

Meadowbank Education and Employment Precinct Schools Project Heritage Impact Statement and Historical Archaeological Assessment

SSD 18_9343

Prepared by Urbis

For School Infrastructure NSW

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EXECUTIVE SUMMARY

Urbis has been engaged by Woods Bagot Architects to prepare the following Heritage Impact Statement and Historical Archaeological Assessment. This report has been prepared in response to Secretary's Environmental Assessment Requirements (SEARs) for SSD9343 with regard to heritage as set out in section 1.1. This report forms part of an Environmental Impact Statement (EIS) for state significant development application (SSD9343) in support of the proposed redevelopment of the study area for the Meadowbank Education and Employment Precinct Schools Project (MEEPSP).

The Study Area is over land acquired by the NSW Department of Education, which had previously been the northern section of the Meadowbank TAFE College campus. All of the built stock within the Study Area is of mid to late 20th century construction, characteristic of educational buildings of the mid-20th century.

The study area is not identified as an item of heritage significance on either the relevant local environmental plan (Ryde Local Environmental Plan 2014) or the State Heritage Register (SHR). It is, however, located in the vicinity heritage items and the "Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA). The study area was formerly listed on the TAFE (NSW) Section 170 Register (as part of the Meadowbank TAFE site), however it was transferred to the Department of Education and has not been included on the Department of Education s.170 Register.

This HIS therefore assesses the potential impacts of the proposed redevelopment on the proximate heritage items in accordance with the statutory requirements. The proposal has been assessed against the relevant provisions of the Ryde Local Environmental Plan (2014) and Development Control Plan. It has been assessed that the proposed works will have no impact on the proximate heritage items, their setting or significant views and vistas.

Of principal consideration is the state heritage listed West Ryde pump station opposite the site to the northwest. The significance of the pump station is however primarily vested in the pump station complex and former reservoir which are located on the Victoria Road frontage, along with the archaeological resource and some landscape features. The laboratory building on the southern tip of the pump station site, and opposite the Study Area, is a later 20th century development within the pump station site, is not of heritage significance and does not significantly contribute to the heritage significance of the pump station.

Other identified items in the vicinity, being the dwellings at See Street and Forsyth Street respectively, and the shops at Meadowbank Station are considerably distanced from the study area and sit within their respective lower scaled built form contexts and setting. The proposed school development is up to six levels, however noting the distance from the study area and development on the southern TAFE campus, the proposed development of the study area will have no significant visual impacts on the dwelling pair at See Street or the Meadowbank shop group. There may be some views to the school from the Federation dwellings on Forsyth Street, however this will have no significant impact on their immediate setting, with Forsyth Street being characterised by single storey late 19th and early 20th century dwellings.

The site is also in proximity to the Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA), to the northwest of the Study Area however the conservation area is separated by the railway line, which forms a significant physical and visual separation and boundary for the HCA. The subject development is located on the south eastern portion of the site and is considerably distanced from the HCA. Although development is proposed up to six levels, the proposal will have no significant visual impacts on the HCA or its curtilage/setting.

Overall the proposed development is not considered to result in any detrimental heritage impacts on the adjoining heritage item or the broader vicinity items and HCA.

Based on the historical background and assessments presented in this report (section 3), including review of historical aerials; and reporting prepared by Alliance Geotechnical (2017), the potential for intact, in-situ archaeological deposits has been assessed as low. Research to date suggests that the site was not developed for the early manufacturing phases of occupation. The high levels of impact to the Study Area since at least 1930s, including clearing, formation of tracks and rudimentary roads and construction of the current buildings has heavily disturbed the Study Area. Should archaeological material such as bricks, stone, or timbers be identified in sub-surface layers, these are likely out of context and non-interpretable.

The proposal is supported from a heritage perspective subject to the following standard provision:

If unexpected sub-surface historical remains are encountered during any future site works, it would be necessary to stop work in the vicinity of the find. The NSW OEH should be notified, in conjunction with a suitably qualified historical archaeologist who will need to inspect and provide preliminary assessment of the find, and provide advice on it's appropriate management. This may include archival recording and removal, further investigation, future interpretation or potential retention in-situ.

1. INTRODUCTION

1.1. BACKGROUND

This Heritage Impact Statement and Historical Archaeological Assessment has been prepared by Urbis on behalf of the NSW Department of Education and School Infrastructure NSW (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD 18_9343) for the Meadowbank Education and Employment Precinct Schools Project (hereafter referred to as MEEPSP) at 2 Rhodes Street, Meadowbank (the site).

MEEPSP will cater for 1,000 primary school students and 1,620 high school students. The proposal seeks consent for:

- A multi-level, multi-purpose, integrated school building with a primary school wing and high school wing. The school building is connected by a centralised library that is embedded into the landscape. The school building contains:
 - Collaborative general and specialist learning hubs, with a combination of enclosed and open spaces;
 - Adaptable classroom home bases;
 - Four level central library, with primary school library located on ground floor and high school library on levels 1 to 3.
 - Laboratories and workshops;
 - Staff workplaces;
 - Canteens;
 - Indoor gymnasium;
 - Multipurpose communal hall;
 - Outdoor learning, play and recreational areas (both covered and uncovered).
- Associated site landscaping and public domain improvements;
- An on-site car park for 60 parking spaces; and
- Construction of ancillary infrastructure and utilities as required.

The purpose of this Heritage Impact Statement and Historical Archaeological Assessment is to address the SEARs requirements, assess the potential heritage impacts of the proposal, and assist the consent authority in their assessment.

1.2. RESPONSE TO SEARS

This Heritage Impact Statement and Historical Archaeological Assessment is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD 18_9343. This table identifies the SEARs and relevant reference within this report. This table identifies the SEARs and relevant reference within this report.

Table 1 – SEARs and Relevant Reference

SEARs Item	Report Reference
<p><u>9 Heritage:</u></p> <p>The EIS must include a Heritage Impact Statement (HIS), prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The HIS should identify any state and local heritage items and heritage conservation areas within and in the vicinity of the site and provide an assessment of</p>	Section 6

SEARs Item	Report Reference
heritage impacts. Where impacts are identified, the HIS should outline the proposed mitigation measures.	
The EIS must include a Heritage Archaeological Assessment (HAA), prepared by a suitably qualified historical archaeologist. The HAA should identify what relics, if any, are likely to be present within the site or in the vicinity, assess their significance and consider the impacts from the proposal on this potential resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations	Section 4

1.3. STATUTORY FRAMEWORK

The Study Area is not identified as an item of heritage significance on either the relevant local environmental plan (Ryde Local Environmental Plan 2014) or the State Heritage Register (SHR). It is, however, located in the vicinity of heritage items:

- Item #155 – Ryde Pumping Station and site, 948 Victoria Road
- Item #116 – Attached dwellings, corner 1A Angas and 34 See Streets
- Item #37 – Meadowbank Shops, 58–64 Constitution Road
- Item #57- House group comprising 61, 63, 65, 67, 69, 71, 73, 75 and 77 Forsyth Street

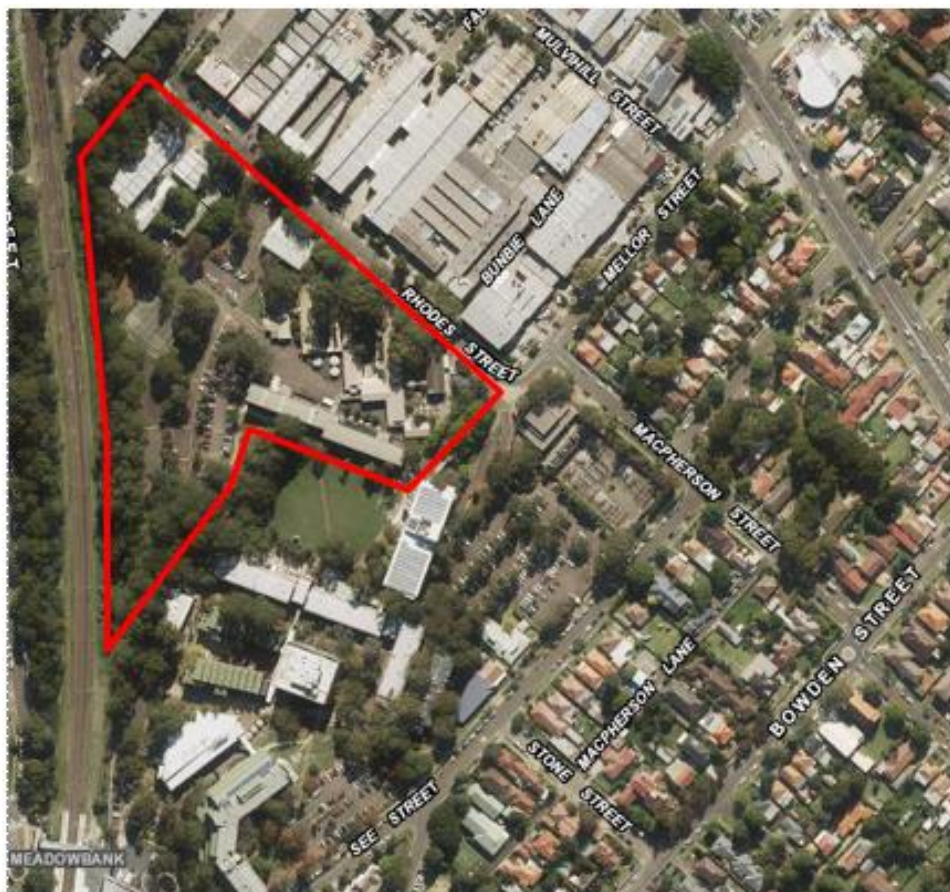
The Study Area is also in proximity to the “Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA)”, to the northwest of the Study Area.

The Study Area was formerly listed on the TAFE (NSW) s.170 Heritage and Conservation Register (as part of the Meadowbank TAFE site), however it was transferred to the Department of Education and has not been included on the Department of Education s.170 Register.

1.4. SITE LOCATION

The study area is situated on 2 Rhodes Street, Meadowbank and legally identified as Lot 10 in DP1232584 being part of Lot 1 in DP837179. The property is bounded by Rhodes Street to the north east, the Meadowbank TAFE Campus to the east and south, and the T1 Northern Rail Line to the west (with Meadowbank station located opposite the southern tip of the TAFE site). The Study Area is over land acquired by the NSW Department of Education, which had previously been the northern section of the Meadowbank TAFE College campus.

Figure 1 – Aerial image with the boundaries of the Study Area indicated within the campus



Source: SIX Maps 2018

1.5. METHODOLOGY

This Heritage Impact Statement has been prepared in accordance with the NSW Heritage Branch guideline 'Assessing Heritage Significance' (2001) and the *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009). The philosophy and process adopted is that guided by the *Australia ICOMOS Burra Charter* 1999 (revised 2013).

This Heritage Impact Statement and Historical Archaeological Assessment has been undertaken in conjunction with the Development Application for the redevelopment of the Department of Education property, which has been acquired from TAFE NSW.

1.6. AUTHOR IDENTIFICATION

The following report has been prepared by Chrisia Ang (Heritage Consultant), Léonie Masson (Historian), Holly Maclean (Archaeologist) and Fiona Binns (Associate Director). Fiona Binns has reviewed and endorsed its content.

Unless otherwise stated, all drawings, illustrations and photographs are the work of Urbis.

1.7. THE PROPOSAL

MEEPSP will cater for 1,000 primary school students and 1,620 high school students. The proposal seeks consent for:

- A multi-level, multi-purpose, integrated school building with a primary school wing and high school wing. The school building is connected by a centralised library that is embedded into the landscape. The school building contains:

- Collaborative general and specialist learning hubs, with a combination of enclosed and open spaces;
- Adaptable classroom home bases;
- Four level central library, with primary school library located on ground floor and high school library on levels 1 to 3.
- Laboratories and workshops;
- Staff workplaces;
- Canteens;
- Indoor gymnasium;
- Multipurpose communal hall;
- Outdoor learning, play and recreational areas (both covered and uncovered).
- Associated site landscaping and public domain improvements;
- An on-site car park for 60 parking spaces; and
- Construction of ancillary infrastructure and utilities as required.

The following plans were prepared by NSW Education School Infrastructure, and have been relied on in this impact assessment:

- DA201 09/04/2019 Playground Level Plan
- DA202 09/04/2019 Lower Ground Floor
- DA203 09/04/2019 Ground Floor Plan
- DA204 09/04/2019 Level 1 Floor Plan
- DA205 09/04/2019 Level 2 Floor Plan
- DA206 09/04/2019 Level 3 Floor Plan
- DA207 09/04/2019 Level 4 Floor Plan

2. SITE DESCRIPTION

2.1. SITE DESCRIPTION

The site is located at 2 Rhodes Street, Meadowbank and is legally described as Lot 10 DP 1232584. The School will occupy the northern portion of the Meadowbank TAFE NSW site.

The site is bounded by Rhodes Street to the northeast, the Sydney Water site to the north, the remaining TAFE NSW campus to the east and the T1 Northern railway line to the west (with Meadowbank station located opposite the southern boundary of the TAFE NSW site).

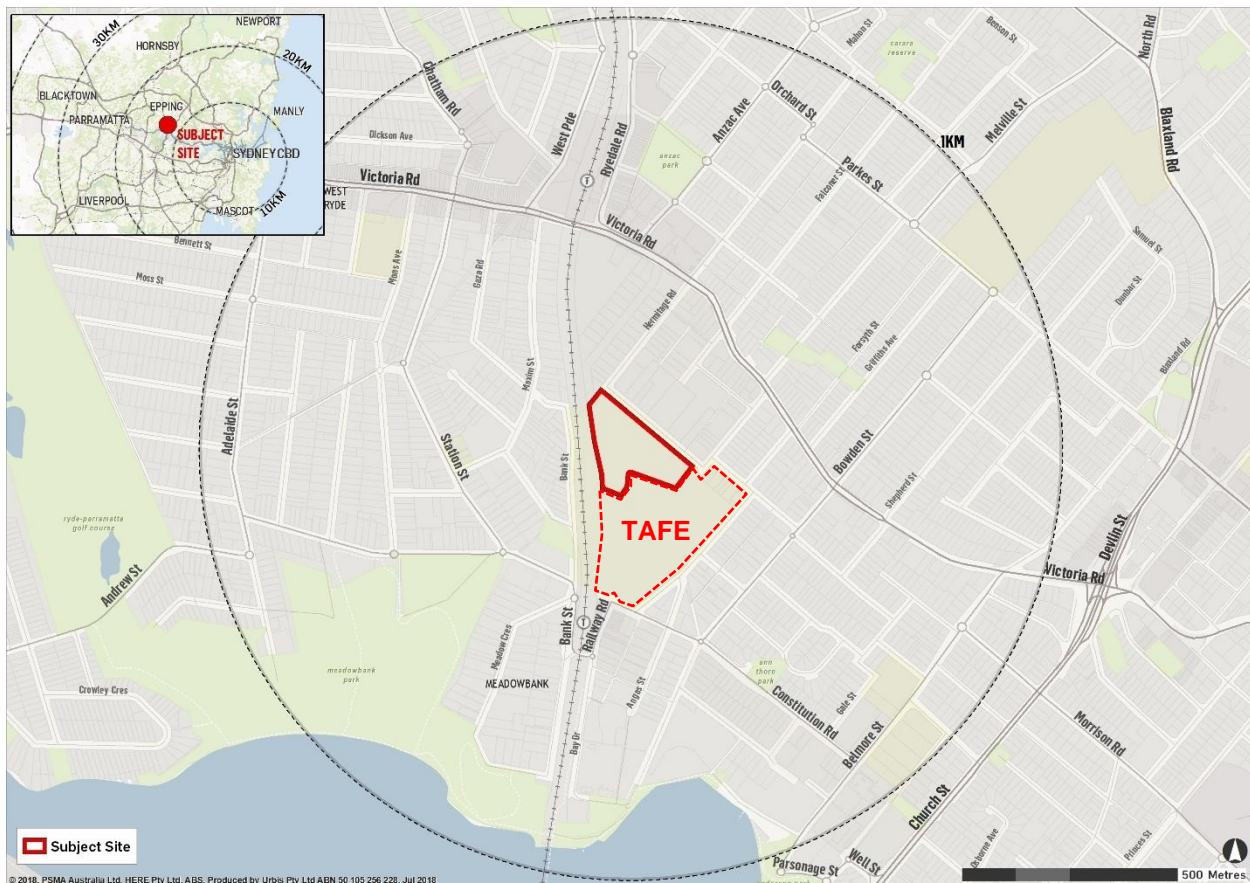
The site is an irregular shaped parcel, with a primary frontage to Rhodes Street and a total area of 3.3 hectares (**Figure 2** and **Figure 3**).

The site is generally undulating and features a central depression at the centre. This results in the site having falls of approximately 14m to both the east and west. Due to the site's topography, it is identified as being flood affected and subject to a 1 in 100-year flood to +8.2RL.

The site includes two major easements, refer to **Figure 3** which depicts the following:

- A 2.44m and 5.49m wide drainage easement transverses the site in a north-east to south-west direction. The drain is a covered concrete channel.
- A Sydney Trains access easement located along the embankment at the northern boundary of the site.

Figure 2 – Location Map



Source: Urbis

Figure 3 – Aerial Location Plan



Source: Urbis

Figure 4 – Diagram Depicting Easements & Contours



Source: Woods Bagot

2.2. EXISTING DEVELOPMENT

The site previously accommodated a series of former TAFE NSW buildings, on grade car parking areas, sports courts and open space areas. Photographs of the exterior of the existing buildings are provided at **Figure 5**. The existing development has been demolished during the early works phase under separate approval.

The site is currently serviced by an existing off-street car parking area located at the centre of the site. The parking area is accessed by a combined ingress/egress driveway connecting with Rhodes Street and another car parking area located within the TAFE NSW Campus.

Pedestrian access is via the existing permeable campus setting. A series of gates along Rhodes Street connect to the pathways running between the existing buildings. A dedicated walkway that runs along the railway corridor via the TAFE into the site and provides a direct pedestrian linkage to Meadowbank Station.

All of the built stock within the Study Area is of mid to late 20th century construction, characteristic of educational buildings of the mid-20th century. The site comprises blocks O, Q, R, S, T, V, W & X, and a complex of 5 buildings known as Y1-Y6. Vehicle access is via Rhodes Street, with two large bitumen hard stand parking areas within the central and western portions of the study area. There are 2 sports courts at the northern end of the car park, in proximity to the Y Blocks (constructed circa 1980). The northern car park was constructed by the mid-1980s while the southern car park was constructed by the early 1990s.

The northern most point of the campus comprises the Y Block complex, which are single storey workshops clustered in close density to the north of the car parking area. These buildings appear to be constructed in the mid – late 20th century, with Blocks Y2 and Y4 being the earliest constructed between 1943 and 1955. Development may correspond to the 1949 establishment of the Meadowbank Technical College, however may also date to the 1956 opening of the Meadowbank Junior Technical High School. Y2 and Y4 are weatherboard utilitarian buildings, with low pitched gabled roofs and spans of double hung timber windows. Block Y2 is not shown on the above site plan however is located behind Block Y6. Block Y1 and Y6 are contemporary double height sheet metal clad shed buildings (constructed c.1990). Block Y1 has a compressor room attached on the south-western end of the building. Block Y5 is a fibro demountable building constructed c.1985 for the TAFE and Block Y3 is a smaller demountable constructed c.1990 on the site of an earlier building. Much of the complex is connected via contemporary covered walkways between the buildings.

The vehicular access from Rhodes Street separates the study area into two areas, with the car park and Y block located to the west. To the east of the car parking area, Blocks O, Q, R, S, T, U, V, W and X are situated.

