the *Heydon Laurence Building* (item I75) and *Site landscaping , University of Sydney perimeter fencing and gates* (item I72). The Substation is located to the rear of the RD Watt Building and is listed as an item of environmental heritage under the University of Sydney S.170 Heritage Register (ID 4726030).

The RD Watt building (1916) is of historic, aesthetic and social significance, as well as of scientific and research value. The site demonstrates the establishment of the first university course for agriculture in NSW and it is associated with a number of significant identities in agricultural science, including Emeritus Professor Robert Dickie Watt, Emeritus Professor Walter Lawry Waterhouse and Professor JM Vincent. Research undertaken at the faculty has had a significant impact on agriculture and pastoral growth in Australia and internationally.

The Substation (1913) is of historic and aesthetic significance. The establishment of the substation, in the early 20th century was directly necessitated by the proliferation of the University's science laboratories which were constructed in the vicinity.[1] The substation illustrated the changes in the technology of power generation and distribution.

This Heritage Interpretation Strategy is required in conjunction with the University of Sydney Campus Program (CIP) 2014-2020 (SSD-6123) Conditions of Consent, specifically condition 14 which states:

> ***Condition B14–****All future development applications for new built form that involve the demolition or alteration of existing items of heritage significance shall include a heritage interpretation plan in accordance with the NSW Heritage Branch Guidelines, titled "Interpreting Heritage Places and items: guidelines and policy titled 'Heritage Information Series: Heritage Interpretation Policy' for assessment and approval. The Interpretation Plan must:*
>
> *a) Detail how information on the history and significance of the building within the University of Sydney will be provided for the public and include pictures, text and detailed designs for its implementation; and*
>
> *b) Include significance themes, including the buildings contribution to the development of the university and residential colleges.*

The purpose of this Heritage Interpretation Strategy is to ensure that the history and significance of the above mentioned buildings is properly documented, interpreted and displayed, such that it can be appreciated by future users and the wider public.

Relevant heritage interpretation themes associated with the subject site are outlined in Section 4.2. With consideration for the intended wider audience, interpretation is proposed to be provided through built form

[1] University of Sydney, Grounds Conservation Management Plan, 2014

and media, including embedded in landscaped zones within publicly accessible areas and in principal internal circulation areas.

1 Introduction

1.1 BACKGROUND

Urbis has been engaged by Lend Lease (on behalf of Sydney University), to prepare the following Heritage Interpretation Strategy of the RD Watt Building and the Substation No.54 and Switchroom ('Substation') located within the University of Sydney, Camperdown Campus.

The RD Watt building is located on Science Road, to the north of University Oval number two and to the west of the Heydon Laurence Building. It is a Local heritage listed item on Sydney Local Environment Plan (LEP) 2012 (Item I74) and is also located in the vicinity of local heritage listed items, including the *Heydon Laurence Building* (item I75) and *Site landscaping , University of Sydney perimeter fencing and gates* (item I72). The Substation is located to the rear of the RD Watt Building.

The subject buildings are also located within the *University of Sydney Conservation Area* (item C5) and the campus also has a general heritage listing under the University of Sydney S.170 Register. The subject RD Watt and Substation 54 as well as the Heydon Laurence building and Ovals 1 and 2 are also listed individually on the University's Section 170 Register. It is also noted that the Camperdown campus of the university has been nominated to the State Heritage Register; the outcome of which is pending.

This Heritage Interpretation Strategy is required to satisfy the University of Sydney Campus Improvement Program (CIP) 2014-2020 (SSD-6123) Conditions of Consent (B14) which states:

> ***Condition B14–****All future development applications for new built form that involve the demolition or alteration of existing items of heritage significance shall include a heritage interpretation plan in accordance with the NSW Heritage Branch Guidelines, titled "Interpreting Heritage Places and items: guidelines and policy titled 'Heritage Information Series: Heritage Interpretation Policy' for assessment and approval. The Interpretation Plan must:*
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1.2 METHODOLOGY

Interpretation means all the ways of presenting the significance of an item. Interpretation may be a combination of the treatment and fabric of the item, the use of the item, the use of interpretive media, such as events, activities, signs and publications, or activities, but is not limited to these.[2]

This Heritage Interpretation Strategy is intended to inform and guide collaborative Interpretation planning on the site with stakeholders and relevant parties. Due to the sites location within the wider University of Sydney campus, this strategy has been prepared with input from the University of Sydney, to ensure it is in accordance with the greater Campus 2020 masterplan (including by way of content and presentation) and utilises their extensive resources and knowledge of the area. Built form interpretation has been prepared in conjunction with project architects. This document should be read in conjunction with the architectural plans and associated documentation for the proposed works, prepared by Architectus.

This heritage Interpretation Strategy has been prepared in accordance with relevant guidelines and policy as outlined in Section 1.2.1 below.

[2] NSW Heritage Branch, Department of Planning, Interpreting Heritage Places and Items Guidelines, August 2005, p3.

1.2.1 THE BURRA CHARTER AND HERITAGE GUIDELINES

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.[3] Heritage 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.[4]

This Heritage Interpretation Strategy 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) as well as conditions of the CIP (as outlined above). The general philosophy and process adopted is guided by the Australia ICOMOS *Burra Charter 2013.*

The Burra Charter defines interpretation as "all the ways of presenting the *cultural significance* of a *place*" (Article 1.17) 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 explanatory material.

Interpretation should provide and enhance understanding of the history, significance and meaning of the place. 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

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.

[3] NSW Heritage Branch, Department of Planning, Heritage Information Series, Heritage Interpretation Policy, August 2005, p2.

[4] Ibid, p3.

1.2.2 RD WATT CONSERVATION MANAGEMENT PLAN

A Conservation Management Plan (CMP) was prepared for the site by Clive Lucas Stapleton in 2005. This Heritage Interpretation Strategy has been prepared in accordance with the relevant policies as listed below:

Policy 11: *The place should be interpreted utilising a combination of:*

- *restoration and reconstruction works to the fabric;*
- *Allowing access to the public and specialists;*
- *Naming of rooms to reflect historical associations; and*
- *Displays (photographic, associated objects) reflecting the history of the building.*

Policy 12: *The interpretation of the place should emphasis the following outstanding matters:*

Aspect	*Details*
Architectural	*Central stair, lecture theatre (R109), Brick and stone façade (gables, gargoyles, chimneys, weather vane), portico and entrance door*
Agricultural History	*Laboratory spaces, important research topics (e.g. cereal rust research, microbiology, Milk Board laboratories).*

1.3 OBJECTIVES OF THE INTERPRETATION STRATEGY

As outlined above, this Heritage Interpretation Strategy considers the recommendations of the NSW Heritage Branch *Interpreting Heritage Places and Items: Guidelines* and is consistent with the University of Sydney Campus Improvement Program (CIP) 2014-2020 (SSD-6123) Conditions of Consent (B14).

It is intended that appropriate heritage interpretation of the subject buildings will communicate their history and significance in various forms to audiences, which will enrich their experience and enhance their appreciation and understanding of the sites and their association with University of Sydney. The development of this Heritage Interpretation Strategy has been guided by significant historical themes identified and detailed in Section 4 below.

1.4 AUTHOR IDENTIFICATION

The following report has been prepared by Fiona Binns (Associate Director) and Alicia Vickers (Graduate Consultant). Stephen Davies (Director) has reviewed and endorsed its content.

Unless otherwise stated, all drawings, illustrations and photographs are the work of Urbis or the project architects (Architectus).

1.5 LIMITATIONS

This Heritage Interpretation Strategy is intended to be a high level guiding document.

It is noted that possible content outlined in Section 4.1 below is subject to adjustment and editing, and is to be finalised in conjunction with Architectus and graphic design consultants. Use of images is also contingent upon copyright permission and right of reproduction, which is subject to confirmation.

2 The Subject Site

2.1 AREA DESCRIPTION

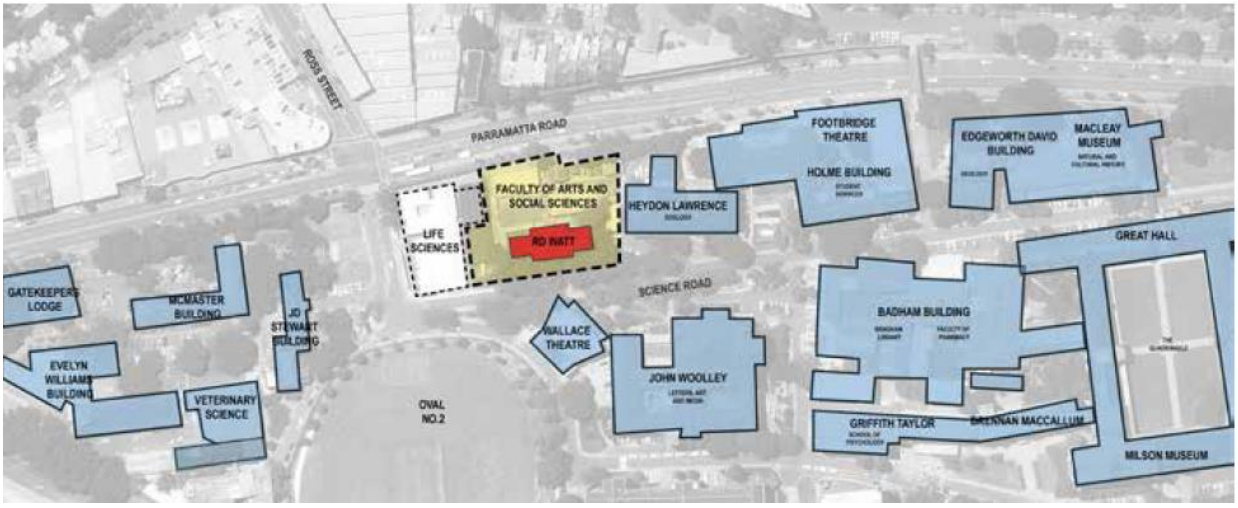
2.1.1 THE FASS SITE

The FASS site is located on the Parramatta Road frontage, in the northern part of the University of Sydney Campus, and east of the Parramatta Road/ Ross Street entry.

The FASS site is located between the Federation Arts and Crafts style RD Watt building on Science Road and the southern side of Parramatta Road. The site is bounded by the Heydon-Laurence Building to the east, Parramatta Road to the north, the RD Watt building and Science Road to the south and the demountable village and Ross Street entrance to the west.

At present, the site comprises the subject Substation 54 and switch room, the Ross Street storage facility and a small brick utility building/ waste store to the south and an asphalt car park accessed from Agriculture Lane. The Ross Street Storage facility is a brick building with a concrete roof, which is accessible from the elevated northern portion of the site. The removal of these buildings is subject to an Early Works package to enable the FASS works (REF 3-2016 Early Work Package Stage 2, Camperdown Campus), and heritage impacts have been previously assessed (Urbis March 2016).

FIGURE 1 – LOCATION OF THE FASS SITE, UNIVERSITY OF SYDNEY



SOURCE: ARCHITECTUS

FIGURE 2 – AERIAL VIEW OF THE RD WATT BUILDING AND THE SUBSTATION

SOURCE: SIX VIEWER

2.2 SITE DESCRIPTION

2.2.1 THE RD WATT BUILDING

The RD Watt Building has a primary frontage to Science Road. The site is in proximity to noted campus buildings including the Heydon Laurence building (to the east) and the JD Stewart building (to the west). It is also located to the northeast of Oval no.2.

The RD Watt building is a relatively small split level face brick and stone construction with timber framed, slate clad roof and floors of concrete and timber. The windows are metal framed. The building is orientated towards the south, where there is an elaborate stone and copper portico. The building has an elaborate facade composition of piers, strings and window openings, with decorative carved stone parapets and original copper rainwater goods. Although nominally three levels, the building is actually arranged on split-levels internally, joining a central open staircase. The ground floor retains the original lecture theatre and most of the offices on the floors above are also relatively intact. However, the former laboratory spaces have mostly been partitioned.

