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Report on Preliminary and Detailed Site (Contamination) Investigation

Glebe Mid-Rise Project
31 Cowper Street and 2A-2D Wentworth Park Road, Glebe

Prepared for
New South Wales Land and Housing Corporation

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Executive Summary

This report presents the results of a combined preliminary and detailed site (contamination) investigation (DSI) undertaken for the Glebe Mid-Rise Project at 31 Cowper Street and 2A-2D Wentworth Park Road, Glebe. The investigation was commissioned by New South Wales Land and Housing Corporation via a Letter of Agreement dated 29 January 2020 and was undertaken in accordance with Douglas Partners Pty Ltd (DP) proposal SYD191235 dated 11 December 2019.

The investigation was undertaken in support of a planning proposal for the site and for preliminary design by New South Wales Land and Housing Corporation (LAHC). It was carried out concurrently with a geotechnical investigation (reported separately). At the time of the investigation, the two parts of the site were occupied by either a two-level residential building with central courtyard (31 Cowper Street: 'South Site'), or a two-level residential 'townhouse-style' building (2A-2D Wentworth Park Road: 'North Site'), separated by a City of Sydney Council road known as 'Park Lane'.

The proposed development is understood to comprise a mixed use commercial and residential mid-rise development. Basement levels (one or two) are proposed for some areas of the site. The majority of the ground floor is proposed for commercial or utility use, with the exception of five townhouses in the western portion of the South Site. The majority of the area of the townhouses will be underlain by two levels of basement parking, however part of this area will be directly on ground.

A site history review undertaken as part of the DSI indicated that part of the site is on reclaimed land, and that former structures were present at the site, which had been demolished prior to construction of the current site buildings. Adjacent site uses have included commercial/ industrial activities.

Seven boreholes were drilled for the current investigation, with one borehole converted into a groundwater monitoring well. Fill was observed in all locations, with fill at the site underlain by alluvium, underlain by residual soil and/ or sandstone bedrock. Groundwater was observed 2.64 m bgl during groundwater sampling, with groundwater depth expected to fluctuate over time and across the site.

Acid Sulfate Soil (ASS) has been confirmed to be present at the site, and management will be required for any works below the groundwater table.

Contamination has been identified in soil at the site, including total polycyclic aromatic hydrocarbons (PAH), benzo(a)pyrene toxic equivalent (BaP TEQ) and total recoverable hydrocarbons fraction F3 ($>C_{16}$-C_{34}) (TRH F3) relative to human health based investigation levels and benzo(a)pyrene (BaP), copper and zinc compared to ecological based investigation levels.

Cobalt has been recorded in groundwater at a concentration marginally above the marine water protection level. It is not considered likely to be sourced from the site.

A preliminary waste classification assessment has been provided herein, and is considered suitable for planning purposes. Further classification will be required prior to off-site disposal of soils.

Based on the site history, field and analytical results presented in this report, it is concluded that the site can be rendered suitable for the proposed development, from a contamination perspective, subject to the remediation and / or management of the identified contamination, namely metals, PAH

and TRH in soil. Whilst asbestos has not been identified in the current investigation there is considered to be a high risk of it being present based on the site history and the observation of building rubble in the site fill.

It is recommended that the following works are required to address contamination and ASS management for the project:

- Supplementary investigation, including in areas not currently accessible to fill in data gaps and allow better characterisation of contamination. Once appropriate characterisation of contamination has been undertaken, the results can be assessed relative to the likely exposure in different areas of the site to inform the remediation extent and strategy, particularly for areas where no basement excavation is proposed. It is noted however, that current site access restrictions may limit the ability to undertake this prior to demolition, in which case this item could be undertaken following preparation of the Remediation Action Plan (RAP), as below;
- Preparation of a RAP detailing how contamination at the site is to be remediated / managed;
- Preparation of an Acid Sulfate Soil Management Plan (ASSMP) describing how ASS will be managed during development works;
- A waste classification assessment, it is anticipated that further waste classification will be required before and / or during redevelopment works;
- Remediation and management of waste and ASS during redevelopment; and
- Validation of the successful remediation of the site to render it suitable for the proposed development.

If contamination is to be retained on site a long-term Environmental Management Plan may also need to be prepared and implemented for the site. The need for this will depend on the remediation approach adopted.

Table of Contents

Page

Appendices

Report on Preliminary and Detailed Site (Contamination) Investigation
Glebe Mid-Rise Project
31 Cowper Street and 2A-2D Wentworth Park Road, Glebe

1. Introduction

1.1 Overview

This report presents the results of a combined preliminary and detailed site (contamination) investigation (DSI) undertaken for the Glebe Mid-Rise Project at 31 Cowper Street and 2A-2D Wentworth Park Road, Glebe (the site). The investigation was commissioned by New South Wales Land and Housing Corporation via a Letter of Agreement dated 29 January 2020 and was undertaken in accordance with Douglas Partners Pty Ltd (DP) proposal SYD191235 dated 11 December 2019.

The investigation was undertaken in support of a planning proposal for the site and for preliminary design by New South Wales Land and Housing Corporation (LAHC). It was carried out concurrently with a geotechnical investigation (reported separately).

The site comprises two parts, namely 31 Cowper Street (Lot 17 or the 'South Site') south of Park Lane and 2A-2D Wentworth Park Road (Lot 18 or the 'North Site') north of Park Lane. At the time of the investigation the site was being used for residential purposes.

The investigation included a site history review and limited sampling and analysis of soil and groundwater samples for potential contaminants and of soil samples for Acid Sulfate Soil (ASS).

This DSI was conducted and reported with reference to the NSW Environmental Protection Authority (EPA) endorsed guidelines and State Environmental Planning Policy (SEPP) 55.

1.2 Proposed Development

The architectural drawings prepared by Johnson Pilton Walker Pty Ltd (Project 19001, Revision 00, dated 1 May 2020) show that the proposed development is to include two buildings separated by Park Lane, known as the North Site (i.e. 2A-2D Wentworth Park Road) and the South Site (i.e. 31 Cowper Street). Drawings A-1000 and A-1001 show that the South Site is to have two basement levels for car parking and machine rooms, and that the North Site has one level of basement car parking (within the southern portion of the development footprint).

The majority of the ground floor is proposed for commercial or utility use, with the exception of five townhouses in the western portion of the South Site. The majority of the area of the townhouses will be underlain by two levels of basement parking, with the exception of the south western corner of the western most townhouse, where part of the townhouse building and front courtyard/ garden will be directly on ground.

2. Scope of Works

The scope of works comprised:

- Conduct a site walkover to observe situations that indicate a potential for contamination and identify environmental receptors including *inter alia*:
  - Disturbed or discoloured soil;
  - Disturbed or affected vegetation;
  - Presence of stored chemicals and on-site activities; and
  - Proximity to surface waters and groundwater.
- Obtain and review historical aerial photographs;
- Obtain and review historical title deeds;
- Obtain and review SafeWork NSW records pertaining to dangerous goods;
- Review of the Section 10.7 Planning certificates;
- Review EPA online database for Notices under the CLM and POEO Acts;
- Review readily available historical Council records;
- Collect soil samples recovered from boreholes using augers or standard penetration tests (SPT) at changes in soil strata and at regular depth intervals;
- Screen all samples for volatile organic compounds (VOCs) using a photo-ionisation detection (PID) instrument;
- Analysis of soil samples at a NATA-accredited laboratory for:
  - Metals (As, Be, B, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Ag, Zn) (18 samples);
  - Total recoverable hydrocarbons (TRH: a screening test for total petroleum hydrocarbons - TPH) (18 samples);
  - Monocyclic aromatic hydrocarbons (benzene, toluene, ethylbenzene and xylene - BTEX) (18 samples);
  - Polycyclic aromatic hydrocarbons (PAH) (18 samples);
  - Phenols (12 samples);
  - Polychlorinated biphenyls (PCB) (12 samples);
  - Organochlorine pesticides (OCP) (12 samples);
  - Organophosphate pesticides (OPP) (12 samples);
  - Asbestos (presence/absence) (13 samples);
  - Cation exchange capacity (CEC) and pH (4 samples);
  - Toxicity characteristic leachability procedure (TCLP: As, Cd, Cr, Cu, Pb, Hg, Ni, Zn) (6 samples);
  - TCLP (PAH) (5 samples);
  - Screening for the presence of acid sulphate soil (ASS) (23 samples);
  - SCr full suite analysis (for ASS) (9 samples);
  - QA / QC sample collection / analysis of:
    - Intra-laboratory replicate sample (metals, PAH, TRH, BTEX) (1 sample);
    - Trip spike samples (BTEX) (2 samples); and

  - Trip blanks samples (BTEX) (2 samples).

- Develop the standpipe piezometer following drilling by the removal of 3 well volumes (or until the well is pumped dry), and off-site disposal of collected water;
- Collect one groundwater sample using low-flow sampling techniques following stabilisation of field parameters;
- Analysis of one groundwater samples at a NATA-accredited laboratory for:
  - Metals (As, Be, B, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Ag, Zn);
  - Total recoverable hydrocarbons (TRH: a screening test for total petroleum hydrocarbons - TPH);
  - Monocyclic aromatic hydrocarbons (benzene, toluene, ethylbenzene and xylene - BTEX);
  - Polycyclic aromatic hydrocarbons (PAH);
  - Phenols;
  - Polychlorinated biphenyls (PCB);
  - Organochlorine pesticides (OCP);
  - Organophosphate pesticides (OPP);
  - Volatile organic compounds (VOC);
  - Total cyanides;
  - QA / QC sample collection / analysis of:
    - Intra-laboratory replicate sample (metals, PAH) (1 sample);
    - Trip spike sample (BTEX) (1 sample); and
    - Trip blanks sample (BTEX) (1 sample).
- Preparation of this DSI report detailing the methodology and results of the investigation and making a conclusion regarding the likely suitability of the site for the proposed development and the need for further work (if any). The report has been prepared in general accordance with EPA-endorsed guidelines.

3. Site Identification and Description

3.1 Site Identification

The site location and layout is shown on Drawing 1, Appendix A, and the site is identified as follows:

Attribute	Site Information	
Referred to in this report as	Lot 18 or North Site	Lot 17 or South Site
Lot, Deposited Plan (D.P.)	Lot 18, D.P. 244897	Lot 17, D.P. 244897
Address	2A-2D Wentworth Park Road, Glebe	31 Cowper Street, Glebe
Location	North of Park Lane	South of Park Lane
Area[1]	625.7 m^2	1162.8 m^2

1 Based on the provided survey (Veris Australia, Plan of Detail & Levels, Ref 201704, date of survey 15.08.19, issue date 19.08.19)

3.2 Site Description and Current Land Use

A site drawing is provided as Drawing 1 in Appendix A and site photographs are provided in Appendix B.

Lot 17 and Lot 18 are both roughly trapezoidal-shaped parcels of land which are separated by a north-west to south-east trending road known as Park Lane.

As shown on the survey drawing provided, Lot 17 (the South Site) has maximum plan dimensions of some 37 m by 40 m (refer Drawing 1 of Mepstead and Associates Pty Ltd, Project 5743, Rev B, dated 27 February 2019). The survey drawing provided shows that the Lot 18 (the North Site) has maximum plan dimensions of some 30 m by 28 m (refer Sheet 1 of Veris Australia Pty Ltd, Project 201704, Issue 1, dated 19 August 2019).

At the time of the investigation, the site was being used for residential purposes. The South Site was occupied by a two-level residential building with central courtyard. The courtyard, and areas surrounding the building included soft and hard landscaping areas including various garden beds, paved paths and carports. The North Site was occupied by a two-level residential 'townhouse-style' building divided into four residences, each with a planter box at the front (facing Wentworth Park Road) and an unpaved backyard. The two areas were separated by a City of Sydney Council road known as 'Park Lane'.