Blocks T, U, V, W and X were all constructed in the late 1940s, mid 1950s. Construction may correspond to the establishment of the Technical College in 1949 (established with the construction of buildings A and B) but is more likely to date to the establishment of the Meadowbank Junior Technical High School, which opened in 1956 (the 1955 aerial shows these buildings). The buildings are characteristic of simple education buildings of the period, being of weatherboard construction, single storey and built on a brick base, with low hipped roofs. Facades are characterised by arrangements of regular timber framed double hung windows. Blocks T, V and W are all long buildings, running parallel to each other and presenting diagonally to Rhodes street. Block U presents to be a single storey extension of Block T. Block X is a freestanding single storey brick and timber building to the west of Block W, consistent with the typology of blocks T, V and W.

Block S (designed in 1959 and still under construction in 1962) houses the Sport and Fitness Centre. It is two to three storeys, of brick construction at the base and metal (kliplock) sheeting above.

Block O is a single storey brick building to the east of Block T, constructed between 1955 and 1965. The building has a low pitched gabled roof. Facades are articulated into panelled sections with pebblecrete and clad finishes.

Blocks Q and R are more substantial three storey brick buildings. These buildings were constructed c.1969 in a stripped classical style. They are of masonry construction, in a combination of blonde and brown brick, with a flat roof. The facades are symmetrical divided into segmented bays, with dark brick horizontal spandrels, and arrangements of aluminium sliding windows, broken by blonde brick expressed piers.

The majority of buildings were designed by the Department of Public Works on behalf of the Department of Education and reflect standard government education building typologies.

The southern section of the TAFE site (not part of the Study Area) comprises a mix of late 20th and early 21st century built stock, including higher density development.

Figure 5 – Existing Development



Picture 1 – View across carpark to the rail corridor



Picture 2 – View from carpark to courts and Rhodes St



Picture 3 – Existing boat sheds



Picture 4 – Existing weatherboard teaching buildings



Picture 5 – Street view from Rhodes St



Picture 6 – Existing vegetation on site

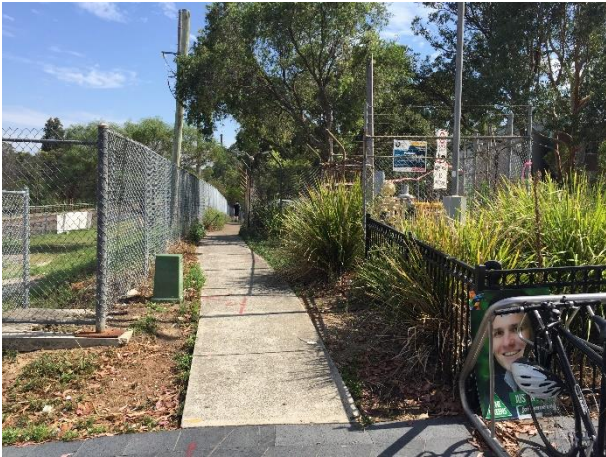
2.3. SITE CONTEXT AND SURROUNDING DEVELOPMENT

The site is in the suburb of Meadowbank, which is approximately 15km north west of Sydney CBD. Photographs of surrounding area are provided at **Figure 6**. The site is surrounded by a diverse mix of land uses but is predominantly in a low density residential and light industrial area.

Table 2 – Surrounding Land Uses

Aspect	Description
North	<p>To the north is land owned by Sydney Water that contains the Ryde Pumping Station – also known as ‘948 Victoria Road’.</p> <p>A light industrial precinct is located to the north east, on the opposite side of Rhodes Street. Discussions with the strategic planning unit at Ryde Council during the early planning phase of the project indicated that Council is seeking to retain and consolidate the industrial precinct for employment.</p>
East	<p>The site is adjacent to the existing TAFE NSW campus, which will remain operational during the development and construction of the new school. TAFE NSW has consolidated its assets onto the southern portion of the site. SINSW and TAFE NSW are in discussions about an integrated Education Precinct. TAFE is in the early stages of its own master planning.</p> <p>Further east, beyond TAFE NSW is low density residential, consisting of detached dwellings.</p>
South	<p>South is the Meadowbank train station and the Shepherds Bay Precinct, previously known as the Meadowbank Employment Area (Shepherds Bay).</p> <p>The whole precinct is currently undergoing significant redevelopment as an urban renewal project with a series of high density residential flat buildings ranging from 5-10 storeys in height.</p>
West	<p>The T1 railway line runs along the western edge of the site. Beyond the railway line is a mix of low density residential and walk up style residential flat buildings.</p>

Figure 6 – Surrounding Development



Picture 7 – Existing dedicated walkway



Picture 8 – Existing TAFE Green



Picture 9 – Sydney Water Site (north)



Picture 10 – Meadowbank Station (south)



Picture 11 – Light industrial on the opposite side of Rhodes St (north east)



Picture 12 – View towards TAFE NSW campus (east)

Source: Urbis

2.4. TOPOGRAPHY

The topography of the site grades naturally to the south-west. Levels range from 6m AHD at the south-western extent to 17m AHD at the south-eastern extent. A wide depressed channel runs through the site from the north-east to south-west. Two depressions exist across the existing car parks, which fall towards the

ultimate low point in the south-west corner of the site. The high points are the south-eastern and north-western corners along Rhodes Street. At the western site boundary, the raised railway embankment forms a physical bund.

2.5. HERITAGE ITEMS IN THE VICINITY

The site is in proximity to heritage items as identified in Section 1.1 above, being Item #155 – Ryde Pumping Station and site, 948 Victoria Road, Item #116 – Attached dwellings, corner 1A Angas and 34 See Streets, Item #37 – Meadowbank Shops, 58–64 Constitution Road and Item #57 Federation House group at 61-77 Forsyth Street. Noting that the Study Area comprises the northern section of the TAFE site, the relationship of the site with the pump station in particular was reviewed. The Study Area adjoins the southern tip of the pump station site, which comprises the late 20th century laboratory building. Views of the Hermitage Road frontage of the heritage item are provided below.

Figure 7 – The West Ryde Pump Station site as viewed from Hermitage Road



Picture 13 – View northwest along Rhodes Street (from the vehicle entry to the TAFE) and towards the Hermitage Road frontage of the West Ryde Pump station site.



Picture 14 – View along Hermitage Road, with the non-significant laboratory building shown at left

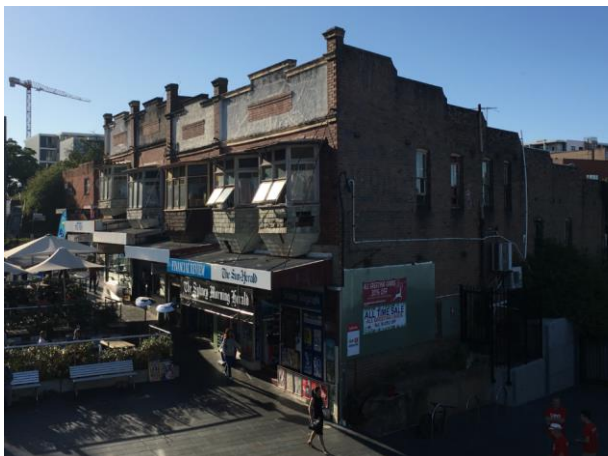
Source: Urbis 2017

Source: Urbis 2017

The significance of the pump station site is primarily vested in the pump station complex and former reservoir which are located on the Victoria Road frontage, along with the archaeological resource and some landscape features.

The Meadowbank shops are known as Sundin's Building and comprise of a group of four attached 2 storey shops, located on the eastern side of Meadowbank Railway Station, close to the eastern station entrance, and include a corner shop on the corner of Constitution Road and Railway Road, Meadowbank. They are distanced from the study area, located opposite the southern section of the TAFE campus.

Figure 8 – Heritage items in the vicinity – the Meadowbank Shops



The shops as viewed from the Railway Station



The shops as viewed from Constitution Road

The attached dwellings' at the Corner 1A Angas and 34 See Streets (Item No. 116) are a pair of single storey Victorian sandstone dwellings. The dwellings are oriented to the north and have secondary frontages to See Street (west) and Angas Street (east).

Figure 9 – Heritage items in the vicinity – the attached dwellings and contemporary subdivisions to the rear



View of the detached stone dwellings



View of the eastern elevation (side) fronting Angas St.

Figure 10 – Heritage items in the vicinity – the Federation house group



The house group as viewed from the junction with Macpherson street (77 at left)

Source: Google Maps 2018



The house group (with 61 at right)

Source: Google Maps 2018

The Forsyth group comprises of nine modest single storey Federation Queen Anne style freestanding houses, set on regular allotments with side driveways, low brick or timber fencing (or no fencing), and small front gardens. The group is unified by a consistency in scale, form and siting, and to a lesser extent fabric and stylistic features.

The site is also in proximity to the “Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA)”, to the northwest of the Study Area. This is separated from the site via the T1 Northern railway line.

3. HISTORICAL OVERVIEW

3.1. AREA HISTORY

The earliest European occupants in Ryde were marines, soldiers, emancipated convicts and free settlers in a region known as the Field of Mars (land to the west of the current railway line) and the Eastern Farms (land to the east of the railway line). The military men and free settlers were offered up to 120 acres whereas the emancipated felons were given 30 acres, a further 20 acres if they were married and another 10 acres for every offspring.¹ Out of the 90 land grants which fell within today's City of Ryde, 14 were given to the military and free settlers from the First Fleet and another 37 from the Second Fleet.²

The area around West Ryde, known as the Meadowbank Estate, was granted to naval surgeon and colonial administrator, William Balmain (b.1762 – d.1803), who arrived on the First Fleet in 1794.³ Following his death on 17 November 1803, the estate was first tended by medical practitioner and public servant, D'Arcy Wentworth (b.1762 – d.1827)⁴, and later sold to an ex-convict, John Bennett, and commander of the 9th cavalry, Major Edward Darvall (b.1776 – d.1869).⁵

From 1796 to 1799, naval officer, Lieutenant William Kent (b.1760 – d.1812) owned an extensive landholding adjoining Darvall's property, which stretched from Shaftsbury Road to Ryedale Road and from Rowe Street to Victoria Road.⁶ Kent was born on 20 November 1760 at Newcastle upon Tyne, England, the son of Henry Kent and his wife Mary, a sister of Governor John Hunter. He joined the navy aged 10 and became a lieutenant in 1781. In 1795, he was given command of the *Supply* which sailed with the *Reliance*, carrying Hunter as governor-elect to New South Wales, and reached Port Jackson on 7 September.⁷

The Study Area forms part of the lands granted to Lieutenant Kent, who was required to “*reside within the same and proceed to improvement and cultivation thereof such timber as may be growing or may grow...which may be deemed fit for naval purposes.*”⁸ He did not comply with these conditions as he constructed a house near Tank Stream instead. Hence, the land acreage was managed and developed by overseers for cattle grazing and orchards. There is also no evidence on whether timber was grown or harvested at the site.

Ryde was designated as a municipality in 1870. Ferries were the main mode of transportation across the Parramatta River from Ryde to Rhodes Prior to construction of the Gladesville and Iron Cove bridges in 1881 and 1882 respectively.⁹ The inauguration of the Strathfield-Hornsby railway line in 1886 improved Ryde's connection with the city as three stations were situated within the municipality at Meadowbank, West Ryde and Eastwood¹⁰.

The Meadowbank Estate was first subdivided in 1883, in anticipation of the railway line. Further subdivision of the Estate took place in 1888, following the opening of the Strathfield-Hornsby line. Allotments near Station Street were sold to professional gentlemen who commuted to offices in the city. The largest land sale, however, was the Helenie Estate to the Mellor brothers. They established the Meadowbank

¹ Julie Dawson and George Elliott, “The Original Land Grants,” *The Ryde District Historical Society*, accessed 10 May 2017, http://www.rydehistory.org/html/the_original_land_grants.HTM.

² Ibid.

³ B.H. Fletcher, “Balmain, William (1762-1803)”, Australian Dictionary of Biography, National Centre of Biography, Australian National University, <http://adb.anu.edu.au/biography/balmain-william-1736>, published first in hardcopy 1966, accessed 10 May 2017.

⁴ J.J. Auchmuty, “Wentworth, D'Arcy (1762-1827)”, Australian Dictionary of Biography, National Centre of Biography, Australian National University, <http://adb.anu.edu.au/biography/wentworth-darcy-1545>, published first in hardcopy 1967, accessed 10 May 2017.

⁵ Angela Phippen, “West Ryde,” *Dictionary of Sydney*, accessed 10 May 2017, http://dictionaryofsydney.org/entry/west_ryde.

⁶ “Kent, William (1760-1812)”, Australian Dictionary of Biography, National Centre of Biography, Australian National University, <http://adb.anu.edu.au/biography/kent-william-2300>, published first in hardcopy 1967, accessed 10 May 2017.

⁷ Australian Dictionary of Biography: William Kent: <http://adb.anu.edu.au/biography/kent-william-2300>

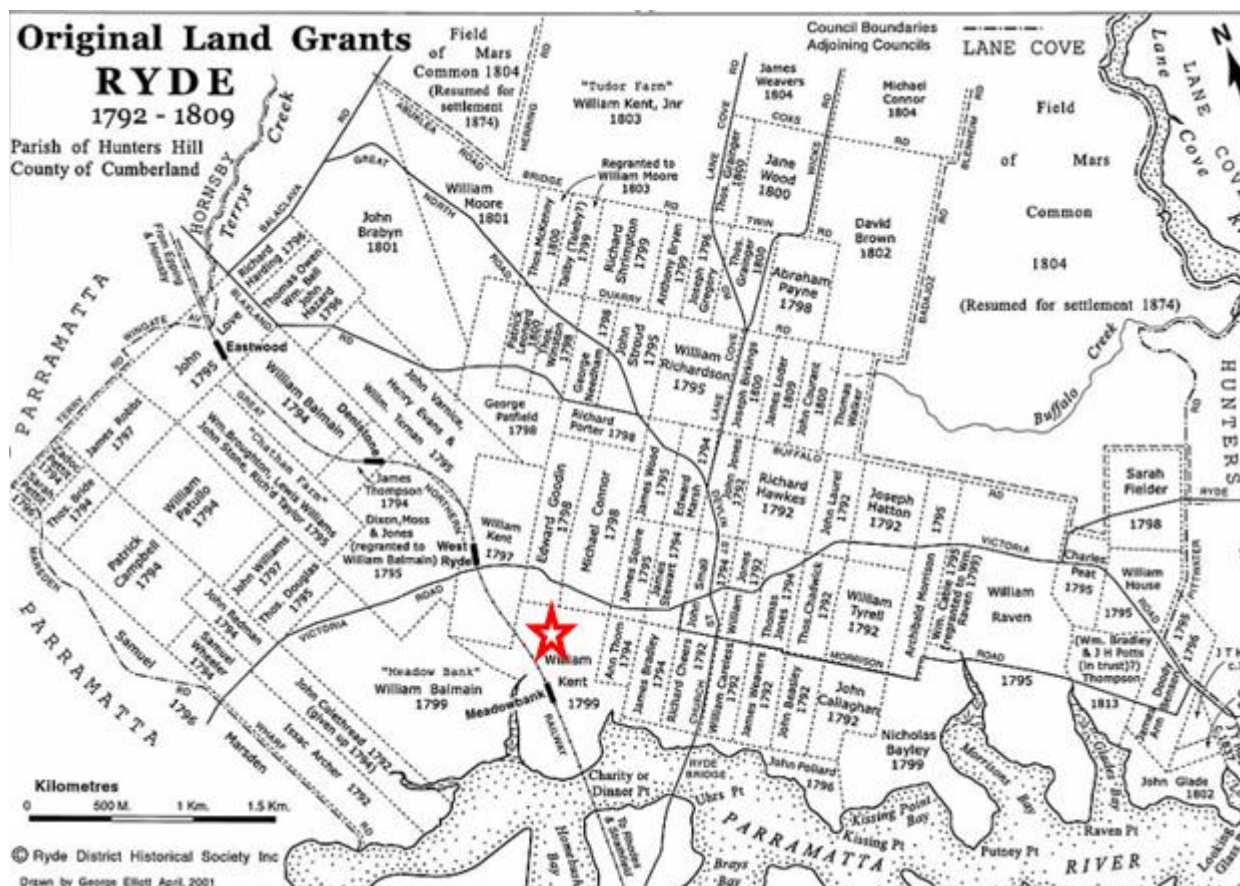
⁸ Sydney Water Corporation, *Op. Cit.*, 6.

⁹ “Opening of the Iron Cove Bridge,” *The Sydney Morning Herald*, 30 November 1882, accessed 10 May 2017, <http://trove.nla.gov.au/newspaper/article/13523274>.

¹⁰ Kevin Shaw, *Historic Ryde: A Guide to Some Significant Heritage Sites in the City of Ryde* (Sydney: Ryde District Historical Society, 2002), 13.

Manufacturing Company in 1890, part of which was located on the Meadowbank TAFE site.¹¹ The Meadowbank Manufacturing Company produced stump-jump implements, strippers, windmills, pumps, horse-rakes, wheat separators, ploughs, harrows, scarifiers, shares, other agricultural and general implements. The firm later produced tramcars and railway rolling stock.¹² Existing land acreages near railway stations were progressively subdivided into suburban blocks as heavy industries were established at Meadowbank and the area of farming land shrank.¹³ A new suburb west of the main civic centre in Ryde was gradually developed in the early 1900s and designated an official postal code in 1926. The local public school was renamed "West Ryde Public School" in 1930 and the railway station was renamed "West Ryde" in October 1945.¹⁴

Figure 11 - The original land grants in Ryde 1792 to 180. The approximate location of the Study Area indicated by red star.



Source: The Ryde District Historical Society

¹¹ Office of Environment and Heritage Inventory listing: Sundin's Building - Four Federation period shops <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2340059>

¹² Angela Pippen, "Meadowbank," *Dictionary of Sydney*, accessed 6 February 2018, <http://dictionaryofsydney.org/entry/meadowbank>.

¹³ "Tramway for Ryde," *Australian Town and Country Journal*, 6 November 1880, accessed 10 May 2017, <http://trove.nla.gov.au/newspaper/article/70949508>.

¹⁴ Angela Pippen, "West Ryde," *Dictionary of Sydney*, accessed 10 May 2017, http://dictionaryofsydney.org/entry/west_ryde.

Figure 12 – Detail from undated map of the Parish of Hunters Hill showing William Kent's two land grants. The approximate location of the Study Area outlined in red within Kent's 160-acre grant.