The building is surrounded by institutional landscaping, consisting of stone edging, garden beds, stone and concrete steps and stone and concrete paving, all typical of a university campus environment. There is substantial tree planting along Science Road to the south and a substantial screen of deciduous trees to the east.

As noted above, the interior incorporates split levels either side of the central open stair. The ground floor originally comprised the museum at the western end, the small lecture theatre, Professor's library, student

bathrooms and ‘basement’ utility area at the eastern end. The first floor comprised the botanical laboratory and lecturer’s rooms, with the agricultural chemistry lab and small theatre on the second floor and a large lecture theatre at the eastern end of the third floor. The interiors have been variously refurbished, with the larger former museum and laboratory spaces at the western end typically subdivided to form office spaces. The former lecture theatres featured tiered seating which has been removed with the exception of the small lecture theatre room on the ground floor. Some original detailing survives including early fireplaces and some original ceilings, as well as original doors and hardware.

FIGURE 3 – RD WATT BUILDING

PICTURE 1 – VIEW FROM SCIENCE ROAD

PICTURE 2 – VIEW OF THE PRINCIPAL (EXTERIOR) ENTRY

PICTURE 3 – VIEW OF THE PRINCIPAL FACADE

PICTURE 4 – VIEW OF THE REAR FACADE

PICTURE 5 – VIEW OF LECTURE THEATRE

PICTURE 6 – VIEW FROM ROOFTOP TO REAR OF BUILDING.

2.2.2 SUBSTATION NO.54 AND SWITCH ROOM

The Federation style masonry Substation 54 presents its northern façade to Parramatta Road. The structure was built in 1913 in the Arts and Crafts style. It has slate roof tiles to the gable ended form, and copper rainwater goods and roof vents. The soffits of the eaves have exposed rafters. There are sandstone courses dividing the face brick primary facades and sandstone is also applied to the window sills and the heads of all openings. The building adopts a similar materials palate to those larger faculty buildings constructed by the university along Science Road. Internally the building has a concrete floor with various sunken areas.

There are various later modifications associated with the building. The switch room to the east was constructed in the early 1950s, significantly later than the original structure. This building is a stripped version of the former and features face brick and a gable ended roof form. The building is approximately two thirds of the size of the substation and has double painted timber doors on the southern façade. There is no fenestration on the northern façade.

In 1947 the substation building was altered to reinforce the floor structure against the load of the electrical equipment and to introduce a second door into the northern elevation. Other 1947 alterations to this building include new rainwater goods, enclosure of transformer and concrete slab, replacement of the southern roller door, cement rendering around the western doorway and repairs to the roof slates and windows.

The subject site is bounded by an early fence along the Parramatta Road boundary to the north. The stone section of the fence which is adjacent to the subject site has been replaced with matching stone since 2010 however the pillar has been retained. Concrete stairs built between 1943 and 1949 run between the subject site and Parramatta Road.

FIGURE 4 – SUBSTATION 54 AND SWITCH ROOM

PICTURE 7 – THE SOUTHERN FAÇADE OF THE SUBSTATION, WITH THE LATER SWITCH ROOM ON THE RIGHT OF THE IMAGE.

PICTURE 8 – VIEW WEST TOWARDS THE SUBSTATION AND SWITCH ROOM.

PICTURE 9 – VIEW TOWARDS THE SOUTH WEST CORNER OF THE SUBSTATION.

PICTURE 10 – DETAIL OF THE NORTHERN FAÇADE OF THE ITEM.

PICTURE 11 – VIEW SOUTH TOWARDS THE SUBJECT SITE FROM THE NORTHERN SIDE OF PARRAMATTA ROAD AND SHOWING THE ADJOINING RD WATT BUILDING

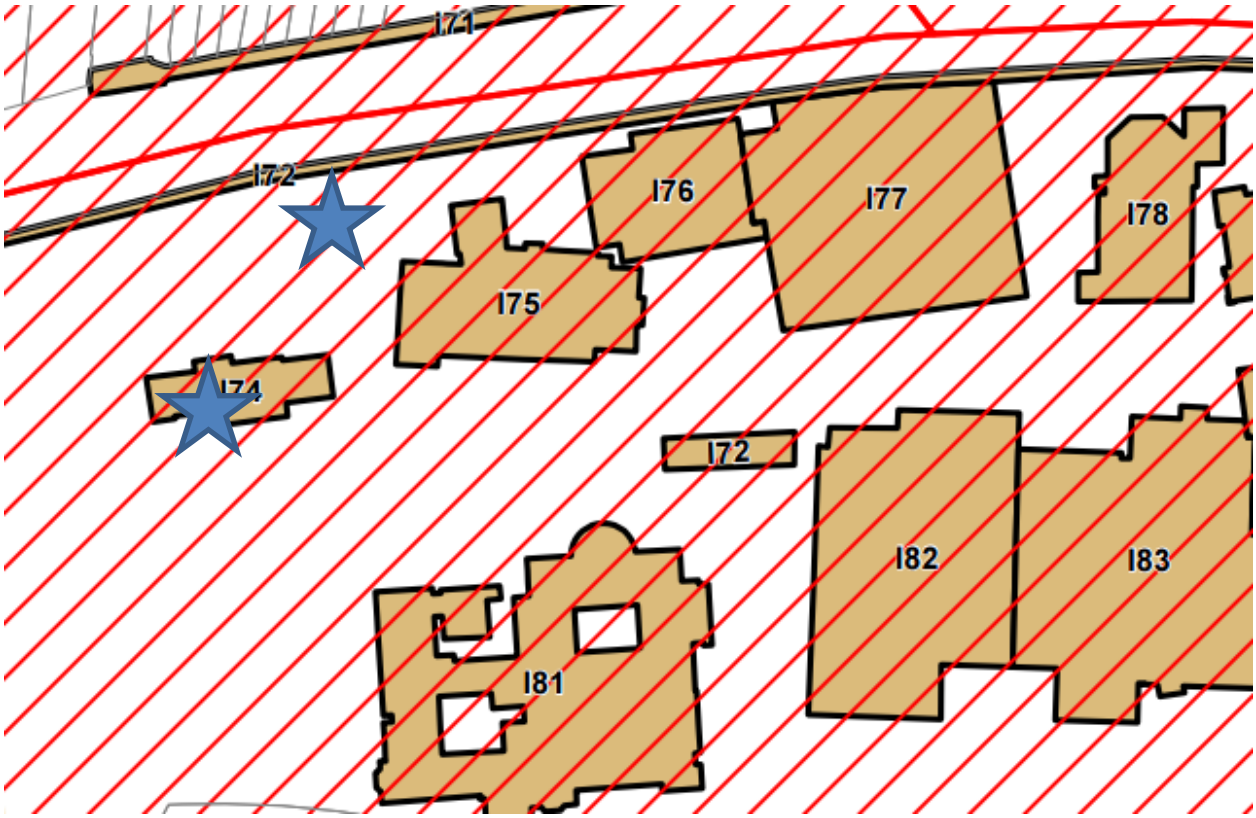
PICTURE 12 – VIEW SOUTH TOWARDS THE SUBSTATION AND SUBJECT SITE FROM THE NORTHERN SIDE OF PARRAMATTA ROAD.

2.3 STATUTORY CONTEXT

The RD Watt building is a Local heritage listed item on Sydney Local Environment Plan (LEP) 2012 (Item I74) and is also listed individually on the University's Section 170 Register. The Substation is listed as an item of environmental heritage under the University of Sydney S.170 Heritage Register (ID 4726030).

The subject buildings are also located within the *University of Sydney Conservation Area* (item C5) and the campus also has a general heritage listing under the University of Sydney S.170 Register. It is also noted that the Camperdown campus of the university has been nominated to the State Heritage Register; the outcome of which is pending.

FIGURE 5 – HERITAGE MAP INDICATING THE LOCATION OF THE RD WATT BUILDING AND THE SUBSTATION, WITHIN THE UNIVERSITY OF SYDNEY.



SOURCE – CITY OF SYDNEY LOCAL ENVIRONMENTAL PLAN (LEP) 2012 HERITAGE MAP 009

2.4 STATEMENT OF SIGNIFICANCE

The following statements of significance define the significance of the subject RD Watt and Substation 54 buildings.

2.4.1 RD WATT BUILDING

The below statement of significance has been sourced from the NSW Office of Environment and Heritage inventory listing for the site:

> *"The first purpose-built building for the newly established School of Agriculture, in continuous use for that purpose since 1916 and one of a diminishing number of buildings still used for its original purpose. One of the subjects introduced into the curriculum in the early 20th century in recognition of the need for a high standard of training and research in areas of major significance to agricultural and pastoral growth and hence to the national economy.*
>
> *One of the unusual and carefully detailed Federation Arts and Crafts style Science faculties to be constructed along Science Road, designed by the Government Architects branch under Walter Liberty Vernon."*[5]

[5] Office of Environment and Heritage, RD Watt Building: http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2431021

2.4.2 THE SUBSTATION

The following statement of significance has been sourced from the Heritage Impact Statement (HIS) for the FASS Enabling Works-Early Works package HIS, prepared by Urbis in January 2016.

> *The original 1913 section of the substation is considered to have historic, associative and aesthetic significance on a local level.*
>
> *The building has historic and aesthetic associations with the Arts and Crafts style Science Road Science facilities which were developed just prior to WWI. The historic significance of the 1913 building is vested in its concurrent development with these buildings which indicates that the University required extensive power supplies for the laboratories at the start of the 20th century. The substation also indicates changes in the technology of power generation and the emergence of the Federation Arts and Crafts architectural style. It was designed in a similar style as those buildings in the area designed by Vernon so to establish architectural harmony.*
>
> *The 1913 substation is associated with the architect Robert Hargreaves Broderick. Broderick worked for the Sydney Municipal Council for 12 years before becoming City Architect.*
>
> *The substation indicates changes in the technology of power generation and distribution. However, it is considered that there is no information contained therein which could not be gained from other sources.*
>
> *The later ancillary switch room is not considered to meet the requisite threshold for heritage listing.*

3 Historical Overview

The following history concerns that of the RD Watt Building and the Substation only. A detailed historical overview of the University of Sydney is provided in the HIS prepared by Urbis in March 2016. Except where otherwise referenced, the following site history is summarised from the RD Watt CMP. [6]

3.1 RD WATT

3.1.1 THE BEGINNINGS OF AGRICULTURE AT THE UNIVERSITY OF SYDNEY (1871-1890S)

At the foundation of the University of Sydney in 1850, there was no provision for the teaching of agriculture. At the time, there was no government Department of Agriculture, and little concern for formal academic training in agricultural sciences.

In 1882, the University passed by-laws creating the Faculties of Science, Medicine, and Law in response to external criticisms that the University of Sydney offered a 'gentlemen's' education, based on Arts and Classics, rather than a practical or relevant education which could be a benefit to the wider community. The subsequent success of these new professional courses, including engineering which was under the Faculty of Science, paved the way for consideration of additional professional courses and applied sciences.

A visit to Sydney in 1889 by Professor William Wallace, Professor of Agriculture at the University of Edinburgh, furthered the cause for agriculture at the University. Wallace reported that farmers required training, which could only be achieved through education in schools, continuing in a University-sanctioned agricultural college. Following Wallace's report, the Minister of Public Instruction, Joseph Carruthers, proposed to the University Senate that a chair of Agriculture be established to provide a higher degree course. The University chair was proposed to be the culmination of a centralised system of agricultural education, commencing with the subject at school level, progressing on to the Agricultural Colleges, which were about to be established, and terminating with a university degree in the subject. Although the Senate was agreeable to the proposal, it did not feel that 'the time was opportune' to establish the chair.