No signs of contamination concern such as chemical storage or staining were noted during the site walkover. It is noted that not all areas of the site were accessible for inspection due to them being private residences.

3.3 Adjacent Land Uses

Land uses adjacent to the site comprise:

- North: Wentworth Park Road, then Wentworth Park;

- East: Cowper Street, then mixed use commercial / residential (modern multistorey building);
- South: Wentworth Street, then low and medium density residential use; and
- West: Mitchell Lane then MJ Doherty Reserve (west of Lot 17) and low and medium density residential (west of Lot 18).

4. Topography, Geology, Soils and Water

4.1 Records of Reclamation

A historical 'Parish of Petersham' map for the Municipality of The Glebe (dated 1890) shows that both an area of 'reclaimed land' and the historical high-water mark for the nearby Blackwattle Bay are approximately co-incident with the southern property boundary of Lot 18 and Park Lane. An extract of the plan is provided in Section 5.1 and this historical high-water mark has been included on Drawing 1, Appendix A. The source drawing is provided in the title deed records, Appendix D.

4.2 General Site Topography

Both lots are relatively flat, with a slight slope down to north-east, towards Wentworth Park. In accordance with the provided survey drawings, site levels fall from approximately RL3.2 m along Wentworth Street to RL2.5 m at the Wentworth Park Road property boundary (relative to the Australian Height Datum: AHD).

Figure 1, below, shows the local topography, with the area generally sloping towards the area of the reclaimed that is now Wentworth Park.

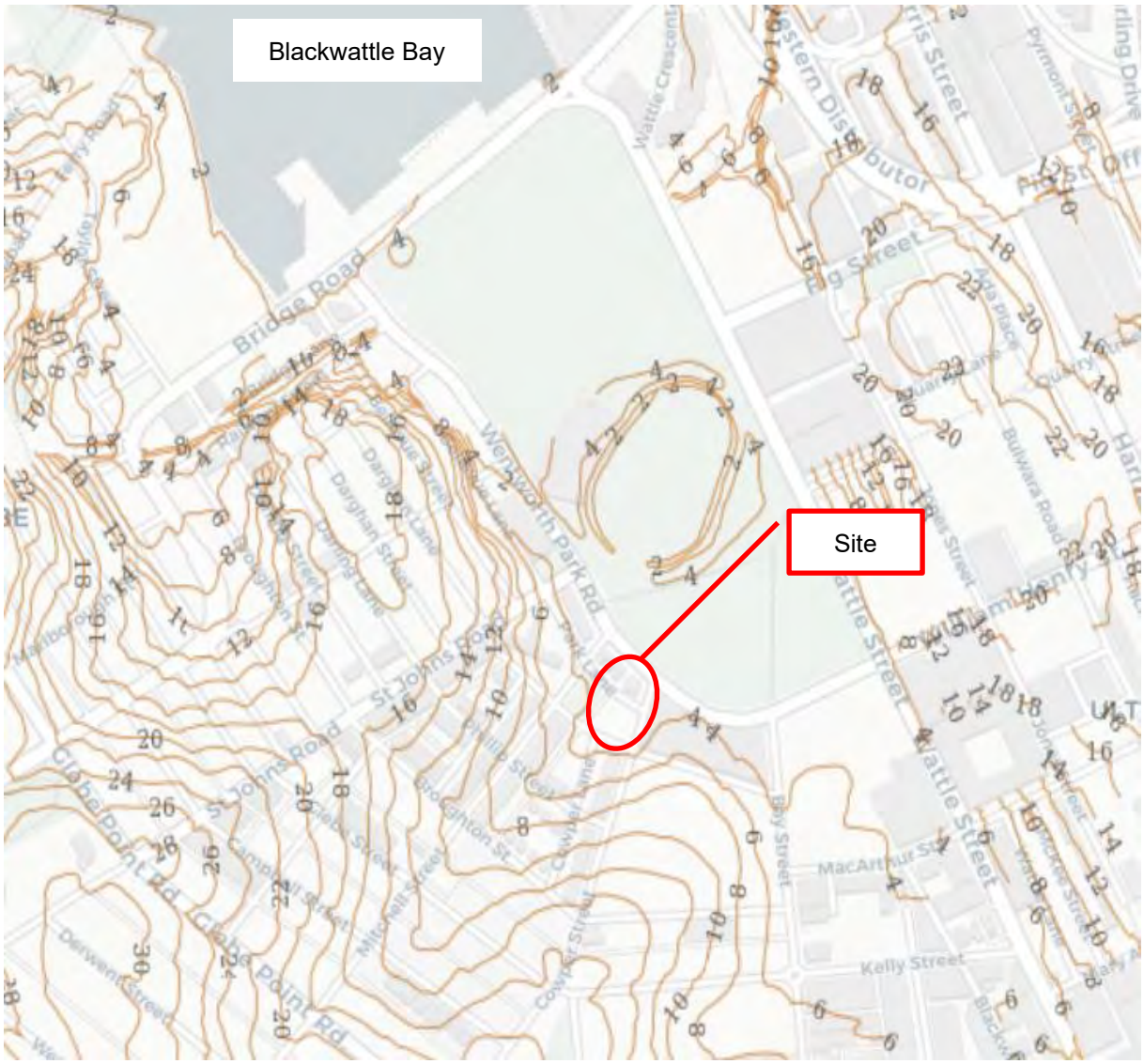

Figure 1: Site and Regional Topography (2 m Contour Interval)

4.3 Surface Water

Surface water from the site is expected to enter Blackwattle Bay via the local stormwater system. Blackwattle Bay is located approximately 0.5 km to the north of the site.

Drawings from the title deed records (Section 5.1 and Appendix D) show:

- The northern portion of the site is reclaimed, as discussed in Section 4.1; and
- What may be a creek entering the site from the east, in approximate alignment with the current Park Lane, indicating that a drainage line previously crossed the site.

4.4 Geology

Reference to the Sydney 1:100 000 Geological Series Sheet (Herbert, 1983, refer to Figure 2, below) indicates that the site is underlain by man-made fill over Quaternary alluvial and estuarine sediment (Qha), underlain by Hawkesbury Sandstone. Alluvium is generally silty to peaty quartz sand, silt and clay. The Hawkesbury Sandstone typically comprises horizontally bedded and vertically jointed, massive and cross-bedded, medium grained quartz sandstone with a few shale interbeds.

A parallel series of intrusive igneous dykes are indicated on the geological map, traversing approximately north-west to south-east about 50 m north of the site, and approximately parallel with Wentworth Park Road. Igneous dykes typically weather to form deep residual soils.

The drilling confirmed the presence of filling materials and estuarine alluvial sediments, underlain by Hawkesbury Sandstone.

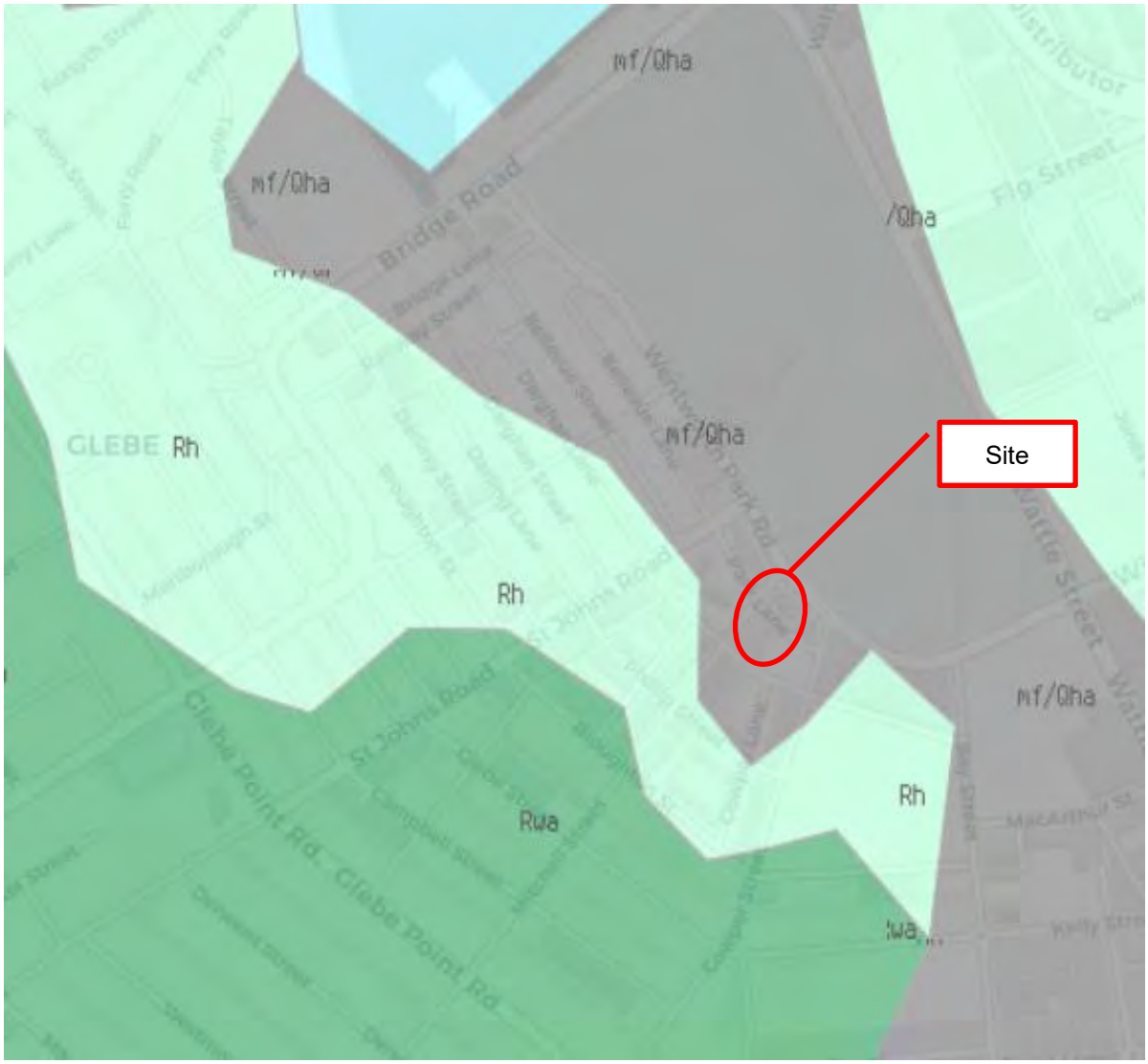

Figure 2: Extract of Sydney 1:100,000 Geological Series Sheet Showing Manmade fill (Mf/Qha), Hawkesbury Sandstone (Rh) and Ashfield Shale (Rwa)

4.5 Soil Landscapes

Reference to the Soil Landscapes of the Sydney 1:100 000 sheet (Chapman and Murphy, 1989) indicates that the site is underlain by disturbed terrain ("extensively disturbed by human activity").

4.6 Acid Sulfate Soils

Review of the *Sydney Local Environmental Plan 2012*, Acid Sulfate Soils Map - Sheet ASS_008 shows the eastern portion of the site mapped as 'Class 2' and the western portion of the site mapped as 'Class 5' as shown in Figure 3, below. Table 1 below, provides the works which trigger development consent to be required based on the potential for acid sulfate soil (ASS) disturbance for the relevant land classes. On the basis of the LEP, ASS will need to be addressed for the proposed development.