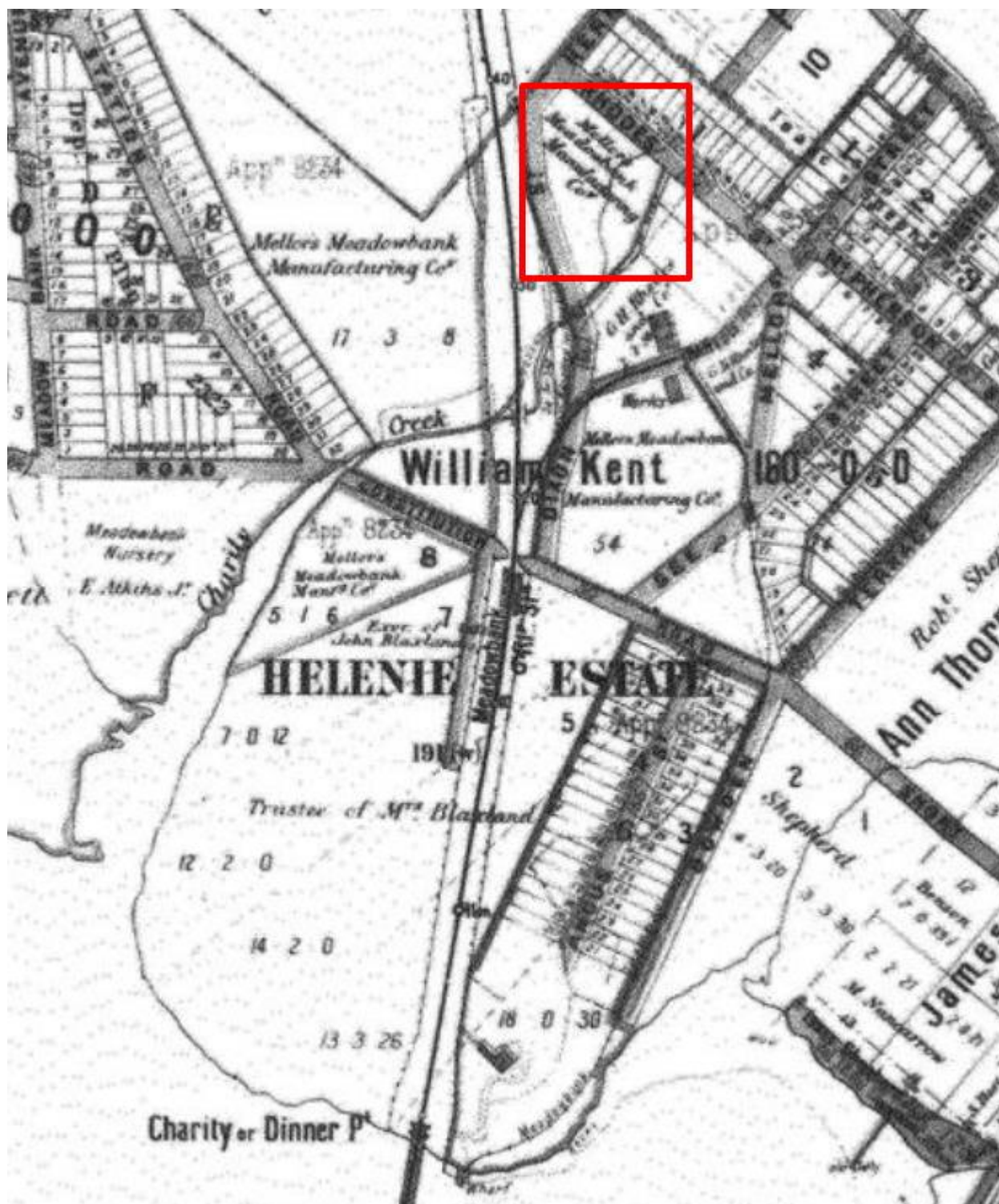
Source: NSW LRS, HLRV, Barcode 140639, Image ID 14063901, PMap MN03, Parish of Hunters Hill, County of Cumberland

Figure 13 – Detail from Higinbotham & Robinson. Maps of municipalities surrounding the city of Sydney – Ryde: Parishes of Hunters-Hill & Field of Mars, [189-?] Approximate location of study area indicated in red, being one of two sites occupied by “Mellor’s Meadowbank Manufacturing Coy Property” shown on map.



Source: NLA, nla.obj-231106513

Figure 14 – Detail from Map of the Municipality of Ryde, Hunter's Hill and Field of Mars /compiled from the latest official and private surveys and published by the proprietors Higinbotham and Robinsons, 1892-4. Approximate location of Study Area indicated in red.



Source: SLNSW, Z/M4 811.142/193/1

18 HISTORICAL OVERVIEW

Figure 15 – Meadowbank Township, at the railway station, First Subdivision: auction sale on the ground, Saturday, 17th Feb:1906 / Richardson & Wrench Ltd., Auctioneers; D.M. Anderson, Ryde, Local Agent. Approximate location of Study Area indicated.



Source: NLA, nla.obj-230294819

3.2. SITE HISTORY

Between 1835 and 1841, Isaac Shepherd acquired several parcels of land at Meadowbank, including part of William Kent's 160-acres (67.4 hectares). In the early 1840s, Shepherd built "Helenie", a substantial two-storey sandstone villa near the Parramatta River.

Isaac Shepherd died at Helenie on 11 December 1877. The property passed to his daughter, Mary Elizabeth Bowden and her husband Thomas Kendall Bowden. The latter died in November 1879 at Newlands, Parramatta, survived by Mary and their eight children.¹⁵ In the intervening period, the house was leased to a succession of tenants. Mary Elizabeth Bowden retained ownership of the house and 95 acres of land (38.5 hectares) until April 1890 when she contracted to sell same to Mellors Meadowbank Manufacturing Company Limited for the sum of £18,000. To facilitate the transaction, Bowden lodged an application to convert the property to Torrens title. The land was registered on 29 April 1892 on Certificate of Title Vol 1053 Fol 245 in the name of Mary Elizabeth Bowden (see Figure 16 for block plan of land).

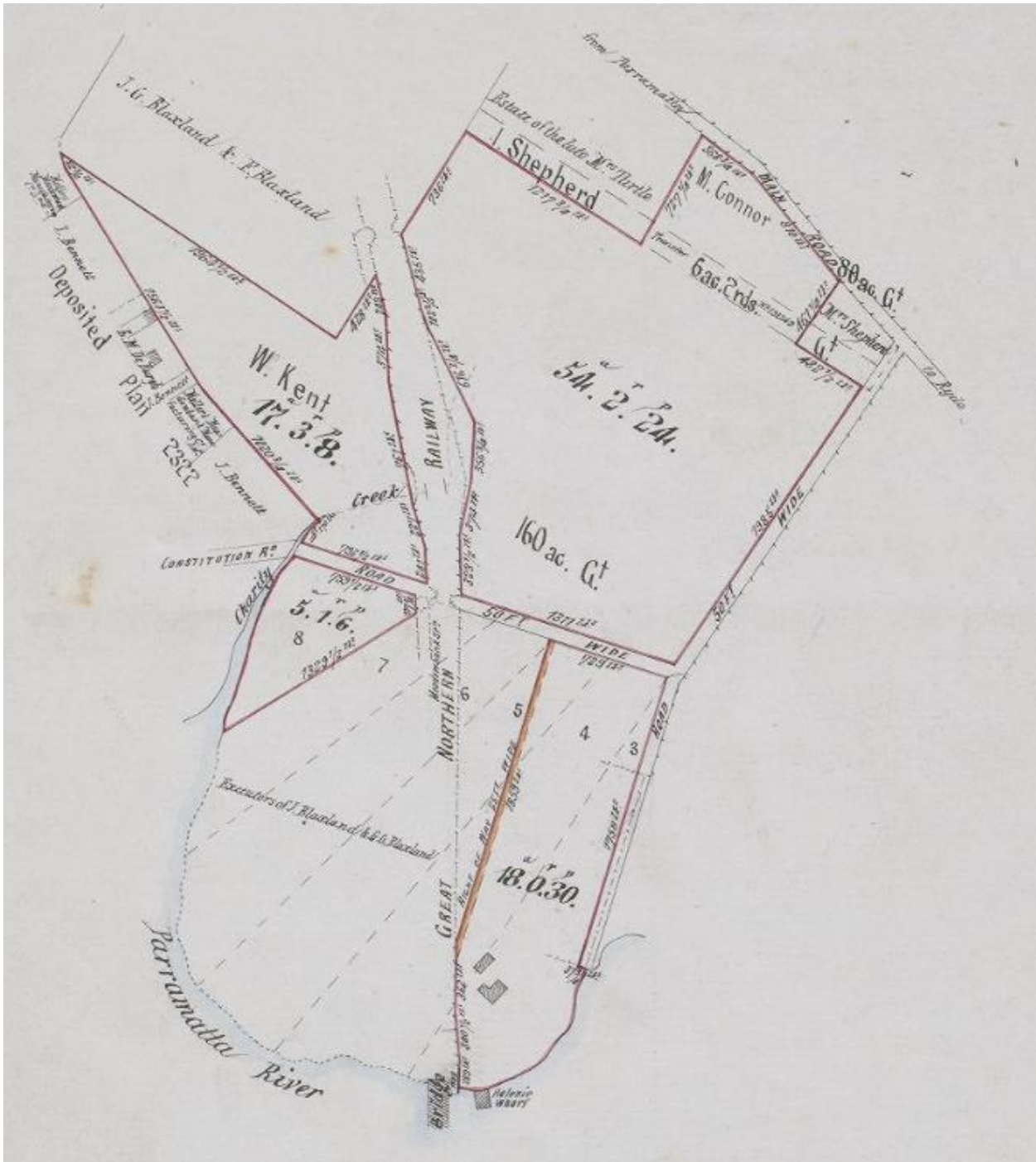
Bowden subdivided part of the Helenie Estate into residential allotments as DP 2929 as shown in Figure 17. In January 1893, Bowden sold Lots 12 and 13 in Section 3 of DP 2929 to William Johnston¹⁶ and transferred

¹⁵ "Obituary Mr T K Bowden", *Australian Town and Country Journal*, 15 November 1879, p17

¹⁶ CT Vol 1053 Fol 245, NSW LRS

the residue in March the same year to Mellors Meadowbank Manufacturing Company Ltd¹⁷ as shown in Figure 18. ¹⁸ Between 1890 and July 1893, Mellor's occupied part of the land under lease, as in August 1890, Mellor's invited tenders for clearing undergrowth and small timber on the estate.¹⁹ The following year, the company advertised for a "good general blacksmith" care of the Meadowbank works or Post Office Ryde.²⁰

Figure 16 – Block plan of land accompanying CT Vol 1053 Fol 245, April 1892.



Source: NSW LRS

¹⁷ CT Vol 1101 Fol 20, NSW LRS

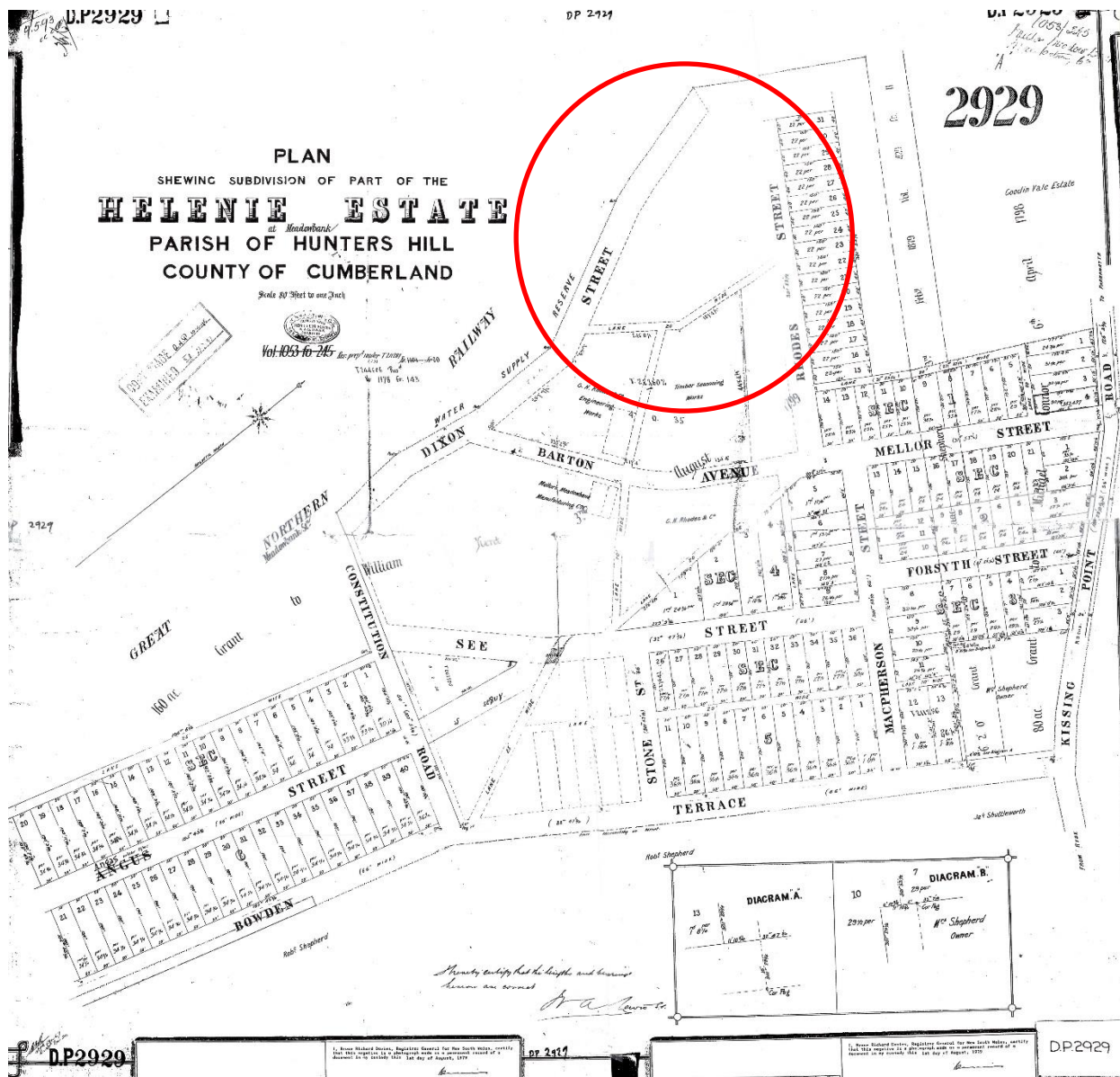
¹⁸ CT Vol 1053 Fol 245, NSW LRS

¹⁹ "Tenders, Mellor's Meadowbank Manufacturing Company Ltd", *Evening News*, 29 August 1890, p1

²⁰ "Wanted", *Evening News*, 6 March 1891, p1

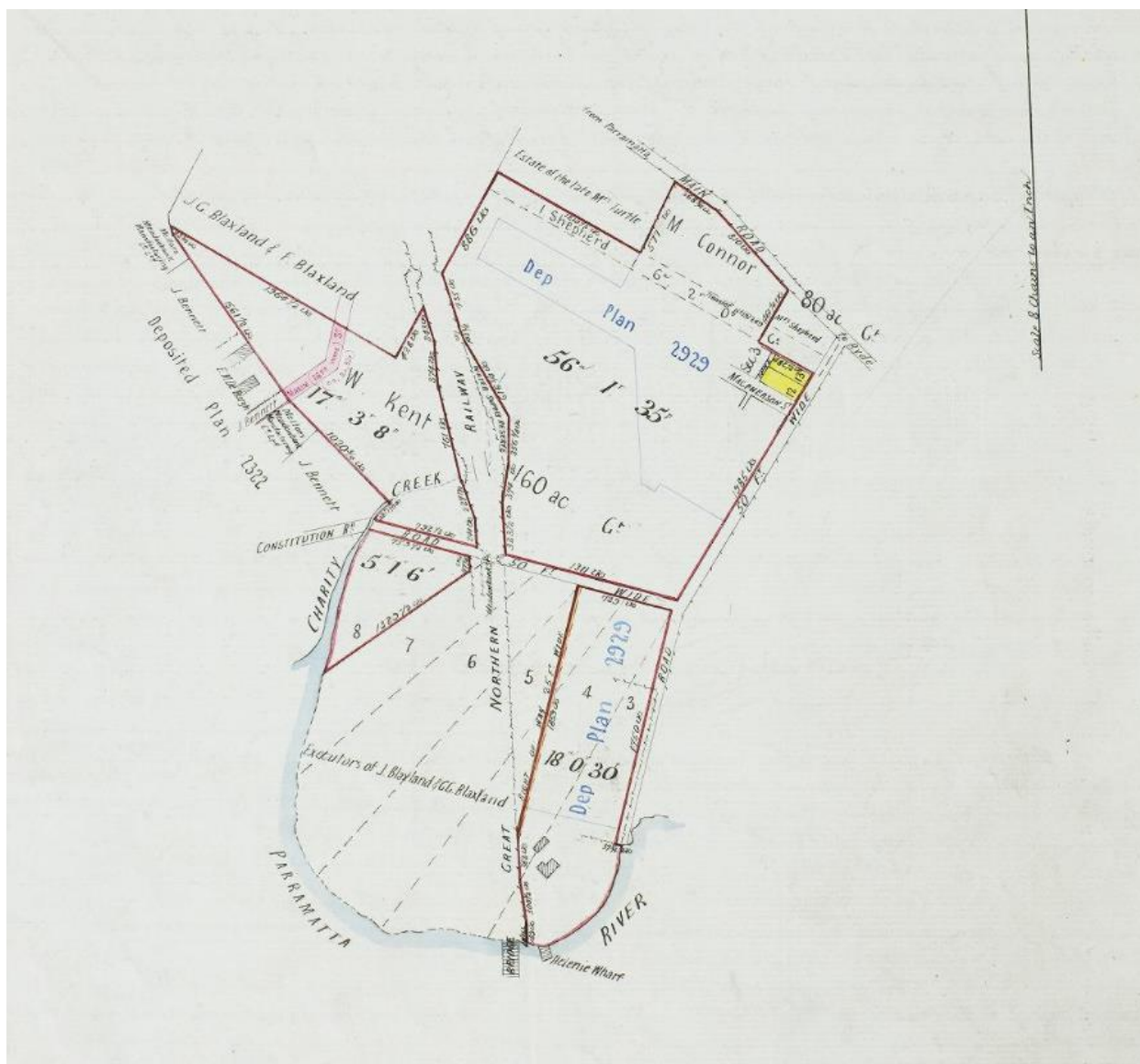
Figure 17 comprises the plan of subdivision of part of the Helenie Estate about 1893. Portions of the estate are shown in the occupation of Mellor's Meadowbank Manufacturing Co Ltd, G H Rhodes & Co and "Timber Seasoning Works". With buildings shown cross hatched on either side of Barton Avenue. At this date, the Study Area appears to be mostly vacant land. The structures are also shown on the c1893 Higinbotham and Robinson map of Ryde (Figure 14).

Figure 17 – Plan shewing subdivision of part of the Helenie Estate at Meadowbank Parish of Hunters Hill County of Cumberland.



Source: NSW LRS, DP2929

Figure 18 – Block plan accompanying CT Vol 1101 Fol 20, being the land registered in July 1893 in the name of Mellor's Meadowbank Manufacturing Company Limited. The Study Area is located within the portion comprising over 56 acres.



Source: NSW LRS

Mellor's agricultural machine factory featured in the following description of Meadowbank in 1892:

Meadowbank, as it appears at present, divested of the greater part of its forest growth, is a pretty place of undulating country, gently sloping up towards the quiet, well-adorned village of Ryde. The main pipe which conveys Sydney's water supply is close to the factory site. And the pumping works which lift the water at this point, adjoins the Meadowbank land. Down on the lower part of the estate, with a creek of good water running beside it, is the factory of Rhodes and Co.; and next to it the Mellor Meadowbank Company are putting up a building shed, the dimensions of which are 80ft. x 65ft. New buildings, to be used as residences are being erected, and there is a pleasing air of activity pervading the place. Mr Barton, the manager, resides close to the railway bridge in a large stone mansion which was purchased with the estate.²¹

In June 1895, in accordance with the resolution of shareholder at an extraordinary general meeting to wind up the Company²² the mortgagee advertised the auction sale of the Company's "extensive and valuable

²¹ "Agricultural Machine Factories – Meadowbank", *Sydney Mail and New South Wales Advertiser*, 3 September 1892, p518

²² "The Mellors Meadowbank Manufacturing Company (Limited)", *New South Wales Government Gazette*, 22 March 1895, p2003

water-frontage property...at Ryde, Parramatta River" on 5 July the same year (Figure 19). The advertisement does not describe existing buildings on the land apart from "a large stone family residence and outbuildings" (Helenie).

In October the same year, the mortgagees conveyed the property to John Howard Angus.²³ That land is registered on a new certificate of title with the accompanying block plan (Figure 20). On this plan, the portions yellow shaded areas comprise previous sales in the Helenie Estate, notably 4 acres 35 perches sold on 7 January 1894 to Henry Simon of Manchester, England, milling engineer²⁴ and occupied by G H Rhodes & Co, engineering works.

Figure 19 – Auction sale notice.

