

**THE UNIVERSITY OF SYDNEY
PROPOSED MUSEUM SITE
LANDSCAPE ASSESSMENT**

October 2016



CAB CONSULTING PTY LTD.

ABN: 48076670990

Heritage Urban Design

Landscape and Architecture

CRAIG BURTON AAIA FAILA AAA

BArch.MA.DipLD.DipEnv.S.Hort.Cert

PO Box 277

CHURCH POINT N.S.W.2105

Tel/Fax: 02-99971085 Scot. Island

02-99971050 Church Pt.

mobile : 0428424414

e-mail: craigburton@cabconsulting.com.au

web site: www.cabconsulting.com.au

CONTENTS

1.0 INTRODUCTION

- 1.1 Background**
- 1.2 Study Area**
- 1.3 Scope and Objectives**
- 1.4 Methodology**

2.0 NATURAL ENVIRONMENT

- 2.1 Geology**
- 2.2 Landform**
- 2.3 Drainage and Water Form**
- 2.4 Soils**
- 2.5 Vegetation**

3.0 CULTURAL ENVIRONMENT

- 3.1 History**

4.0 ANALYSIS

- 4.1 Landscape Character**
- 4.2 Visual and Spatial Structure**

5.0 SIGNIFICANCE

6.0 RECOMMENDATIONS

7.0 SELECT BIBLIOGRAPHY

1.0 INTRODUCTION

1.1 Background

This report arises from a request by the NSW Heritage Division to prepare a Landscape Assessment of the land to the east of the Main Quadrangle complex forming part of the grounds of the University of Sydney and its landscape setting. This is in addition to all previous studies. Reference was made to the

1.2 Study Area

The study area is the

1.3 Scope and Objectives

The purpose of the study is as follows ;

To identify the landscape characteristics, areas and items of cultural landscape significance.

To provide a philosophical basis for future work.

To inform the preparation of a architectural design proposal which is integrated with a landscape master plan for the whole of the study area.

1.4 Methodology

The methodology that was adopted was based on an understanding of the landscape of the study area and its setting as a cultural expression derived from existing documentary evidence and a review of the physical evidence. Time constraints have limited the extent of any detailed documentary research.

The methodology includes the following;

- * Analysis of existing documentary and physical evidence
- * Assessment of the study area as a cultural landscape and the identification of significant areas and items.
- * Analysis of the physical qualities of the place with an emphasis on identifying the landscape character of the place.

2.0 NATURAL ENVIRONMENT

2.1 Geology

The Study area is located within the geological formation known as Ashfield Shale which is the most extensive sedimentary layer of the Wianamatta Group. Its dominant shaley composition has produced moderately fertile soil and a low undulating topography.

2.2 Landform

The study area is a remnant slope of a former undulating topography with an easterly aspect and has been adapted for agriculture, pedestrian and vehicular

access routes together with terracing to create a sporting facility associated with the physical development of the University of Sydney.

2.3 Drainage and Water Form

The study area formed part of the catchment of a tributary creek draining to Blackwattle Swamp Creek and ultimately to Blackwattle Bay (now reclaimed). The natural line of the creek was intercepted by the formation of Parramatta Road and the development of the Glebe, particularly Bishopgate and St Phillip's estates. A lake formed within a depression at the junction of Parramatta Road and the Cooks River Road (later Newtown Road and now City Road). The resulting pond was called the Horse Pond and remains, in a different form as Lake Northam within Victoria Park.

2.4 Soils

The soils for the study area are classified as belonging to the Residual Soil Landscape Group and have been identified as Blacktown. (Soil Landscapes Sydney 1:100,000 Sheet). The soil characteristics comprise shallow to moderately deep Red and Brown Podsollic soils on the well drained slopes but with moderately reactive highly plastic subsoil with low soil fertility and generally poor soil drainage. These soils are generally capable of sustaining regular cultivation and grazing.

2.5 Vegetation

The study area is in an altered state in terms of its indigenous vegetation structure and floristic composition. Early clearing of timber has favoured grassland since the late 18th century when the first Colonial occupiers referred to this area as part of the Kangaroo Grounds where hunting kangaroo on the cleared country was established as a form of sport by the Military Corps. The vegetation structure may have been that of an Open Woodland to a Forest depending on local variation in soil, aspect and moisture. Benson and Powell have identified the area as part of a former Turpentine – Ironbark Forest however patches of Blackbutt (*Eucalyptus pilularis*) and Blue Gum (*Eucalyptus saligna*) may have also been present. A dense understory of shrubs may have been also present, particularly along water courses with more moist pockets supporting visually distinctive *Melaleuca* species and *Callicoma* species (Blackwattle).

3.0 CULTURAL ENVIRONMENT

3.1 History

The study area has undergone eight main periods in its evolution from an environment occupied by Aboriginal people to the present institutional parkland landscape setting.

The periods of historical evolution are considered to be;

1. Aboriginal Occupation.
2. Land Grants and Rural Leases

3. Establishment of the University of Sydney 1850 - 1862
4. Development of the Approach Reserve 1865 – 1872
5. Development of the Approach Reserve 1872 – 1889
6. Development of the Approach Reserve 1890 – 1911
7. Competing Visions and Land Swap 1912 - 1925
8. Expanding Campus 1926 – 2016

Periods 4 to 8 are represented in the diagrams at Figures 23 and 24.
The periods are briefly summarised as follows;

1. Aboriginal Occupation

The study area is part of the territory of the Darug Coastal Nation and the land is within the freshwater catchment of Sydney Harbour. The University Grounds form part of the ridgeline separating the Sydney Harbour catchment and the Botany Bay catchment. Its former creeks drained towards the north into Wanagal country whilst the ridgeline to the east was connected to Cadigal country.

2. Land Grants and Rural Leases

In 1789, after Governor Arthur Phillip had established a colonial settlement at Sydney Cove, received instructions requiring him to provide an allotment of land for the support of a clergyman and a schoolmaster for the new settlement. In 1790 he selected 1000 acres of land to the south and west of Blackwattle Creek for these purposes. It comprised 400 acres for the Church to the north, 400 acres for the Crown in the middle and 200 acres to the south, for a schoolmaster. The north became The Glebe and the middle and south the University where the clay soils were better for farming compared to the sandstone soils of the settlement at Sydney Cove. The lands supported a forest vegetation formation which was eventually cleared for farming when 30 acres was leased to Lieutenant – Governor Grose for fourteen years. Adjacent land was granted to Major Foveaux in 1794 and Thomas Laycock in 1797. When these leases lapsed a block of 500 acres was granted in 1803 by Governor King to the Orphan Institution however the Orphan Institution later relinquished the grant for other land in western Sydney and Bathurst. This land continued to be called Grose Farm despite Grose relinquishing the land much earlier. The Glebe lands eventually came under the control of the Church and School Corporation which subdivided the land in 1828 and in so doing established Glebe Point Road coming off the Parramatta Road. The Glebe lands and that of Grose Farm lay outside of the Sydney City boundary which aligned itself with the Cooks River Road (now City Road) and the course of the Blackwattle Swamp Creek. A Toll house was established on the Grose Farm side of Parramatta Road and to the west with the junction with Glebe Point Road.