Table 1: ASS Land Classes present at the site

Class of Land	Works
2	Works below the natural ground surface. Works by which the watertable is likely to be lowered.
5	Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

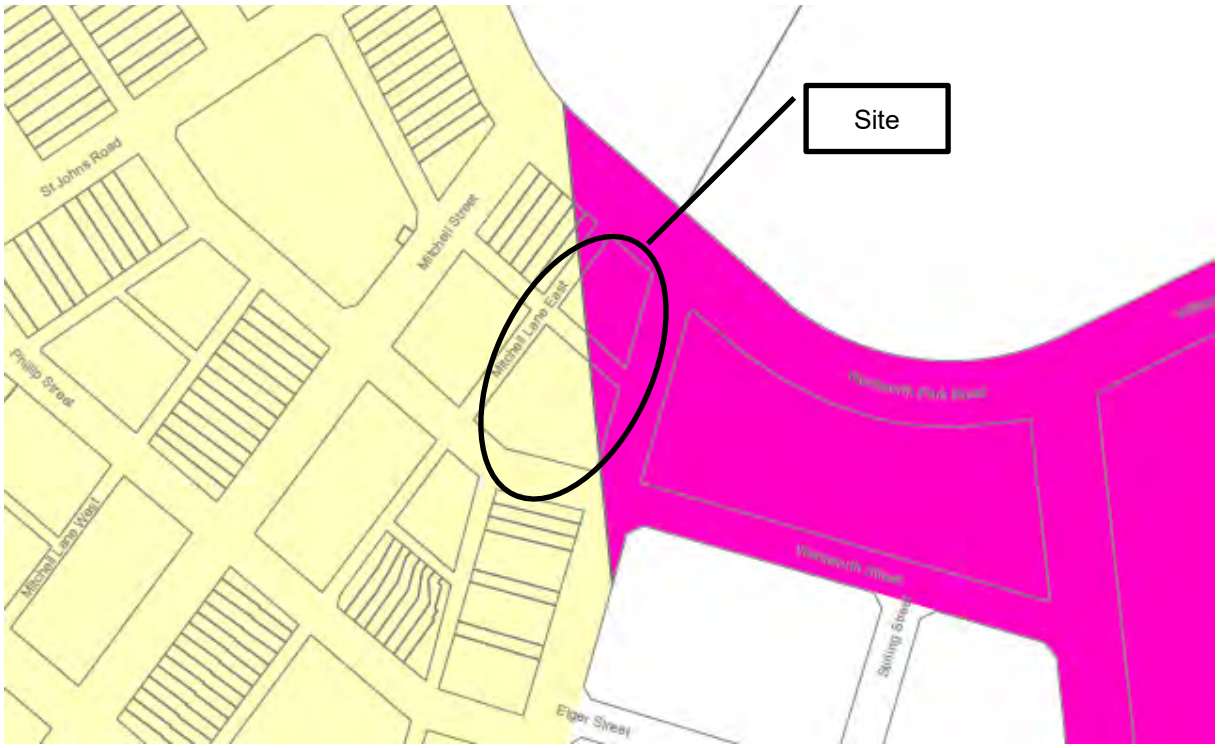

Figure 3: Acid Sulfate Soil Risk Map (Class 2 shaded dark pink, Class 5 shaded light pink)

4.7 Groundwater Bore Database

A NSW Department of Primary Industries (Office of Water) (DPI) groundwater bore search was conducted on 20 February 2020. Five groundwater bores were found within a 500 m radius of the site. All of the bores were shallow monitoring wells located approximately 450 m north, north west from the site.

'Work Summary' reports obtained from the DPI for each groundwater bore are presented in Appendix C along with figures showing their location.

5. Site History

5.1 Title Deed Records

A title deed search was undertaken as is provided in Appendix D. In summary, the search found that:

- The site formed part of unalienated Crown Land, being reclaimed land as at 1889. Prior to reclamation the land was within Black Wattle Cove, with the recorded high water mark shown in Figure 4, below and on Drawing 1, Appendix A;
- 1930 to 1974: Registered owner was the Glebe Administration Board;
- 1974 to 1987: Registered owner was the Commonwealth of Australia; and
- 1987 to date: Registered owner was the New South Wales Land and Housing Corporation.

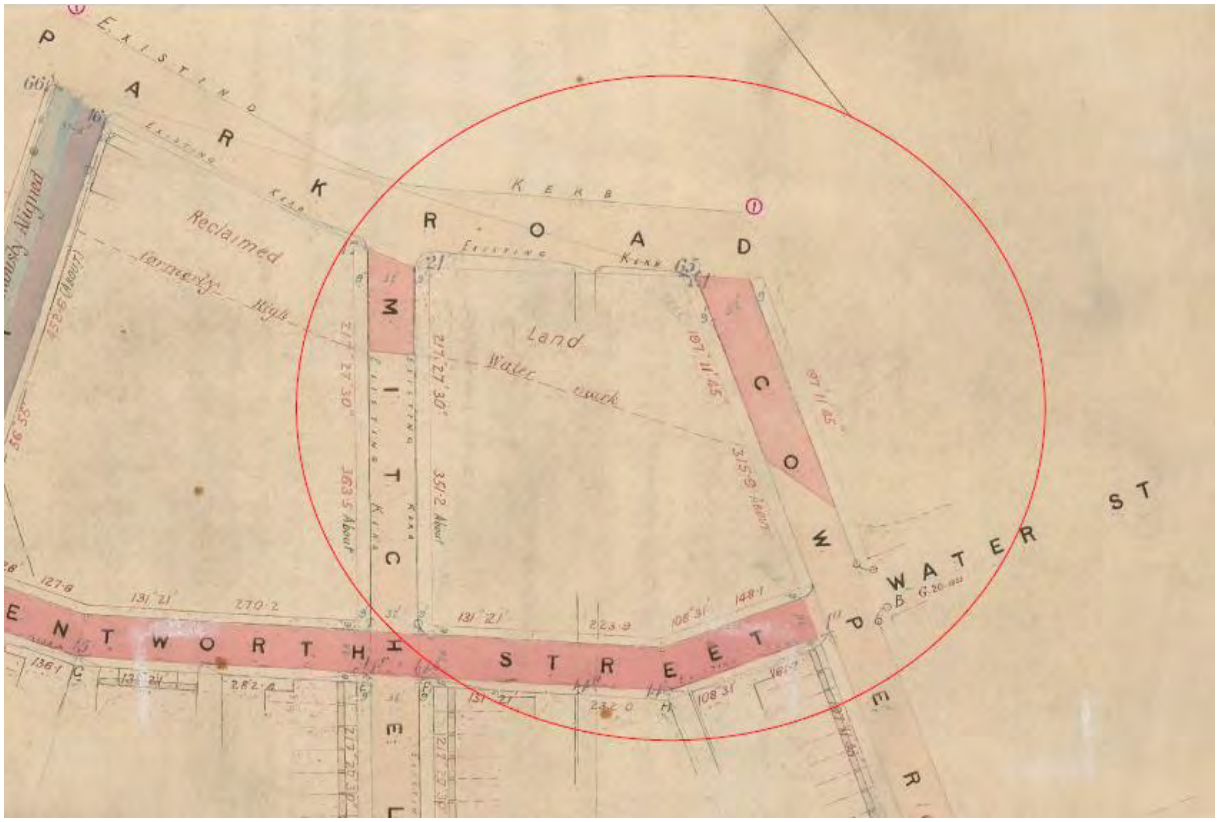

Figure 4: Plan dated circa 1890 showing former high water mark and reclaimed land at the site

An extract from the title deeds potentially showing a water course entering the site is provided in Figure 5, below.

Figure 5: Plan, possibly dated circa 1930, showing what may be a creek line potentially entering the site

5.2 Aerial Photographs

Extracts of historical aerial photographs are provided in Appendix E and briefly discussed in Table 2 below.

Table 2: Summary of Historical Aerial Photographs

Year	Site Features	Surrounding Features
1930	Site layout not clear due to photograph quality. Structures appear to have been present at the site. A roadway appears to have been present along the alignment of Park Lane.	Wentworth Park was present. Structures appear to have been present in the area of the current MJ Doherty Reserve to the west of the site. The surrounding area appears to have been a mix of residential and commercial / industrial use.
1943	No structures appear to have been present at the site. The image is consistent with a grassed area with foot tracks.	Wentworth Park has structures consistent with an army camp and woolsheds. The area of the current MJ Doherty Reserve is mostly vacant with tracks across it, with the exception of a structure along the western edge of the property.

Year	Site Features	Surrounding Features
		Property immediately to the east of the site appears to be commercial/ industrial. The surrounding area appears to be a mix of residential and commercial / industrial use.
1951	The layout was generally consistent with the previous photograph with the exception of a small structure adjacent to the eastern boundary of the North Site. Some lines are also visible in the North Site. It is not clear what they were, possibly a fence.	Land use in the surrounding area was generally consistent with the previous photograph. The army camp appears to have been removed from Wentworth Park.
1955	The structure and lines observed on the North Site in the previous photograph appear to have been removed. The South Site appears to have had disturbed ground/ vegetation, and possibly structure(s) including in the south western corner.	Land use in the surrounding area was generally consistent with the previous photograph. The possible woolshed structures appear to have been removed from Wentworth Park.
1961	The site appears to be vacant with no structures other than Park Lane. Low vegetation appears to have been present.	Land use in the surrounding area was generally consistent with the previous photograph. The structure appears to have been removed from the area of the current MJ Doherty Reserve. A large residential unit block had been built to the west of MJ Doherty Reserve.
1965	The use of the site is unclear from the photograph. North Site: the ground surface appears to have been disturbed. Dark shapes visible in the central area in the photograph may have been structures or temporary structures. South Site: vegetation had been cleared and small rectangles around the edges of the site may have been structures/ temporary structures/ a structure under construction or vehicles. Lines present in the south of the area may have been product bays.	Land use in the surrounding area was generally consistent with the previous photograph. Some changes to buildings appear to have occurred in the commercial / industrial properties to the east of the site.
1970	North Site: appears to be used for car parking. South Site: a structure had been constructed around the edges of the Area, with an opening/ entrance point in the south east. The central portion appears to	Land use in the surrounding area was generally consistent with the previous photograph.

Year	Site Features	Surrounding Features
	be vacant.	
1982	The layout was generally consistent with the previous photograph.	Land use in the surrounding area was generally consistent with the previous photograph.
1991	Structures consistent with the current buildings appear to have been present.	Land use in the surrounding area was generally consistent with the previous photograph.
2000	Structures consistent with the current buildings appear to have been present.	Land use in the surrounding area was generally consistent with the previous photograph. MJ Doherty Reserve appears to have been landscaped in a manner consistent with a public open space.
2007	Structures consistent with the current buildings appear to have been present.	Land use in the surrounding area was generally consistent with the previous photograph.
2014	Structures consistent with the current buildings appear to have been present	Land use in the surrounding area was generally consistent with the previous photograph. Previous residential-style buildings to the south east of the site had been demolished[1].
2018	Structures consistent with the current buildings appear to have been present	Land use in the surrounding area was generally consistent with the previous photograph. The area of demolished buildings to the south east of the site is under construction with multistorey buildings[1]. Some changes to buildings appears to have occurred in the commercial/ industrial properties to the east of the site[2].
2019	Consistent with current site layout	Generally consistent with current development pattern

Notes:
1. Nearmap.com photographs show earthworks commencing on this property circa 2011 and redevelopment being completed circa 2019.
2. Nearmap.com photographs show redevelopment occurring between circa 2015 and 2018. The redevelopment appears to have included complete demolition and earthworks.

5.3 SafeWork NSW

The result for a site search of Schedule 11 Hazardous Chemical on Premises records held by SafeWork NSW was undertaken and is provided in Appendix F. No records were located.

5.4 Council Records

5.4.1 Section 10.7 Planning Certificates

The Section 10.7 (2&5) Planning Certificates are provided in Appendix G. Both Certificates included the statements below:

'*The following matters are prescribed by section 59 (2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate:*

*a) The land to which the certificate relates **is not** declared to be **significantly contaminated land** within the meaning of that act as at the date when the certificate is issued.*

*b) The land to which the certificate relates **is not** subject to a **management order** within the meaning of that act as at the date when the certificate is issued.*

*c) The land to which the certificate relates **is not** the subject of an **approved voluntary management proposal** within the meaning of that act at the date the certificate is issued.*

*d) The land to which the certificate relates **is not** the subject of an **ongoing maintenance order** within the meaning of that act as at the date when the certificate is issued.*

e) *As at the date when the certificate is issued, Council **has not** identified that a **site audit statement** within the meaning of that act has been received in respect of the land the subject of the certificate*.'