BY ORDER OF THE MORTGAGEE.
Extensive and Valuable Water-frontage Property
known as
MELLOR'S MEADOWBANK MANUFACTURING
COMPANY'S,
at
RYDE, PARRAMATTA RIVER.
Intersected by the Great Northern Line, the Meadowbank
Railway Station adjoins the property, and a railway
siding is constructed through the Estate, and con-
necting by tramway to a wharf on the river frontage.
AREA of LAND about 90 ACRES.
•• **A splendid position for a large manufactory, with**
sufficient area to sell off a township subdivision. On
the water frontage is a large stone Family Residence
and outbuildings, including stabling.
THE PROPERTY has a special COMMERCIAL VALUE,
being on the Sydney side of the Railway Bridge, and
with deep water frontage to the main river available
for vessels of large size to berth at the wharf. The
local office of the Australian Gaslight Company is
erected on one of the township lots, and the large
pumping station and reservoir is adjoining the
estate.
RICHARDSON and WRENCH, Limited, have received
instructions to sell by auction, at the Rooms, Pitt-
street, on FRIDAY, 5th JULY, at 11 o'clock,
The above well-known property at MEADOWBANK,
RYDE.
TORRENS TITLE.

Source: *Sydney Morning Herald*, 22 June 1895, p15

From early 1897, John Howard Angus sold a few more allotments in the Helenie Estate. The following year, the Mellors Meadowbank Manufacturing Company was finally wound up and Angus established a new firm styled "The Meadowbank Manufacturing Co Ltd". In the intervening period, the company set about erecting additional buildings on the site to meet growing business demands.²⁵ The *Daily Telegraph* reported in

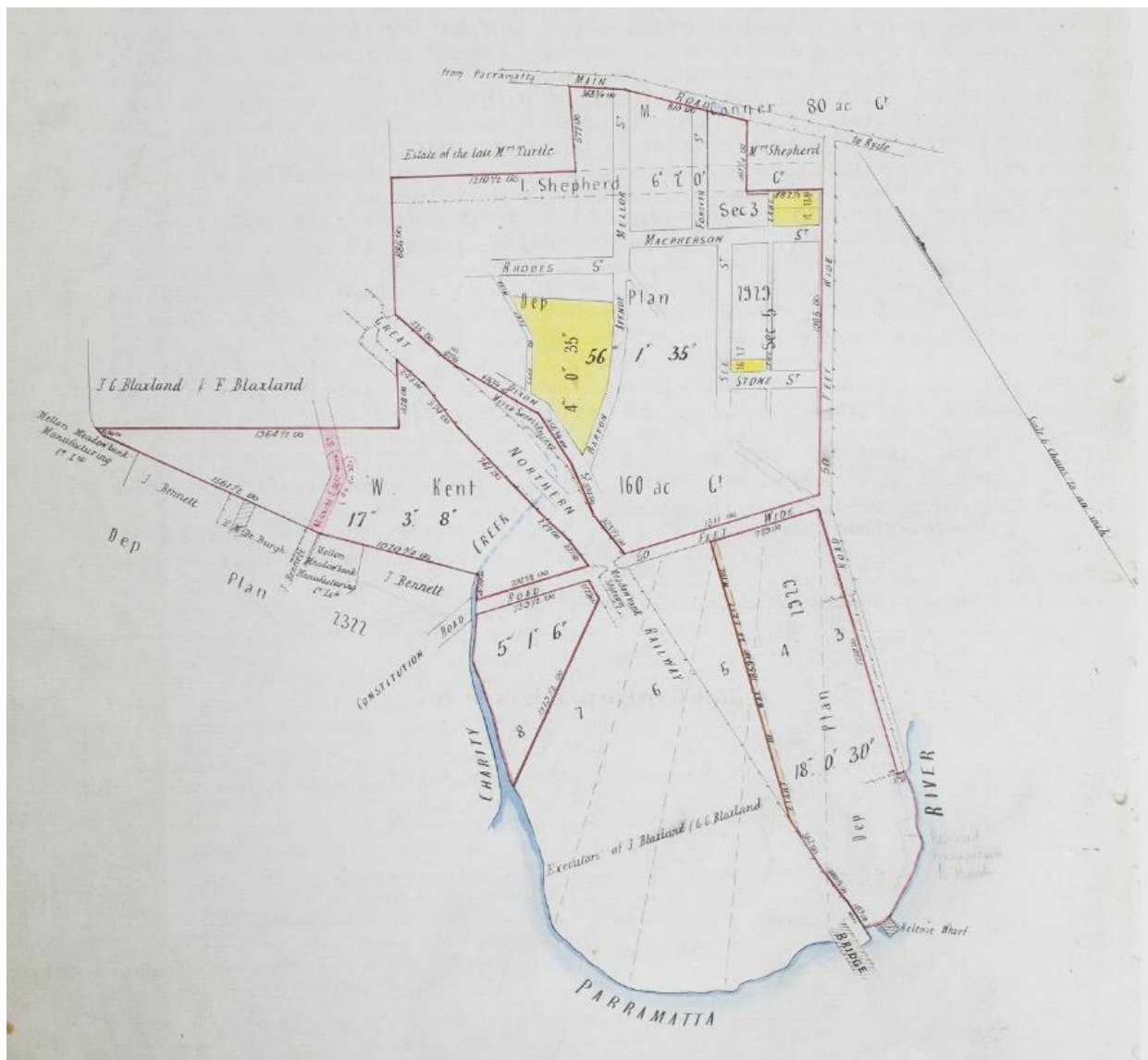
²³ CT Vol 1178 Fol 143, NSW LRS

²⁴ CT Vol 1101 Fol 20, NSW LRS

²⁵ The Meadowbank Manufacturing Company", *Cumberland Free Press*, 19 June 1897, p3

October 1898 that the works at Ryde were “wonderfully alive...turning out about 10 or 12 truck-loads of agricultural implements per day, which are being conveyed by rail to various parts of the country”.²⁶ A full description of the works was furnished in the *Sydney Stock and Station Journal* the same month. At this date, J B Messent and Mr Barton were respectively the manager and engineer/practical manager of the Meadowbank works owned by J H Angus, a well-known South Australian squatter and breeder of Shorthorn cattle. “When he took possession of the manufactory three years ago, it was an insignificant concern. It has since been increased to three times the size”.²⁷

Figure 20 – Block plan accompanying CT Vol 1178 Fol 143, registered November 1895.



Source: NSW LRS

Following the death of John Howard Angus, the property at Meadowbank passed by transmission in December 1904 to Susanne Angus, John Alexander Thomson and Leonard William Bakewell.²⁸ The following year, they conveyed the land to Susanne Angus, John Alexander Thomson, Leonard William Bakewell and Charles Howard Angus. One year later, they purchased the land formerly owned by Henry Simon and occupied by the former G H Rhodes & Co engineering works.²⁹ The respective portions of land were consolidated on a new certificate of title in October 1905 as shown in Figure 21 below. In May 1906,

²⁶ “Prosperous Works”, *Daily Telegraph*, 6 October 1898, p7

²⁷ “Making Agricultural Implements, The Meadowbank Works”, *Sydney Stock and Station Journal*, 18 October 1898, p3

²⁸ CT Vol 1474 Fol 51, NSW LRS

²⁹ CT Vol 1124 Fol 138, NSW LRS

part of the property was conveyed to The Meadowbank Land Syndicate Limited³⁰ excluding the Meadowbank Works. Part of the present Study Area in Rhodes Street adjoining the railway corridor was comprised in the property sale (Figure 24). The first subdivision of the “Meadowbank Township” was advertised for auction sale on 17 February 1906 as shown in Figure 23.

Figure 21 – Block plan of land on CT Vol 1644 Fol 98 registered in the name of Susanne Angas, Charles Howard Angus, Leonard William Bakewell and John Alexander Thomson, all of South Australia, 21 October 1905.



Source: NSW LRS

³⁰ CT Vol 1705 Fol 127, NSW LRS

Figure 22 – Helenie Estate Meadowbank near Ryde, c1897

HELENIE ESTATE
MEADOWBANK^{near} RYDE
TORRENS
FOR PRIVATE SALE
TITLE

With River View
11 Miles from SYDNEY.
2 minutes from Meadowbank Railway Statⁿ
Communication by RAIL, ROAD & RIVER.
25 Minutes by Rail from Sydney.

CHEAP BUILDING SITES
EASY TERMS CAN BE ARRANGED.
Money advanced to build.

For Particulars & Plans
APPLY TO **PIERCY ETHELL & CO**
3 MOORE ST, SYDNEY.

TURNER & MENDERSOHN, LITHO. SYDNEY.

Source: NLA, nla.ob_230294363.tif

Figure 23 – First subdivision, Meadowbank Township At The Railway Station, 17 February 1906.



Source: NLA, MAP Folder 101, LFSP 1516

In 1906, Ernest Samuel Trigg, manager of the Meadowbank Manufacturing Company, gave evidence before the Tariff Commission. At this date, there were 200 workers employed the plant, 180 of whom were employed in the manufacture of agricultural machinery, representing approximately half of their output. The business continued to prosper through the following decade or more. Figure 27 comprises an advertisement for the company

[illegible]

28 HISTORICAL OVERVIEW

Figure 25 – Rex Hazlewood / Meadowbank Works, about 1915.



Source: City of Ryde Library

Figure 26 – Staff of the Meadowbank Manufacturing Company, c.1930.




Source: City of Ryde Library

Figure 27 - Meadowbank Manufacturing Company advertisement from the Agricultural Gazette, 2 August 1916.

MEADOWBANK ENGINES

**WILL
MAKE**



MONEY FOR YOU

MEADOWBANK BENZINE-KEROSENE ENGINES are made at our Works near Sydney, are most up to-date in design, and manufactured by modern methods.

THE COMMONWEALTH GOVERNMENT, after inviting public Tenders, and receiving some hundreds of quotations, selected the Meadowbank Engine, ordering six 10-B.H.P. Horizontal, and twelve 6-Brake Horse Vertical type.

The Engines were severely tested by the Commonwealth Officer for efficiency and economy, and gave the greatest satisfaction.

YOU CAN SAFELY ENTRUST YOUR ENGINE ORDER TO MEADOWBANK, and know that you will get far better value than in any imported Engine.

Meadowbank Engines are built to run as well at the end of 10 years as at starting. This cannot be said of many so-called cheap engines that are on the market to-day.

THE PRICE of the 10-B.H.P. Benzine-Kerosene Portable Engine, as illustrated above, is **£190. complete**—half cash, balance in 12 months.

A liberal discount is allowed for cash, or longer terms can be arranged.

NO PAYMENT until the Engine is given a satisfactory start, free of charge to you.

BOOK YOUR ORDER NOW, and save disappointment later on.

MEADOWBANK MFG. Co., ENGINEERS AND IMPLEMENT MAKERS
MEADOWBANK, NEAR SYDNEY, N.S.W.

Source: Image courtesy of Steve Bower

Figure 28 – Block plan of land registered on CT Vol 1982 Fol 132 in the name of Meadowbank Land Syndicate Limited, 10 July 1909.



Source: NSW LRS

A new company with the name “Meadowbank Manufacturing Company Limited” was registered in March 1923. The directors of the new company were Ernest Samuel Trigg, Rosabelle Irene Trigg, William Arthur Trigg, James Paul Larcombe Willie Frederick Arthur Larcombe, Raymond Spencer Goward and Robert Johnston. The company was formed to manufacture railway and tramway rolling stock, agricultural and pastoral equipment, coach and motor bodies, and to act as engineer, wood workers and metal foundries. The head office was Constitution Road, Meadowbank.³¹ Coinciding with the reorganisation of the business and management, 16 acres of land (containing portion of the Study Site) was conveyed on 8 March 1923 to Meadowbank Manufacturing Co Ltd.³² At the beginning of the Great Depression in 1929, Meadowbank Manufacturing Company Limited was forced to lay off the entire workforce when the State Government cancelled all railway contracts. By October the same year, there were just 20 employees, down from the peak of 400 to 500 workers. The factory had closed by October the following year.

Following the closure of the engineering works in 1930, the Study Area appears to be predominantly vacant with the exception of three residential dwellings adjacent to the north-eastern boundary and three commercial/ industrial buildings located in the south eastern portion of the site. The area surrounding the site appears to be primarily residential to the north-west and north-east. The heritage listed water pumping

³¹ “New Companies”, *Daily Telegraph*, 3 March 1923, p9

³² CT Vol 1762 Fol 101, NSW LRS

station is to the north of the site. The area to the south comprises commercial and industrial buildings. The railway is to the west of the site with residential buildings beyond the railway.

Figure 29 - Detail from 1930 aerial survey of Sydney showing Study Area adjoining Meadowbank Engineering Company which is vacant apart from three cottages.



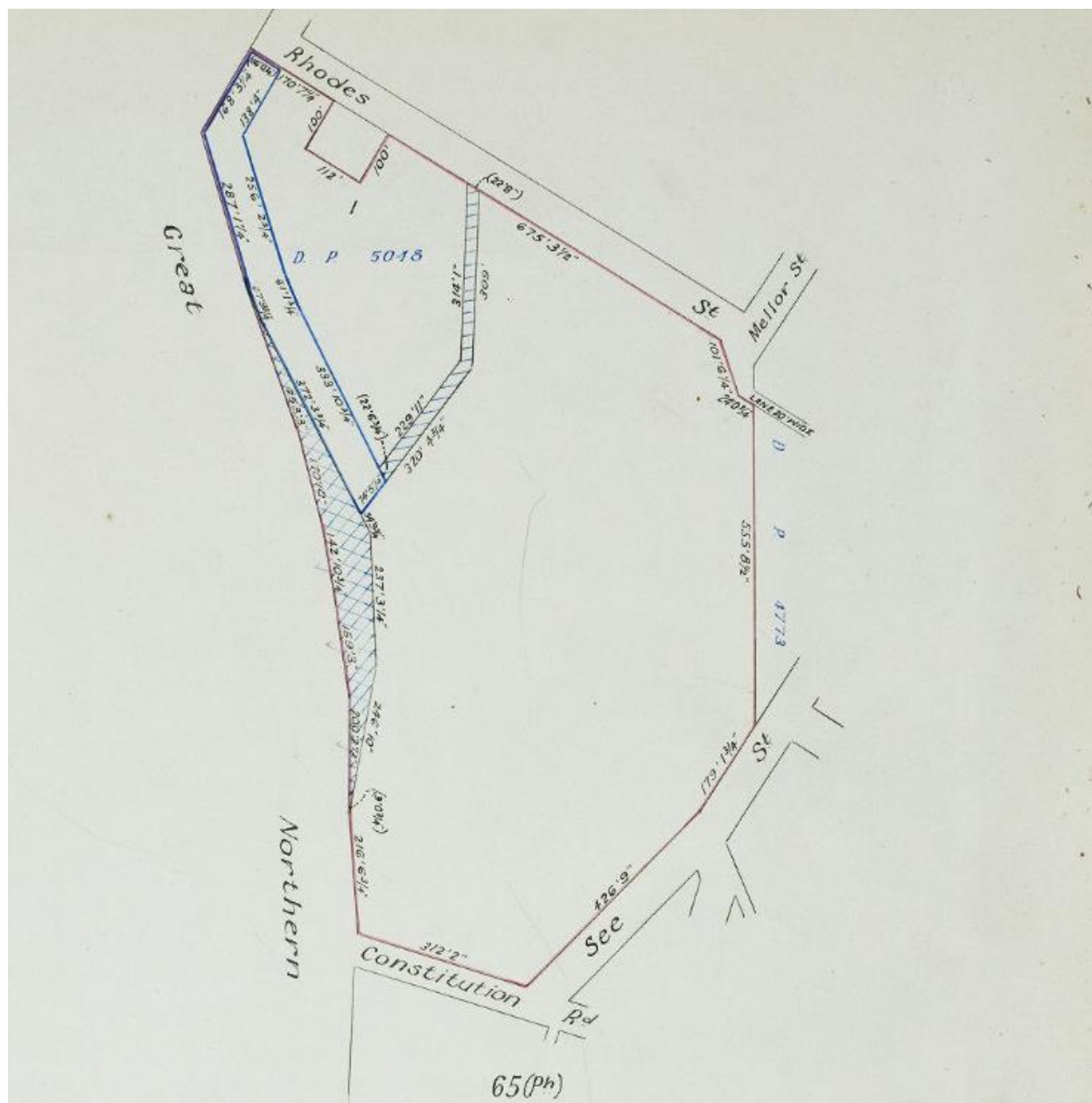
Source: NSW LRS

In October 1938, the remaining engineering workshop buildings were demolished and building materials advertised for sale.³³ The 16-acre site was purchased by the Council of the Municipality of Ryde for the sum of £5,500.³⁴ A new Certificate of Title was issued to the Council of Municipality of Ryde on 27 August 1942, consolidating several land parcels as shown in Figure 30 below and including the bulk of the Study Site in the north-west. Those areas shaded or outlined in blue comprise reservations acquired in 1923 by the Metropolitan Water Sewerage and Drainage Board and the Public Works Department.

³³ "Building materials at Meadowbank", *Sydney Morning Herald*, 14 October 1938, p2

³⁴ Ibid.

Figure 30 – Block plan of land on CT Vol 5341 Fol 169, registered to Ryde Municipality, 27 August 1942 and comprising 21 acres 2 roods 37 perches of land, excluding portions outlined or cross-hatched in blue.

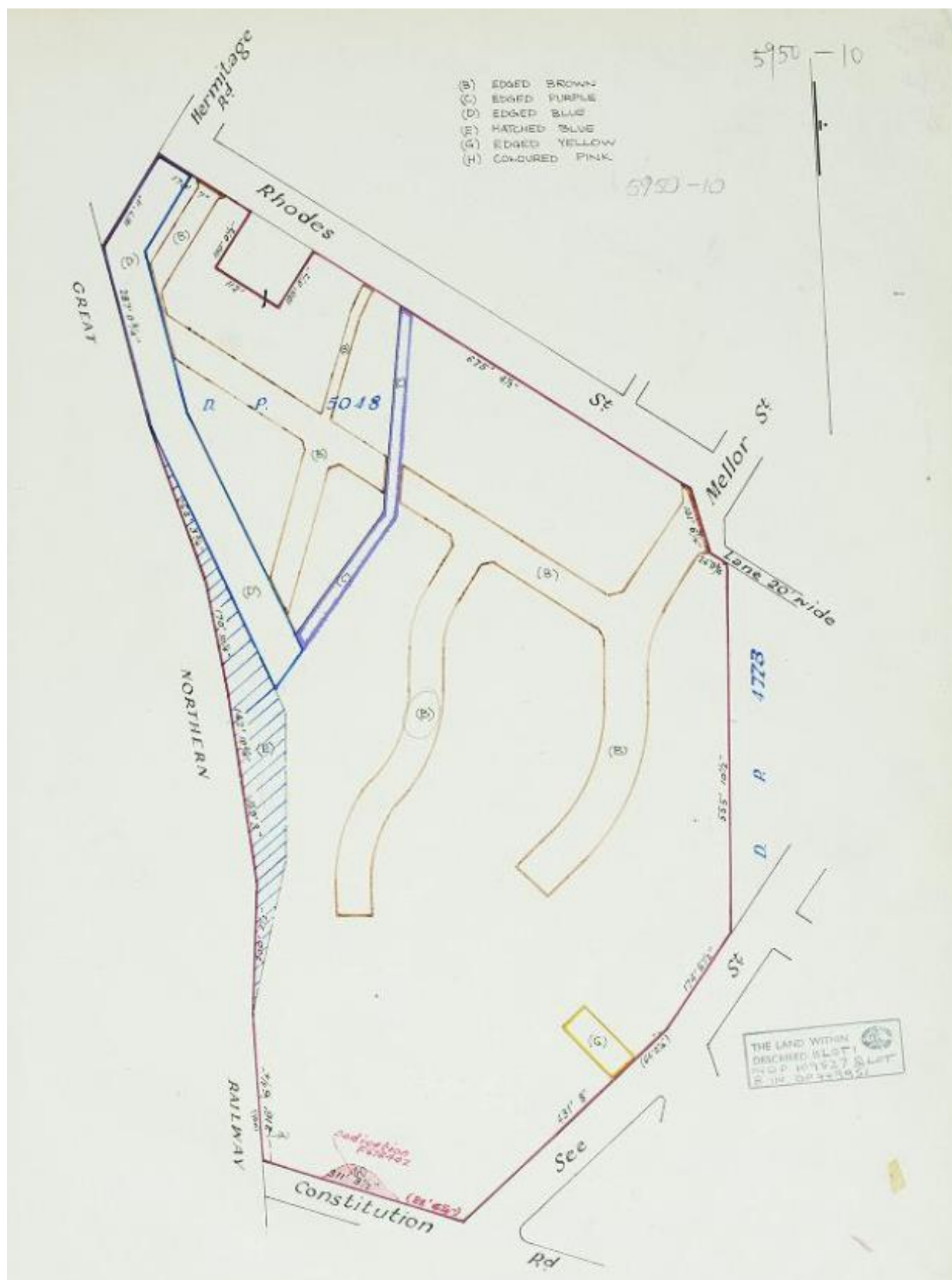


Source: NSW LRS

The Ryde Council intended to quarry stone on the site for the reclamation of Charity Creek, which adjoined the site. Once the quarry was expended, the Council proposed to subdivide the area for residential allotments. Part of the site was leased to the Sydney County Council. The State Government notified Ryde Council in May 1945 of its intention to resume the Meadowbank site for a technical college for the sum of £16,000. In the intervening period, Ryde Council had expended £15,000 on "extensive road construction, excavation, filling, levelling, kerbing and guttering, and stormwater drainage construction".³⁵ The resumption of 21 acres 1 rood 39¼ perches of land was registered on a new certificate of title in April 1949 in the name of the Minister of Public Instruction, including the Study Site as shown in Figure 31.