The dammed water at the junction of the Cooks River Road and Parramatta Road within Grose Farm was known as the Horse Pond as livestock would use

the pond accessed from near the Toll House as well as livestock agisted within the Grose Farm lands.

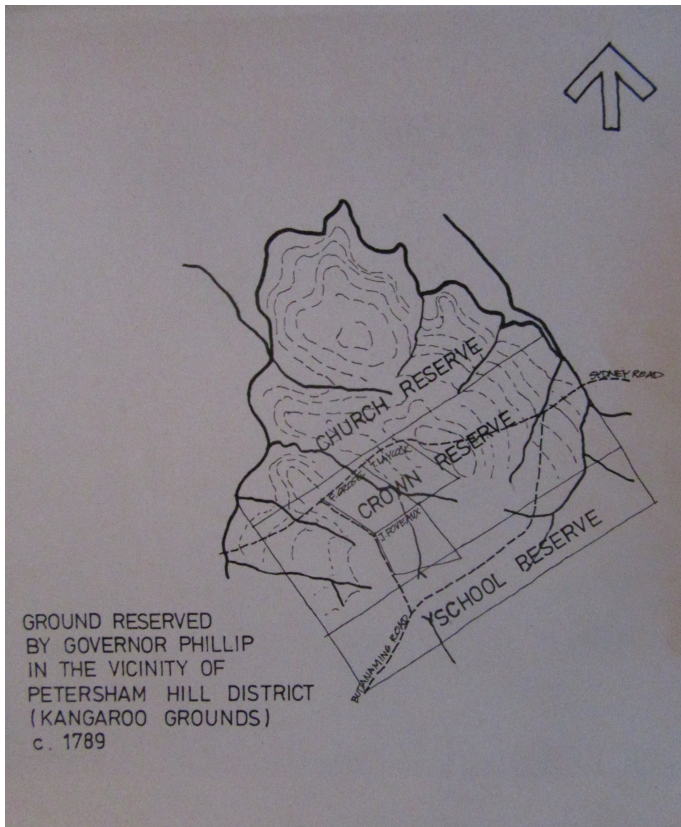


Figure 1. Governor Phillip's selected allotments.



Figure 2. View East from the University site c.1850 including the Horse Pond, the Toll house and remnant indigenous forest on the Glebe.

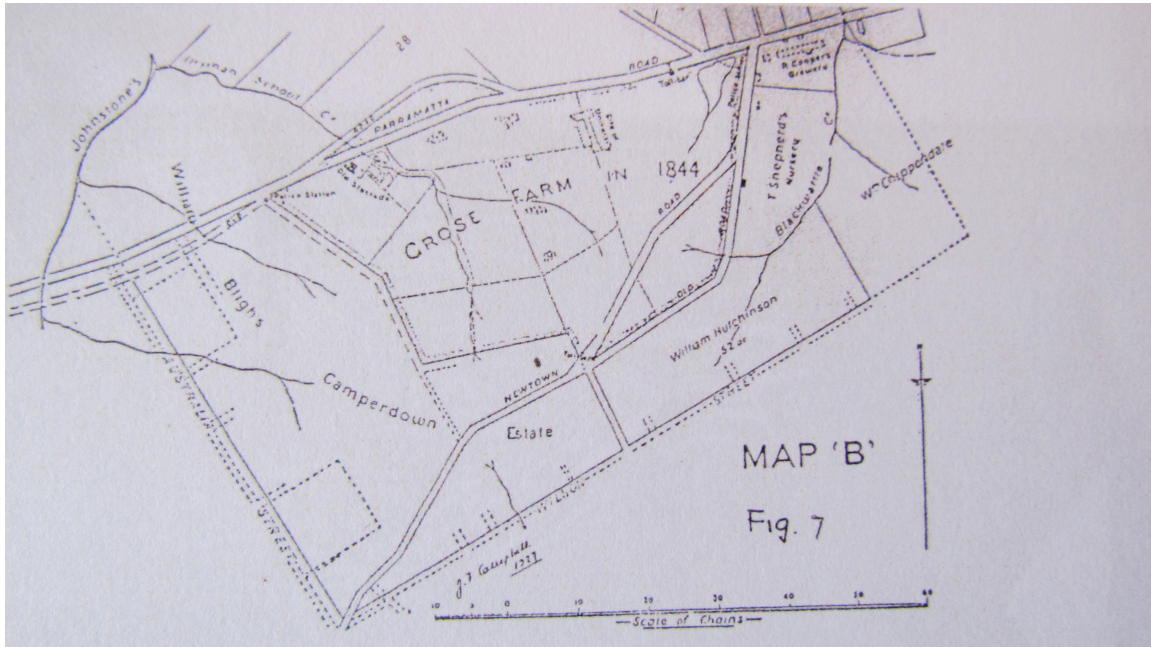


Figure 3. Grose Farm 1844

3. Establishment of the University of Sydney 1850 - 1862

The University of Sydney was founded following the University of Sydney Act passed in September 1850 and inaugurated on 11 October 1852 sharing premises in what is now Sydney Grammar School.

The Government granted land in Grose Farm (126 acres) in 1855 as the main campus for the University.

The first buildings were designed by the ex Colonial Architect Edmund Blacket and were sited in a conspicuous location along one of the ridge lines of the Petersham Hills and relatively close to the Parramatta Road alignment.

The sandstone buildings forming the eastern section of the Quadrangle and Great Tower were completed by 1862. The Victorian Academic Gothic buildings dominated the cleared ridgeline of the hill overlooking the Horse Pond at the bottom of the grassed slope.

By 1858 a plantation of mixed trees had been made along the northern boundary of the University Grounds and adjacent to the then alignment of Parramatta Road. The plantation was defined by hardwood paling fences. It ran from the western side of the Toll House and to the west terminating just to the west of the original Medical School building located to the north west of the first Quadrangle buildings.

An 1857 plan of the intended Quadrangle complex clearly shows the intention to create a main access road across the Horse Pond to connect to the Cook's

River Road and a secondary access off Parramatta Road together with tree plantings.

By 1862 plantation of four rows of Moreton Bay Figs (*Ficus macrophylla*) had been planted around a central fenced avenue space and aligned as a formal axis centred on the Tower on the eastern façade of the intended Quadrangle building. The central avenue spanned the Horse Pond with a timber bridge structure and continued along with the formal tree row plants to meet the Newtown Road (formerly Cooks River Road).