'*Contaminated Land Potential:*

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this Section 10.7 Certificate to confirm that the land has not been used for a purpose which would be likely to have contaminated the land. Parties should make their own enquiries as to whether the land may be contaminated.'

5.4.2 Reclamation of Wentworth Park

Information on the City of Sydney website provides the following details regarding the area of Wentworth Park: [it] '*was originally the swampy mouth of the creek variously known as Black Wattle or Blackwattle Creek. Between the 1830s and 1860 various noxious industries were established along the shore, including in particular abattoirs and boiling down works. The pollution from these works so polluted the swamp that, even after the removal of these establishments from the area in 1860, the local council lobbied to have the area filled in because of the stench that continued to arise from the water and mud'*.[1]

'*Filling the creek and head of the swamp commenced in 1876 and continued until 1880. Silt dredged from the harbour was used to carry out the process and numerous sea walls and dykes were constructed as part of the programme'*.[2]

5.4.3 Historical Development Applications

A record of an approved development application *circa* 1970 was downloaded from the City of Sydney Archives and is provided in Appendix G. It is for off-street parking of vehicles at Lot 18.

5.4.4 Historical Photographs

Extracts of historical photographs downloaded from the City of Sydney Archives are provided as Figures 6 and 7, below, with full details provided in Appendix G.

[1] https://www.cityofsydney.nsw.gov.au/learn/archives-history/sydneys-history/people-and-places/park-histories/wentworth-park
[2] https://www.cityofsydney.nsw.gov.au/learn/archives-history/sydneys-history/people-and-places/park-histories/wentworth-park

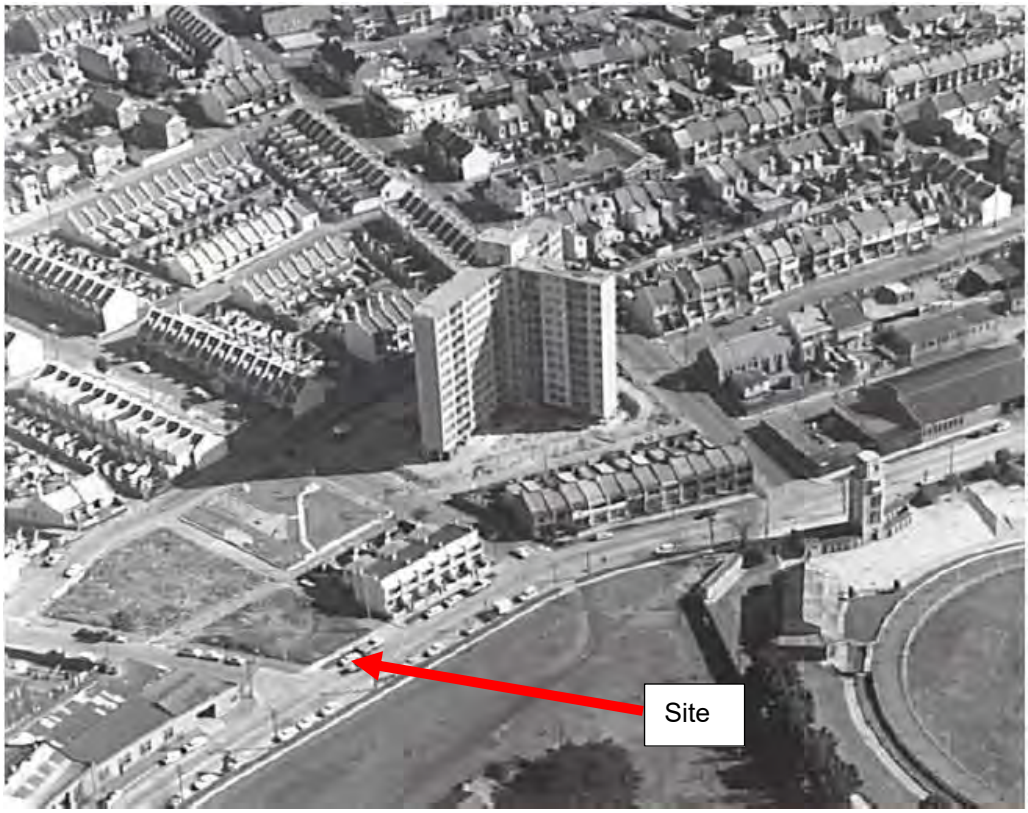

Figure 6: 1961 Photograph, Looking west from above Wentworth Park Oval near cnr of St Johns Road, City of Sydney Archives, Unique ID: A-00012502[3]

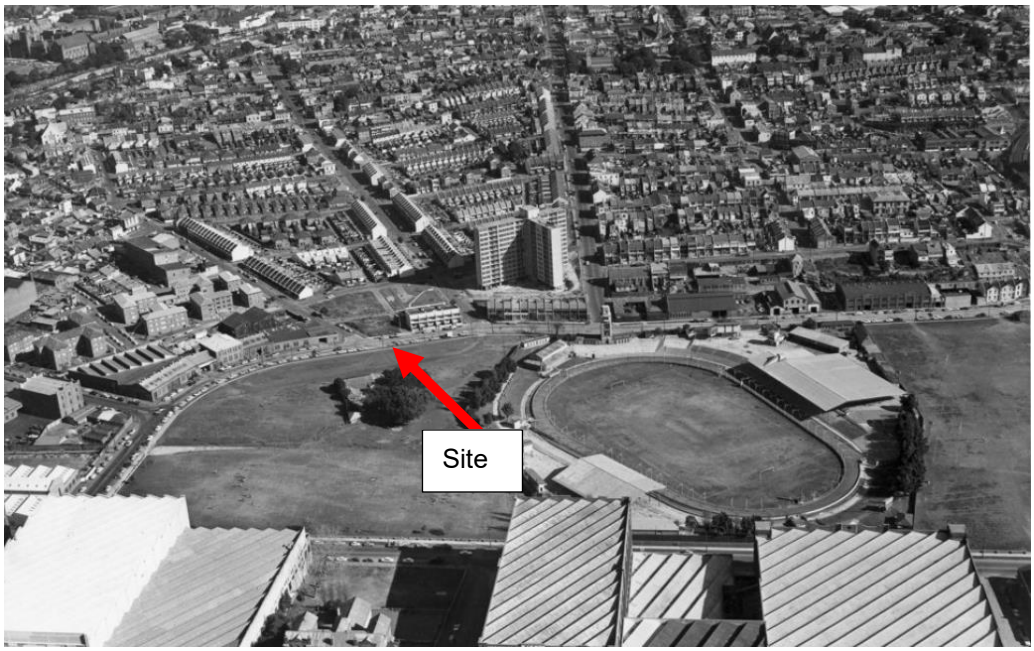

Figure 7: *circa* 1970 Photograph, Looking south west down St Johns Road Glebe from above Wentworth Park. Mitchell Street and Cowper Street. City of Sydney Archives, Unique ID: A-00009710[4]

[3] https://archives.cityofsydney.nsw.gov.au/nodes/view/573235

5.5 Databases under the CLM and POEO Act

A search on 20 February 2020 of the Environment Protection Authority (EPA) databases indicated that:

- No licences or notices have been issued for the site under the POEO Act. The same applies for adjacent sites;
- The search did not identify any notices of orders to investigate or remediate issued for the site under the CLM Act, or to any other site in Glebe; and
- The search for sites notified to the EPA under the Section 60 of the CLM Act listed under Glebe and Ultimo did not identify that the site. The same applies to land within 250 m of the site.

6. Preliminary Conceptual Site Model

A Conceptual Site Model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how the site became contaminated and how potential receptors may be exposed to contamination either in the present or the future i.e., it enables an assessment of the potential source – pathway – receptor linkages, as listed in Table 4, Section 6.4. The CSM is used to inform the scope of investigations and remediation (if required).

6.1 Potential Contamination Sources

Based on the current and previous site uses as documented in Sections 3 and 5 and DP site observations, the potential contamination sources (or areas of environmental concern) are summarised in Table 3 below.

[4] https://archives.cityofsydney.nsw.gov.au/nodes/view/570355

Table 3: Areas of Environmental Concern (AEC)

Potential AEC	Location	Description of Potential Contaminating Activity	Contaminants of Concern
Imported fill from unknown sources (S1)	Potentially the entire site	Fill is potentially present at the site, including as part of the former reclamation works. Fill would be from unknown sources, but may have included silt dredged from the harbour.	Metals, TPH, BTEX, PAH, phenols, PCB, OCP, OPP and asbestos
Demolition of former structures (S2)	Potentially the entire site	Structures which are no longer present at the site were observed in the historical aerial photographs.	Asbestos, lead, PCB
On-site car parking (S3)	Lot 18	Parking of cars on the site (generally low risk, but possible former spills / leaks)	TPH, BTEX, PAH, lead
Previous industry in the local area (S4)	Groundwater	Abattoirs, boiling down works, unknown industrial uses	Metals, TPH, BTEX, PAH, phenols, PCB, cyanide, VOC

AEC: Area of Environmental Concern

6.2 Potential Receptors

Human Health Receptors

R1 - Site users (residents, visitors);

R2 - Future construction and maintenance workers; and

R3 - Land users in adjacent areas (commercial/ residential).

Environmental Receptors

R4 - terrestrial organisms;

R5 - Groundwater; and

R6 - Surface water (Blackwattle Bay).

Note, the nearest surface water body, Blackwattle Bay, is located approximately 0.5 km from the site and is considered to be too far from the site to be considered a significant environmental receptor from overland flow. However, consideration of impact on this potential receptor has been given for impact by surface water flow through the stormwater system.

Building and Structures Receptors

R7 - Buildings and foundations; and

R8 - Underground services.

6.3 Potential Pathways

Potential pathways for contamination to impact on receptors include the following:

P1 - Ingestion and dermal contact;

P2 - Inhalation of dust and/or vapours;

P3 - Leaching of contaminants and vertical mitigation into groundwater;

P4 - Lateral migration of groundwater;

P5 - Migration in surface water via the stormwater system; and

P6 - Contact with buildings and structures.

6.4 Summary Preliminary CSM Table

Table 4: Preliminary Conceptual Site Model

Source	Potential Contaminants	Transport Pathway	Receptor
S1 - Imported Fill **S2 -** Former buildings, previously demolished **S3 –** On-site car parking **S4** – Previous industry in the local area	Metals, TPH, BTEX, PAH, OCP, OPP, PCB, phenols, cyanide, asbestos, VOC	**P1**: Ingestion and dermal contact	**R1** – Site users **R2** – Future construction and maintenance workers **R4** – terrestrial organisms
		P2: Inhalation of dust and/or vapours	**R1** – Site users **R2** – Future construction and maintenance workers **R3**: Land users in adjacent areas
		P3: Leaching of contaminants and vertical mitigation into groundwater.	**R4**: Groundwater
		P4: Lateral migration of groundwater **P5**: Surface water via the stormwater system.	**R5:** Surface water
		P6: Contact with buildings and structures.	**R6:** Underground services **R7:** Buildings and foundations

7. Fieldwork and Analysis

7.1 Data Quality Objectives and Project Quality Procedures

The investigation has been devised broadly in accordance with the seven step data quality objective (DQO) process which is provided in Appendix B, Schedule B2 of NEPC (2013).

The DQO process is outlined as follows:

- Stating the Problem;
- Identifying the Decision;
- Identifying Inputs to the Decision;
- Defining the Boundary of the Assessment;
- Developing a Decision Rule;
- Specifying Acceptable Limits on Decision Errors; and
- Optimising the Design for Obtaining Data.

An evaluation of the DQO is presented in Appendix L.