³⁵ "£16,000 for College Site", *The Sun*, 8 June 1945, p2

Figure 31 – Block plan of land registered on CT Vol 5950 Fol 10, April 1949.



Source: NSW LRS

3.3. MEADOWBANK TECHNICAL COLLEGE (SOUTH & EAST SECTION OF THE STUDY AREA)

In June 1945, the Commonwealth Government approved an estimated expenditure of £1,331,000-£1,511,500 in New South Wales for the provision of buildings for technical college training facilities for ex-Service personnel.³⁶ One month later, the NSW Department of Education informed the Public Works Department that this budget would fund five workshop units for a new technical college at Meadowbank.³⁷ Consequently, Public Works prepared drawings in 1945 for the Meadowbank Technical College with an estimated cost of £58,000, including two new two-storey buildings of wood on concrete.³⁸ A revised plan was prepared in March 1947, converting the buildings to brick and correspondingly raising the estimated cost to £55,100.³⁹ The Minister for Education, Mr Heffron, announced one month later that new technical colleges were under construction at Meadowbank, North Sydney, Granville, Bankstown, Leichhardt-Petersham, with colleges to be built at Orange, Dubbo, Albury, Lismore, Leeton, Tamworth and Gunnedah.⁴⁰

The new Meadowbank Technical College was officially opened in May 1949 with approximately 850 students. The College offered classes in carpentry and joinery, fitting and machining, electrical trades, diploma preparatory and dressmaking. "Classes in shorthand, typewriting and other commercial subjects would become available at a later date".⁴¹ Buildings 1 and 2 have been modified since that time and are now known as Buildings A and B (these buildings are located on the southern portion of the campus and do not form part of the study area).

Figure 33 and Figure 34 are two Water Board detail surveys with a base date of March 1947. The first plan shows foundations for buildings 1 and 2 (A and B) of the Meadowbank Technical College and three houses with a frontage to Rhodes Street within the Study Site. The second plan contains latter annotations showing additional buildings on the College grounds and the footprint of buildings on the Study Site (former Meadowbank Boys High School).

In 1956-57, the Department of Public Works prepared design sketches for a workshop block estimated to cost £51,700. It is presumed this building was completed the following year. Further alterations and additions took place in 1958-9 at a cost of £15,800. There was no additional building development of the campus until 1963-4 when Public Works commenced construction of "additional accommodation". Two years later, the Department reported that the additional accommodation was still under construction at a cost to date of £783,300 to date.

The Meadowbank College underwent a major expansion programme in the 1970s. The Department of Public Works Annual Reports detail the various construction works carried out during this period including: in 1971-72, planned Science and Art Buildings to cost \$1,640,000; and in 1974-5 major development to cost \$3,373,000, with construction continuing in 1975-76 a total cost of \$3,706,000.

In 1981-82, the NSW Department of Public Works prepared working drawings for Stage 4 development at Meadowbank College, estimated to cost \$5,837,000.

Figure 35 comprises an artist's impression of the proposed building as it appeared in the Department's 1981-82 Annual Report Work. The following year, it was reported that Stage 4 was under construction as shown in photographs dated to October 1982 (Figure 36 and Figure 37). Stage 4 was completed by September 1984 at a cost of \$6,961,793 (Figure 38). The Stage 4 buildings are identified on the current Campus as Building J.

Further development of the Meadowbank campus took place in 1988-89 when the Department of Public Works commenced construction of a Carpentry/Joinery/Acoustics building estimated to cost \$100,000, to be completed in the end of 1989. The following year, the Department reported that Stage 6 was under construction with an estimated value of \$12.93 million. Stage 6 (Building P) was completed in July 1993 for

³⁶ "Technical Colleges will train ex-Servicemen", *Sydney Morning Herald*, 27 June 1945, p4

³⁷ A.104 in NRS 4352, SB.52/4856, State Archives & Records

³⁸ NSW – Public Works Department, *Annual Report*, 1945-6, p 7, 63, 70, A45/1812 in NRS 4352, SB.52/4856, State Archives & Records

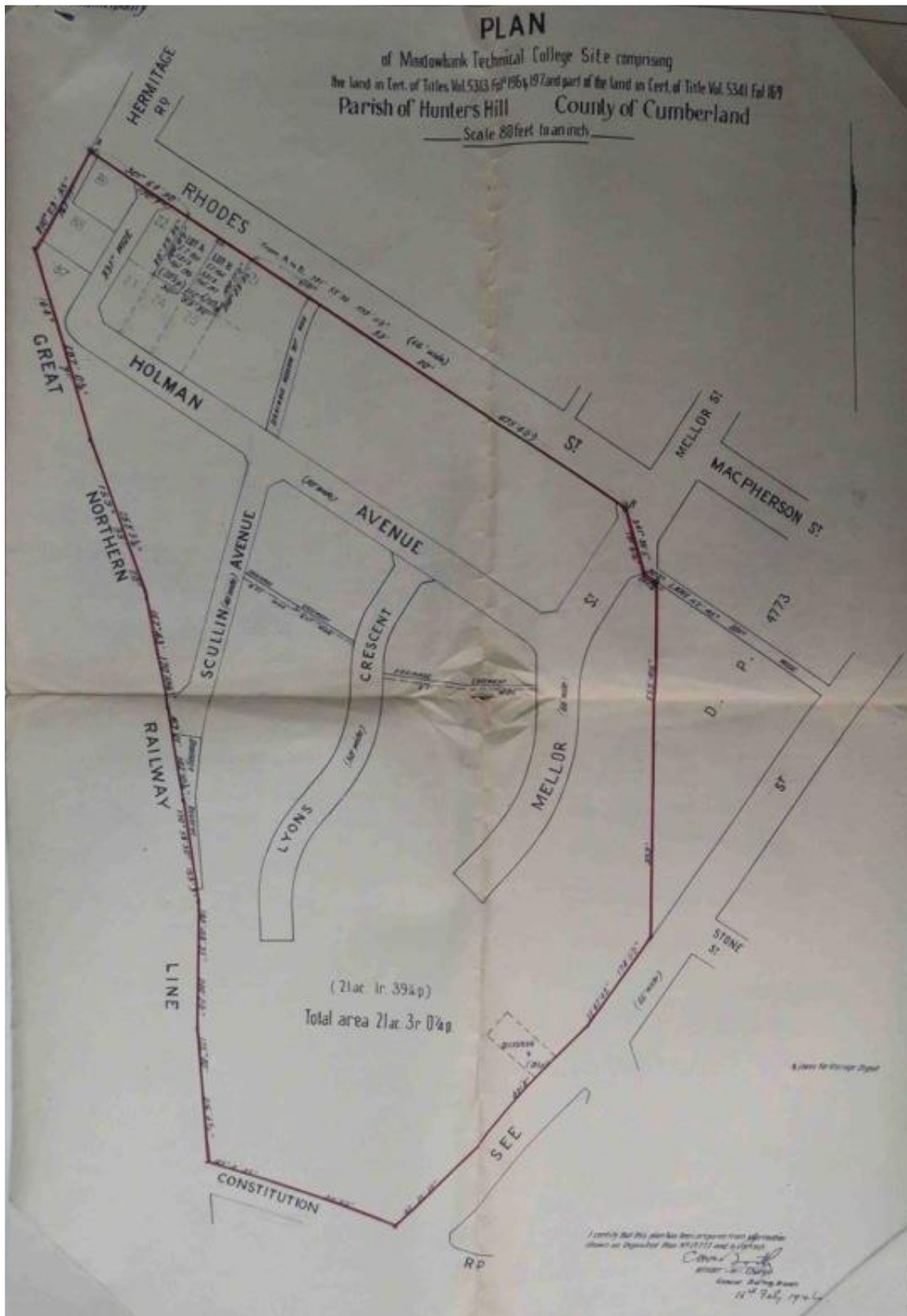
³⁹ A47/1724 in NRS 4352, SB.52/4856, State Archives & Records

⁴⁰ "Grant for New Technical Schools", *Daily Telegraph*, 8 April 1947, p11

⁴¹ "New Meadowbank Technical College", *Construction*, 6 April 1949, p2

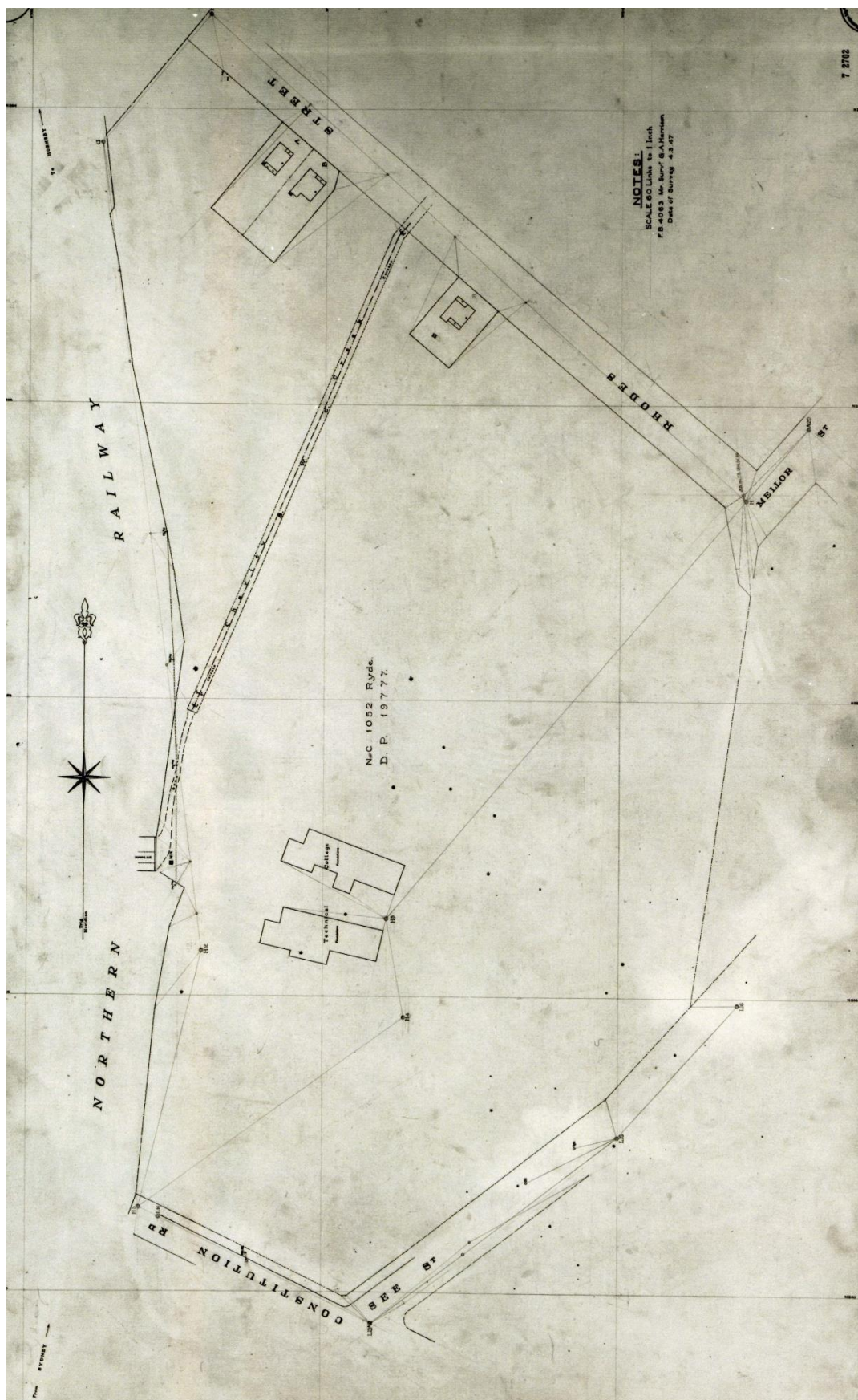
the sum of \$9.563 million. Concurrently, Conybeare Morrison and Partners was commissioned to prepare a Master Plan for a fee of \$50,000.

Figure 32 - The plan of the TAFE land prepared in February 1946.



Source: In NRS 4352, SB.52/4856, State Archives & Records, reproduced in David Scobie Architects Pty Ltd 2017

Figure 33 – Detail Survey Ryde Sheet 88, date of survey 4 March 1947. Shows foundations of buildings 1 and 2 of new Technical College and three houses in Rhodes Street.



Source: Sydney Water Historical Research Facility, DTS2702(2)

Figure 34 – Detail Survey Ryde Sheet 88, date of survey March 1947, with later annotations. This plan contains the shadow of the three houses in Rhodes Street demolished for the High School. Also shows WRAAC barracks in See Street at the southern tip of the site.



Source: Sydney Water Historical Research Facility, BLKTWL4090

Figure 35 - The artist's impression of the proposed Stage 4 buildings constructed on the southern side of the TAFE (excluded from the study area).



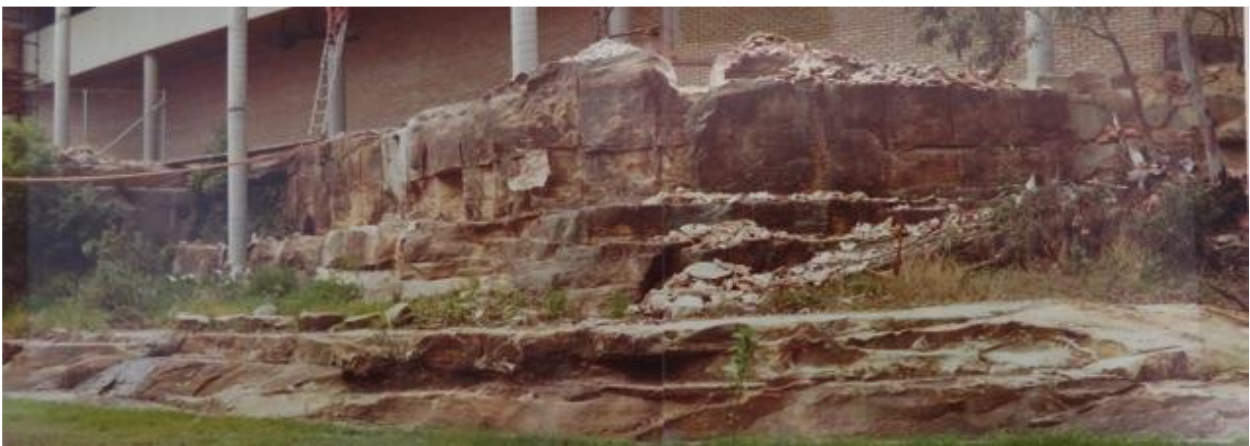
Source: *Public Works Department, Annual Report 1981-2*, p 86

Figure 36 – Landscaping works adjoining Stage 4, Meadowbank Technical and Further Education, October 1982.



Source: *Source: State Archives & Records, NRS 4352, S.5685/51, reproduced in David Scobie Architects Pty Ltd 2017*

Figure 37 – Landscaping works associated with Stage 4, Meadowbank Technical and Further Education, , along Constitution Road, October 1982.



Source: *State Archives & Records, NRS 4352, S.5685/51, reproduced in David Scobie Architects Pty Ltd 2017*

Figure 38 – Stage 4, Meadowbank College of Technical and Further Education, September 1984. (southern section of the TAFE excluded from the study site).



Source: SLNSW, Government Printer collection, 4/34929



Source: SLNSW, Government Printer collection, 4/33375



Source: Source: SLNSW, Government Printer collection, 4/33371

3.4. MEADOWBANK MIGRANT HOSTEL

Analysis of documentary records including plans indicates the hostel was located on the southern portion of the TAFE site outside the study area.

In August 1948, the Prime Minister announced the Commonwealth Government would build hostel accommodation for Baltic immigrants, many of whom were allocated to building industries. Consequently, the NSW Department of Public Works reported in 1948-49 that they were carrying out work on an immigration reception depot at Meadowbank involving “adaptation of an existing military encampment for the housing of Balt immigrants ... in two stages”.⁴² The following financial year, the Department reported that the total cost of Section 1 and 2 respectively was £12,460 and £31,557.⁴³

The term “Balt” referred to all immigrants, irrespective of origins, after the first ship arrived in late November 1947 carrying largely migrants from the Baltic.

Between August and December 1949, 70 new European immigrants were accommodated at the Meadowbank Migrant Workers’ Hostel. This camp appears to have solely housed men, as at least one resident wrote to the paper complaining that the men were separated from their wives and children at Parkes, Cowra and Greta.⁴⁴ By July 1951, Meadowbank was one of the smallest hostels housing 26

⁴² *Report of the Department of Public Works for the year ended 30th June, 1949*, p40

⁴³ *Report of the Department of Public Works for the year ended 30th June, 1950*, p38

⁴⁴ “Camps of Separation”, *The Sun*, 6 December 1949, p19

families⁴⁵ mostly of British origin.⁴⁶ It is unclear when the hostel closed. Whilst there is a reference in 1953 in the *Sydney Morning Herald* to the establishment of new WRAAC barracks at Meadowbank for girls experiencing accommodation difficulties⁴⁷, these buildings were not connected to the migrant hostel (Study Site) as these are shown as a cluster of buildings south of the technical college buildings near Constitution Road and See Street as shown in the detail survey (Figure 34).

3.5. MEADOWBANK JUNIOR TECHNICAL HIGH SCHOOL (1956-1961)

On 5 April 1954, the Minister for Public Instruction set aside 4 acres 1 rood 20 perches of land in Rhodes Street, forming part of the Technical College grounds, for a high school.

By mid-1955, the Department of Education had transferred all responsibility for the maintenance of public schools and the erection of classroom units to the Department of Public Works, resulting in a large increase in their workload. Consequently, the Department prepared a large number of plans and specifications of new school buildings consisting of units up to four classrooms, plus ancillary services such as toilets, ablution blocks, etc.⁴⁸ This included new buildings for the Meadowbank Secondary Boys' School at an estimated cost of £130,000.

Many large works were undertaken, the more important being:

Meadowbank Secondary School for Boys: -This work comprises the erection of fifteen timber-framed buildings linked together by covered ways, together with a brick administration building and ancillary toilet and ablution blocks to form a complete school.⁴⁹ (page 43

In the year 1954-55, £34,647 of a budget of £122,213 was spent to date. The school officially opened in January 1956. Two photographs of the new school dated to July 1956 (Figure 39 and Figure 40) show buildings T, V, W and X, Y2 and Y4 in the foreground as well as the ancillary and toilets/ablution blocks. Figure 41 comprises a view of the school reproduced in the Public Work's Department annual report for 1956/57 and shows a similar arrangement. A similar photograph (Figure 42) was published alongside views of Manly Boys High School, Chester Hill North Primary School and Gymnasium Homebush Boys High School in *Education* on 31 October 1956 in an article titled "More New Buildings Like These Are Urgently Required".