The space between the Quadrangle building, Newtown road and Parramatta Road was fenced with a timber paling fence and the land understood to be used for the purpose of a park and gardens associated the University. The formed avenue and its defining plantations were also fenced, first with a post and rail fence then later as a paling fence which also ran around the Quadrangle complex to enclose the first buildings on the ridge. Further plantations were made to the south of the Quadrangle building

In 1865 an 8 acre area of land was added to the University grounds for use as a formal entrance. This was referred to as the Approach Reserve.



Figure 4. 1857 Plan of University buildings and Grose Farm (copy of Blacket drawing)

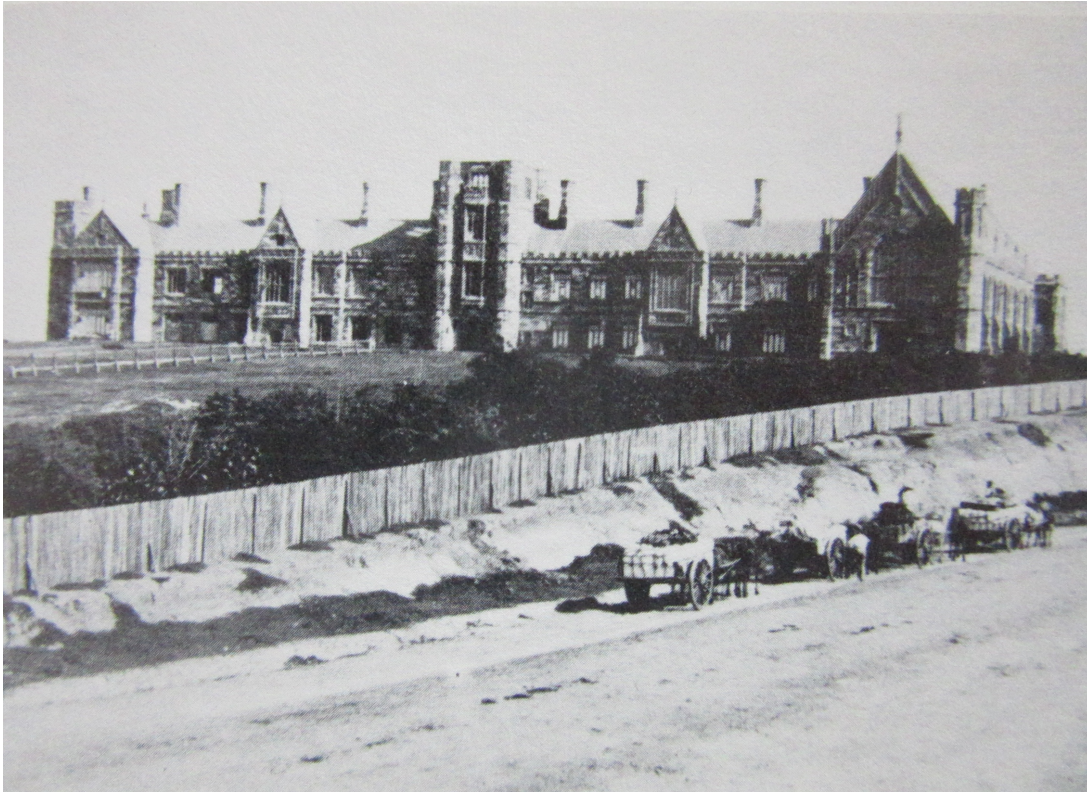


Figure 5. 1858 View from Parramatta Road



Figure 6. 1862 View from Parramatta Road (Professor J. Smith image)

4. Development of the Approach Reserve (1865 – 1872)

A pedestrian gate and a curving path had been provided for access from Parramatta Road at the termination of the earlier 1850s plantation and was located to the west of the Toll house and opposite Derwent Street junction with Parramatta Road. The path linked to a more formal path composition across the grass terraces established as a major forecourt to the Quadrangle building. Each path was aligned to existing entrance doors in the façade of the Quadrangle building as symmetrical composition.

Derwent Street was formed as part of the Bishopthorpe subdivision of the Archdeaconry land to the west of Glebe Point Road in 1856.

The Glebe was predominantly a working class suburb however many of the academic staff of the university were housed in Glebe. Edmund Blacket and James Barnet both lived in Glebe, particularly to be close to the construction sites within the university.

With the establishment of the Approach Reserve in 1865 the plantation along the Parramatta Road boundary was extended past the Toll house and down to the edge of the Horse Pond which was now also referred to as the University Pond. Planting was also carried out along the Newtown Road boundary from the corner of Parramatta Road to the entry point of the formal avenue which became known as the University Avenue and later University Way. The tree species at the corners of the fenced plantations next to the pond appear to be Willow (*Salix* species).

In 1870 Victoria Park was proclaimed as a public park with the University Approach Reserve running through it. The Park's design came under the care of the Sydney Botanic Gardens and its then Director Charles Moore.



Figure 7. 1869 View from Parramatta Road



Figure 8. 1870 View along Approach Avenue



Figure 9. 1870s View junction of Parramatta Road and Newtown Road

5. Development of the Approach Reserve (1872 – 1889)

At some point during this period the formal entrance plantation of Moreton Bay Figs were removed except for the last line adjacent to the University Pond and the remainder of the avenue from the bridge to Newtown Road. The removed trees were replaced by Stone Pines (*Pinus pinea*). Also the Parramatta Road edge was planted with rows of Moreton Bay Fig (*Ficus macrophylla*). Plants were sent from the Sydney Botanic Gardens in May 1872, July 1881 and August 1881.

The main entry point off Newtown Road had a sandstone Messenger's Lodge sited on the south side of the Avenue entrance and adjacent to new sandstone piers and gates.

The study area remained an open grassed space defined to the north and south by tree plantations and with the addition of a more formalised road access intersecting with the University Avenue whilst the footpath alignment was kept. This new vehicular entrance off Parramatta Road also had a set of sandstone piers and gates established, most probably to the design of the then Government Architect James Barnet c.1880s. Integrated with the new gateways was a dwarf sandstone wall and an iron palisade fence which enclosed both the boundary of the park and the university grounds.



Figure 10.1880 – 90 View of University entrance avenue across Victoria Park



Figure 11. Main Entry University Avenue Newton Road



Figure 12. View along Parramatta Road



Figure 13. Parramatta Road Gates c.1890

6. Development of the Approach Reserve (1890 – 1911)

In this period the inside row of Stone Pine trees were removed and replaced with linear garden beds of mass planting of a variety of shrubs only along the distance between University Place and the Pond with two original Moreton Bay Figs retained next to the bridge as well as those beyond the bridge over the remodelled pond to create a more Picturesque setting.