In 1890, remarks of the Chancellor hinted at the concerns of the Senate regarding the establishment of vocational courses, such as agriculture, saying that student's should not be awarded a degree unless they have undertaken a proper course, such as Engineering. Although subjects may be taught which related to agriculture, the 'more technical aspects' would not be addressed, keeping in line with University principles. Nonetheless, in June 1891, the Senate resolved to request £1000 as a government grant in order to fund the School of Agriculture.

Despite the pioneering efforts of Joseph Carruthers, then Minister of Public Instruction, the Department of Education expressed reservations about the formation of a School of Agriculture at the University, citing an overlap of subjects already provided by the Technical Colleges. A compromise was proposed by the government whereby the chair of agriculture at the University would also hold a position with the Department of Education overseeing agricultural instruction at the Technical Colleges. The University Senate balked at this proposal, and further discussion of the School of Agriculture was hampered by the onset of the depression of the 1890s.

3.1.2 ESTABLISHMENT OF THE SCHOOL OF AGRICULTURE WITHIN THE FACULTY OF SCIENCE (1900-1910)

Ironically, it was the decline of rural expansion brought about by the depression and drought of the 1890s which highlighted the need for training and research in the fields of agriculture and veterinary science. As the failure of the agricultural sector demonstrated, agricultural and pastoral industries were central to the Australian economy. The heightened awareness of the need for an academic approach to the problems of agriculture, along with the continued success of previous professional courses such as Engineering,

[6] CLS&P 2005: 20-30

and the growth of the Technical Colleges, caused the University of Sydney to reassert its desire for a School of Agriculture.

In an atmosphere of greater acceptance of the place of professional training in a University liberal education, the Senate recognised that increased student numbers would also bode well for government funding and greater support from the public. The Universities of Queensland and Western Australia were founded in the early part of the 20th century with a focus on practical courses, and in 1904, the University of Sydney was again approached by the government to suggest a course in agricultural science, motivated by the election of Joseph Carruthers' party to government in the same year.

In response to the suggestion of WJ Campbell, Director of the NSW Department of Agriculture, the Professorial Board met with representatives of the Hawkesbury Agricultural College and recommended the establishment of a 'complete curriculum in agriculture.' The Professorial Board also recommended that a full chair of agriculture be established at the University, an opinion which was supported by a report by the Victoria Department of Technical Education calling for a chair of agriculture to be established somewhere in Australia. The Senate endorsed the Professorial Board's report, and forwarded it, along with a strong recommendation for its implementation, to the government, where it was shelved until 1907.

Despite Chancellor MacLaurin's request for an endowment of £15,000 per year together with additional funds for buildings and equipment for the proposed Department of Agriculture, it was not until May 1908, after a general election, that the amount of £5000 was voted for the two chairs of agriculture and veterinary science.

In November 1909, the appointment of Robert Dickie Watt, of the Transvaal Department of Agriculture, was confirmed by the University Senate. Watt was born and educated in Scotland, gaining the degree of DSc from Glasgow University. As a chemist and director of the Transvaal Department of Agriculture, Watt developed an interest in the Australian agricultural environment. He arrived in Sydney to take up the chair in February 1910, and spent his first year in office travelling throughout NSW acquainting himself with the agricultural features and conditions of the state.

Because the first year of the new degree of BscAg required students to attend the first-year Science course, Watt had the opportunity to develop the curriculum, plan facilities, and recruit lecturing staff prior to the commencement of teaching agricultural subjects in the 1911 academic year. The object of his course, based in part on the Cambridge agriculture curriculum, was to train teachers and experimenters in a scientific system of research.

The appointment of suitable staff proved difficult in a country where there were no local graduates in the subject. As the funding was not sufficient to import staff, Watt recruited local experts to teach in the University until local graduates became available. In this way, Watt assembled something of a powerhouse of early 20th century life scientists to deliver lectures in the School of Agriculture, including JH Maiden (Government Botanist), WW Froggatt (Government Entomologist), RT Barker (of the Technological Museum), and EK Wolstenholme (NSW Department of Agriculture). Watt himself covered the remainder of the agricultural subjects, and other departments of the University provided lectures in agricultural geology, agricultural engineering, economics, and veterinary hygiene. In 1912, the first full member of staff was appointed. Gilbert Wright was a graduate of the Hawkesbury Agricultural College and was previously a demonstrator with the Department of Chemistry. Wright taught agricultural chemistry and bacteriology.

3.1.3 GROWTH OF THE SCHOOL OF AGRICULTURE (1910-1920)

Facilities for the new School were virtually non-existent for the first several years of the course. Professor Watt's office was located in the old Chemistry Building, with a 'primitive' lab in the basement below. Lectures were held in many locations, from the Geology lecture theatre to the Botanical Gardens and Technological Museum. The site for the new Agriculture building was recommended to the Senate in May 1909, and Watt provided the Government Architect with a rough sketch and a description of the type of building and fittings required in 1910. However, work did not commence on the building until 1913, and it was not reasonably completed until 1916. Further delays with funding for laboratory apparatus meant that the building was not fully equipped until 1920.

The new building was designed by the Government Architect's Branch under the direction of Government Architect George McRae and Assistant Architect GM Blair. Blair completed his architectural training under

Charles Rene Mackintosh in Glasgow, and it may be his influence which caused the interesting Art Nouveau features evident in the design of the RD Watt Building. Other architects in the Government Architect's Branch which had a part in the design included John Barr and George Oakeshott.24 In 1913, Hermes reported on the progress of the building, saying 'After months of weary waiting, an imposing edifice is at last rearing itself...Rumour hath it that it is an Agriculture School...the building is a fine example of old Agrarian architecture.'

Enrolment in the new course commenced slowly, and the advent of World War I prevented any substantial growth in numbers. In the first year of the course, four students enrolled, all under cadetships with the NSW Department of Agriculture. Four students again enrolled in the second year. By 1913, the number grew to 13 students.

3.1.4 AGRICULTURE BECOMES A FACULTY (1920-1946)

Watt acknowledged that, during World War I, the School became so depleted that there was talk of closing it down. However, in 1919, the Senate voted to create six new faculties, including the Faculty of Agriculture, after an examination of the heterogenity and incohesiveness of the varying disciplines within the Faculty of Science. At the same time, driven by the University-wide post-war surge in enrolments, the Faculty of Agriculture saw enrolment numbers finally increase, with 32 students enrolled in 1924.

The subject of Agricultural Chemistry, taught as a pure science from the beginning of the School of Agriculture, was offered through the Faculty of Science from 1921 in order to meet the high demand for Chemistry II. In writing to the Registrar to support the proposal, Watt pointed out that the existing agricultural chemistry laboratory was suitable for 40 students, but with the expenditure of only about £50 on fittings, it could accommodate an additional 10. The appeal of the subject's balance of biochemistry, organic, and physical chemistry, along with the interest in agricultural bacteriology taught by Gilbert Wright, led to the formation of the Department of Microbiology in 1968.

In 1935, the Faculty celebrated its Silver Jubilee, despite the ongoing depression which affected enrolments and staff expenditure. Professor Watt was the subject of a number of honours for the occasion. Watt and the foundation Professor of Veterinary Science, JD Stewart, were also granted honourary life memberships in the Royal Agricultural Society of NSW for the jubilee.

The Sydney University Agricultural Graduates' Association, formed in 1923 from the graduate members of the Sydney University Agricultural Society, was instrumental in 1935 in the formation of the Australian Institute of Agricultural Science, a nation-wide professional organisation for agricultural scientists. Watt was a foundation member and served as president of the NSW chapter as well as the Federal governance.

Just prior to the outbreak of World War II, Watt put forward a proposal to the Vice-Chancellor for the erection of a new building to the north of the existing building, a three-fold increase in permanent staff, and the acquisition of a teaching farm. His long-term aim was to facilitate the newly-introduced four-year course of Agriculture, with a 5th year of specialised study. Although money was voted by the Senate for Watt's proposal, World War II intervened, and the plan did not come to fruition. Again, World War brought about a general disruption to the University, causing declines in staff and student numbers. During WWII, the 'nerve centre for air raid precautions was in the basement of the Ag School, behind the men's toilets

In 1945, Watt again noted that one of the greatest weaknesses of the Faculty was that there was still no teaching farm. Shortly thereafter, he retired. The Senate awarded him the title of Emeritus Professor in honour of his contributions to the University. It may be seen as ironic that Watt chose to retire in the midst of the post-war growth of the University, after many years of hard pioneering. His replacement, JRA McMillan, was well suited to the requirements of the position. Fittingly, McMillan was a graduate of the University of Sydney's Agriculture course. McMillan turned his attention to campaigning for a new building, as well as the acquisition of a teaching farm.

Between 1920 and 1943 a number of ancillary glasshouses and outbuildings appear to have been constructed to the north of the RD Watt Building. These were later used for biology.[7]

[7] Casey and Lowe, 2016, 14

FIGURE 6 – HISTORICAL VIEWS OF THE RD WATT BUILDING (C.1935)

PICTURE 13 – VIEW OF THE RD WATT FROM SCIENCE ROAD CIRCA 1935.

SOURCE: FACULTIES OF VETERINARY SCIENCE AND AGRICULTURE SILVER JUBILEE PROGRAM, SUA (IN CLS&P CMP 2005, FIGURE 2.11)

.'

3.1.5 AGRICULTURE IN RECENT YEARS (1946-PRESENT)

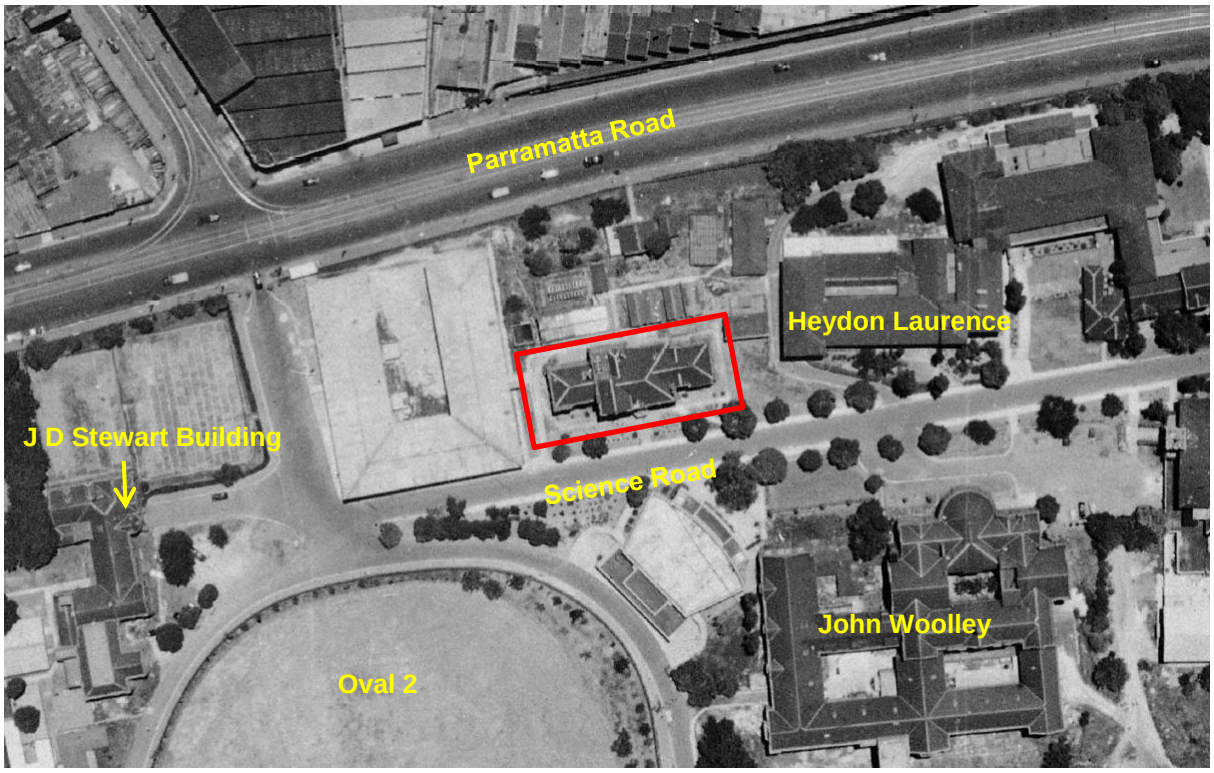
In the years immediately following the Second World War, a number of 'transient' buildings were constructed. These had asbestos fibre cement (fibro) sheeting walls and roofs, and brick and concrete foundations. One of these buildings, later known as the 'Ross Street Building (A03)', was built partly within the present study area. It was initially used for Biology, although it is later believed to have been used for a variety of other purposes. It was demolished around 2011.[8]

In the immediate post-war years, the surge in enrolments affected the Faculty of Agriculture dramatically. The first-year class in 1946 had 101 students, compared to the usual intake of 20. A shortage of funding to provide for the growth of the Faculty caused McMillan to seek assistance from the Rural Bank, which contributed £13,000 for new research work, and funded the establishment of the Curlewis research station. Thus commenced McMillan's long mission of seeking funding from sources outside the University where necessary, continuing a working relationship with the agricultural sector initiated by Professors Watt, Waterhouse, and Watson in particular. Over the next 20 years, McMillan raised over £1,000,000 from the industry and commerce sectors to fund research and equipment. Another form of funding enabled a new Chair in Agricultural Economics through an endowment from the Commonwealth Bank's Rural Credits Development Fund. Some funding also came from wool levies and the like.