Figure 39 – Meadowbank Junior Technical High School, July 1956.



Source: State Archives & Records, NRS 15051, Photographic Collection, Meadowbank Boys High School as reproduced in David Scobie Architects Pty Ltd 2017, p31

⁴⁵ "We're Sick of Sausages, Stews and Spinach", *Sunday Herald*, 29 July 1951, p6

⁴⁶ "Migrants 'Must Pay Increases'", *Daily Telegraph*, 13 July 1951, p4

⁴⁷ "New Barracks for WRAACS in Sydney", *Sydney Morning Herald*, 26 March 1953, p4

⁴⁸ *Report of the Department of Public Works in New South Wales for the year ended 30th June, 1955*, p48

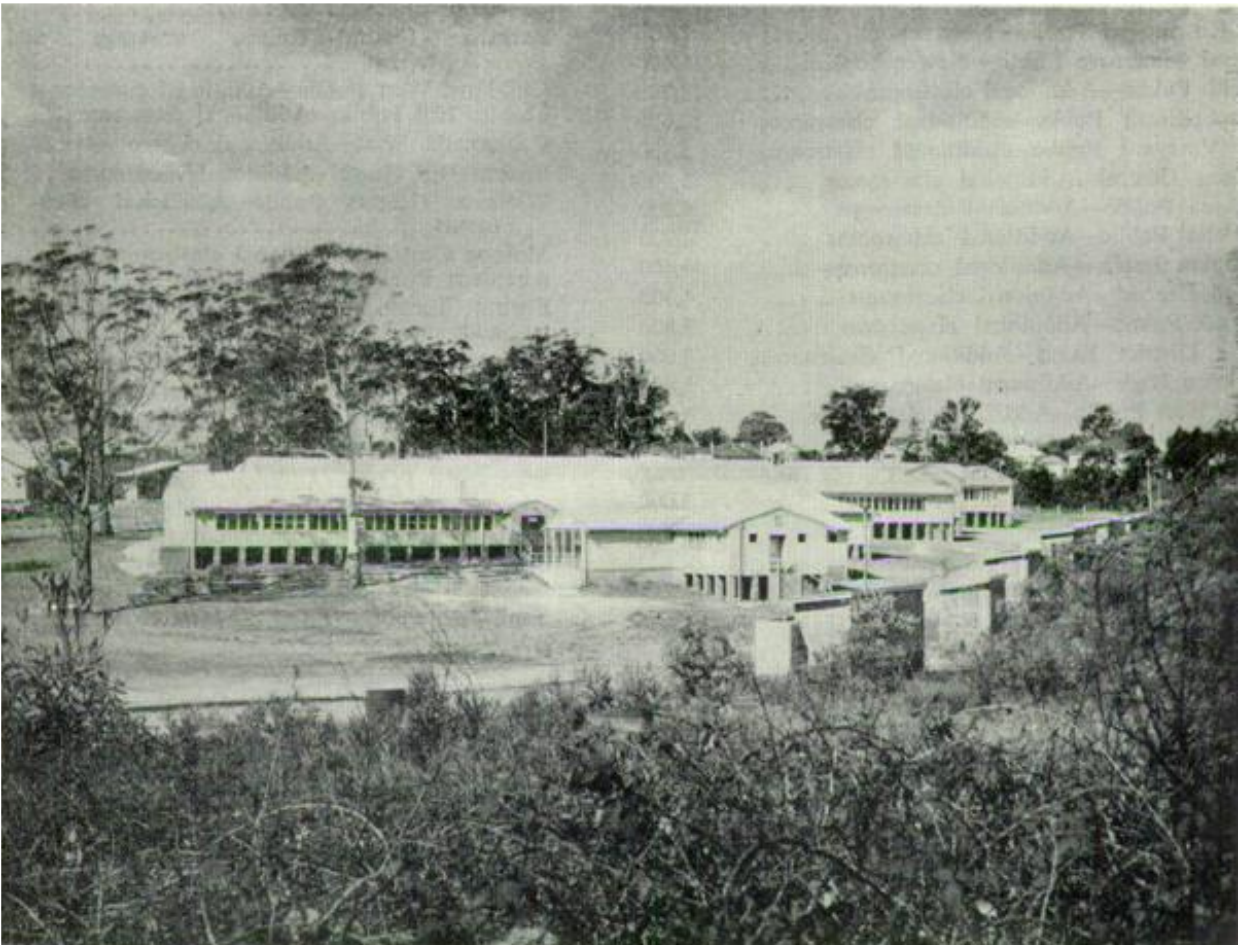
⁴⁹ *Report of the Department of Public Works in New South Wales for the year ended 30th June, 1955*, p43

Figure 40 - Meadowbank Junior Technical High School, July 1956.



Source: State Archives & Records, NRS 15051, Photographic Collection, Meadowbank Boys High School as reproduced in David Scobie Architects Pty Ltd 2017, p31

Figure 41 – Meadowbank Secondary School.



Source: Report of the Department of Public Works of New South Wales for the year ended 30th June, 1957, p48

Figure 42 – Meadowbank Junior Technical School – timber frame construction.



Source: *Education*, Vol 38 No 13, 31 October 1956, p1

In 1959/60 the Department of Public Works prepared sketches for additional accommodation at the school and commenced construction of the “new assembly hall and administrative block”, costing approximately £54,000⁵⁰ These buildings, were designed in 1959 by the Department in association with Concrete Industries (Aust) Ltd and Kevin J Curtin and comprising pre-cast concrete single storey school buildings. Shortly thereafter, an additional area of 7 acres 1 rood 4 ½ perches of land was added to the school grounds on 27 May 1960.⁵¹ Concrete Industries (Aust) Pty Ltd prepared working drawings in December 1960 for a new classroom block in monocrete sited next to the parking area.⁵² By 1961-62, the cost of the assembly hall and administration building had risen to £56,700. Simultaneously, the Department commenced construction of a music room and two classrooms for the sum of £14,500, increasing to £16,600 by completion in 1960/61.

There was a major reorganisation of New South Wales secondary schools following the introduction of the Wyndham Scheme. Consequently, the junior technical high schools such as Meadowbank were converted to comprehensive high schools in 1961. Meadowbank Junior Technical High School closed at the end of 1961 and reopened in January 1962 as Meadowbank Boys High School.

According to David Scobie Architects Pty Ltd 2017 *TAFE NSW Meadowbank Campus: Northern Precinct*, page 33, “approval was given on 23 February 1965 for an additional five B type classrooms, one senior study centre, one art room, one music room, two B3 science laboratories, one bulk science store, one metalwork room, one staff common room, a staff studies area and toilet for 46 teachers, four form masters’ offices, one toilet/wash room for senior girls, and cleaners’ stores. The Public Works Department file regarding the school had been ‘misplaced’. The new buildings would be built adjacent to the oval. Other changes were also proposed”. The work proposed in 1963-64 and approved for construction in 1965 was

⁵⁰ *Report of the Department of Public Works for the year ended 30 June, 1960*, p47 & p54

⁵¹ State Archives & Records, NRS 3988, Site Register Card, No 106, Meadowbank Boys High School, 11/11780 referenced in Scobie Architects Pty Ltd, *op. cit.*, p32

⁵² Plan Services, SB962/38

According to David Scobie Architects Pty Ltd:

By 4 September 1967, the new building and been altered to the following layout: Basement – shelter, toilets, armoury; Ground floor – library and office, workroom and two group study rooms, library annex, two laboratories plus preparation room, bulk science store, two classrooms, text book store, form master's office, staff study plus toilet, general store; First Floor - double art room plus pottery annex, Deputy Principals' office, clerk's office, five classrooms, senior study centre, form masters' office and two staff study rooms.⁵⁴ Work had not commenced by May 1968 and it was reported that overcrowding would increase since the Technical College would no longer make any rooms available to the school.

The new classroom building and alterations to existing buildings were under construction in 1968-9 costing £375,400. An agreement was signed with the contractor, James Wallace, of 89 Berry Street, North Sydney on 24 March 1969 to complete it for \$375,411.

Construction of "new classroom block and alterations to existing" commenced in 1968-69.⁵⁵ The work was completed the following financial year for the sum of \$375,400.⁵⁶ The working drawings referred to in the previous paragraph were prepared by the Department in association with Winterbottom Moore & Associates. This likely refers to Buildings Q and R.

Figure 44 – New school buildings, c.1974.



Source: State Archives & Records, NRS 15051, Photographic collection, Meadowbank Boys High School, reproduced in David Scobie Architects Pty Ltd 2017, p35

⁵⁴ Press statement, School file, Meadowbank Boys High School, 14/7682, State Archives & Records, reproduced in David Scobie Architects Pty Ltd, *op. cit.*, p35

⁵⁵ *Report of the Department of Public Works for the year ended 30 June, 1969*, p83

⁵⁶ *Report of the Department of Public Works for the year ended 30 June, 1970*, p82

Following the closure of Meadowbank Boys High School in December 1983, the property reverted to occupation by Meadowbank Technical College and Further Education. David Scobie Architects Pty Ltd report the following changes to the former school site since 1983: two demountable classrooms (Y3 and Y5) erected in 1985; Y1 and Y6 erected on the former tennis courts in 1990; building V substantially refurbished internally in 1992; and buildings T, V W and Y1 refurbished and services upgraded.

3.6. SECONDARY SCHOOL BUILDINGS AFTER WORLD WAR II

Australia experienced an unprecedented immigration boom in the post-war years based on the notion of “populate or perish”. Between 1945 and 1965, over two million migrants, including displaced refugees from Europe, arrived on our shores. A corresponding increase in enrolments necessitated a large-scale school building programme to meet the demand for additional schools. For instance, in 1945 there were 86,492 post-primary pupils, but by 1960 this figure had risen to 160,307.

According to Russell C Jack, 1980, *The Works of the NSW Government Architect's Branch 1958-1973*, post-war “high school plans invariably followed a single-loaded corridor principle, usually over two storeys. This planning approach continued into the 1950s before being appraised. These buildings were uninspiring as learning environments and did nothing to encourage the pupils to break away from the current attitude that schooling was drudgery.

In the 1950s, the Department of Education in conjunction with the Department of Public Works, undertook a massive school building programme to meet unprecedented numbers of students enrolled across the State. For instance, in 1957, thirty-eight primary school sites and seven secondary school sites were acquired and extensions made to seventy-one existing schools. During that year, 974 new classrooms were completed, up from 751 the previous year. Of those, 172 were constructed in brick, 16 in brick veneer, 1000 in aluminium, 266 in pre-stressed concrete, and the remaining 420 units built in timber which represented 44% of the total new building. According to the Annual Report:

Timber continued to be the largest single material used in classroom construction. It is employed extensively in country districts where timber is readily available locally, but its use is also widespread in metropolitan areas. It does, of course, provide a cheaper means of construction, but against this must be set a greater cost of maintenance.⁵⁷

This trend continued in 1958, with a further 1323 classrooms completed, up one-third from the previous year. In 1959, the Department of Education reported there were 146,653 pupils enrolled in secondary schools across the State, up from 133,684 the previous year.⁵⁸ The greater part of the building programme in that period consisted of new and additional accommodation to meet the rapidly increasing number of secondary school students. Timber and brick were the favoured construction media, however there was an increase in the use of pre-stressed concrete to meet tight delivery deadlines.

In the Department of Public Works, innovative new designs, modern construction methods/materials and standard building types and whole school designs were developed to meet the increasing demand for new and enlarged schools.

3.7. ILLUSTRATED CHRONOLOGY OF THE STUDY AREA

The following sequence of aerial surveys illustrates the development of the Study Site commencing in 1930. By 1943, the three residential buildings remain while all other structures appear to have been removed. In 1955, the easternmost residential dwellings were removed and Blocks Y2, Y4, T, V, W and X were constructed by this time, most likely associated with the forthcoming opening of the Meadowbank Junior Technical College in January 1956. By 1965, all residential dwellings have been removed. Block Y5, Block S and Block O appear to be present at this date, along with some hardstand areas across the campus, and built especially for the Meadowbank Boys High School. The area surrounding the site remained predominantly the same until the 1960s when land to the north and north east were developed generally for commercial/ industrial purposes.

Block Q and R were constructed in 1968-69 for the Meadowbank Boys High School. Following the closure of the high school at the end of 1983, the school buildings reverted to TAFE use. Block Y1 was constructed in the late 1980s, along with the car parking area immediately outside Block S, accessed from Rhodes

⁵⁷ *Report of the Minister for Education for 1957*, p9

⁵⁸ *Report of the Minister for Education for 1959*

Street. By 1994, Block Y6 and Block Y3 was constructed, again for TAFE puposes. The secondary car parking area to the west of Block R was also constructed at this date. Following the development in the early 1990s, no significant change occurred to the Study Area.

Figure 45 – 1930 aerial survey.



Source: NSW LRS

Figure 46 - Detail from 1943 aerial survey of Study Site comprising three houses in Rhodes Street and undeveloped land.



Source: NSW LRS, SIX Maps

Figure 47 – 1955 aerial survey.



Source: NSW LRS

Figure 48 – 1965 aerial survey.



Source: NSW LRS

Figure 49 – 1975 aerial survey.



Source: NSW LRS

Figure 50 – 1987 aerial survey.



Source: NSW LRS

Figure 51 – 1994 aerial survey.



Source: NSW LRS

Figure 52 – 2005 aerial survey.



Source: NSW LRS

3.8. DATE OF CONSTRUCTION

The following table is an indication of the approximate date of construction of the buildings within the Study Area. These have been dated in accordance with historical research conducted and rely on fabric analysis and review of aerial mapping.

Table 3 – Approximate date of construction and original occupation/ use

Building	Date	Occupation/ Use (where known)
Block Y1	c.1990	Constructed for the Meadowbank Technical College
Block Y2	Between 1944 and 1954	Likely c.1949 for Meadowbank Technical College
Block Y3	Between 1987 and 1993	Built for TAFE
Block Y4	Between 1944 and 1954	Likely c.1949 for Meadowbank Technical College
Block Y5	1985	Built for TAFE
Block Y6	c.1990	Constructed for the Meadowbank Technical College
Block O	Between 1956 and 1964	c.1956 likely for the Meadowbank Junior Technical College
Block Q	Between 1966 and 1974	Under construction 1968-69
Block R	Between 1966 and 1974	Under construction 1968-69
Block S	Between 1956 and 1964	Designed in 1959, still under construction 1961-62
Block T	Between 1944 and 1954	Built either for the Meadowbank Technical College (c.1949) or the Meadowbank Junior Technical School which opened in January 1956
Block U	Between 1944 and 1954	Likely c.1949 for Meadowbank Technical College
Block V	Between 1944 and 1954	Likely c.1949 for Meadowbank Technical College
Block W	Between 1944 and 1954	Likely c.1949 for Meadowbank Technical College
Block X	Between 1944 and 1954	Likely c.1949 for Meadowbank Technical College

4. HISTORICAL ARCHAEOLOGICAL ASSESSMENT

The historical background presented in Section 3 demonstrates the Study Area has an extensive history dating back to its non-Aboriginal origins as grazing land and orchard belonging to William Kent. The information particularly pertaining to the Study Area and relevant for the historical archaeological assessment is presented at Table 3 below.

Table 4 – Historical information relevant to historical archaeological assessment

Date	Information
1796-1799	Study Area land – part of the lands granted to Lt William Kent, naval officer. Land understood to be used by overseers for cattle grazing and orchards. Study Area location shown in Figure 6 and 7, section 3.1
1890	Subdivision of land, establishment of Meadowbank Manufacturing Company by Mellor Bros. Company primarily produced agricultural equipment and machinery. Mellor's land shown in Figure 14 3.1 in relation to existing Rhodes Street. Figure 9 also shows that Mellor's Company extended from Study Area to west, across train line. Figure 9 also shows alignment of Charity Creek
1890s	Meadowbank lands gradually subdivided, farming land reduced and area increasingly industrialised
c1892/1893	Mapping at Figure 12 shows 'Timber Seasoning Works' and 'GW Rhodes Engineering Works', with road 'Barton Avenue' and unnamed laneways within overall Meadowbank TAFE site, as well as 'Dixon Street' adjacent to railway line. Study Area specifically appears to be undeveloped in Figure 12. Arrangement of existing surrounding roads in place
1892	Description of Meadowbank works indicates overall TAFE site includes Sydney water supply pipe, Rhodes & Co factory at the 'lower part of the estate', Mellor's shed and residences and Charity Creek being 'a creek of good water'. Figure 13 shows the water supply reserve adjacent to the railway line
1895	Plan at Figure 15 shows Charity Creek running into the water supply reserve adjacent to the railway line. The tramway identified in the advertisement at Figure 14 is shown as terminating at the Meadowbank Siding to the south of Constitution Road (outside of the Study Area).
1897 - 1898	Mellor's company closes. John Angus establishes The Meadowbank Manufacturing Co Ltd. Additional buildings constructed at southern portion of TAFE site.
1905	Plan at Figure 16 shows 'Dixon Street' and unnamed laneway within Study Area, as well as water supply reserve adjacent to railway line. Figure 17 also shows these items, as well as termination of tramway in southern portion of TAFE site. 'Barton Avenue' as shown in Figure 17 appears to roughly form the southern boundary of the Study Area.
1906	Figure 18 shows the TAFE site as "Meadowbank Engineering Works" in 1906. Documentary evidence indicates 200 workers, and manufacture of agricultural machinery

Date	Information
1915	Figure 20 shows extensive industrial development associated with Meadowbank works. It is not confirmed from this picture, but additional documentary evidence suggests this construction is on the western side of the rail line
1930	Meadowbank Manufacturing Co had shifted business to rolling stock and railway equipment. Great Depression causes closure of Meadowbank Manufacturing Co, following State Government directive cancelling all railway contracts
1930s	Aerial imagery of Study Area at Figure 28, and plan at Figure 30 shows it is predominantly vacant land, with three residences at Rhodes Street. These may be the residences mentioned in the 1892 description of the Mellor's site. Figure 30 also shows "Charity Creek covered". Development restricted to southern portion of TAFE site (Figure 23), with the exception of four to five buildings which appear to be in the southern reaches of the Study Area
1938	All engineering workshop buildings demolished. Council of Municipality of Ryde purchases land comprising TAFE site. Metropolitan Water, Sewerage and Drainage Board acquires portions of the Study Area
c1940 – 1945	Ryde Council quarries stone from TAFE site, for purposes of reclamation of Charity Creek. Council expends £15,000 on "extensive road construction, excavation, filling, levelling, kerbing and guttering, and stormwater drainage construction" throughout TAFE site. Plan at Figure 26 shows arrangement of named roads within TAFE site
1947 – 1949	Understanding that Meadowbank TAFE is under construction at south of Study Area. Opening 1949. Plan at Figure 31 shows established TAFE buildings
1950s	Land adjacent Rhodes Street, including part of the Study Area, used as Meadowbank Junior Technical High School. Photograph at Figure 36 – 38 shows several timber buildings, raised on stumps, and connected by walkways, and including ablutions blocks and network of paths. Continued building construction. Figures 44 and 45 show buildings associated with the school
1970s to 1980s	Widespread expansion programme costing several million dollars. Buildings understood to generally be multiple storey brick on concrete slabs.
1980s to present	Ongoing construction and development of site includes construction of buildings (generally masonry), landscaping, establishment of plantings, pathways, bitumenised car parks, sports facilities such as basketball courts, and establishment of sealed roads.