The pathway from the Parramatta Road gates was fenced and planted with a mixture of shrub species.

In 1906 the creation of the Broadway impacted on Victoria Park through the loss of fig trees.

In 1911 the Women's Tennis Courts were constructed in the centre of the previously grassed sloping land of the study area as three lawn tennis courts by cutting and filling the slope. A fence was erected to enclose the courts. It is unknown if there were any paths to and from the courts in this period however the northern boundary plantation of mixed species appears to have been continually added to with mostly Pines amongst other species.

In 1911 management of Victoria Park was given to Sydney City Council.



Figure 14. View from Victoria Park c.1890

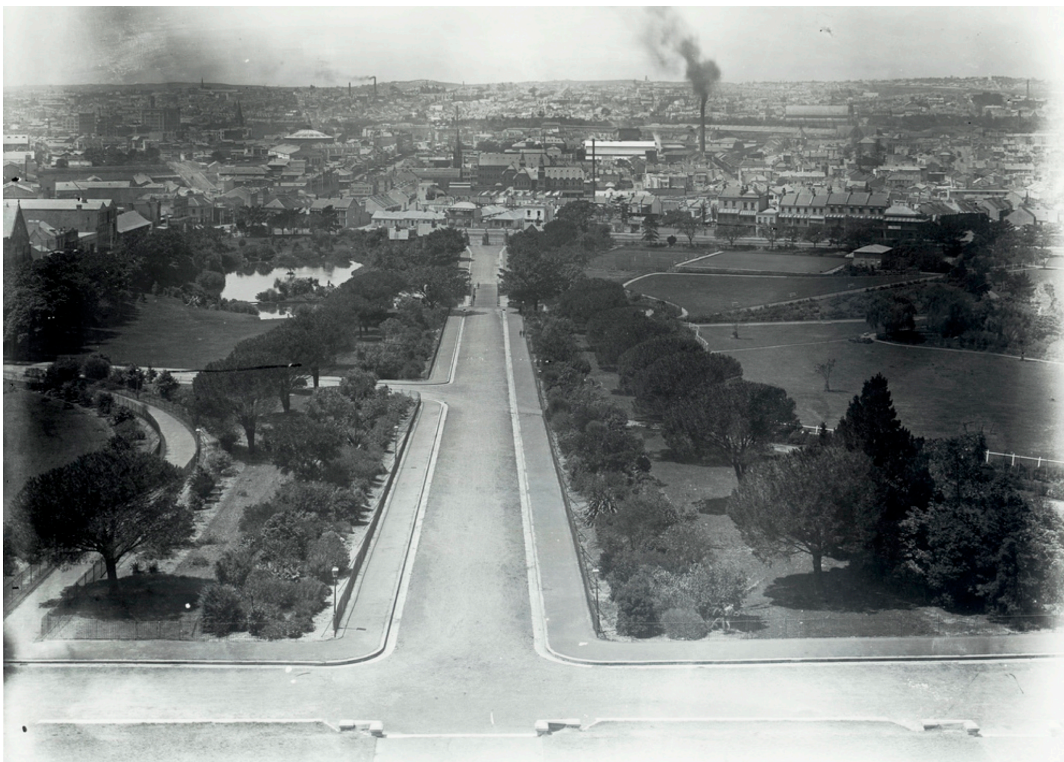


Figure 15. View from Quadrangle Clock Tower c. 1890

7. Competing Visions and Land Swap (1912 – 1925)

In this period visions of the future planning of the campus were developed following a 1910 plan for the campus prepared by the Government Architect Walter Liberty Vernon. In 1913 George McRae prepared a new campus plan. In 1915 Walter Burley Griffin prepared a master plan. A further plan was prepared in 1917 by the Government Architects Office and in 1920 a plan was presented by Professor Wilkinson. All of the plans with the exception of Wilkinson's proposed new buildings within the study area.

At some point in this period the plantations forming the University Avenue were changed again. Photographic evidence suggests that the pines were replaced by Port Jackson Figs (*Ficus rubiginosa*) and Small Leaved Fig (*Ficus obliqua*) about 1916 with a single row either side of the central avenue. A row of trees were also planted in the centre of the grass terraces comprising University Place together with a pair of Canary Island Palms (*Phoenix canariensis*) framing the entrance to the central tower of the Quadrangle building.

In 1924 part of the Approach Reserve (7.75 acres) was transferred to the City of Sydney in exchange for 9 acres of Victoria Park to allow for the expansion of the university onto the then existing extent of Victoria Park. Both the Griffin and the Wilkinson plans had taken the liberty of extending the boundary.

In 1925 road widening took place along Parramatta Road which resulted in a loss of trees along the northern boundary.



Figure 16. View along Parramatta Road c. 1920s

8. Expanding Campus (1926 – 2016)

In the 1920s a Sports Union tennis courts pavilion is evidenced through photographic images on the northern side addressing the central court and sitting within the edge of the plantation to the north. A structure was depicted on the 1919 Campus Plan by Professor Wilkinson which may indicate that the structure may have been built as a clubhouse at a similar time as the construction of the terraced tennis courts.

As a result of the land swap the Parramatta Gateway became the principal entry point for vehicles particularly and it was not until 1939 - 40 that new gates and gate lodge were constructed to the designs of Professor Wilkinson.

In 1930 the iron palisade fence surrounding Victoria Park was removed and a new fence constructed between the Park and the University.

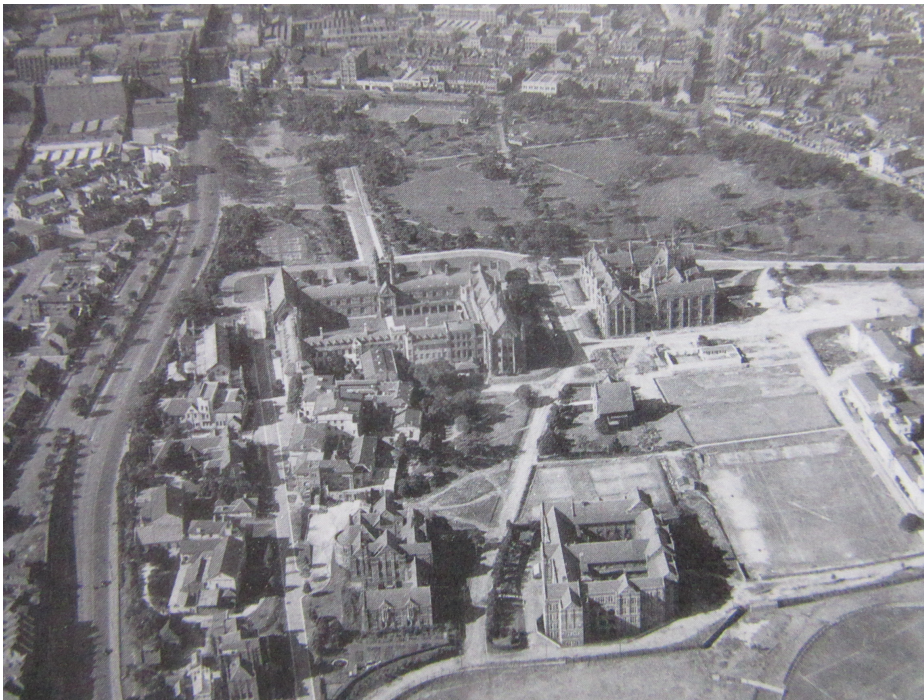


Figure 17. Aerial view c.1930

The lawn Tennis courts appear to have been reconstructed into concrete terraces In this period.