7.2 Data Quality Indicators

The performance of the assessment in achieving the DQO was assessed through the application of Data Quality Indicators (DQI), defined as follows:

Precision:	A quantitative measure of the variability (or reproducibility) of data;
Accuracy:	A quantitative measure of the closeness of reported data to the "true" value;
Representativeness:	The confidence (expressed qualitatively) that data are representative of each media present on the Site;
Completeness:	A measure of the amount of useable data from a data collection activity; and
Comparability:	The confidence (expressed qualitatively) that data can be considered equivalent for each sampling and analytical event.

An evaluation of the DQI is presented in Appendix L.

7.3 Sample Location and Rationale

The site has an approximate area of 1,800 m^2. According to the NSW EPA *Sampling Design Guidelines* (1995) for a site of 0.2 ha in size a minimum of seven sample locations are recommended to adequately characterise the site.

The current contamination investigation was carried out in conjunction with a geotechnical investigation and, as such the bore locations were positioned primarily for geotechnical investigation

purposes in areas where access was available. Seven boreholes were drilled and sampled across the site as shown on Drawing 1, Appendix A, and provide general site coverage to the extent practicable given current site access restrictions.

Representative samples of the filling and natural soil profiles were recovered from the boreholes in order to provide information on:

- Soil type, including the presence of fill;
- Contaminant concentrations in soil and potentially groundwater;
- Acid sulfate soils; and
- Waste classification.

One groundwater monitoring well was installed at Borehole BH4 (in the centre of the site). A sample of the water from the well was recovered to provide indicative information on the groundwater quality beneath the site.

7.4 Drilling and Soil Sampling Methods

The field work was undertaken between 21 and 24 January 2020, and included:

- Scanning for buried services using a scanning sub-contractor;
- Drilling of seven boreholes (Boreholes BH1 to BH7), to depths ranging between 0.7 m and 15.38 m, with two of the boreholes drilled using hand tools (i.e., BH3 and BH7), and the other five boreholes drilled using track-mounted drilling rigs;
- Completion of dynamic cone penetrometer (DCP) tests at two locations (i.e., adjacent to Boreholes BH3 and BH7), taken to depths of 0.62 m and 2.35 m;
- Installation of one groundwater well (standpipe piezometer) within Borehole BH4; and
- Groundwater observations during auger drilling.

It is noted that the surface pavers and concrete in boreholes BH2 and BH4 were dia-cored. The boreholes were drilled within soils (and between 0.1 m to 0.3 m into weathered sandstone within Boreholes BH1, BH2 and BH6) using auger drilling methods. With the exception of Boreholes BH3 and BH7, five of the boreholes were extended into the underlying rock using rotary diamond core drilling techniques.

Selected samples were obtained from soils recovered from augers or standard penetration tests (SPT). QA/QC samples were collected as discussed in Appendix L.

All field work was carried out under the full-time supervision of a geotechnical engineer, with logging of the soil undertaken generally in accordance with Australian Standard AS 1726 (2017).

Coordinates and surface levels for the test locations were obtained using either a differential Global Positioning System receiver (dGPS: Borehole BH4), or interpolated based on site measurements and the site survey drawings provided. The co-ordinates and surface level of Borehole BH4 are considered to have an accuracy of 0.1 m in both plan and elevation, whereas the co-ordinate accuracy for the other boreholes is considered to be about 0.5 m in plan and 0.1 m in elevation. Coordinates

are in GDA94 / MGA Zone 56 format (Geocentric Datum of Australia 1994 base, with Map Grid of Australia projection) and elevations are measured relative to the Australian Height Datum (AHD). The test locations are shown on Drawing 1 in Appendix A.

The weather on two of the field days was mostly fine and sunny, however, periods of rain occurred on 21-22 January 2020, and 24 January 2020.

Further details of the methods and procedures employed during the site investigation are presented in the Notes About This Report, in Appendix A.

7.5 Groundwater Well Construction and Groundwater Sampling Methods

One groundwater well (standpipe piezometer) was constructed in Borehole BH4, screened within soil to a depth of 6.5 m below ground level (bgl). The well was constructed of 50 mm diameter acid washed, Class 18, PVC casing and machine slotted well screen intervals. Joints were screw threaded. The sand pack extended above the well screen and be completed with a bentonite plug and concrete. The borehole log, Appendix H, provides the construction details.

The groundwater well was developed on 29 January 2020 by removing three borehole volumes. The well was sampled one week later on 5 February 2020. Development and sampling records are provided in Appendix H, and the method undertaken included:

- Measuring water level depth using a dip meter prior to sampling;
- Assessing for phase separated hydrocarbons using an interface meter and clear bailer;
- Pumping groundwater using a low flow peristaltic pump. Recording of field parameters (pH, temperature, dissolved oxygen (DO), conductivity, turbidity and redox];
- Groundwater using a low flow peristaltic pump once field parameters had stabilised;
- Collection of samples in laboratory prepared containers. Samples collected for metals analysis were filtered in the field using a 0.45 µm filter. Sample bottles were filled directly from the pump outlet to minimise disturbance;
- Recording field data; and
- Storing samples in an ice cooled, insulated and sealed container for transport to the laboratory (with chain of custody).

Collection of QA/QC samples as discussed in Appendix L.

7.6 Field Quality Assurance and Quality Control

The field quality assurance (QA) and quality control (QC) procedures for sampling were as prescribed in Douglas Partners' *Field Procedures Manual*. Field replicate samples were recovered and analysed for a limited suite of contaminants. Trip blank, trip spike samples were also included as part of the QA/QC process. This is in accordance with standard industry practice and guidelines.

A complete discussion of the field QA/QC is presented in Appendix L.

7.7 Analytical Rationale

Samples were submitted to a National Association of Testing Authorities, Australia (NATA) accredited analytical laboratory, for analysis of soil.

The analytical scheme was designed to obtain an indication of the potential presence and possible distribution of contaminants that may be attributable to past and present activities, and features within the site, as informed by the CSM and discussed in Section 6. Furthermore, the analytical rationale was to enable appropriate data to preliminarily classify soils to be excavated in accordance with the NSW Environment Protection Authority (EPA) *Waste Classification Guidelines* November 2014 (EPA, 2014).

The presence or absence of VOC was assessed through the PID readings, as recorded on borehole logs in Appendix H.

8. Assessment Criteria

The assessment criteria adopted for the current assessment are discussed in Appendix I. These include thresholds for assessment of soil and groundwater for the proposed land use, waste classification criteria and acid sulfate soil criteria.

The proposed development comprises mixed use, multi-storey buildings with partial basements. It is anticipated that the most sensitive land use for the proposed development will be residential with accessible to soil. The Site Assessment Criteria (SAC) applied in the current investigation are therefore based on the generic residential with accessible soil thresholds. It is anticipated that, if required, once the development plans have been finalised any additional recommended investigations completed, exceedances of the generic SAC adopted herein will be reviewed to determine their significance in relation to proposed development and location within that development footprint.

The SAC have been sourced from the National Environment Protection Council (NEPC) *National Environment Protection (Assessment of Site Contamination) Measure 1999* (as amended in 2013) (NEPC, 2013).

The investigation and screening levels are applicable to generic land use settings and include consideration of, where relevant, the soil type and the depth of contamination. The investigation and screening levels are not intended to be used as clean up levels. Rather, they establish concentrations above which further appropriate investigation (e.g., Tier 2 assessment) should be undertaken. They are intentionally conservative and are based on a reasonable worst-case scenario.

9. Field Work Results

9.1 QA/QC Assessment Results

A QA/QC assessment for the investigation is provided in Appendix L. Based on the conclusions of the assessment it is considered that the results are suitable for the purposes of the investigation.

9.2 Field Work Results

The subsurface conditions encountered within the boreholes are presented on the borehole logs provided in Appendix H, along with standard notes defining the descriptive terms and the classification methods used.

The subsurface conditions encountered during the investigation can be summarised as:

- North Site
  - FILL - Sand and gravelly sand fill up to 1.0 m depth, over sandy clay fill with some (variable) brick, sandstone gravel, ash, plastic, charcoal, slag, glass and ceramic tile to 1.9 m depth (elevation down to RL0.8 m), generally in a loose or medium dense condition; over
  - ALLUVIUM - Very soft to stiff and loose to medium dense, orange-brown, grey or red-brown clayey sand, low to medium plasticity sandy clay or high plasticity clay, moist then wet (moisture content for cohesive soils greater than the plastic limit below an elevation of RL0.3 m); over
  - RESIDUAL - Dense, pale grey clayey sand, wet (possibly extremely weathered sandstone: Borehole BH5 only); over
  - SANDSTONE - Medium to coarse grained, very low to low strength becoming high strength sandstone.
- South Site
  - FILL - Sand, gravel, gravelly sand, and clayey sand fill up to 2.4 m depth (to an elevation of RL1.0 m), including some (variable) inclusions of brick, sandstone gravel, ash, plastic, charcoal, slag, glass and ceramic tile, generally in a loose condition, and some surface concrete slabs and gravelly sand 'roadbase' materials associated with footpaths and car parking areas (Boreholes BH2 and BH4 only); over
  - ALLUVIUM - Very soft to stiff, mottled orange-brown and grey, grey and dark grey low to medium plasticity sandy clay or high plasticity clay, moisture content equal to or greater than the plastic limit below an elevation of between RL0.2 m and RL0.7 m); over
  - RESIDUAL - Sense, pale grey-brown clayey sand, wet (possibly extremely weathered sandstone: Borehole BH4 only); over
  - SANDSTONE - Medium to coarse grained, very low strength becoming high strength sandstone, with dark grey, very low strength and highly to slightly weathered carbonaceous shale encountered in Borehole BH1 between 10.08-10.70 m depth.

A summary of the surface levels and depths at which various strata were encountered during the investigation is presented in Table 5. It is noted that the top of rock is indicated to reduce in 'steps' towards the north-east and Wentworth Park, with a 2 m difference in elevation between the levels for the top of rock in boreholes BH5 and BH6.

Table 5: Surface levels and Summary of Subsurface Profile at Test Locations

Test ID	Surface RL (AHD) and Top of Concrete / Filling Materials	Top of Alluvium		Top of Extremely Low to Very Low Strength Sandstone		Top of Medium or High Strength Sandstone[2]	
		Depth (m)	RL (AHD)	Depth (m)	RL (AHD)	Depth (m)	RL (AHD)
BH1	3.2	1.8	1.4	5.2	-2.0	7.1	-3.9
BH2	3.5	2.4	1.1	5.1	-1.6	5.3	-1.8
BH3	3.5	>0.7	<2.8	*ne*	*ne*	*ne*	*ne*
BH4	2.9	1.9	1.0	6.3	-3.4	6.9	-4.0
BH5	2.7	1.8	0.9	*ne*	*ne*	6.0	-3.3
BH6	2.7	1.9	0.8	8.0	-5.3	8.2	-5.5
BH7	3.5	>1.5	<1.9	*ne*	*ne*	*ne*	*ne*

Notes: 1. 'ne' denotes the material was not encountered.
2. Taken as consistent medium or high strength sandstone, below thick clay seams.

Groundwater was observed within the five boreholes drilled through the alluvium (i.e., either during auger drilling or within the standpipe piezometer in Borehole BH4), with groundwater observed within the alluvium at an elevation of between RL0.1 m and RL0.3 m. The water level within the standpipe piezometer (Borehole BH4) was measured both 9 and 16 days following standpipe installation, at depths of 2.84 m and 2.64 m (respectively) within sandy clay alluvium (lower than was observed during the drilling). Note groundwater levels are transient and fluctuate over time and space.

During development, about 90 litres of water was pumped from the standpipe using a low flow pump. Following the pumping, it was noted that the water level within the standpipe was similar to the pre-pumping level, indicating a high permeability of the surrounding soil and a rapid rate of groundwater recharge.