4.1. HISTORICAL ARCHAEOLOGICAL POTENTIAL

Historical archaeological potential is defined as:

The degree of physical evidence present on an archaeological site, usually assessed on the basis of physical evaluation and historical research. (Department of Urban Affairs and Planning 1996)

Archaeological research potential of a site is the extent to which further study of relics likely to be found is expected to contribute to improved knowledge about NSW history which is not demonstrated by other sites, archaeological resources or available historical evidence. The archaeological potential of the Study Area is

assessed based on the background information presented in Section 3 and Table 4 above, and graded as per:

No Potential: the land use history suggests significant disturbance that is likely to have destroyed or significantly disturbed previous occupation layers.

Low Potential: the land use history suggests limited development or use, or there is likely to be quite high impacts in these areas, however deeper sub-surface features such as wells, cesspits and their artefact-bearing deposits may survive.

Moderate Potential: the land use history suggests limited phases of low-moderate development intensity, or that there are impacts in this area. A variety of archaeological remains is likely to survive, including building footings and shallower remains, as well as deeper sub-surface features.

High Potential: substantially intact archaeological deposits could survive in these areas.

4.2. DISTURBANCE

In order to consider the potential for archaeological remains within the Study Area, a consideration of the level of ground disturbance is required, in order to understand the level to which potential historical deposits have been impacted by modern or later land uses. The following definitions are used:

Low Disturbance: the area or feature has been subject to activities that may have had a minor effect on the integrity and survival of archaeological remains.

Moderate Disturbance: the area or feature has been subject to activities that may have affected the integrity and survival of archaeological remains. Archaeological evidence may be present, however it may be disturbed.

High Disturbance: the area or feature has been subject to activities that would have had a major effect on the integrity and survival of archaeological remains. Archaeological evidence may be greatly disturbed or destroyed.

4.3. ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

The following table identifies the types of archaeological evidence potentially extant in the study area, and assesses the likelihood of survival of such remains, with consideration of the level of disturbance of the Study Area.

Table 5 – Assessment of Archaeological Potential

Date	Activity	Potential Archaeological Remains	Likelihood of Survival
Late 1700s	William Kent's land – grazing and orcharding	Orchard remains including informal tracks, fence lines associated with grazing activities, huts or outbuildings for storage of agricultural activities, water troughs or tanks	No potential. Structures would have been lightweight and non-permanent, tracks would have been rudimentary. Extensive development on site during 1800s to 2000s would have removed all traces. Clearing of vegetation during the modern period would have removed any fruit bearing trees.
1890s	Mellor's Meadowbank Manufacturing Company	Foundations of sheds associated with manufacturing activities, discarded agricultural	Low to none. The historical background suggests that few sheds were constructed during

Date	Activity	Potential Archaeological Remains	Likelihood of Survival
		equipment (potential moveable heritage), pathways, drainage, services, rubbish pits or dumps	<p>the use of the site by the Mellor Bros, and these may have been lightweight and non-permanent. Where these sheds may have been of a more permanent nature, all trace of such sheds was likely removed when the manufacturing building were demolished and materials sold in 1938. Establishment of the TAFE buildings, including concrete slabs would have likely removed such evidence.</p> <p>Further, the historical background and review of aerial imagery suggests that the buildings associated with Mellor's occupation of the site were primarily south of the Study Area.</p>
1890s -to 1930	The Meadowbank Manufacturing Co Ltd.	Foundations of workshops associated with manufacturing activities, discarded agricultural equipment (potential moveable heritage), pathways, drainage, services, rubbish pits or dumps	<p>Low to none, as per considerations above. Whilst historical documentation and aerials suggests the Manufacturing Co had buildings within the Study Area, these were generally confined to the southern reaches of the Study Area. Any archaeological evidence associated with the workshops of GW Rhodes is unlikely to have survived ground disturbance associated with construction of the TAFE buildings. The historical background suggests that the majority of the built infrastructure associated with the Meadowbank Manufacturing Co was sited at the western side of the railway line.</p> <p>There is low potential for rubbish dumps or similar in the form of pits to be extant within the northern portion of the Study Area where there was</p>

Date	Activity	Potential Archaeological Remains	Likelihood of Survival
			historically less building construction. The location or extent of such features cannot be determined.
1950s	Meadowbank Junior Technical High School	Building foundations in the form of former location of stumps, pathways, drainage associated with ablutions blocks	Low, where such buildings are not extant and adaptively reused. The buildings appear to have been of timber construction and raised on stumps. There is little to no potential for evidence of the buildings themselves, and little potential for extant remains of the stumps. Low potential for earlier drainage systems, the extent of such systems is unknown, and these are likely to have been impacted by later construction associated with the TAFE campus.
1940s	Site acquired by Council for TAFE site	n/a – Extant buildings and current site use	n/a – Extant buildings and current site use. Noting in background history that during the 1940s significant funding was expended for “extensive road construction, excavation, filling, levelling, kerbing and guttering, and stormwater drainage construction” – such works are likely to have resulted in high level of disturbance across the Study Area and TAFE site more broadly, and consequently destruction or significant impact to any remains associated with former uses of the Study Area.

4.3.1. Summary of Impacts

The non-Aboriginal history of the Study Area dates to the late 1700s, and since then has been modified and redeveloped for a variety of uses, including grazing and orcharding, agricultural manufacturing activities, use as a school site, and its current use as a TAFE campus. Associated with these land uses, sheds, workshops, residential and educational buildings have been constructed across the current TAFE site, to varying degrees of permanency. Whilst the southern reaches of the TAFE site are understood to have been relatively developed during the site's use for the Meadowbank Manufacturing companies, the Study Area is

understood to have been less developed until the 1940s and the establishment of the Junior Technical High School. It is considered that there is low potential for deeper archaeological deposits in the form of artefactual remains such as dump sites that may be associated with the use of the land by the manufacturing companies. However, in general the potential for archaeological remains in the form of earlier roadways, paths, services or building foundations is considered low, on account of the high level of disturbance that the Study Area appears to have undergone as a result of the construction and expansion of the Meadowbank TAFE site. This disturbance includes construction of buildings, landscaping, establishment of pathways and car parks, and internal roads.

4.4. ARCHAEOLOGICAL SIGNIFICANCE

The following assessment has been prepared with reference to the guiding document *Assessing Significance for Historical Archaeological Sites and Relics* (Department of Planning 2009). As per this document, the significance of the potential archaeological resource of the Study Area is assessed against Criterion A-G of the NSW Heritage Criteria, as well as in response to Bickford and Sullivan's questions regarding research potential.

4.4.1. Significance Criteria

Archaeological Research Potential – Criterion E

Archaeological research potential is the ability of archaeological evidence, through analysis and interpretation, to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site and its 'relics'. The integrity of the site, the state of preservation of archaeological material and deposits will also be relevant.

The research potential of the Study Area is considered low, as its history is relatively well documented in archival sources such as plans, maps, photographs including aerial imagery, and land titles. It is understood that the Study Area was generally undeveloped until the establishment of the Junior Technical College, however if deep deposits such as dumps or rubbish pits were extant within the Study Area, moveable heritage items found in such deposits could provide insight into the residential or industrial uses of the Study Area and/or may provide evidence of changes in site use or occupants, technology or personal preferences (in the context of domestic items) through time. Such deposits are considered unlikely to be rare or particularly significant in a State context, but may have interest at a local level. If other deposits such as building foundations were present, it is likely their integrity would be significantly compromised as a result of the site activities associated with the construction of the Meadowbank TAFE. Such deposits are likely to only have interest at local level.

Associational Significance – Criterion A, B, D

Archaeological remains may have particular associations with individuals, groups and events which may transform mundane places or objects into significant items through the association with important historical occurrences.

No important historical occurrences are considered to have taken place at the Study Area, nor is the place known to have any particular associations with individuals or groups of significance in the history of NSW. Archaeological remains associated with the activities of the Meadowbank Manufacturing Company (Mellor's and Angus') are considered likely to have interest at local level only. The site is considered to have low to no potential to yield any artefactual material attributable to the use of the site in the late 1700s and ownership by William Kent, however should such deposits exist they may potentially be of State value on account of their age.

Aesthetic or Technical Significance – Criterion C

The buildings historically constructed across the TAFE site, including the Study Area, are understood to have generally been utilitarian or functional. The buildings associated with the Junior Technical School were simple timber buildings with rectangular footprints, not demonstrating any particular aesthetic value or technical achievement.

Ability to Demonstrate Through Archaeological Remains – Criterion A, C, F, G

Archaeological remains have an ability to demonstrate how a site was used, what processes occurred, how work was undertaken and the scale of an industrial practice or other historic occupation. They can demonstrate the principal characteristics of a place or process that may be rare or common.

A site may best demonstrate these aspects at the time of excavation. It may also be possible to explain the nature of the site and demonstrate past practices via public interpretation either before, during, or after excavation.

The Study Area is considered unlikely to contain any intact, high integrity archaeological remains that would provide useful information to interpret historical site uses. It is unlikely that archaeological evidence exists that would provide information about the use, processes, or occupation of the site that is currently not understood through documentary evidence.

Should any deposits remain, they would have potential to show the extent of the works of the Meadowbank Manufacturing Company (first and second) within the TAFE site including Study Area. Sub-surface artefactual deposits could demonstrate multiple phases of use and occupation of the site. However, on account of the high level of disturbance assessed as occurring on site, the potential of the place to demonstrate continuity and change is considered low.

4.4.2. Assessment of Research Potential

Archaeological significance has long been accepted as linked directly to archaeological (or scientific) research potential:

“A site or resource is said to be scientifically significant when its further study may be expected to help answer questions. That is scientific significance is defined as research potential.”

This is a concept initially developed in the United States for cultural resource management that was extended by Bickford and Sullivan in the Australian situation and redefined as the following questions which can be used as a guide for assessing the research potential of an archaeological site within a relative framework:

1. Can the site contribute knowledge that no other resource can?
2. Can the site contribute knowledge that no other site can?
3. Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

The emphasis in these three questions is on the need for archaeological research to add to the knowledge of the past in an important way, rather than merely duplicating known information or information that might be more readily available from other sources such as documentary records or oral history.

The potential archaeological resource of the Study Area is assessed against this framework, below.

Can the site contribute knowledge that no other resource can?

Based on the historical background presented in Section 3, and the above assessments of archaeological potential and significance, the Study Area is considered unlikely to contribute knowledge that no other resource can. The use of the site during ownership by William Kent has been identified through documentary research as being grazing and orcharding. On account of the high level of disturbance to the Study Area throughout its history, it is unlikely there is extant archaeological evidence that can provide additional information about the site that cannot be found in other resources.

Should evidence in the form of structural remains or building foundations dating to the use of the site as the Meadowbank Manufacturing Company survive, this may provide information about building materials and construction. However, should this information be discernible, it is unlikely to yield knowledge that is of significance at State level, and therefore contributing to new knowledge about NSW history. As shown in Section 3, there are existing advertisements and similar print media that describe the production capabilities and outputs from the Meadowbank Manufacturing Companies. While extensive collections of photographs of the Manufacturing sites have not been identified to date, those identified provide at least a cursory understanding of the design of the associated buildings.

Similarly, the history of the Study Area as the Junior Technical High School is relatively well documented through documents and photographs, and it is unlikely that archaeological remains will provide any additional information, should such remains survive.

Can the site contribute knowledge that no other site can?

William Kent was known to have large scale land holdings in the Meadowbank area. Meadowbank has been significantly redeveloped as a residential suburb, and the Study Area forms part of this redevelopment. Evidence relating to Kent's ownership of the site would have been lost as a result of such development, and the high level of disturbance has likely removed any traces of this era of land use. It is unlikely that the Study Area can contribute knowledge that no other site can.

The Meadowbank Manufacturing Company (Mellor's and Angus') is understood to have only operated in Meadowbank, within the Study Area and surrounds. However, historical research suggests that the Study Area was largely undeveloped during this period of use, with the majority of the built infrastructure existing on alternative locations to the south and west of the Study Area. Therefore, the Study Area is considered unlikely to yield information unobtainable from other sites.

The Junior Technical High School is understood to have been one of several such schools constructed in the 1950s for boys' education. Whilst the Meadowbank site is obviously unique to its site in comparison to other such schools, the construction and function of the place is not considered to be unique in a broad context and it is considered that if archaeological evidence dating to this use of the Study Area survives, it is unlikely to contribute knowledge that no other site can.

Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

As discussed above, the Study Area is unlikely to provide information that is unique and relating to human history, Australian history, or major research questions. The pre-European vegetation of the Ryde area is generally understood and the disturbance that has occurred across the Study Area is likely to have removed any potential palynological evidence that could assist further in an understanding of the area's palaeoenvironments.

Should extant evidence survive dating to the manufacturing use of the site, information could be gained about construction methodologies or similar, however these answers are unlikely to contribute to any major research questions about the history of Sydney, NSW, or Australia more broadly.

Should sub-surface excavation occur for the redevelopment of the TAFE site, some information may potentially be gained that can assess the level of site disturbance, and confirm or otherwise the information regarding the levelling and other activities undertaken in the 1940s in preparation of the use of site as a TAFE.

4.4.3. Summary Statement of Significance

The analysis presented above for the Study Area assessed that the potential for intact, sub-surface remains illustrating the phases of the site's land use and history is considered low, largely as a result of the high level of disturbance that is documented to have occurred on site since the 1940s.

The site's use as the Mellor's Meadowbank Manufacturing Company and later the Meadowbank Manufacturing Company is considered to be of local interest only, as the activities undertaken by these companies, including manufacture of agricultural equipment, and later railway rollingstock, is not unique.

There is little potential for the site to contain an archaeological resource that has the ability to demonstrate a way of life, taste, function, custom or process of particular interest. The land has not been identified as having any particular historical value and the site has no known connections with events important in the history of NSW. The nature and extent of the historic land use activities undertaken within the Study Area are not considered to be particularly rare or representative.

5. HERITAGE SIGNIFICANCE

5.1. WHAT IS HERITAGE SIGNIFICANCE?

Before making decisions to change a heritage item, an item within a heritage conservation area, or an item located in proximity to a heritage listed item, it is important to understand its values and the values of its context. This leads to decisions that will retain these values in the future. Statements of heritage significance summarise the heritage values of a place – why it is important and why a statutory listing was made to protect these values.

The study area is not a listed heritage item. Its significance was however separately assessed in a heritage assessment, prepared by Urbis. This Heritage Impact Statement is required to assess the proposal with regard to heritage items in the vicinity. Accordingly, statements of significance for proximate heritage items are provided below (where available).

5.2. HERITAGE ITEMS IN THE VICINITY - STATEMENTS OF SIGNIFICANCE

The following Statements of significance have been sourced from the NSW Heritage Division database.

5.2.1. Ryde Pumping Station and Site

The following Statement of significance have been sourced from the NSW Heritage Division database

*Ryde pumping station as a whole is highly significant as an integral component of the water supply system to much of Sydney. At its completion, it was the largest water pumping station in Australia, and today retains considerable fabric and work practices which can be interpreted from that period. While much of the significant plant and equipment has been removed and replaced, it still maintains the overall function and values it was designed for. The significant curtilage includes only the buildings, works, archaeological evidence, machinery and equipment, sheds, and cultural landscape elements (including paths, drives, plantings etc.) up to 1930. The Ryde Pumping Station site contains landscape elements of high significance and has the ability to demonstrate three important and distinct phases of its history by its pre-European vegetation remnants, farming phase remnants and the distinctive 1890s earthworks and group of 1920s plantings associated with, respectively, the 1890s site use, and 1920s major expansion, for the North Shore water supply. The design of the main civic address both built, (pumping station and residence) and planted, demonstrates the high importance placed on the site at this time of its development. The place continues to make an important contribution to the local townscape and serve as an outstanding landmark group. The remnant 1920s plantings are likely to have associative value in being with the influence of JH Maiden Director of the Royal Botanic Gardens (1896-1924) and include mature species that are uncommon within the State Chilean Wine Palm (*Jubaea chilensis*). The place holds scientific value as a reserve for indigenous vegetation remnants.⁵⁹*

It should be noted that the significance of the site is primarily vested in the pump station complex and former reservoir which are located on the Victoria Road frontage, along with the archaeological resource and some landscape features. The laboratory building on the southern tip of the pump station site, and opposite the Study Area, is not of heritage significance and does not significantly contribute to the heritage significance of the pump station.

5.2.2. Attached dwellings, corner 1A Angas and 34 See Streets

There is no state heritage inventory listing or accompanying significance statement for the dwellings. External inspection and preliminary assessment indicates that the dwellings are of significance for their historic, aesthetic and representative values as a fine example of a late 19th century Victorian attached dwellings, demonstrating the 19th century subdivision and expansion of Ryde.

⁵⁹ Office of Environment and Heritage, "Ryde Pumping Station", updated 12 December 2012. <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2340117>.

5.2.3. Meadowbank Shops, 58–64 Constitution Road

The following Statements of significance have been sourced from the NSW Heritage Division database.

The shops, built 1916- 1920, on land which was part of Blaxland Estate No.2 Meadowbank subdivision of 1914, are of historical significance as evidence of early twentieth century commercial development at Meadowbank close to the railway station. The early uses of the shops: general store (No. 58); boot maker/shoe repairs (No. 60), and long-term use of No. 64 as a newsagent, illustrate both changing and static retail uses over time. The shops have historical association with their first owner, Wilhelm Emanuel Sundin, a Swedish immigrant, whose initials "WES" are on the parapet. Sundin, a merchant, entrepreneur and local property developer, was responsible for building the shops, which were initially known as "Sundin's Store" or "Sundin's Building". Sundin appears to have initially operated a store in one of the shops (probably the corner one, No. 58), and leased the others. Sundin retained ownership of the shops till 1924. The shops are of aesthetic significance as a group of Federation period shops in a prominent location near the eastern entry to Meadowbank Railway Station and at the corner of Constitution and Railway Roads. The shops are a now rare group of Federation period shops in the Meadowbank and Ryde area, representative of their period of construction.⁶⁰

5.2.4. Federation Queen Anne style dwelling group

The following Statements of significance have been sourced from the NSW Heritage Division database.

The dwellings at Nos. 61-77 Forsyth Street are of historical significance as part of the early twentieth century subdivision and development pattern of West Ryde. All the houses on the west side of Forsyth Street were built between 1908 and 1911, by builder A. Anderson, adjacent to the Meadowbank Manufacturing Company works, as a speculative development. No direct historical association has been found between the houses and the Meadowbank Manufacturing Company. The dwellings have aesthetic significance as a fine group of Federation Queen Anne style dwellings with landmark quality as a streetscape group. Nos. 61-73 have technical significance in being constructed of rock-faced concrete blocks, an innovative building technology for the time of construction. The group of Federation Queen Anne style dwellings are rare in the West Ryde area as a complete group from the period 1908-1911 and for encompassing a rare group of concrete-block houses at Nos. 61-73 Forsyth Street.⁶¹

⁶⁰ Office of Environment and Heritage, "Sundins Building – Four Federation period shops", updated 13 November 2012. <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2340059>.