McMillan set about enhancing the staffing of the school in order to facilitate first-class research in the areas of wheat, soil fertility, agricultural chemistry, production economics, agricultural policy, nutrient deficiencies in soils, and the effects of fertilisers.

[8] Ibid

FIGURE 7 – AERIAL VIEW OF THE RD WATT



PICTURE 14 – VIEW OF THE RD WATT (INDICATED IN RED) AND SIGNIFICANT BUILDINGS IN THE VICINITY.

SOURCE: HISTORICAL ATLAS OF SYDNEY, AERIAL SURVEY OF THE CITY OF SYDNEY, 1949, MAIN SURVEY - AO070

By the 1960s, several new chairs were established, and research stations were established at Castle Hill and Narrabri in northern NSW. New chairs addressed the fields of Agricultural Botany, Soil Science, and Agricultural Chemistry. Animal husbandry research was also conducted with the Faculty of Veterinary Science at Sydney, Camden, and Jerilderie.

McMillan's efforts led to the construction of a new building, now known as the JRA McMillan Building, constructed in 1962. It was a multistorey building designed to house facilities related to agricultural research, although it was later used to provide teaching and learning facilities. It was demolished in 2012.[9]

McMillan's tenure as Dean is recalled as a period of great strengthening and building of the Faculty. After his retirement in 1966, the Faculty was divided into six departments: Agricultural Botany, Agricultural Chemistry, Agricultural Economics, Agricultural Microbiology, Agronomy, and Soil Science. The graduate courses expanded to offer diplomas in 15 different fields.

[9] Ibid

FIGURE 8 – HISTORICAL VIEW OF THE RD WATT BUILDING (1960S)

PICTURE 15 – STUDENTS APPROACHING THE RD WATT CIRCA 1960.

SOURCE: FACULTY OF AGRICULTURE JUBILEE YEARBOOK (IN CLS&P CMP 2005, FIGURE 2.11)

3.1.6 SUBSTATION NO.54 AND SWITCHROOM

The below history of the subject buildings has been summarised from the Conservation Management Plan for Substation No.54 and Union Steps prepared in June 2010.

At the start of the 20th century a new power station was necessitated by the proliferation of the University's science laboratories which were constructed in the vicinity.[10] An application from the City Council to erect an 'electric light and power substation' near the Parramatta Road and Ross Street junction was considered by the University Buildings and Grounds Committee in August 1913.

It was recommended that the site between the area proposed to be used for a building for the Department of Agriculture (A04) and the Parramatta Road be leased to the City Council for a period of 25 years at a nominal rent and that the plans submitted by the City Council be approved.[11]

The Office of City Electrical Engineer, H.R Forbes Mackay and architect Robert Hargreaves Broderick prepared a sketch plan which was forwarded to the university for consideration. Robert Hargreaves Broderick was an architect from England who worked for the Sydney Municipal Council for 12 years before becoming City Architect.

It was advised that the university could make any desired amendments to the style of the building. It was only requested to remove the large lettering to the facades be omitted. Otherwise the plans were approved. It was estimated that the building would cost around 1150 pounds.

[10] University of Sydney, Grounds Conservation Management Plan, 2014

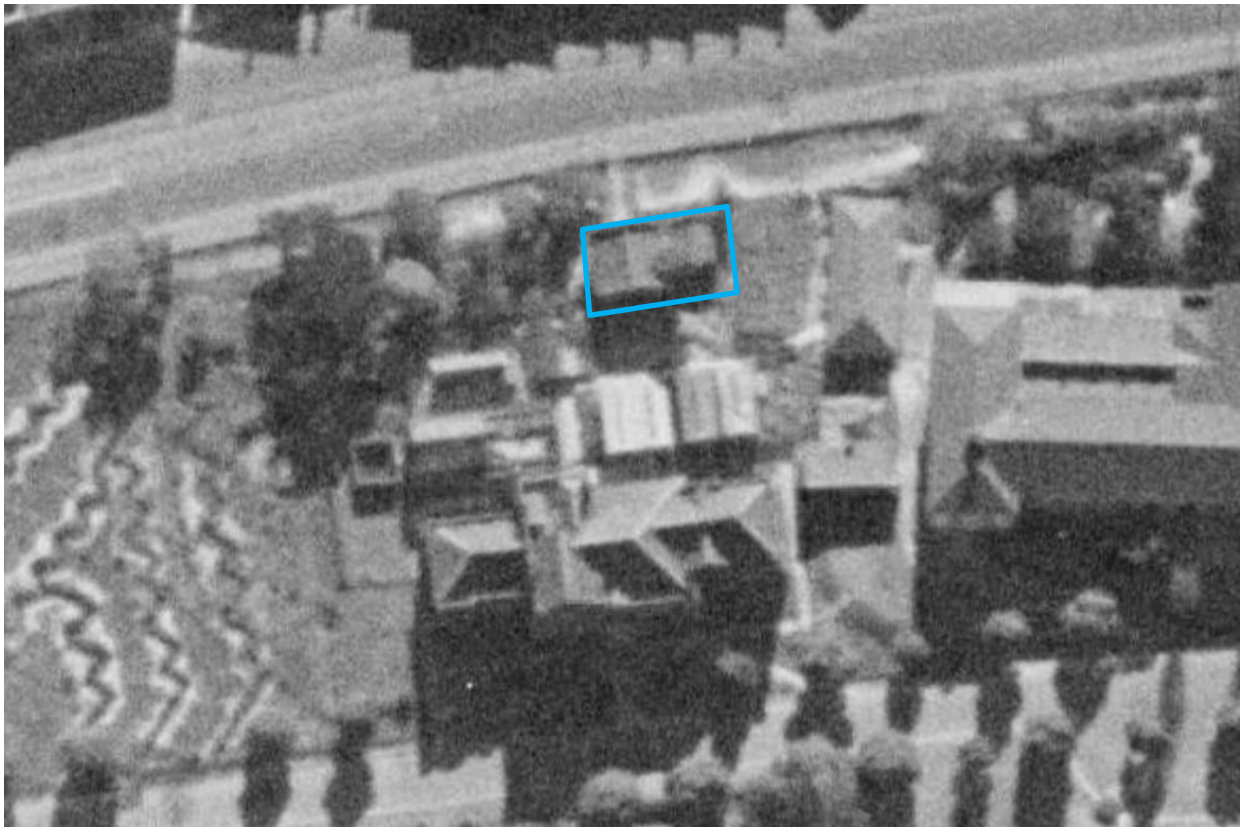
[11] NSW Office of Environment and Heritage Database no. 4726030

Modifications to the building were undertaken in 1947 when it was altered to reinforce the floor structure against the load of the electrical equipment and to introduce a second door into the northern elevation. Other 1947 alterations included new rainwater goods, enclosure of transformer and concrete slab, replacement of the southern roller door, cement rendering around the western doorway and repairs to the roof slates and windows.

The 1943 aerial indicates that there was an additional structure to the east of the 1913 building at that time. However, records indicate that the existing switch room was constructed between 1949 and 1956. It is possible that the switch room is resultant of an application made to the City of Sydney Council in 1948 which was made by the University of Sydney for a "Substation and Transformer Annex"[12].

The aerials indicate that the stair to the substation site was constructed between 1943 and 1949. Between 2010 and 2016 the stone section of the fence adjacent to the site appears to have been reconstructed, likely retaining the original palisade.

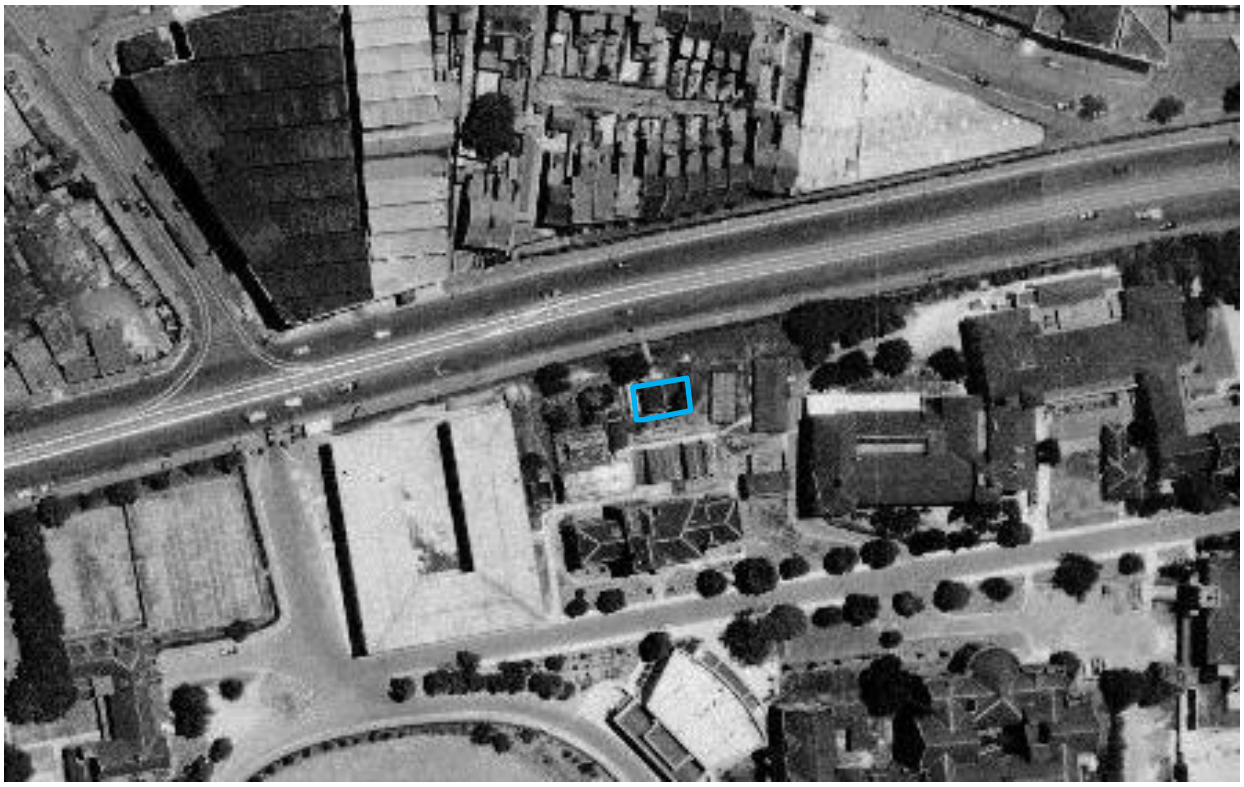
FIGURE 9 – 1943 AERIAL IMAGE WITH SUBJECT SITE INDICATED (BLUE BOUNDARY).