No visible evidence of unnatural staining or odours was observed in any of the test bores or at the ground surface. However, ash, slag and charcoal were observed in the fill over the site along with inclusions of building rubble (such as brick, tile, timber, metal and glass). Whilst no obvious potential asbestos containing materials (ACM) were identified in the fill in the 100 mm diameter boreholes, the presence of building rubble is commonly a strong indicator of the potential for ACM.

PID screening results were all below 5 parts per million and are all considered to be consistent with background ranges for Australian soils.

9.3 Laboratory Results

Laboratory analytical results are summarised in the following tables, included in Appendix J:

Table J1: Summary of Laboratory Results for Soils for Proposed Land Use;

Table J2: Summary of Laboratory Results for Groundwater;

Table J3: Summary of Laboratory Results for Acid Sulfate Soil Assessment; and

Table J4: Summary of Laboratory Results for Waste Classification.

The full laboratory certificates are provided together with the chain of custody and sample receipt information in Appendix K.

10. Discussion of Results Relative to Site Use Criteria

10.1 Relative to Site Use Criteria

10.1.1 Soil

Table J1, Appendix J summarises the soil results relative to the SAC. All results were within the SAC with the exceptions tabulated in Table 6, below. An exceedance was recorded for one or more of the SAC in every borehole. An extract of Table J1 showing the exceedances is provided as Table 6, below.

Concentrations at 'hotspot' level relative (i.e. more than 250% of the SAC) relative to the health-based HIL were recorded in one or more samples from boreholes 1, 2, 4 and 6. Hotspot concentrations were recorded for lead, BaP TEQ and total PAH. One exceedance of the Management Limit was also recorded. Various other exceedances of the HIL and ecological based EIL/ESL were also recorded.

Based on the widespread distribution of exceedances, including hotspots, in the results, and the relatively limited amount of data, statistical analysis was not considered to be warranted.

Again, it is noted that while no ACM was identified in the investigation, building material debris was observed in the fill and can be indicative of the presence of ACM.

Table 6: SAC Exceedances – Extract of Table J1 (mg/kg)

			Copper	Lead	Mercury (inorganic)	Zinc	F3 (>C16-C34)	BaP	BaP TEQ	Total PAH
Site Assessment Criteria (SAC)										
HIL A			6,000	300	40	7,400			3	300
EIL/ ESL	coarse		#	1,100		#	#	0.7		
	fine		#	1,100		#	#	0.7		
Management Limit	coarse						2,500			
	fine						3,500			
Laboratory Results										
Sample ID	Depth	Soil Type								
1	0.9 - 1 m	Fill/ Sand	-	510 300 1100	-	-	2,900 NC 300	70 NC 0.7	**110** 3 NC	**870** 300 NC
2	1.9 - 2 m	Fill/ Clay	240 6000 230	**1,900** 300 1100	47 40 NC	1,100 7400 790	-	1.1 NC 0.7	-	-
3	0 - 0.1 m	Fill/ Sand	-	-	-	-	380 NC 300	-	-	-
4	0.4 - 0.5 m	Fill/ Sand	-	**1,100** 300 1100	-	-	-	2.6 NC 0.7	4.2 3 NC	-
4	0.9 - 1 m	Fill/ Sand	910 6000 150	670 300 1100	-	450 7400 790	-	1.6 NC 0.7	-	-
BD1/ 200120	0.9 - 1 m	Fill/ Sand	530 6000 150	**890** 300 1100	-	540 7400 790	-	1.4 NC 0.7	-	-
4	2.5 - 2.6 m	Clay	-	410 300 1100	-	-	-	0.2 NC 0.7	-	-
5	0.4 - 0.5 m	Fill/ Clay	-	650 300 1100	-	-	-	0.84 NC 0.7	-	-
6	0.1 - 0.2 m	Fill/ Sand	360 6000 150	**2,200** 300 1100	-	-	-	1.3 NC 0.7	-	-
6	0.9 - 1 m	Fill/ Clay	-	700 300 1100	-	-	-	1.6 NC 0.7	-	-
7	0.2 - 0.3 m	Fill/ Sand	-	-	-	-	-	1.7 NC 0.7	-	-
7	1.2 - 1.3 m	Fill/ Clay	-	-	-	-	-	1.4 NC 0.7	-	-

Notes:

Bold	sample considered to be 'hotspot' of health-based investigation level exceedances
Yellow shading	HIL/HSL exceedance
Green shading	EIL/ESL exceedance
Orange shading	HIL/HSL and EIL/ESL exceedance
Red shading	ML and HIL/HSL or EIL/ESL exceedance
HIL	(human) health investigation level
ESL	Ecological Screening Level
EIL	Ecological Investigation Level
PAH	polycyclic aromatic hydrocarbons
BaP	benzo(a)pyrene
BaP TEQ	benzo(a)pyrene toxic equivalent
-	Result below the SAC
#	As shown in green text below result

10.1.2 Groundwater

Groundwater results, as summarised in Table J2, Appendix J.

All results were within the GIL for marine waters with the exception of cobalt. It is noted that the concentrations of cobalt detected in soil were all low, indicating that the cobalt detected in groundwater is not likely to be sourced from the site.

All results for organic analytes were within the HSL and below the laboratory practical quantitation limit (PQL), which has been adopted as the screening level for TRH for areas where basements are to be excavated.

It is noted, however, that the groundwater result is a single location at a single point in time. Groundwater conditions can change over time, particularly if there are tidal influences. Given that dewatering is likely to be required as part of any basement construction, groundwater conditions should be monitored over a period of time and at additional locations.

10.2 Acid Sulfate Soil

Acid sulfate soil (ASS) has been identified to be present at the site with the results summarised in Table J3, Appendix J, along with summary information on observed groundwater depth and soil observations.

The following comments are made regarding ASS distribution at the site:

- ASS was not recorded in soils from BH1, indicating that it may not be present over the entire site. This is consistent with ASS risk mapping;
- ASS was not recorded in soil above the observed groundwater table;
- ASS was identified in grey, and grey and red-brown coloured soils; and
- ASS was recorded in some samples at concentrations below the management limits. This recorded ASS will affect the classification of the soil as discussed in Section 10.3.2.

10.3 Preliminary Waste Classification

10.3.1 Fill

The preliminary waste classification of the fill encountered in the bores was conducted in accordance with the six step process as set out in EPA (2014) and summarised in Table 7 below.

Table 7: Six Step Classification

Step	Classification	Rationale
1. Is it special waste?	No	Asbestos not reported in the samples. It is noted however that the presence of building rubble indicates that there is an elevated risk of asbestos being present
2. Is it liquid waste?	No	The spoil comprised of soil matrix (i.e., no liquids)
3. Is the waste "pre-classified"?	No	Waste not observed to contain coal tar, batteries, lead paint or dangerous goods containers.
4. Does the waste have hazardous waste characteristics?	No	Waste not observed to/ or considered at risk to contain explosives, gases, flammable solids, oxidising agents, organic peroxides, toxic substances or corrosive substances.
5. Chemical Assessment	Undertaken	Soil matrix with unknown chemical characteristics.
6. Is the waste putrescible?	No	All observed components of material composed of materials pre-classified as non-putrescible (i.e., soil-based materials). Organic content is assessed to be minor.

The laboratory results compared to the waste classification criteria in NSW EPA (2014) is presented in Table J4, Appendix J. The results were all within the thresholds for General Solid Waste, taking into account total and TCLP date with the exception of:

- Sample 1/0.9-1:
  - Total BaP of 70 mg/kg compared to the SCC2 threshold of 23 mg/kg;
  - TCLP BaP of <0.001 mg/L compared to the TCLP1 threshold of 0.04 mg/L;
  - Total PAH of 870 mg/kg compared to the SCC2 threshold of 800 mg/kg;
  - TCLP PAH of 0.0067 mg/L, no TCLP thresholds applicable.
- Sample 2/1.9-2:
  - Total lead of 1,900 mg/kg compared to the SCC1 threshold of 1,500 mg/kg and the SCC2 threshold of 6,000 mg/kg;
  - TCLP lead of 0.58 mg/L compared to the TCLP1 threshold of 5 mg/L;
- Sample 6/0.1-0.2:
  - Total lead of 2,200 mg/kg compared to the SCC1 threshold of 1,500 mg/kg and the SCC2 threshold of 6,000 mg/kg;
  - TCLP lead of 26 mg/L compared to the TCLP1 threshold of 5 mg/L and the TCLP2 threshold of 20 mg/kg;

Review of the borehole logs for the three samples with concentrations exceeding the General Solid Waste thresholds indicated that all of the subject materials were logged to contain inclusions of ash and slag. As such the following *General Approval Of The Immobilisation Of Contaminants In Waste* apply:

- Approval Number 1999/05 for Ash, ash-contaminated natural excavated materials or coal-contaminated natural excavated materials. Approval 1999/05 applies to BaP and PAHs, and the total concentration (SCC) limits for the applicable contaminants do not apply, and these contaminants in the waste can be classified based on the TCLP values alone; and
- Approval Number 1999/07 for Metallurgical furnace slag or metallurgical furnace slag contaminated natural excavated materials. Approval 1999/07 applies to beryllium, chromium (VI), lead, nickel, PAHs and BaP., and the total concentration (SCC) limits for the applicable contaminants do not apply, and these contaminants in the waste can be classified based on the TCLP values alone.

On the basis of the total and TCLP laboratory results, the material descriptions and the *General Approval Of The Immobilisation Of Contaminants In Waste* 1999/05 and 1999/07, the fill at the site is provisionally classified as follows with respect to chemical contaminants:

- Fill represented by Sample 6/0.1-0.2 is provisionally classified as Hazardous Waste based on the TCLP lead concentration; and
- General site fill: General Solid Waste (non-putrescible).

It is noted that whilst asbestos had not been identified in fill at the site, there is considered to be an elevated risk of asbestos being present based on the presence of building rubble in the fill and the site history. If asbestos containing materials are observed in the fill, including during excavation, the fill would classify as Special Waste (asbestos) in conjunction with its classification based on chemical contaminants.

Given the variable concentrations in fill, and the potential for these to increase the waste classification it is recommended that further waste classification is required prior to disposal. This should include sufficient sampling and analysis to allow statistical analysis as appropriate to classify soil of similar waste classification (such as total and TCLP lead in fill represented by Sample 6/0.1-0.2).

10.3.2 Natural Soil / Rock

The POEO Act defines virgin excavated natural material (VENM) as:

'*natural material (such as clay, gravel, sand, soil or rock fines):*

(a) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities; and

(b) that does not contain any sulfidic ores or soils or any other waste.

The VENM assessment for natural soil encountered in the bores was conducted in accordance with the criteria given in the POEO Act and summarised in Table 8 below.

Table 8: VENM Classification Procedure

Item	Comments	Rationale
1. Is the material natural?	Yes	Natural materials logged in the boreholes.
2. Are there current or previous land uses that have (or may have) contaminated the materials?	Yes	Refer to Section 5 for information on identified former land uses within and near the investigation area
3. Are manufactured chemicals or process residues present?	Assessed, see below	Based on the former land uses, laboratory assessment was undertaken to assess the potential impact.
4. Are sulfidic ores or soils present?	Assessed, see below	ASS has been recorded in some, but not all, soil at the site as discussed in Section 10.2
5. Are naturally occurring asbestos soils present?	No	Based on the geology, naturally occurring asbestos is not considered to be an issue of concern for the subject materials.
6. Is there any other waste present?	No	Other waste was not present within the assessed materials. Other waste is, however, present on site and the VENM assessment will not apply if these are mixed with the subject natural soils.