Figure 18. 1937 View



Figure 19. Parramatta Road Gates and Lodge 1940

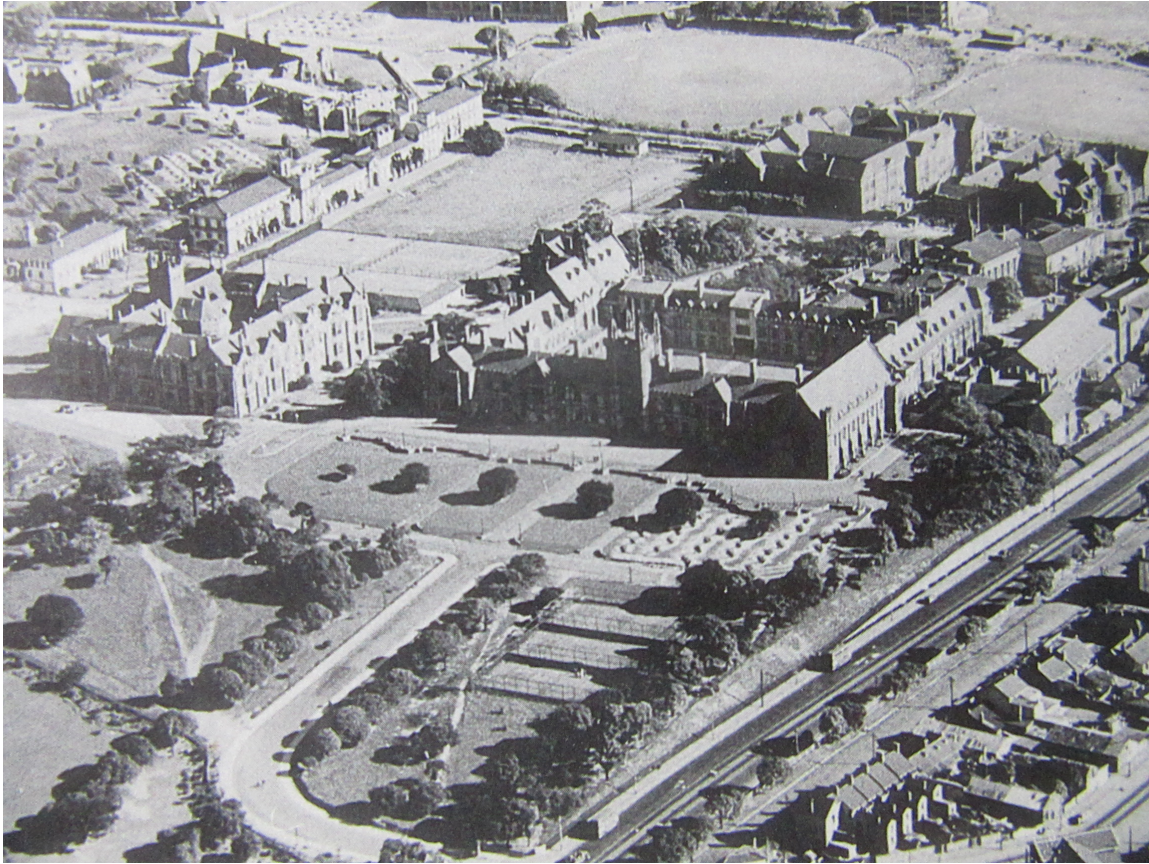


Figure 20. 1943 Aerial view of the Study area

The new entrance road from Parramatta Road had a wider carriageway than previous alignments and included footpaths on both sides of the road with a stone kerb. This reduced the curving pedestrian path to a track through the grass with some remnant planting derived from the earlier gardens and now of a more informal nature. Two other informal tracks were located to the north to link to the tennis courts and to the northern end of University Place.

These were rationalised into one concrete path in the early 1950s with a small stepped terrace and marked by a sculpture created by Tom Bass entitled “the student”.

By 1953 the row of trees in the middle of University Place had been removed as had the Canary Island Palms at an earlier date.

In the 1960s further plantings were added to the northern boundary plantation whilst the plantings on the old park boundary were removed for the construction of the Fisher Library in 1962. This became the most eastern sited building on the main campus and established a precedent for siting buildings to the east of the Quadrangle complex.

The building sited to the east of Eastern Avenue reflect the Draft Maze Report on the Development of the University Site in May 1961.



Figure 21. Tom Bass Sculpture at new entrance and northern path 1953

In the late twentieth century further plantings have been made both to the east, west and to the northern plantation. These include mostly Australian plants such as Eucalyptus species and Tristaniopsis species to further enclose the space occupied by the courts.

At some point the lawn tennis courts were converted into a stepped concrete slab facility and more recently plantings have been made around the concrete skirt of the terraced courts.

In 1990 a Conservation Management Plan was prepared by Helen Proudfoot for Victoria Park and in March 1992 a Draft Plan of Management of Victoria Park for South Sydney Council was prepared by Environmental Partnership Pty Ltd. This plan proposed the reconstruction of the University Avenue through the park, conservation of the remaining Gatehouse and extending Lake Northam (formerly the University Pond).

Following this report South Sydney Council reconstructed the Approach Avenue from City Road and including a new bridge over the lake. In 2002 the University completed work to reinstate the vista to the clock tower through its grounds. Also in 2002 a University of Sydney Grounds Conservation Plan was prepared. In 2007 the original City Road gates were returned to the City Road entrance to



Figure 22. Early 1960s Aerial View

create a direct pedestrian access line along the former alignment of the Approach avenue.

In 2016 an updated University of Sydney Grounds Conservation Management Plan was prepared. This plan recognised the significance of the tree vegetation and the nomination of a select number of individual trees as of exceptional significance (9 trees out of 71 trees existing as indicated on Figs 4.2 and 4.3 in the Grounds CMP.). The Landscape Character Area for the study area was assessed as exceptional without reference to the Tennis courts and built amenity nor the space formed by the mature and semi mature trees in which the tennis court facility was sited in the early twentieth century.