SOURCE – SIX MAPS – LAND AND PROPERTY INFORMATION

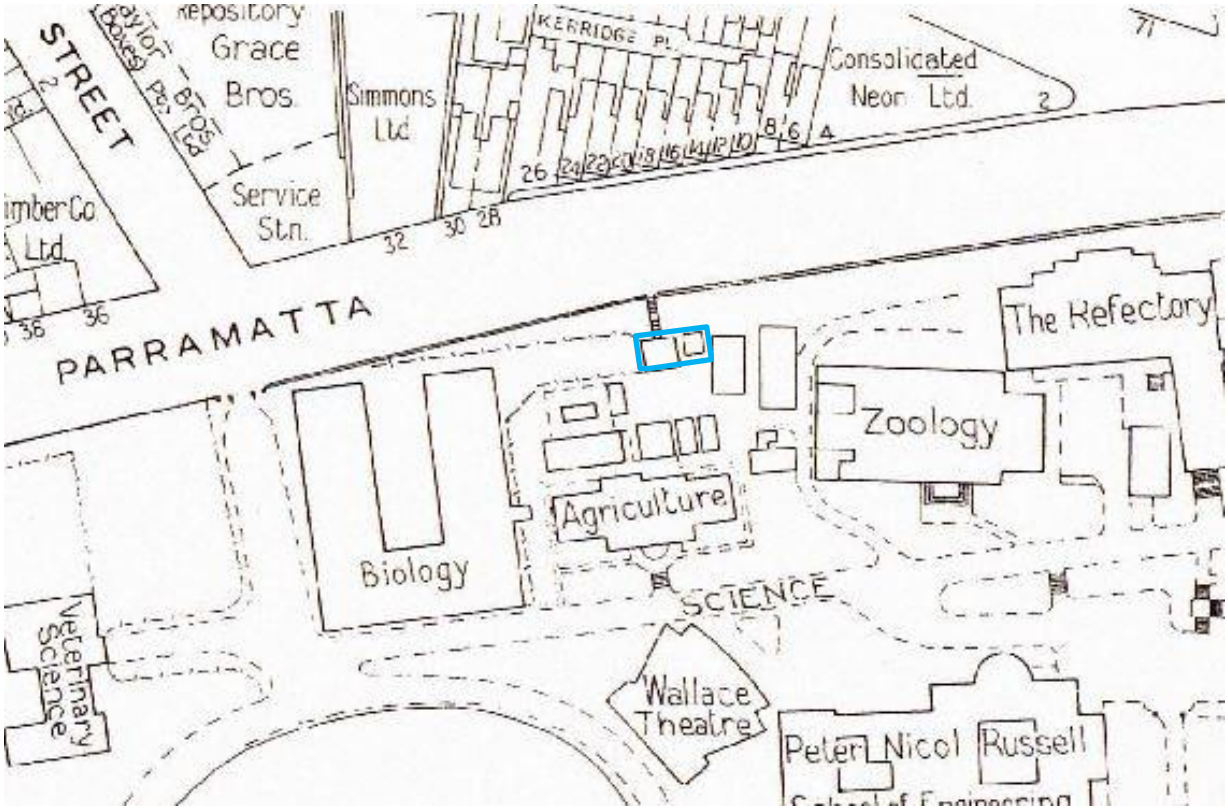
[12] City of Sydney Archives Investigator available at http://archives.cityofsydney.nsw.gov.au/ResultList.aspx, accessed 06.01.16

FIGURE 10 – 1949. MAP INDICATING THE LOCATION OF THE SUBJECT BUILDING.



SOURCE– HISTORICAL ATLAS OF SYDNEY.

FIGURE 11 – 1956. CITY BUILDING SURVEYOR'S DETAIL SHEETS INDICATING THE SUBJECT SITE INCLUDING ANCILLARY SWITCH ROOM (BLUE).



SOURCE– CITY BUILDING SURVEYOR'S DETAIL SHEETS – SHEET 14 – HISTORICAL ATLAS OF SYDNEY.

4 Heritage Interpretation Strategy

4.1 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.

Given the history and significance of the subject buildings, as well as their location within the wider University of Sydney campus, interpretation is mainly intended for occupants and users of the site and wider university users and visitors. The following audience groups have been identified in order of visitation.

- Occupants and users of the site (current students and staff);
- Local wider university users and visitors (including past students and staff);
- Overseas university users and visitors; and
- General public.

With consideration for the intended wider audience, interpretation is proposed to be provided through built form and media, including embedded in a landscaped zone/section within a publicly accessible area/thoroughfare and in principal internal circulation areas.

4.2 HERITAGE INTERPRETATION THEMES

Historical themes can be used to understand the context of a place, such as what influences have shaped that place over time. The Heritage Council of NSW established 35 historical themes relevant to the State of New South Wales. These themes correlate with National and Local historical themes.

Historical themes that are relevant to the RD Watt building and the Substation are provided in Table 1 below.

4.2.1 RD WATT BUILDING

TABLE 1 – HISTORICAL THEMES

AUSTRALIAN THEME	NSW THEME	LOCAL THEME	EXAMPLE
3 Developing local, regional and national economies	Agriculture	Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes, can include aquaculture.	The RD Watt Building (The school and later the Faculty of Agriculture) reflects the establishment of the first university course for agriculture in NSW.
3 Developing local, regional and national economies	Pastoralism	Activities associated with the breeding, raising, processing and distribution of livestock for human use.	The RD Watt Building (The school and later the faculty of Agriculture) has, since its beginnings, maintained a strong relationship with the agricultural sector, industry and the government. The original curriculum was established through consultation with farmers, agricultural colleges and the department of Agriculture. In addition, funding for the establishment of research stations

AUSTRALIAN THEME	NSW THEME	LOCAL THEME	EXAMPLE
			has been received from agricultural producers as well as the Rural bank.
3 Developing local, regional and national economies	Science	Activities associated with systematic observations, experiments and processes for the explanation of observable phenomena.	The RD Watt Building (The school and later the Faculty of Agriculture) was purpose built for agricultural education and has continued to be a leader in the field. It is well-known for its Agricultural education, including courses in Agricultural Chemistry, Agricultural economics, Agricultural microbiology, Agronomy and Soil Science and has been a place of pioneering research and investigations such as the following: * internationally recognised research in plant pathogens (specifically wheat rust) and microbiology; * The establishment of the first NSW milk board laboratories within the faculty from 1946; and *Animal husbandry research conducted in the c1960s.
3 Developing local, regional and national economies	Technology	Activities and processes associated with the knowledge or use of mechanical arts and applied sciences.	The RD Watt Building (The school and later the Faculty of Agriculture) was purpose built for agricultural education and has continued to be a leader in the field. The site was fully equipped with agricultural teaching spaces, including laboratories, a potting shed, a plant culture house and a glass house.
6 Educating	Education	Activities associated with teaching and learning by children and adults, formally and informally.	The RD Watt Building (The school and later the Faculty of Agriculture) was first established in the early 20th century and has a long history as a leader in agricultural education, with strong academic achievements, pioneering research and innovation in Agricultural education associated with the site.
8 Developing Australia's cultural life	Creative Endeavour	Activities associated with the production and	The RD Watt Building (The school and later the faculty of Agriculture) is

AUSTRALIAN THEME	NSW THEME	LOCAL THEME	EXAMPLE
		performance of literary, artistic, architectural and other imaginative, interpretive or inventive works; and/or associated with the production and expression of cultural phenomena; and/or environments that have inspired such creative activities.	an example of the Federation Arts and Crafts architectural style, and was designed by Government Architect George McRae and Assistant Architect GM Blair.
8 Developing Australia's cultural life	Social Institutions	Activities and organisational arrangements for the provision of social activities.	The RD Watt Building (The school and later the Faculty of Agriculture) has a long history in the University of Sydney community for the provision of social activities centred on Agricultural education.
9 Marking the phases of life	Persons	Activities of, and associations with, identifiable individuals, families and communal groups.	The RD Watt Building (The school and later the Faculty of Agriculture) was designed by a team of architects under the NSW Government Architect George McRae, a notable Australian architect of the early 20th century The building has a strong association with agricultural scientists and their work (particularly research by Walter Lawry Waterhouse, Professor Irvine Armstrong Watson and Professor JM Vincent). The building is dedicated to the memory of Emeritus Professor Sir Robert Dickie Watt, the first Professor of Agriculture, and later first Dean of the Faculty of Agriculture.

4.2.2 THE SUBSTATION

TABLE 2 – HISTORICAL THEMES

AUSTRALIAN THEME	NSW THEME	LOCAL THEME	EXAMPLE
3 Developing local, regional and national economies	Science	Activities associated with systematic observations, experiments and processes for the explanation of observable phenomena.	The establishment of the substation in the early 20th century was directly necessitated by the proliferation of the University's science laboratories which were constructed in the vicinity.[13] The substation indicated the changes in the technology of power generation and distribution.
3 Developing local, regional and national economies	Technology	Activities and processes associated with the knowledge or use of mechanical arts and applied sciences.	
6 Educating	Education	Activities associated with teaching and learning by children and adults, formally and informally.	
4 Building settlements, towns and cities	Towns, suburbs and villages	Activities associated with creating planning and managing urban functions, landscapes and lifestyles in towns, suburbs and villages.	The establishment of the Substation came about by a direct relationship between the City of Sydney and the University of Sydney over its construction, style and use, with the building similar in design to other substations in the area and with the site rented to the University of Sydney, with the university able to make desired changes to the building.
4 Building settlements, towns and cities	Utilities	Activities associated with the provision of services, especially on a communal basis	The establishment of the substation provided the university with power to operate the Universities science laboratories.
8 Developing Australia's cultural life	Creative Endeavour	Activities associated with the production and performance of literary, artistic, architectural and other imaginative, interpretive or inventive works; and/or associated with the production and expression of cultural phenomena; and/or	The substation is an example of the Federation Arts and Crafts architectural style. It was designed in a similar style as those buildings in the area designed by Vernon so to establish architectural harmony.

[13] University of Sydney, Grounds Conservation Management Plan, 2014

AUSTRALIAN THEME	NSW THEME	LOCAL THEME	EXAMPLE
		environments that have inspired such creative activities.	

4.2.3 SUMMARY INTERPRETATION THEMES

With consideration of the identified significance of the RD Watt building and the Substation and the identified historical themes, the following themes have been identified for interpretation:

Beginnings of Agricultural Education

The RD Watt building is of historic, aesthetic and social significance, as well as of scientific and research value. The site reflects the establishment of the first university course for agriculture in NSW. The course came about as a response to the University of Sydney's growing expansion and was directly influenced by the drought and economic depression of the 1890s.

The site is associated with a number of significant identities in agricultural science, including Emeritus Professor Robert Dickie Watt, Emeritus Professor Walter Lawry Waterhouse, professor Irvine Armstrong Watson and Professor JM Vincent.

Science and Technology

RD Watt Building

The RD Watt building was a purpose built building for Agricultural education. The site was fully equipped with agricultural teaching spaces, including laboratories, a potting shed, a plant culture house and a glass house and offered courses in Agricultural Chemistry, Agricultural economics, Agricultural microbiology, Agronomy and Soil Science.

The site has maintained a strong relationship with the agricultural sector, industry and government and funding for the establishment of research stations has been received from agricultural producers as well as the Rural bank. Pioneering research and investigations undertaken at the faculty has had a significant impact on agriculture and pastoral growth in Australia and internationally, including internationally recognised research in plant pathogens (specifically wheat rust) and microbiology, the establishment of the first NSW milk board laboratories within the faculty from 1946 and animal husbandry research conducted in the c1960s.