Three samples of soils logged as alluvium were subject to laboratory analysis for the contaminants of potential concern. The metal results were compared with published background ranges for Australian soils as detailed in Table J4, Appendix J as well as the expected background ranges based on other samples in the dataset and the soil origin. The results for organic analytes were compared with the PQL. Concentrations of one or more analyte were recorded above the background ranges in two of the samples, as follows:

- Sample 2/3.4-3.5: mercury and PAH, and possibly arsenic and lead; and
- Sample 4/2.5-2.6: lead, mercury, TRH C10-C36 and PAH, and possibly arsenic.

The results for sample 5/4-4.45 are considered to be within background ranges.

Overall it appears that the upper horizon(s) of soils logged as alluvial are not classifiable as VENM due to the recorded concentrations of likely anthropogenically-source chemicals. This contamination may be due to the alluvium being deposited during the previous industrial use of the area, subsequent contamination from site activities/ overlying fill or that the material is actually fill.

ASS has been recorded in alluvial soils over part of the site, with the results presented in Table J3, Appendix J. The ASSMAC thresholds provided in this table are for determining the need for treatment/ management of ASS, however a stricter threshold applies to VENM, with any detectable level of Scr or TAA associated with ASS resulting in soil not being classifiable as ASS.

Much, if not all, of the alluvial soil at the site is therefore not expected to classify as VENM due to the presence of contamination and/ or ASS. Further testing during excavation may, however, determine that some areas / horizons could be classifiable as VENM. If this is proposed it is recommended that

the testing targets horizons most likely to be VENM based on the contamination and ASS testing results herein.

Based on the available results non-VENM soils at the site which have been treated for ASS (as applicable) are expected to classify as General Solid Waste (non-putrescible) in accordance with the assessment process detailed in Section 10.3.1.

Based on the available data for overlying soils it is considered that residual soil and rock at the site are likely to classify as VENM.

Potential VENM at the site should be subject to validation testing to confirm the removal of overlying non-VENM prior to leaving the site.

11. Updated Conceptual Site Model

The updated CSM, to inform future investigations/ remediation, is provided below.

Table 9: Updated Areas of Environmental Concern (AEC)

Potential AEC	Location	Description of Potential Contaminating Activity	Contaminants of Concern	Confirmed Contaminants Possibly from Source
Imported Fill from unknown sources (S1)	The entire site	Fill is present at the site, including as part of the former reclamation works. Fill is from unknown sources, but may have included silt dredged from the harbour.	Metals, TPH, BTEX, PAH, phenols, PCB, OCP, OPP and asbestos	Metals, PAH, TPH Asbestos also considered to have a high risk of being present
Demolition of former structures (S2)	Potentially the entire site	Structures which are no longer present at the site were observed in the historical aerial photographs.	Asbestos, lead, PCB	Lead Asbestos also considered to have a high risk of being present
Previous industry in the local area (S4)	Groundwater	Abattoirs, boiling down works, unknown industrial uses	Metals, TPH, BTEX, PAH, phenols, PCB, cyanide, VOC	Metals

AEC: Area of Environmental Concern

Table 10: Preliminary Conceptual Site Model

Source	Potential Contaminants	Transport Pathway	Receptor
S1 - Imported Fill **S2 -** Former buildings, previously demolished **S4** – Previous industry in the local area	Metals, PAH, TPH confirmed. Asbestos not identified, but considered to have a high risk of being present.	**P1**: Ingestion and dermal contact	**R1** – Site users **R2** – Future construction and maintenance workers **R4** – Terrestrial organisms
		P2: Inhalation of dust and/or vapours	**R1** – Site users **R2** – Future construction and maintenance workers **R3**: Land users in adjacent areas
		P3: Leaching of contaminants and vertical mitigation into groundwater.	**R4**: Groundwater
		P4: Lateral migration of groundwater **P5**: Surface water via the stormwater system.	**R5:** Surface water (Blackwattle Bay)
		P6: Contact with buildings and structures.	**R6:** Underground services **R7:** Buildings and foundations

12. Conclusions and Recommendations

Based on the site history, field and analytical results presented in this report, it is concluded that the site can be rendered suitable for the proposed mixed-use development, from a contamination perspective, subject to the remediation and / or management of the identified contamination, namely metals, PAH and TRH in soil. Whilst asbestos has not been identified in the current investigation there is considered to be a high risk of it being present based on the site history and the observation of building rubble in the site fill.

Acid sulfate soil (ASS) has been confirmed to be present at the site, and management will be required for any works below the groundwater table.

Based on the proposed development it is recommended that the following works are required to address contamination and ASS management for the project:

- Supplementary investigation, including in areas not currently accessible to fill in data gaps and allow better characterisation of contamination. Once appropriate characterisation of contamination has been undertaken, the results can be assessed relative to the likely exposure in different areas of the site to inform the remediation extent and strategy, particularly for areas where no basement excavation is proposed. It is noted however, that current site access restrictions may limit the ability to undertake this prior to demolition, in which case this item could be undertaken following preparation of the RAP (as below);
- Preparation of a RAP detailing how contamination at the site is to be remediated / managed;
- Preparation of an Acid Sulfate Soil Management Plan (ASSMP) describing how ASS will be managed during development works;
- A waste classification assessment, it is anticipated that further waste classification will be required before and / or during redevelopment works;
- Remediation and management of waste and ASS during redevelopment; and
- Validation of the successful remediation of the site to render it suitable for the proposed development.

If contamination is to be retained on site a long-term Environmental Management Plan may also need to be prepared and implemented for the site. The need for this will depend on the remediation approach adopted.

13. References

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- Sullivan, L, Ward, N, Toppler, N and Lancaster, G 2018, *National Acid Sulfate Soils Guidance: National acid sulfate soils identification and laboratory methods manual,* Department of Agriculture and Water Resources, Canberra, ACT. CC BY 4.0 (Sullivan et al, 2018b);
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- Wilson G., McDonald, I.D., Roy, P.S. and Herbert, C. 1983, *Sydney 1:100,000 Geology Sheet, Edition 1, 1983* (Wilson et al 1983).

14. List of Abbreviations

ABC	ambient background concentration
ACL	added contaminant limits
ACM	asbestos containing materials
ADWG	NHMRC/NRMMC National Water Quality Management Strategy Australian Drinking Water Guidelines (2011)
AEC	area of environmental concern
AF	asbestos fines
AHD	Australian height datum
ANZECC	Australian and New Zealand Environmental & Conservation
As	arsenic
BaP	benzo(a)pyrene
BaP TEQ	benzo(a)pyrene toxic equivalent
bgl	below ground level
BH	borehole
BTEX	benzene, toluene, ethylbenzene, xylenes
BTEXN	benzene, toluene, ethylbenzene, xylenes, naphthalene
Cd	cadmium
CEC	cation exchange capacity
CEMP	construction environmental management plan
CLM Act	Contaminated Land Management Act 1997
CN	cyanide
COC	chain of custody
COPC	Contaminants of potential concern
Cr	chromium
Cr(III)	chromium with oxidation state III (stable in normal environments)
Cr(VI)	chromium with oxidation state VI (typically not stable in normal environments)
CRC Care	Co-operative Research Centre for Contamination Assessment and Remediation of the Environment
CSM	conceptual site model
CT	contaminant threshold
Cu	copper
Cx	equivalent to “x” number of carbon atoms in TRH/TPH groups
DA	development application
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene

DDT	dichlorodiphenyltrichloroethane
DNR	NSW Department of Natural Resources (now superseded)
DP	Douglas Partners
D.P.	Deposited Plan
DPI	NSW Department of Primary Industries
DQI	data quality indicator
DQO	data quality objective
DSI	detailed site (contamination) investigation
DWE	NSW Department of Water and Energy (now superseded)
Eh	redox potential
EIL	ecological investigation levels
ELS	Envirolab Services Pty Ltd
EPA	NSW Environment Protection Authority
ESL	ecological screening level
F1	TPH fraction C_6-C_{10} (less BTEX)
F2	TPH fraction >C_{10}-C_{16} (less naphthalene)
F3	TPH fraction >C_{16}-C_{34}
F4	TPH fraction >C_{34}-C_{40}
FA	friable asbestos
Fe	iron
GIL	groundwater investigation level
GPR	ground penetrating radar
GW	groundwater
Hg	mercury
HIL	heath investigation level
HSL	health screening level
LNAPL	light non-aqueous phase liquid
N/A	not applicable
NATA	National Association of Testing Authorities
ND(nd)	not detected above the practical quantitation limit
NHMRC	National Health and Medical Research Council
NEPC	National Environment Protection Council
NEPM	National Environmental Protection (Assessment of Site Contamination) Measure
Ni	nickel
NL	not limiting
OCP	organochlorine pesticides
OPP	organophosphate pesticides
PAH	polycyclic aromatic hydrocarbons

Pb	lead
PCB	polychlorinated biphenyls
pH	unit measure of acidity/ alkalinity
PID	photoionisation detector
POEO Act	Protection of the Environment Operations Act 1997
PSI	preliminary site investigation
PSH	phase separated hydrocarbons
PQL	practical quantitation limit
QA	quality assurance
QA/QC	quality assurance/ quality control
QC	quality control
RAP	remediation action plan
RL	reduced level
RPD	relative percentage difference
SAC	site assessment criteria
SCC	specific contaminant concentration
SEPP 55	State Environmental Planning Policy No. 55 – Remediation of Land
SWL	standing water level
SWMS	safe work method statement
TDS	total dissolved solids
TPH	total petroleum hydrocarbons
TRH	total recoverable hydrocarbons
VENM	virgin excavated natural material
VOC	volatile organic compounds
WA DoH	Western Australia Department of Health
WHS	work health and safety
Zn	zinc

Mathematical

ha	hectares
KL	kilolitre (1000 litres).
km	kilometre
L	litre
m	metre
mm	millimetre
m^2	square metre
mg/kg	milligrams per kilogram
mg/L	milligrams per litre

µg/L	microgram per litre
µS/cm	microSiemens per centimetre
ppb	parts per billion
ppm	parts per million
%	percent
<	less than
≤	equal to or less than
>	greater than
≥	equal to or greater than

15. Limitations

Douglas Partners (DP) has prepared this report for this project at 31 Cowper Street and 2A-2D Wentworth Park Road, Glebe, in accordance with DP's proposal SYD191235 dated 11 December 2019 and a 'Letter of Agreement to undertake LAHC 2019/608' dated 29 January 2020. The work was carried out under a modified New South Wales Land and Housing Corporation contract. This report is provided for the exclusive use of New South Wales Land and Housing Corporation for this project only and for the purposes as described in the report. It should not be used by or be relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

Asbestos has not been detected by observation or by laboratory analysis, either on the surface of the site, or in filling materials at the test locations sampled and analysed. Building demolition materials, such as brick and tile, were, however, located in previous below-ground filling, and these are considered as indicative of the possible presence of hazardous building materials (HBM), including asbestos.

Although the sampling plan adopted for this investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the site that have not been sampled and analysed. This is either due to undetected variations in ground conditions or to budget constraints (as discussed above), or to parts of the site being inaccessible and not available for inspection/sampling. It is therefore considered possible that HBM, including asbestos, may be present in unobserved or untested parts of the site, between and beyond sampling locations, and hence no warranty can be given that asbestos is not present.

The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk.