A number of trees have been identified as significant and listed on The City of Sydney Register of Significant Trees. These include trees within the larger Precinct 17 : Camperdown and specifically within the identified sub precincts Parramatta Road frontage , Group B Macleay Museum to Baxter's Lodge and University Avenue. The Register records the Fig species as *Ficus rubiginosa* f. *rubiginosa* and *Ficus rubiginosa* f. *glabrescens*. This identification is different to that contained in the Arboricultural Report of 2 September 2016 prepared by ArborSafe Pty Ltd. Where the University Avenue trees are listed as *Ficus rubiginosa* and *Ficus obliqua* .

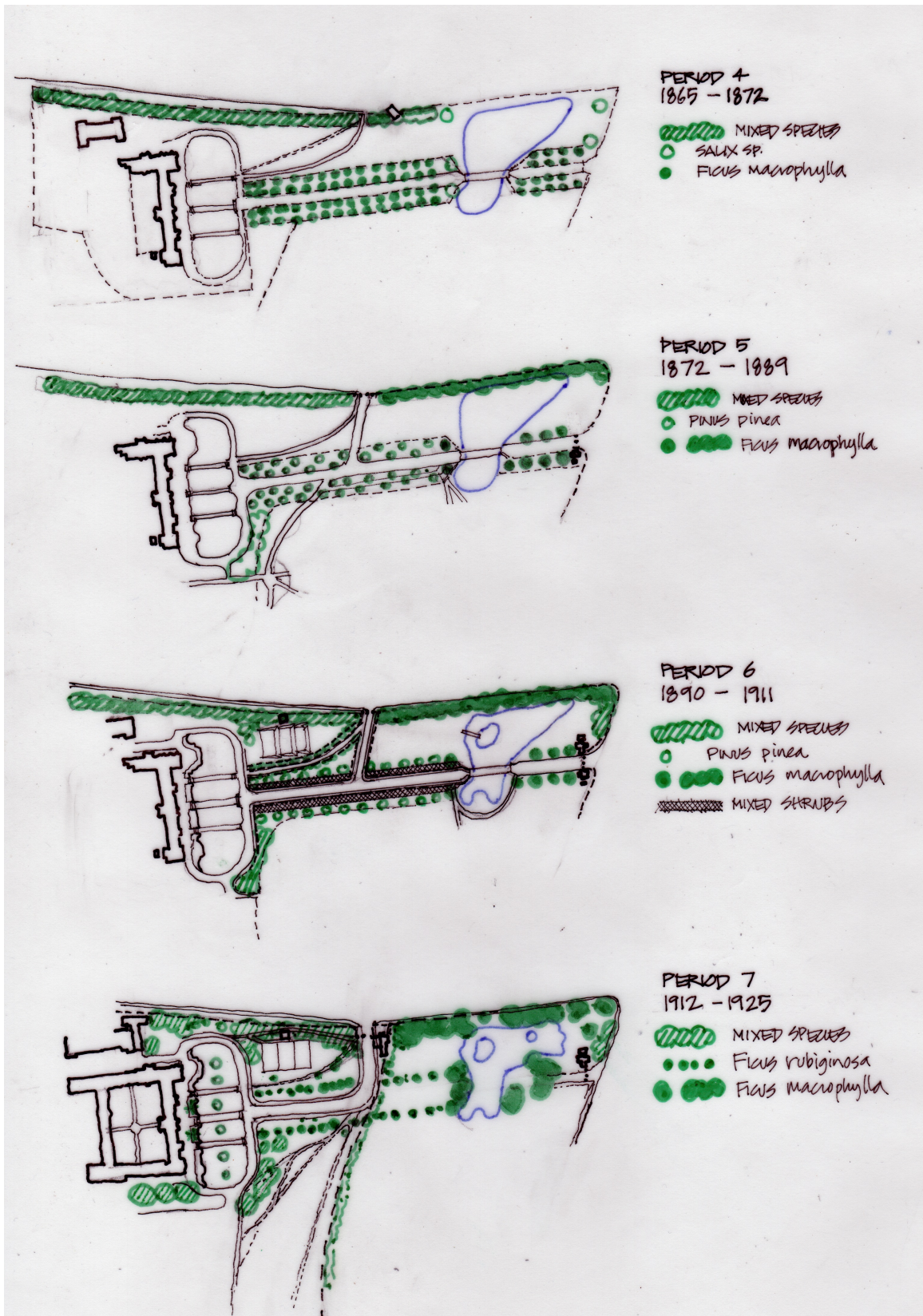


Figure 23. Evolution of the Approach Reserve ; Periods 4 - 7

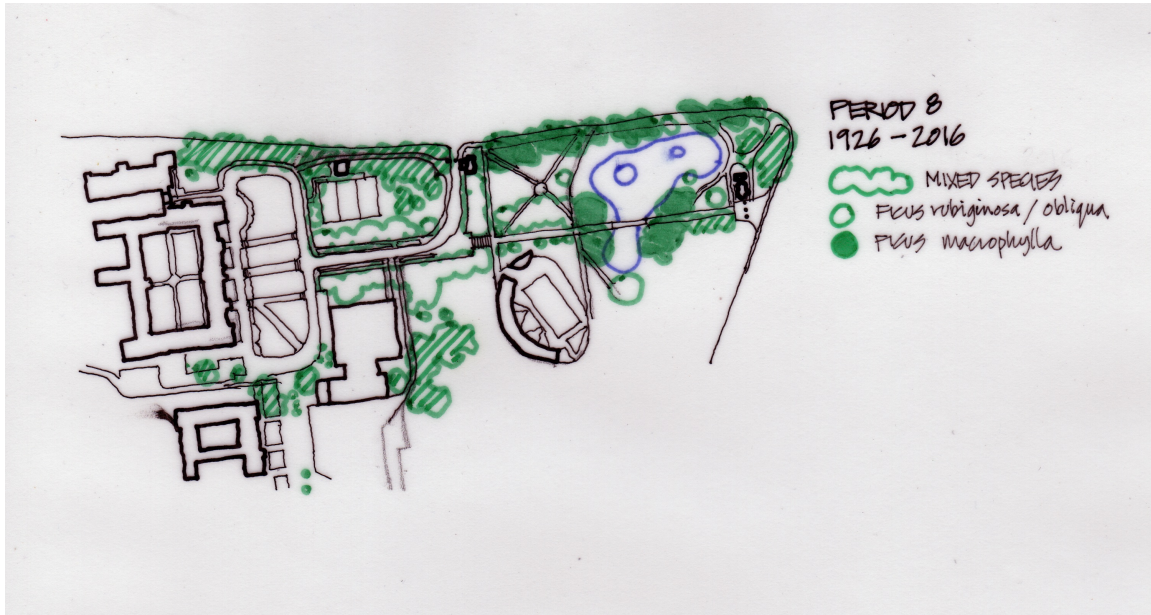


Figure 24. Period 8

The various Master Plans for the University Campus have recommended different proposals for the study area. Walter Burley Griffin's Plan of 1915 proposed two buildings with a central open space where the tennis courts are located and a much larger structure located within Victoria Park.