The Substation

The Substation is of historic and aesthetic significance. The establishment of the substation in the early 20th century was directly necessitated by the proliferation of the University's science laboratories which were constructed in the vicinity.[14] The substation illustrated the changes in the technology of power generation and distribution.

4.3 RESOURCES

This interpretation has considered the following resources:

- The site itself, including its extant built fabric;
- University of Sydney Archives;
- City of Sydney Archives;
- State Library of NSW;
- Published materials; and

[14] University of Sydney, Grounds Conservation Management Plan, 2014

- Professional reports prepared for the sites including the respective conservation plans for the buildings.

4.4 HERITAGE INTERPRETATION

Relevant heritage interpretation themes associated with the subject site are outlined above. With consideration for the intended wider audience, interpretation is proposed to be provided through built form and media, including embedded in landscaped zones within publicly accessible areas and in principal internal circulation areas.

Interpretation is proposed in the following ways listed below, and where panels/signage has been indicated, an outline of relevant topics.

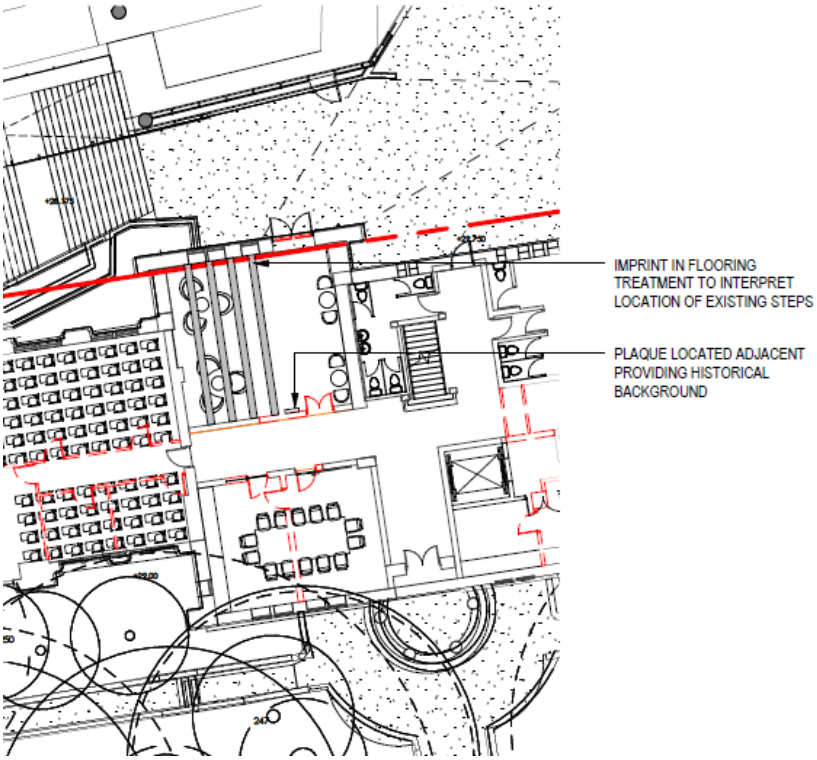
4.4.1 INTERPRETATION OF BUILT FORM

4.4.1.1 RD WATT BUILDING

The proposed redevelopment works involve alterations to the RD Watt building, including the removal of some early fabric and change of use of existing spaces in line with the new contemporary redevelopment and requirements for the building, including requirements for access and changing uses. For instance, it is proposed to convert the existing ground floor lecture theatre (Room 109) into a reception and registration area. The lecture theatre is identified in the CMP as being of high heritage significance and retains the original tiered configuration. It is proposed to provide interpretation of the former lecture room use of the room through demarcation in the flooring, to illustrate the tiered arrangement of the seating.

Where the original timber flooring is intact (subject to investigation) this should be retained and reused. It is also recommended that the stepped configuration is demarcated in the wall finish, in order to further interpret the tiered arrangement of the seating.

FIGURE 12 – LECTURE ROOM 109 INTERPRETATION PLAN



PICTURE 16 – INTERPRETATION PLAN SHOWING PROPOSED DEMARCATION IN THE FLOORING TO INTERPRET THE TIERED SEATING

SOURCE: ARCHITECTUS

The proposed works to the RD Watt Building also include also include conservation and restoration of significant facades and features which enhances the passive interpretation of the building and its former function. Conservation works are guided by the separate Fabric Survey prepared by Urbis which includes:

- Investigation of damp/ salt to significant stonework and brick facades
- Investigation of spalling stonework within the entrance porch
- Repairs to masonry
- Refurbishment of roofing, rainwater goods, flashings cappings, downpipe etc
- Allowance for salvage and potential reuse of removed materials;
- Rationalising and removing redundant services.

The proposed works to RD Watt also enhance the interpretation of the original form and spaces through the following:

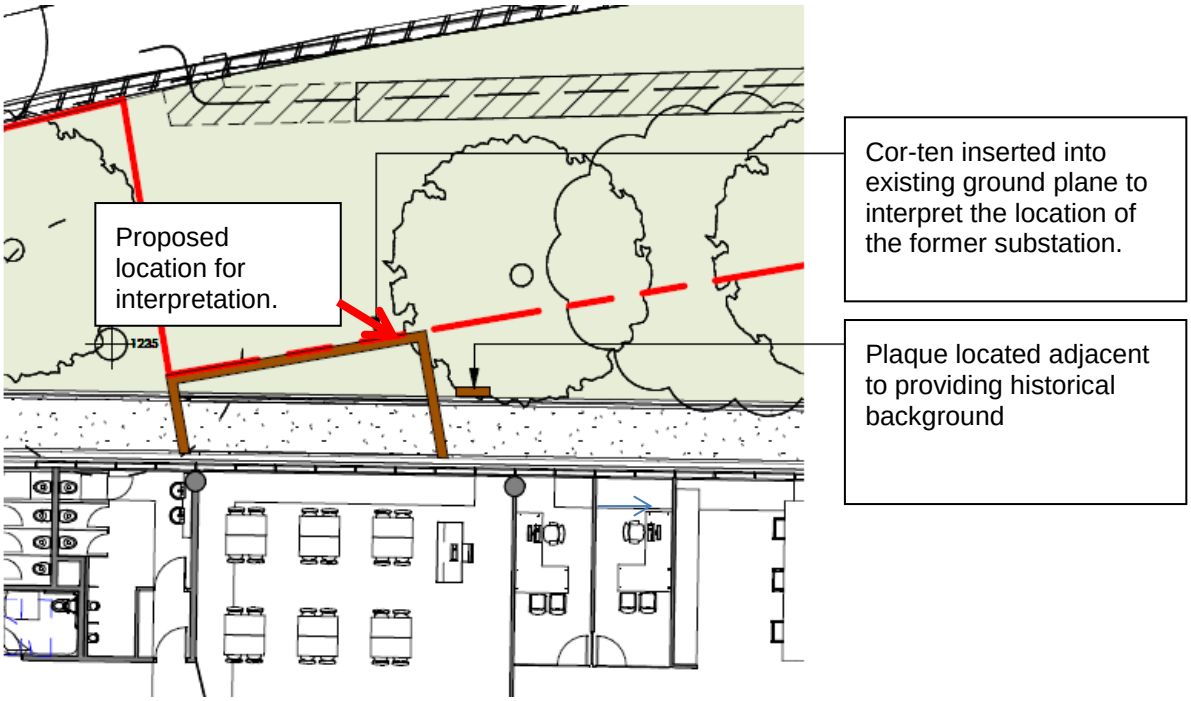
- Reinstatement of the former Museum and one of the laboratories as a single volume space.

4.4.1.2 THE SUBSTATION

The proposed redevelopment works involve demolition of Substation 54. Although the substation is an item of environmental heritage under the University of Sydney S.170 Heritage Register (ID 4726030), and will require the removal of early fabric, it is considered necessary to facilitate the construction of the new FASS building. The HIS prepared by Urbis in April 2016 has assessed the building as making a minor contribution to the historic and aesthetic significance of the conservation area and to the overall campus S170 listing. The HIS acknowledges that the new development forms part of the evolution of the site and the significant ongoing use.

It is therefore proposed to interpret the former substation through the partial demarcation of the former building footprint in the landscape at the location of the present substation building. The substation is located on the north side of the proposed FASS building in proximity to the Parramatta Road frontage. The footprint will be demarcated in cor-ten steel in the ground plane and should incorporate the name of the building and date of construction.

FIGURE 13 – PROPOSED LOCATION OF INTERPRETATION FOR THE SUBSTATION



SOURCE: ARCHITECTUS

It is also proposed to locate a plaque/signage adjacent to the ground inlays as a freestanding element, interpreting the former use of the site and complementing the built form interpretation. The plaque should acknowledge and interpret the significance of the building. Proposed materials are subject to further

detailed design, however should consider the outdoor location, durability and weathering. Core-ten steel or etched aluminium may be appropriate, and would be consistent with the inlays.

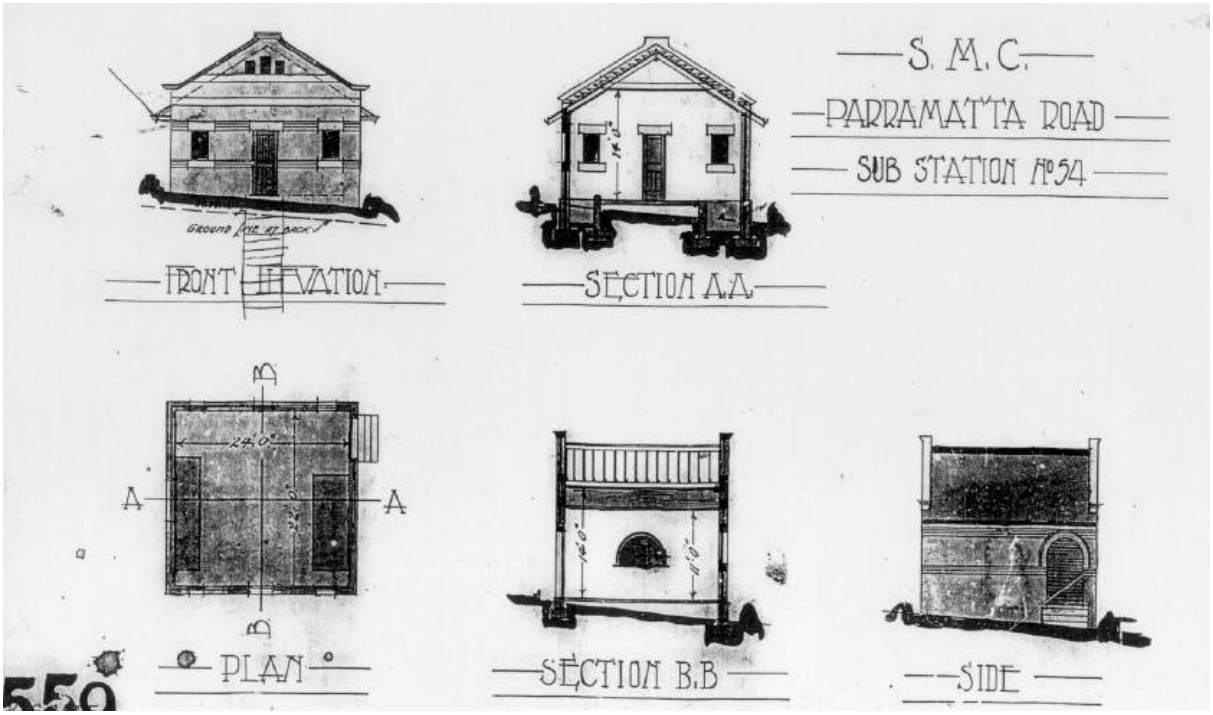
- **Potential content**
- The name of building and year of construction is proposed to be recessed into the metal.
- Suggested plaque content: below:

> *"On this site stood the former Substation No.54. At the start of the 20th century, a new power station was necessitated for the University's science laboratories. Designed by City Architect Robert Hargreaves Broderick and constructed in the Federation Arts and Crafts architectural style, this building demonstrated a change in the technology for power generation and distribution"*

- **Potential images for interpretation panels/signage:**

The following is provided as an indicative example of available images and graphics for use in the interpretation. Use of images is also contingent upon copyright permission and right of reproduction which is subject to confirmation prior to the implementation of the strategy.