⁶¹ Office of Environment and Heritage: Federation Queen Anne style dwelling group <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=2340136>

6. IMPACT ASSESSMENT

6.1. LEGISLATIVE CONTEXT

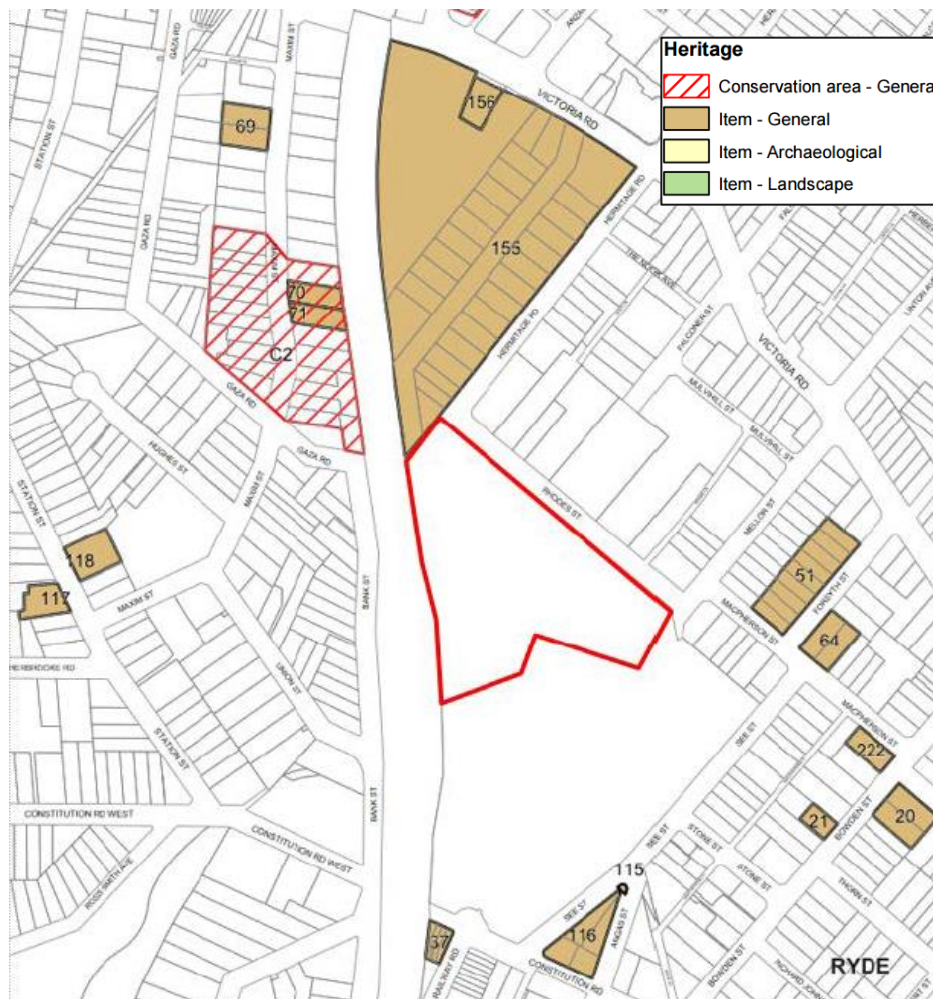
6.1.1. Statutory Listing

The Study Area is not a listed item on either the relevant local environmental plan (Ryde LEP 2014) or the SHR. It is, however, located in the immediate vicinity of the following heritage items.

- Item #155 – Ryde Pumping Station and site, 948 Victoria Road
- Item #116 – Attached dwellings, corner 1A Angas and 34 See Streets
- Item #37 – Meadowbank Shops, 58–64 Constitution Road
- Item #57- House group comprising 61, 63, 65, 67, 69, 71, 73, 75 and 77 Forsyth Street

Noting that the site comprises the northern section of the site, the relationship with the heritage listed Ryde Pumping station is of principal concern. The site is also in proximity to the Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA), to the northwest of the Study Area.

Figure 53 – Heritage listings in the vicinity of the Study Area (indicated by red boundary)



Source: Ryde LEP 2014 (Sheet HER_003)

6.1.2. Heritage Act 1977

The *NSW Heritage Act 1977* (the Heritage Act) provides protection to items of environmental heritage in NSW. This includes places, buildings, works, relics, moveable objects and precincts identified as significant based on historical, social, aesthetic, scientific, archaeological, architectural, cultural or natural values. State significant items are listed on the NSW State Heritage Register (SHR) and are given automatic protection under the Heritage Act against any activities that may damage an item or affect its heritage significance. Impacts to heritage items require Heritage Council approval.

There are no items listed on the SHR within the Study Area. However, the site is within the vicinity of the Ryde Pumping Station which is listed on the SHR.

Historical Archaeology

The Heritage Act also protects 'relics', which can include archaeological material, features and deposits. Section 4(1) of the Heritage Act (as amended 2009) defines 'relic' as:

“any deposit, artefact, object or material evidence that: relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and is of State or local heritage significance.”

Section 139(1) of the Heritage Act states that:

“A person must not disturb or excavate any land knowingly or having reasonable cause to suspect that the disturbance or excavation will, or is likely to result in a relic being discovered, exposed, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.”

Permits to disturb or excavate 'relics' are issued by the NSW Heritage Council or a Delegate of the NSW Heritage Council under Section 140 (for relics not protected by an SHR listing) or Section 60 (for relics protected by an SHR listing) of the Heritage Act. Exceptions or exemptions to these permits may be applicable under certain conditions.

Section 139(1c) exception states that evidence relating to the history or nature of the site, such as its level of disturbance, indicates that the site has little likelihood of Relics or no archaeological research potential.

Section 170 Register

Section 170 of the NSW Heritage Act 1977 requires agencies to identify, conserve and manage heritage assets owned, occupied or managed by that agency. Section 170 also requires government agencies to keep a Register of heritage items, which is called a Heritage and Conservation Register or more commonly, a S.170 Register. A S.170 Register is a record of the heritage assets owned or managed by a NSW government agency.

A S.170 register consists of a list of heritage assets and an assessment of the significance of each asset. It may also include a thematic history of the agency. The register identifies buildings, but may also include natural, movable, archaeological, landscapes and Aboriginal heritage.

S.170 Registers are submitted to the Heritage Council of NSW for endorsement.

The study area was formerly listed on the TAFE (NSW) Section 170 Register (as part of the Meadowbank TAFE site), however it was transferred to the Department of Education and has not been included on the Department of Education s.170 Register.

6.2. STATUTORY CONTROLS

6.2.1. Ryde Local Environmental Plan 2014

The proposed works are addressed in the table below in relation to the relevant clauses in the LEP.

Table 6 – Local Environmental Plan

Clause	Discussion
<p>(1) Objectives</p> <p>The objectives of this clause are as follows:</p> <p>(a) to conserve the environmental heritage of the City of Sydney,</p> <p>(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,</p> <p>(c) to conserve archaeological sites,</p> <p>(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.</p>	<p>The proposal is for a mixed primary and high school, built up to six levels. Development is concentrated to the eastern side of the subject site with the with separate high school and primary school out door/ playground spaces located to the western and southern portions of the site. This ensures that all new built development is located as far from the adjoining Pump Station heritage item as possible, and allows for the new outdoor recreation areas to act as a physical barrier to new development.</p> <p>As identified in section 6.1 above, the site is in proximity to heritage items. Further detail on the items is provided in sections 2.1 (description) and 5.2 (significance). No works are proposed to these items as part of the subject proposal. Potential impacts as a result of development in the vicinity are assessed in detail in the provisions below, however it has generally been assessed that the subject works will not impact on the heritage items, or their established significance.</p> <p>Historical Archaeological assessment contained in section 4 has determined that the archaeological potential for intact, sub-surface remains illustrating the phases of the site's land use and history is considered low to none, largely as a result of the high level of disturbance that is documented to have occurred on site since the 1940s. Should extant remains in the form of foundations or artefact dumps survive, they are considered unlikely to have value beyond local level, and are unlikely to contribute significant information to an understanding of NSW history.</p> <p>Aboriginal Archaeological assessment is subject to a separate Aboriginal Cultural Heritage and Archaeological report (ACHAR) which should be separately referenced.</p>
<p>(2) Requirement for consent</p> <p>Development consent is required for any of the following:</p> <p>(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,</p>	<p>2)(c) Historical Archaeological assessment contained in section 4 has determined that the archaeological potential for intact, sub-surface remains illustrating the phases of the site's land use and history is considered low to none, largely as a result of the high level of disturbance that is documented to have occurred on site since the 1940s. Should extant remains in the form of foundations or artefact dumps survive, they are considered unlikely to have value beyond local level, and are unlikely to contribute significant information to an understanding of NSW history.</p>
<p>(4) Effect of proposed development on heritage significance</p> <p>The consent authority must, before granting consent under this clause in</p>	<p>4) The Study Area is not a listed item on either the relevant local environmental plan (Ryde LEP 2014) or the SHR. It is, however, located in the immediate vicinity of the following heritage items.</p> <ul style="list-style-type: none"> Item #155 – Ryde Pumping Station and site, 948 Victoria Road

Clause	Discussion
<p>respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).</p>	<ul style="list-style-type: none"> • Item #116 – Attached dwellings, corner 1A Angas and 34 See Streets • Item #37 – Meadowbank Shops, 58–64 Constitution Road • Item #57- House group comprising 61, 63, 65, 67, 69, 71, 73, 75 and 77 Forsyth Street <p>Refer to the heritage item map at Figure 53.</p> <p>Of principal consideration is the state heritage listed West Ryde pump station opposite the site to the northwest. The significance of the pump station is however primarily vested in the pump station complex and former reservoir which are located on the Victoria Road frontage, along with the archaeological resource and some landscape features. The laboratory building on the southern tip of the pump station site, and opposite the Study Area, is a later 20th century development within the pump station site, is not of heritage significance and does not significantly contribute to the heritage significance of the pump station.</p> <p>Other identified items in the vicinity, being the dwellings at See Street and Forsyth Street respectively, and the shops at Meadowbank Station are considerably distanced from the study area and sit within their respective lower scaled built form contexts and setting. The proposed school development is up to five (above ground) storeys, however noting the distance from the study area and development on the southern TAFE campus, the proposed development of the study area will have no significant visual impacts on the dwelling pair at See Street or the Meadowbank shop group. There may be some views to the school from the Federation dwellings on Forsyth Street, however this will have no significant impact on their immediate setting, with Forsyth Street being characterised by single storey late 19th and early 20th century dwellings.</p> <p>The site is also in proximity to the Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA), to the northwest of the Study Area however the conservation area is separated by the railway line, which forms a significant physical and visual separation and boundary for the HCA. The subject development is located on the south eastern portion of the site and is considerably distanced from the HCA. Although development is proposed up to five (above ground) storeys, the proposal will have no significant visual impacts on the HCA or its curtilage/ setting.</p> <p>Overall the proposed development is not considered to result in any detrimental heritage impacts on the adjoining heritage item or the broader vicinity items and HCA.</p>
<p>(5) Heritage assessment</p> <p>The consent authority may, before granting consent to any development:</p> <p>(a) on land on which a heritage item is located, or</p>	<p>This HIS has been prepared to assist the consent authority in assessing the potential heritage impacts of the subject proposal. As set out in the discussion in clause 4 above, the proposal will have no significant impact on the various heritage items in the vicinity. No works are proposed to the heritage items and the study area/ development does not contribute to the identified values or setting of the heritage items as set out in section 5.2. The respective heritage items retain their immediate settings and the</p>

Clause	Discussion
<p>(b) on land that is within a heritage conservation area, or</p> <p>(c) on land that is within the vicinity of land referred to in paragraph (a) or (b),</p> <p>require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.</p>	<p>proposed school will have no significant visual impacts on the heritage items, even noting the increase in scale (up to five above-ground storeys).</p> <p>The site is adjacent to the state heritage listed pump station, however impacts are mitigated by the siting of the built form on the eastern/ south-eastern portion of the site, with proposed site landscaping and sports fields located on the western portion of the site creating a visual and landscape buffer to the heritage item. It is also noted that the laboratory building at the southern point of the pump station is not a significant building, with significance primarily being vested in the pump station building and reservoir, located on the Victoria Road frontage, as well as various landscape elements (not adjoining the study area). This assists to further mitigate heritage impacts.</p>
<p>(7) Archaeological sites</p> <p>The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977 applies):</p> <p>(a) notify the Heritage Council of its intention to grant consent, and</p> <p>(b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.</p>	<p>7) As detailed above, archaeological potential of the site has been assessed as low to none. Should extant remains in the form of earlier building foundations or footings, or artefact dumps survive, they are considered unlikely to have value beyond local level, and are unlikely to contribute significant information to an understanding of NSW history.</p> <p>In response to the SEARs and requirements for consultation, Urbis has liaised with the Office of Environment and Heritage (OEH). OEH has advised that consultation is only required where an Historical Archaeological assessment identifies the site as having archaeological potential and further identifies significance. Potential of the study area has been identified as low to none and hence no further liaison has been undertaken.</p>

6.2.2. Development Control Plan

The proposed works are addressed in the table below in relation to the relevant provisions in the DCP. There are few controls relevant to vicinity sites, with the majority of DCP provisions referring to heritage items and conservation areas. The study area is not individually listed and is not within a HCA and as such, these provisions are not relevant to the subject development and have not been included in this assessment.

Table 7 – City of Ryde Development Control Plan 2014

Clause	Discussion
<p>3.2 Staged Development Applications</p> <p>Controls</p> <p>a. On sites over 5000m2 a stage development application is required that addresses:</p> <p>xiii. heritage conservation/interpretation</p>	<p>3.2) There are opportunities to incorporate heritage interpretation of the site's potential indigenous values (subject to separate assessment), the educational history and uses, being the TAFE and the former Junior Technical High School as well as the previous manufacturing occupation of the site. Where required, this should be incorporated as part of DA conditions of consent.</p>

7. CONCLUSION AND RECOMMENDATIONS

This report satisfies the SEARs as set out in section 1.2 of this report.

The study area is not identified as an item of heritage significance on either the relevant local environmental plan (Ryde Local Environmental Plan 2014) or the State Heritage Register (SHR). It is, however, located in the vicinity heritage items and the "Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA). The study area was formerly listed on the TAFE (NSW) Section 170 Register (as part of the Meadowbank TAFE site), however it was transferred to the Department of Education and has not been included on the Department of Education s.170 Register.

This HIS therefore assesses the potential impacts of the proposed redevelopment on the proximate heritage items in accordance with the statutory requirements. The proposal has been assessed against the relevant provisions of the Ryde Local Environmental Plan (2014) and Development Control Plan. It has been assessed that the proposed works will have no impact on the proximate heritage items, their setting or significant views and vistas.

Of principal consideration is the state heritage listed West Ryde pump station opposite the site to the northwest. The significance of the pump station is however primarily vested in the pump station complex and former reservoir which are located on the Victoria Road frontage, along with the archaeological resource and some landscape features. The laboratory building on the southern tip of the pump station site, and opposite the Study Area, is a later 20th century development within the pump station site, is not of heritage significance and does not significantly contribute to the heritage significance of the pump station.

Other identified items in the vicinity, being the dwellings at See Street and Forsyth Street respectively, and the shops at Meadowbank Station are considerably distanced from the study area and sit within their respective lower scaled built form contexts and setting. The proposed school development is up to six levels, however noting the distance from the study area and development on the southern TAFE campus, the proposed development of the study area will have no significant visual impacts on the dwelling pair at See Street or the Meadowbank shop group. There may be some views to the school from the Federation dwellings on Forsyth Street, however this will have no significant impact on their immediate setting, with Forsyth Street being characterised by single storey late 19th and early 20th century dwellings.

The site is also in proximity to the Maxim Street, West Ryde (C2) Heritage Conservation Area (HCA), to the northwest of the Study Area however the conservation area is separated by the railway line, which forms a significant physical and visual separation and boundary for the HCA. The subject development is located on the south eastern portion of the site and is considerably distanced from the HCA. Although development is proposed up to six levels, the proposal will have no significant visual impacts on the HCA or its curtilage/setting.

Overall the proposed development is not considered to result in any detrimental heritage impacts on the adjoining heritage item or the broader vicinity items and HCA.

Based on the historical background and assessments presented in this report (section 3), including review of historical aerials; and reporting prepared by Alliance Geotechnical (2017), the potential for intact, in-situ archaeological deposits has been assessed as low. Research to date suggests that the site was not developed for the early manufacturing phases of occupation. The high levels of impact to the Study Area since at least 1930s, including clearing, formation of tracks and rudimentary roads and construction of the current buildings has heavily disturbed the Study Area. Should archaeological material such as bricks, stone, or timbers be identified in sub-surface layers, these are likely out of context and non-interpretable.

The proposal is supported from a heritage perspective subject to the following standard provision:

If unexpected sub-surface historical remains are encountered during any future site works, it would be necessary to stop work in the vicinity of the find. The NSW OEH should be notified, in conjunction with a suitably qualified historical archaeologist who will need to inspect and provide preliminary assessment of the find, and provide advice on its appropriate management. This may include archival recording and removal, further investigation, future interpretation or potential retention in-situ.

8. BIBLIOGRAPHY AND REFERENCES

8.1. PRIMARY SOURCES

NSW LRS

- Crown Plans 3263-3000, 20619-3000, 20621-3000, 8152-3000
- Primary Application 26245
- Deposited Plans 2929 and 76245
- 1943 aerial survey of Sydney

National Library of Australia

- Helenie Estate Meadowbank

City of Ryde Local Studies Collection

- Meadowbank Works Meadowbank around 1915
- Staff of the Meadowbank Manufacturing Company around 1930

State Library of NSW

- Report of the Minister for Education, 1959-1971

Sydney Water/Water NSW Historical Research Facility

- PWDS1544-98 – Detail Survey City of Sydney Sheet X1, 1883 annotated to 1895
- Sewer Detail Sheet (Blackwattle) 3821, c1928-43
- DS3831, Detail Sheet 3831 City of Sydney, 1964
- Blackwattle Ryde Sheet 88

8.2. MONOGRAPHS AND REPORTS

Apperly, R., Irving, R. and Reynolds, P. (eds) 2002, *A Pictorial Guide to Identifying Australian Architecture: Styles and Terms from 1788 to the Present*, Angus and Robertson, Pymble.

Australia ICOMOS 1999, *The Burra Charter: 2013* The Australia ICOMOS Charter for Places of Cultural Significance, Australia ICOMOS, Burwood.

Davis Scobie Architects Pty Ltd 2017, *TAFE NSW Meadowbank Campus: Northern Precinct*, Sydney.

Heritage Office and Department of Urban Affairs & Planning 1996, *NSW Heritage Manual*, Heritage Office.

Jack, Russell C 1980, *The Work of the NSW Government Architect's Branch 1958-1973*, unpublished M.Arch thesis, University of NSW.

Reynolds, Peter Leggatt 1972, *The Evolution of the Government Architect's Branch of New South Wales, Department of Works 1788-1911*, unpublished PhD thesis, University of NSW.

Robertson and Hindmarsh, TAFE NSW Heritage Register, Draft Inventory Sheet, TAFE NSW Meadowbank Campus 2018.

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

8.3. NEWSPAPERS AND JOURNALS

Building and Engineering - 24 Sep 1948 p65, 24 Sep 1949 p55

Construction – 6 Apr 1949 p2

Cumberland Argus and Fruitgrowers Advocate – 3 Jun 1928 p6, 5 May 1906 p6, 15 Apr 1899 p6, 20 Feb 1909 p4, 20 Mar 1920 p12, 23 May 1908 p10

Cumberland Free Press - 19 Jun 1897 p3

Cumberland Mercury – 21 Oct 1893 p2

Daily Telegraph – 6 Oct 1898 p7, 8 Apr 1948 p11

Education – 2 Mar 1955 p3, 31 Oct 1956 p1, 5 Feb 1958 p3, 326 Feb 1958 p2

Farmer and Settler – 5 Jun 1908, p8

Lithgow Mercury – 3 Jun 1908, p8

Sydney Mail and New South Wales Advertiser – 3 Sep 1892 p518, 21 Apr 1900 p908

Sydney Morning Herald – 2 Jun 1908 p7, 9 May 1945 p5, 27 Jun 1945 p5

Sydney Stock and Station Journal – 18 Oct 1898 p3

Wellington Times – 5 Oct 1908 p2

8.4. INTERNET SOURCES

Department of Lands 2018, Spatial Information Exchange, Department of Lands, Sydney, available at: <<http://imagery.maps.nsw.gov.au/>>.

Google Maps 2018, Aerial view of subject site, available at: <<http://maps.google.com.au/maps?hl=en&tab=wl>>.

Phippen, Angela, Meadowbank, Dictionary of Sydney, 2008, <http://dictionaryofsydney.org/entry/meadowbank>, viewed 23 Jul 2018

Ozwrenches, Vintage Spanners & Wrenches in Australia: Meadowbank Manufacturing Co, <http://ozwrenches.com/meadowbank.htm>, viewed 23 July 2018

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