Leslie Wilkinson's plan of 1920 indicated the conservation of the tennis court facility and with the periphery planted on all sides with trees.

The W.H.Maze plan of 1961 indicates a building proposed in the study area and sited more to the east than the alignment with the Fisher Library (built 1958 – 1962).

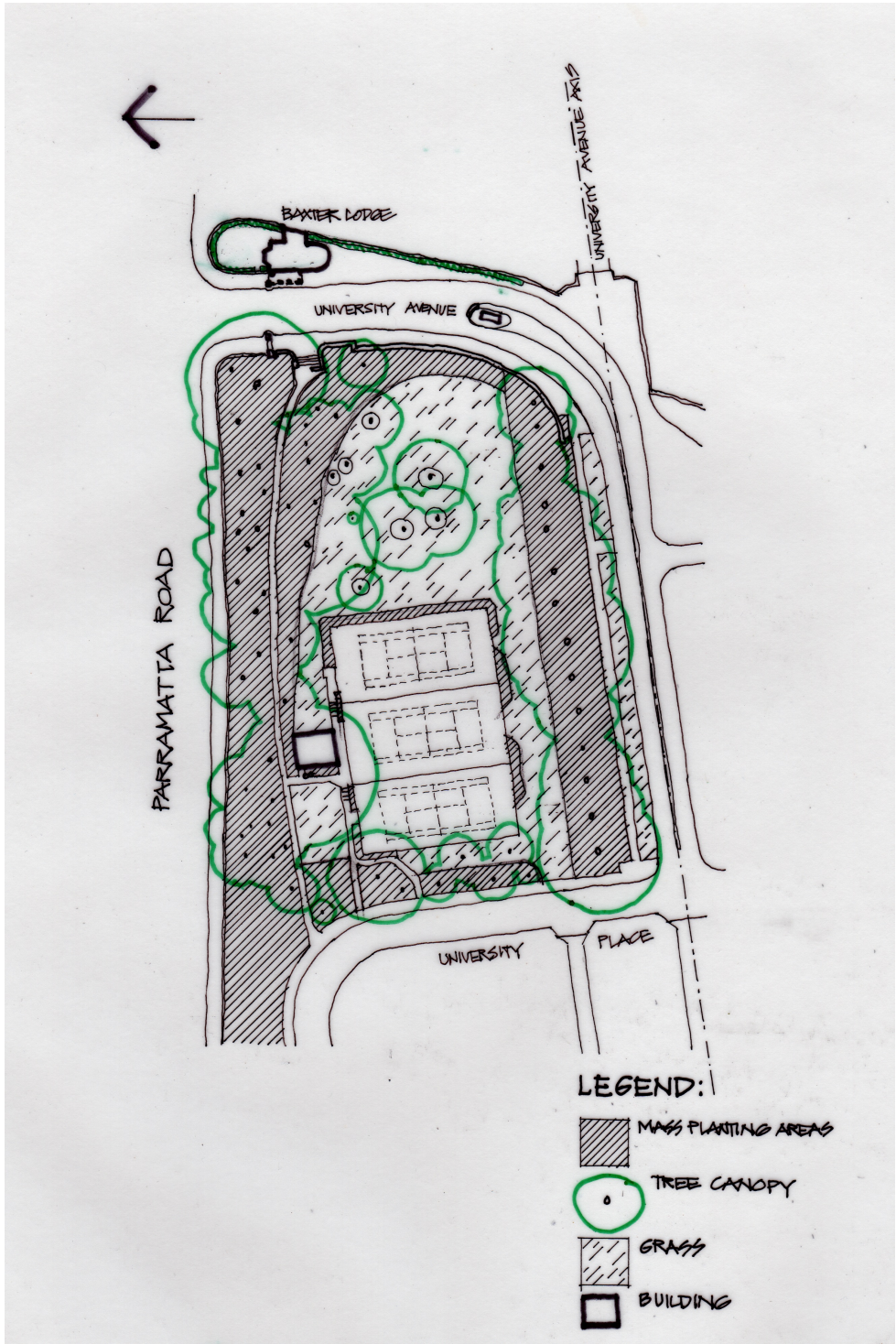


Figure 25. Existing Study Area

4.0 ANALYSIS

4.1 Landscape Character

The landscape character is of an institutional parkland character defined by surrounding roads, footpaths, sandstone retaining walls and fences. It is contained by largely peripheral treed vegetation forming a space which has at its central focus the built form of fenced concrete terraces and an associated single story painted weatherboard and corrugated iron roofed tennis building sited to the north side and at the centre of the tennis courts.

The remainder of the east sloping landform comprises a mixture of grassed surface or mass planting garden beds with peripheral concrete pedestrian paths.

4.2 Visual and Spatial Structure

The study area provides a green framework for the highly significant Quadrangle building complex when viewed from the east. The now mature vegetation generally obscures the Quadrangle complex from a distance but it helps to define the grass terraces and open space immediately to the east, referred to as University Place.

The present Approach avenue is defined separately from the space occupied by the Tennis Courts by the tree row plantations of Port Jackson Figs (*Ficus rubiginosa*) and Small leaved Figs (*Ficus obliqua* or *Ficus rubiginosa* f. *glabrescens*) together with an area of ground cover plantings, footpath and grass verges. This formal composition reinforces the significant vista of the Clock Tower when approaching University Place from downslope.

The treed canopy on all sides creates a central space with the tennis court terraces as a focus within that space.

The nature of the mature Fig trees, with lower branches pruned, forming the northern side to the University Avenue creates a more highly visible sloping ground plane when viewed from downslope.

5.0 SIGNIFICANCE

The University of Sydney Grounds Conservation Management Plan (2016) has identified a selection of trees (nine trees) to the north and south of the existing tennis courts as of exceptional significance and that the landscape character of the area is exceptional without reference to the Tennis courts facility as built form.

The tennis courts and clubhouse building are of some significance but not exceptional as suggested in the University of Sydney Grounds Conservation Management Plan grading of significance as a Landscape Character Area (see Figure 4.2 : Grading of significance : landscapes and open spaces.) makes no reference to the tennis facility as a built element in the centre of the former open space.

The study area is significant as a remnant part of the open space setting of the Quadrangle building complex as the first and conspicuous development of the University however it has been developed as a sporting facility in the form of three tennis courts constructed as three fenced terraces with a central single story building located to the north side of the terraces together with connecting concrete paths, steps and planting structures. The tennis courts and associated building are the first Women's courts constructed within the University Grounds.