FIGURE 14 – SAMPLE GRAPHIC-ORIGINAL PLANS



SOURCE: CITY OF SYDNEY ARCHIVES (SERIES CRS 569 PLAN PO 559)

Examples of inlays are provided below for reference

FIGURE 15 – BUILT FORM INTERPRETATION OF THE STEAMER AND BOATSHED AT PORT ARTHUR

PICTURE 17 – INLAY INTERPRETING THE FORMER BOATSHED

PICTURE 18 – INTERPRETATION OF THE FORMER STEAMER LOCATION

FIGURE 16 – SAMPLE PLAQUE SIGNAGE

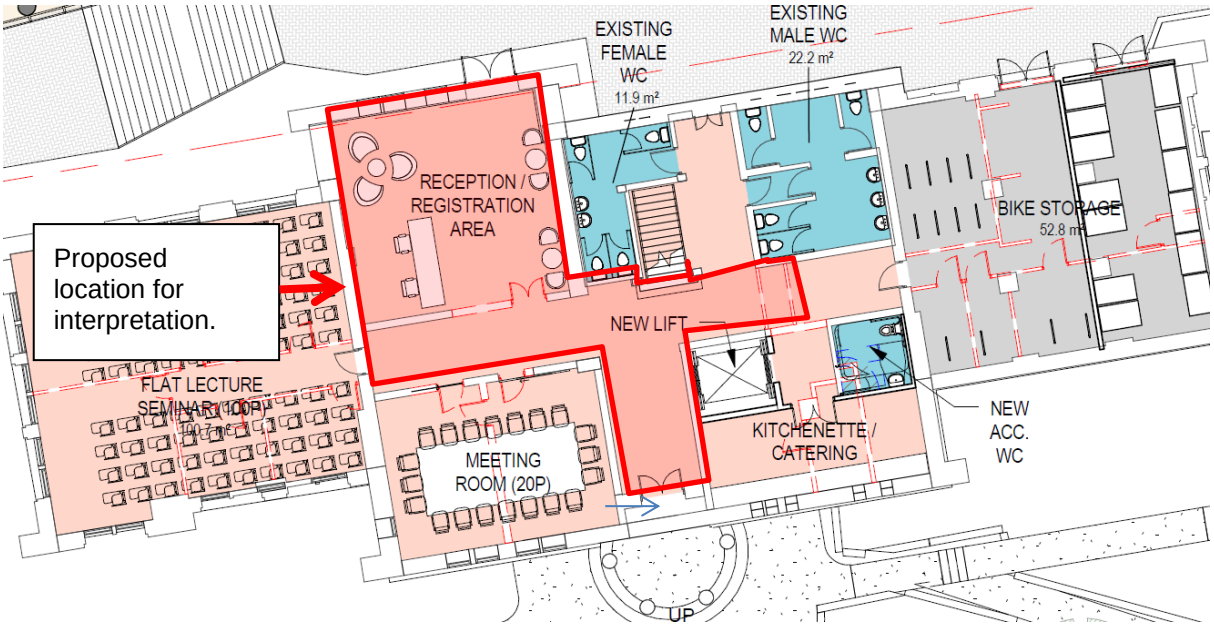
PICTURE 19 – PLAQUE AT PARAMOUNT STUDIOS, SURRY HILLS, INCORPORATING TEXT AND LOGOS.

PICTURE 20 –HERITAGE INTERPRETATION AT THE FORMER CADBURYS WAREHOUSE

4.4.2 INTERPRETATION THROUGH PANELS/ SIGNAGE

It is proposed to include interpretation signage within the RD Watt Building which interprets the historical use of the building as the former Faculty of Agriculture. The interpretation should represent those themes nominated above and should at a minimum present a chronology of the sites development and use, as well as its significant technological and research contribution, overlaid with a variety of graphic images, as presented below.

FIGURE 17 – GROUND FLOOR PLAN SHOWING PROPOSED LOCATION OF INTERPRETATION.



SOURCE: ARCHITECTUS

A fixed location is to be determined, however interpretation should be located on the ground floor within the zone nominated on the floor plan above, being within the ground floor primary circulation area. Final locations are to be confirmed in liaison with the University of Sydney and project architects. The nominated zone is consistent with the aims and objectives of the strategy, by providing interpretation that is readily accessible to all users and occupants of the building. Hence, the best location for any such interpretation is in the primary circulation area.

Interpretation panels in this area should not unreasonably obstruct the flow of the circulation area, and where possible, should include more graphic representations, in preference to large areas of text, which is more suitable to the dynamic flow of the area.

- **Potential content summarised in brief:**

It is acknowledged that the University Archives maintains a website which includes information on the Faculty of Agriculture and the RD Watt Building including a timeline of milestone events and some historical images. The content for any proposed signage should be cognisant of existing website interpretation. Reference should be made to this website: (http://sydney.edu.au/arms/archives/history/senate_exhibitions/students_early1_gallery_agriculture.shtml)

The proposed content should include an overview of the history and use of the building, significant historical identities associated with the building and key research and scientific contributions, as outlined below:

- The initial development of Agriculture in 1910 as part of the Faculty of Science with Professor Robert Dickie Watt as the first Professor of Agriculture in the Department of Agricultural Science.
- Professor RD Watt developed the curriculum, planned facilities, and recruited lecturing staff prior to the commencement of teaching agricultural subjects. In 1911, Watt gave the first Agriculture lecture to the first students James Heinrich, Harry Stephens, Harold Wenholz and Ethelbert (Bert) Southee in 1911.
- The design and development of the School of Agriculture in 1912 by the NSW Government Architects office
- Establishment of the faculty in 1920 and appointment of Professor Watt as the first Dean.
- Noted students such as the first female graduates Lorna Byrne (later Hayter) and Margaret Ramsay (later Brebner) (two of the first four women to enter the Agriculture Science degree in 1917 and graduating in 1921). Although enrolment had commenced slowly, and was hindered by World War I, a large majority of the students were high achievers compared to other larger faculties in the university.

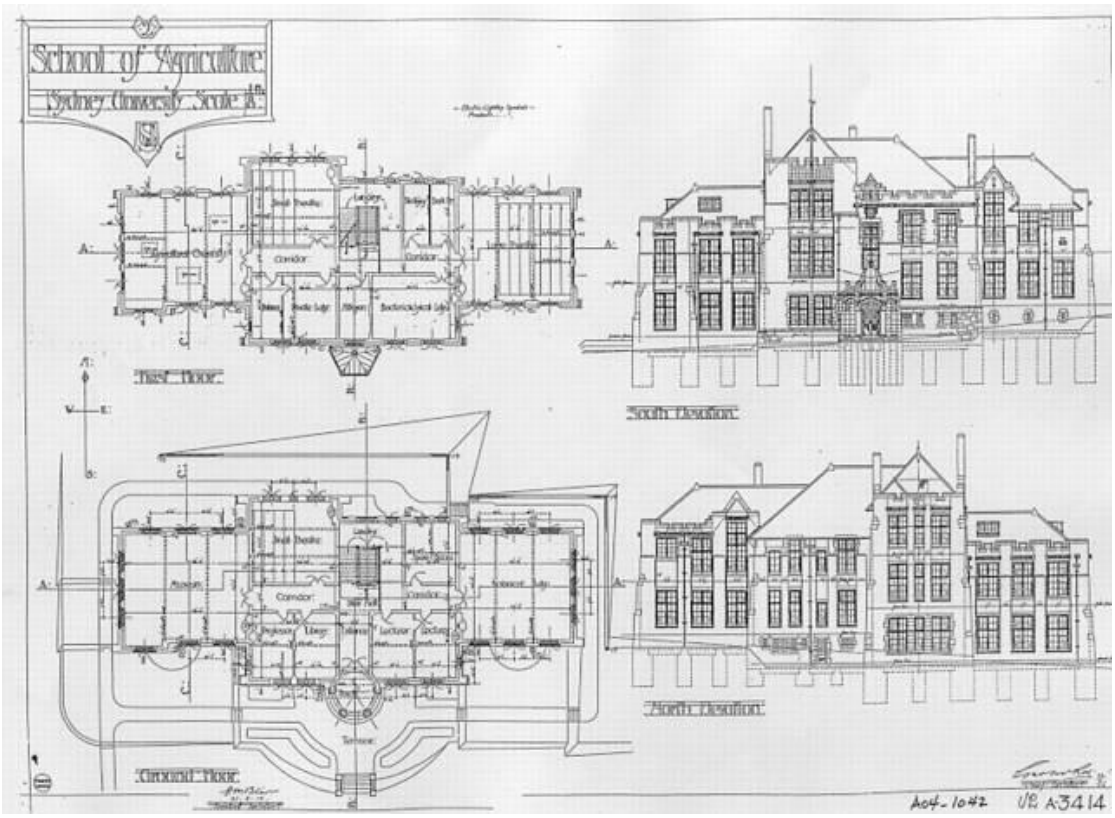
By 1935, 50% of graduates achieved honours degrees, 20% achieved higher degrees, there were seven doctorates awarded and three Rhodes scholars.[15]

- The research by Professor Walter Lawry Waterhouse on cereal rust commenced in 1921. In 1929, he was the first to be awarded a degree of Doctor of Science in Agriculture and he later became a world leader in rust research. Warehouses research was continued by Professor Irvine Armstrong Watson, who pioneered further developments in the research.
- Microbiological research undertaken by Professor JM Vincent between 1939 and 1966 was internationally recognised for its contribution to science. Among his successes was the study of rhizobium inoculants for legumes.
- The Milk control laboratories were first established in the faculty in 1946 by the NSW Milk board, where quality control for milk products was first scientifically tested in NSW.
- Animal husbandry research was conducted with the faculty of Veterinary Science from the c1960 at research stations in Sydney, Camden and Jerilderie.[16]

- **Potential images for interpretation panels/signage:**

The following is provided as an indicative example of available images and graphics for sue in the interpretation. Use of images is also contingent upon copyright permission and right of reproduction which is subject to confirmation prior to the implementation of the strategy.

FIGURE 18 – SAMPLE GRAPHIC-ORIGINAL PLANS



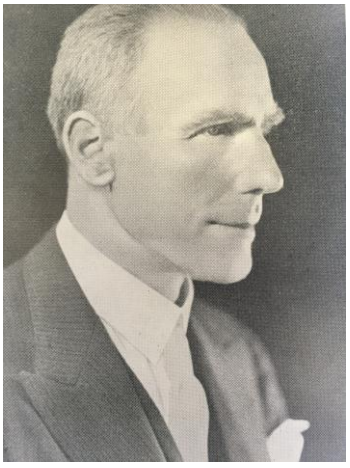
SOURCE: NSW GOVERNMENT ARCHITECTS BRANCH, 1912

[15] Ibid, RD Watt CMP, p23.
[16] Ibid, RD Watt CMP, p26.

FIGURE 19 – SAMPLE GRAPHIC- EXTERNAL FAÇADE OF RD WATT, C1925

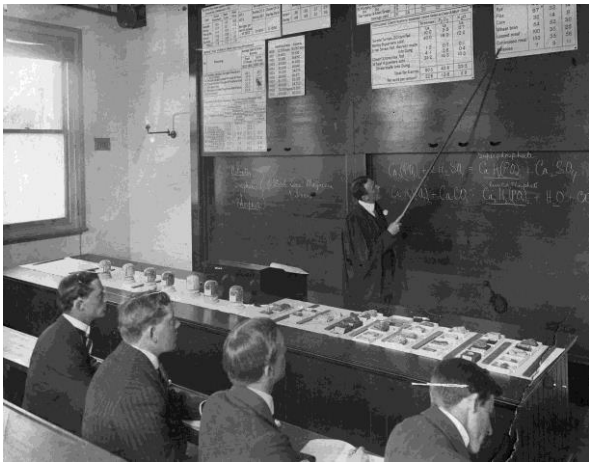
SOURCE: NSW GOVERNMENT ARCHITECTS BRANCH

FIGURE 20 – SAMPLE GRAPHICS FROM THE UNIVERSITY OF SYDNEY ARCHIVES



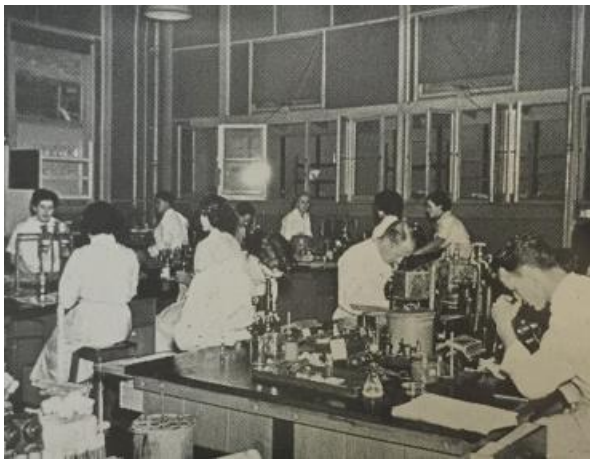
PICTURE 21 – PROFESSOR RD WATT

SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955



PICTURE 22 – PROFESSOR RD WATT GIVING THE FIRST LECTURE THE FIRST STUDENTS JAMES HEINRICH, HARRY STEPHENS, HAROLD WENHOLZ AND ETHELBERT (BERT) SOUTHEE IN 1911,

PHOTO G29_6_001, UNIVERSITY OF SYDNEY ARCHIVES.



PICTURE 23 – MICROBIOLOGY LABORATORY

SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955).

PICTURE 24 – MILK CONTROL LABORATORIES

SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955).

PICTURE 25 – WHEAT PLANTS UNDER TEST FOR RUST RESISTANCE RESEARCH

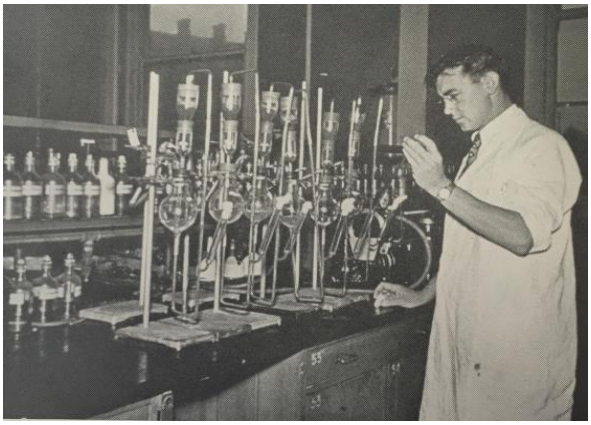
SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955).

PICTURE 26 – STUDENT INSPECTIONS IN THE FIELD

SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955).

PICTURE 27 – GLASSHOUSE FOR PLANT BREEDING INVESTIGATIONS

SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955).



PICTURE 28 – STUDY FOR SOIL NITRIFICATION IN THE LABORATORY.

SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955).

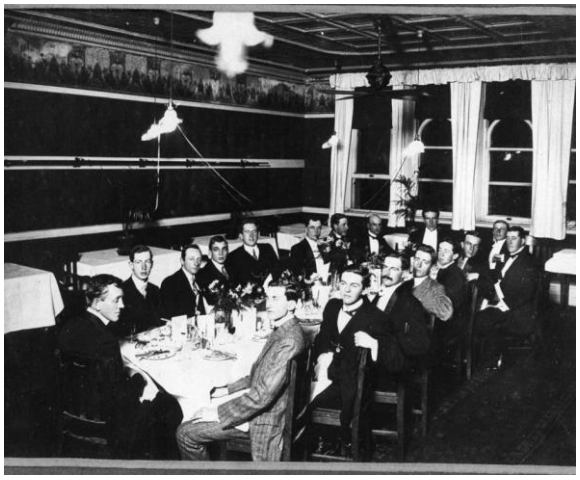
PICTURE 29 – PLANT VIRUS STUDIES IN THE GLASSHOUSE

SOURCE: UNIVERSITY OF SYDNEY, SCHOOL OF AGRICULTURE, REPORT NO.1, DECEMBER 1955).

PICTURE 30 – SCHOOL OF AGRICULTURE, 1926.

PICTURE 31 – THE STUDENTS ON THE 1913 COMMEMORATIVE DAY FLOAT INCLUDE THE FIRST AGRICULTURE UNDERGRADUATE STUDENTS: JAMES HEINRICH, HARRY STEPHENS, HAROLD WENHOLZ AND BERT SOUTHEE,

PHOTO G3_224_0651, UNIVERSITY OF SYDNEY ARCHIVES.

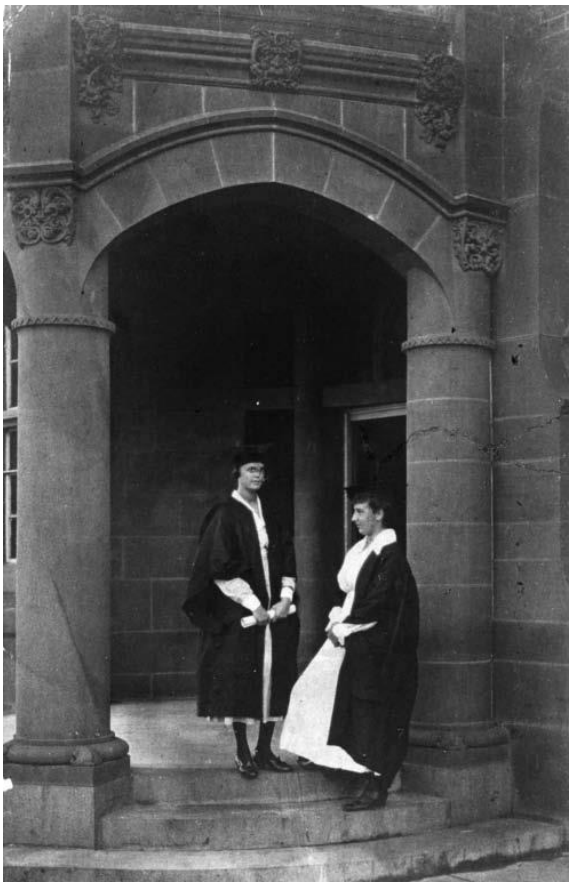


PICTURE 32 – THE SYDNEY UNIVERSITY AGRICULTURAL SOCIETY'S FIRST ANNUAL DINNER AT MISS BISHOP'S CAFE IN 1913,

SOURCE: PHOTO G3_224_1312 , UNIVERSITY OF SYDNEY ARCHIVES.

PICTURE 33 – **HARRY STEPHENS** WAS THE FIRST TO GRADUATE BACHELOR OF SCIENCE IN AGRICULTURE WITH FIRST CLASS HONOURS AND THE UNIVERSITY MEDAL, IN 1914. FOLLOWING THE OUTBREAK OF WAR, HE ENLISTED IN THE AUSTRALIAN ARMY AND ROSE TO THE RANK OF CAPTAIN. HE WAS KILLED IN YPRES ON 18 NOVEMBER 1917

SOURCE: *PHOTO, 'HERMES" JUNE 1918, UNIVERSITY OF SYDNEY ARCHIVES*



PICTURE 34 – LORNA BYRNE (LATER HAYTER) AND MARGARET RAMSAY (LATER BREBNER) WERE TWO OF THE FIRST FOUR WOMEN TO ENTER THE AGRICULTURE SCIENCE DEGREE IN 1917. THEY GRADUATED IN 1921 (THE OTHER TWO HAD DROPPED OUT). IN THIS PHOTO TAKEN IN 1918 THEY ARE IN ACADEMIC DRESS,

SOURCE: G3_224_1338, UNIVERSITY ARCHIVES.

Materials for signage/panels are to be designed in the later stages in conjunction with the architects and the University of Sydney. Contemporary interpretation methods and materials are encouraged. Materials for signage may include brass, stainless steel, anodised aluminium, other sheet metals or glass.

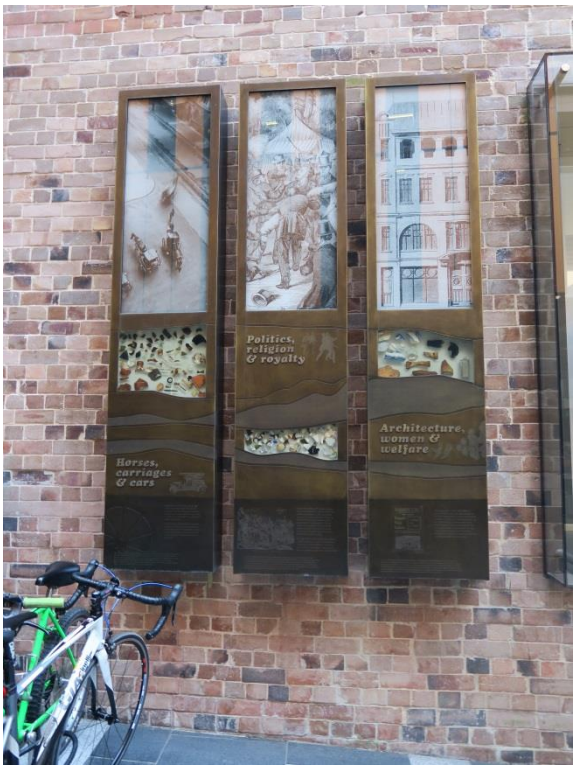
Materiality should take into consideration heritage fabric and the overarching design and aesthetic features of internal works. Signage/panels fixed to original fabric should be attached where it can be demonstrated to be reversible and not damage any significant finishes. At this stage, a suggestion could be to utilise adhesive film, fixed to glazed panels over the existing painted masonry walls. The existing paint finishes in the hall are not original and the proposed interpretation will not obscure any significant fabric in these locations.

Examples of relevant Interpretation panels/signage are provided below for reference.

FIGURE 21 – SAMPLE INTERPRETATION SIGNAGE

PICTURE 35 – SIGNAGE AT THE FORMER PARAMOUNT STUDIOS, BRISBANE STREET SURRY HILLS

PICTURE 36 – PLAQUE AT CUMBERLAND PLACE AND STEPS.



PICTURE 37 – SAMPLE OF SIGNAGE INCORPORATING ARCHAEOLOGICAL

PICTURE 38 – SIGNAGE AT KAMAY BOTANY BAY NATIONAL PARK (KURNELL)

5 Conclusion and Recommendations

This Heritage Interpretation Strategy is required in conjunction with the University of Sydney Campus Program (CIP) 2014-2020 (SSD-6123) Conditions of Consent (Condition B14). Its purpose is to ensure that the history of the subject site is properly documented, interpreted and displayed, such that it can be appreciated by future visitors. This strategy incorporates interpretation within built form and media to communicate the following identified significant themes:

- Beginnings of Agricultural Education; and
- Science and Technology.

The strategy is intended to provide for a broader audience, inclusive of local and international users and visitors. As such, interpretation is proposed as part of the landscaping of the site and in central circulation spaces, in publically accessible areas.

Following approval, it is intended that Urbis will continue to work with the project team to further develop a detailed Interpretation brief to finalise recommended interpretation media.

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[Note: Some government departments have changed their names over time and the above publications state the name at the time of publication.]

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