The Study area is strongly associated with the Approach Avenue and as part of the Approach Reserve lands as the major access to the university in the nineteenth and early twentieth centuries. It remains as the main entry off Parramatta Road and is visually reconnected by the borrowed setting of the avenue within Victoria Park.

The northern plantation area along the Parramatta Road boundary is the site of possibly the earliest tree plantation associated with the establishment of the Sydney University grounds and is considered along with the University Avenue space and plantings as of exceptional significance.

Both plantations have been replanted several times since their formation in the mid nineteenth century and despite the fabric comprising a range of individual tree species the significance is associated with the plantations as structural landscape elements.

The tree plantations contribute to the identity of the University Campus.

The City of Sydney Register of Significant trees identifies 17 Port Jackson Figs (*Ficus rubiginosa* f. *rubiginosa* and *Ficus rubiginosa* f. *glabrescens*) forming the central avenue. Within in the Parramatta Road frontage the following trees are registered: 7 Moreton Bay Figs, 6 Port Jackson Figs (both forms), 1 Deciduous Fig, 1 Bunya Pine, 1 Queensland Kauri Pine and 1 Wild Olive.

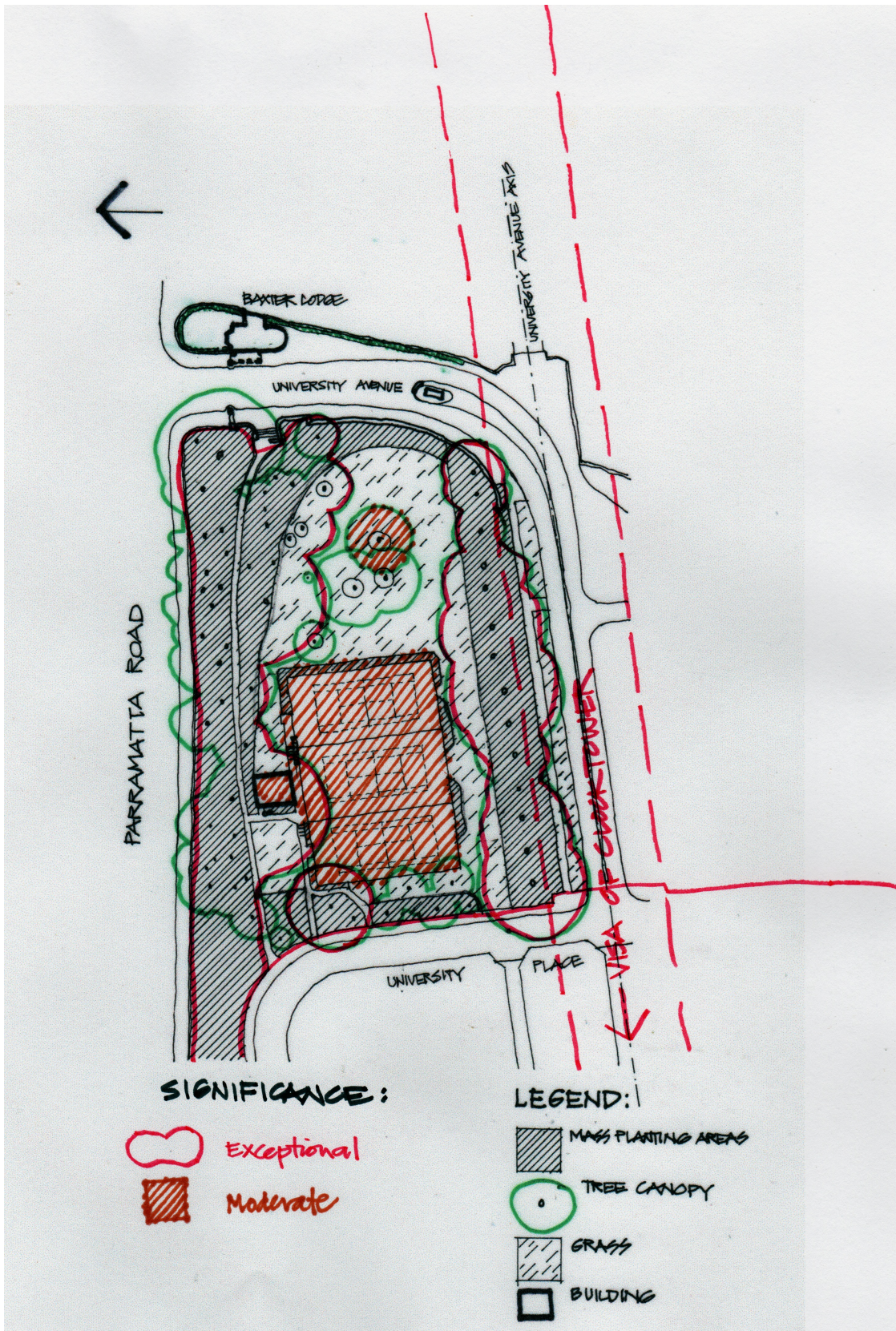


Figure 26. Levels of Significance

6.0 RECOMMENDATIONS

Any built form development of the study area will need to respect the significance of the northern and southern tree plantations through conservation actions regarding tree form, root system and canopy.

Any development should not exceed the height and scale of the University Avenue plantation and be detailed so that its mass is broken by small scaled elements to reduce its potential visual conspicuousness.

Further planting or new planting to the east and west are also a consideration to ameliorate the impact of development, particularly against the University Place space and the visual aspects when viewed from downslope and from within Victoria Park.

It is recommended that the Lone Pine commemorative planting be relocated elsewhere within the University grounds.

7.0 SELECT BIBLIOGRAPHY

ArborSafe Pty Ltd., "Preliminary Arboricultural Report and Root Investigation", 2 September 2016.

Benson, D., and Powell, J., **Taken for Granted. The Bushland of Sydney and its Suburbs**, Kangaroo Press, RBGS, 1990

Cable, K., Turney, C. & Bygott, U., **Australia's First. A pictorial History of the University of Sydney 1850 – 1990**, Southwood Press, Sydney. nd.

Council of the City of Sydney," Register of Significant Trees, Volume 3", August 2005

Groom, B. & Wickman, W., **Sydney The 1850s. The Lost Collections**, The University of Sydney, 1982. (p77)

Kelly, I., "University of Sydney Site of Proposed Chau Chak Wing Museum. Draft Statement of Heritage Impact" July 2016

Smith, Bernard and Kate., **The Architectural Character of Glebe Sydney**, University Co – operative Bookshop, Sydney, 1973.

Solling, M., **Grandeur and Grit. A History of Glebe**, Halstead Press, 2007