Douglas Partners Pty Ltd

Appendix A

Notes About this Report

Drawings 1 to 3

About this Report

Douglas Partners

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

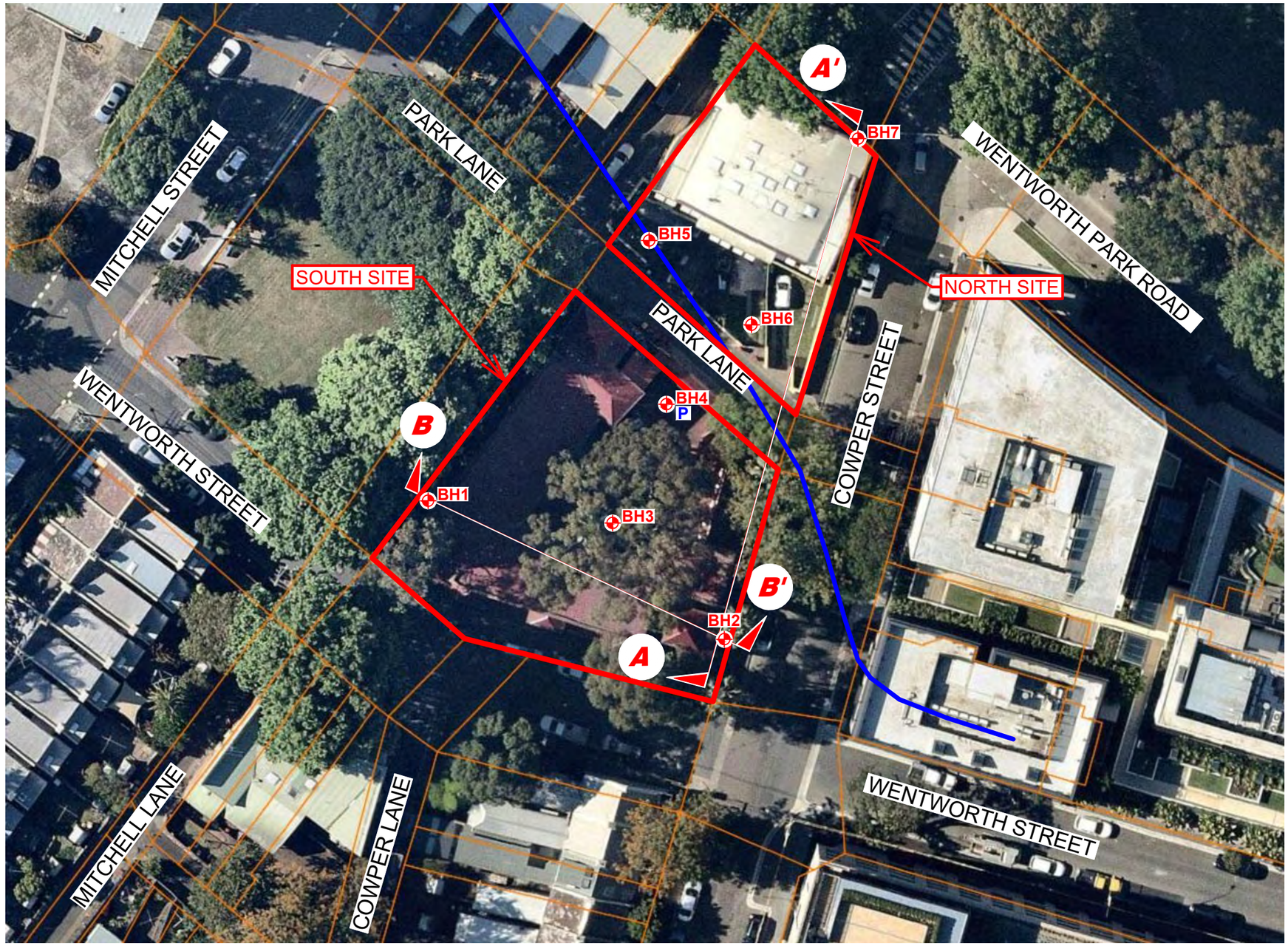
In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.



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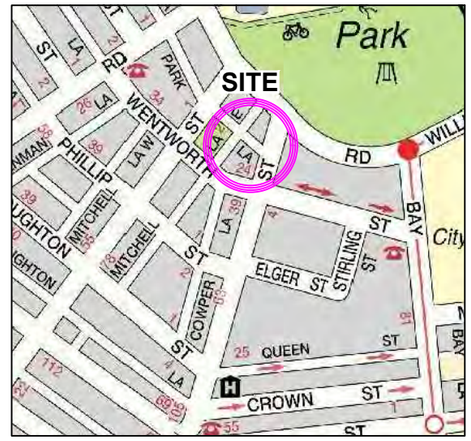


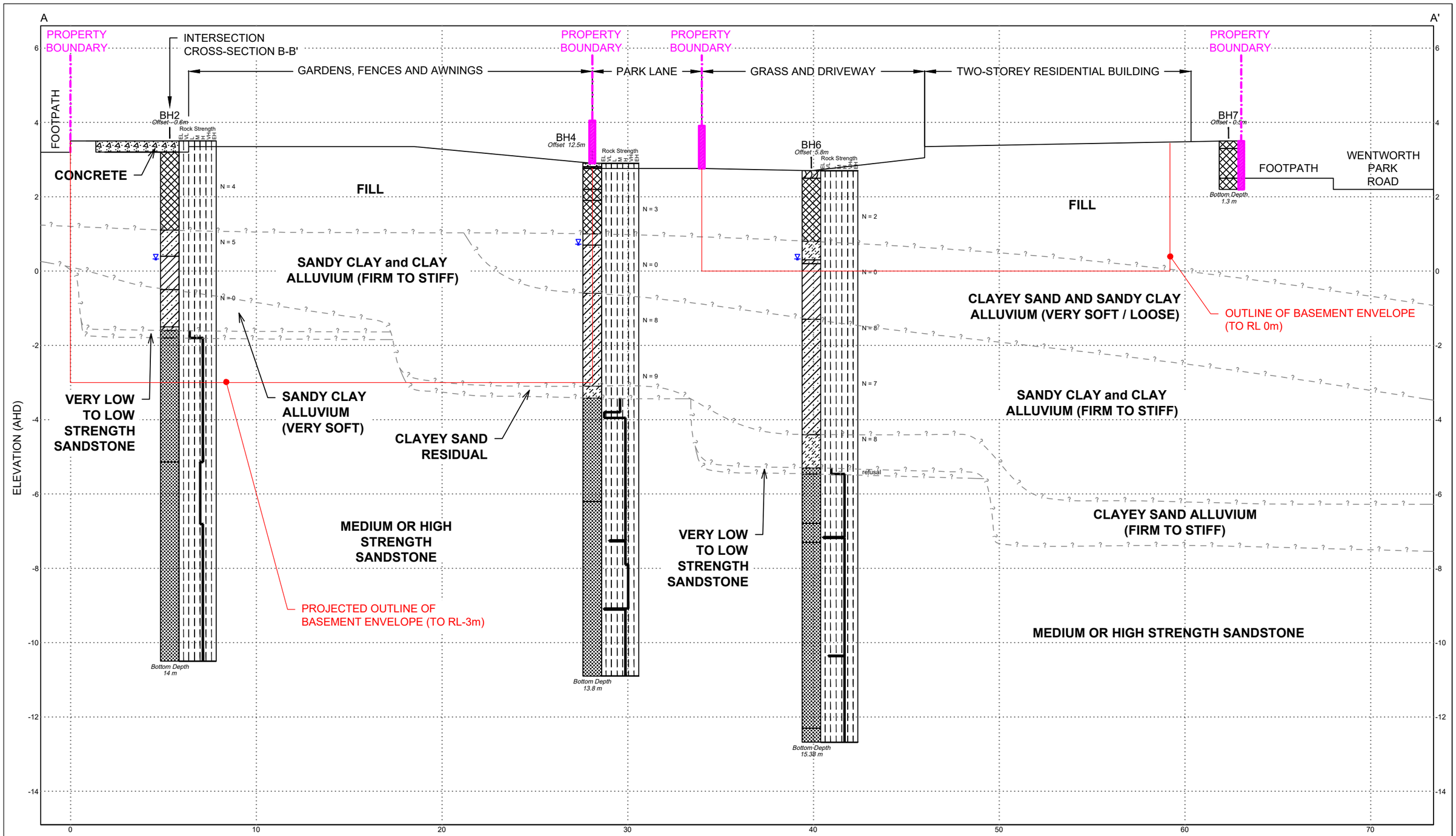
Locality Plan

LEGEND

- Borehole Location
- P Standpipe Piezometer
- A A' Geotechnical Cross Section A-A'
- Historical High Water Mark and Inferred Southern Limit of Reclaimed Land (1890 Map from Parish of Petersham)
- Site Boundary

NOTE:
1: Base image from Nearmap.com (Dated 22.10.2019)

Douglas Partners Geotechnics / Environment / Groundwater	CLIENT: New South Wales Land and Housing Corporation	TITLE: **Site and Test Location Plan** **Glebe Mid-Rise Project** **31 Cowper St and 2A-2D Wentworth Park Rd, Glebe**	PROJECT No: 99554.01
	OFFICE: Sydney / DRAWN BY: IT/HDS		DRAWING No: 1
	SCALE: 1:500 @ A3 / DATE: 11.05.2020		REVISION: 1



LEGEND

- Concrete
- Fill
- Fill / Topsoil
- Fill / Roadbase
- Clay
- Sandy Clay
- Clayey Sand
- Sandstone

NOTES:

1. Subsurface conditions are accurate at the borehole locations only. Variations in subsurface conditions may occur between borehole locations. Interpreted strata boundaries are approximate and should be used as a guide only.
2. Summary logs included only and should be read in conjunction with detailed logs.
3. Horizontal and vertical scales are not equal.

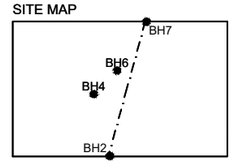
ROCK STRENGTH

- EL - Extremely low
- VL - Very low
- L - Low
- M - Medium
- H - High

TESTS / OTHER

- N - Standard penetration test value
- ¥ - Water level
- — ? — — - Inferred geotechnical boundary

SITE MAP



0 4

Horizontal Scale (metres)

Vertical Exaggeration = 2.0

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Geotechnics | Environment | Groundwater

CLIENT: New South Wales Land and Housing Corporation		TITLE: **Inferred Geotechnical Cross-Section A-A'**	PROJECT No: 99554.00
OFFICE: Sydney	DRAWN BY: IT/HDS	**Glebe Mid-Rise Project**	DRAWING No: 2
SCALE: 1:200 (H) 1:100 (V) @ A3	DATE: 11.05.2020	**31 Cowper St and 2A-2D Wentworth Park Rd, Glebe**	REVISION: 1

B

B'

PROPERTY BOUNDARY

INTERSECTION CROSS-SECTION A-A'

PROPERTY BOUNDARY

TWO-STOREY RESIDENTIAL BUILDING

BH1
Offset 0.0m
Rock Strength
EL VL L M H VH EH

BH2
Offset -0.4m
Rock Strength
EL VL L M H VH EH

MITCHELL LANE

FOOTPATH

COWPER STREET

FILL

N = 3

N = 11

N = 4

N = 4

N = 5

N = 0

SANDY CLAY and CLAY ALLUVIUM (FIRM TO STIFF)

SANDY CLAY ALLUVIUM

VERY LOW TO LOW STRENGTH SANDSTONE

OUTLINE OF BASEMENT ENVELOPE (TO RL-3m)

MEDIUM OR HIGH STRENGTH SANDSTONE

SHALE

Bottom Depth 14.2 m

Bottom Depth 14 m

ELEVATION (AHD)

6 4 2 0 -2 -4 -6 -8 -10 -12 -14

-10 0 10 20 30 40 50

DISTANCE ALONG PROFILE (m)

LEGEND

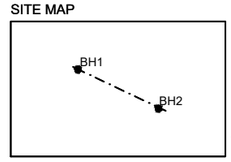
- Concrete
- Fill
- Clay
- Sandy Clay
- Shale
- Sandstone

NOTES:
1. Subsurface conditions are accurate at the borehole locations only. Variations in subsurface conditions may occur between borehole locations. Interpreted strata boundaries are approximate and should be used as a guide only.
2. Summary logs included only and should be read in conjunction with detailed logs.
3. Horizontal and vertical scales are not equal.

ROCK STRENGTH
EL - Extremely low
VL - Very low
L - Low
M - Medium
H - High

TESTS / OTHER
N - Standard penetration test value
- Water level
- ? - - - Inferred geotechnical boundary

SITE MAP



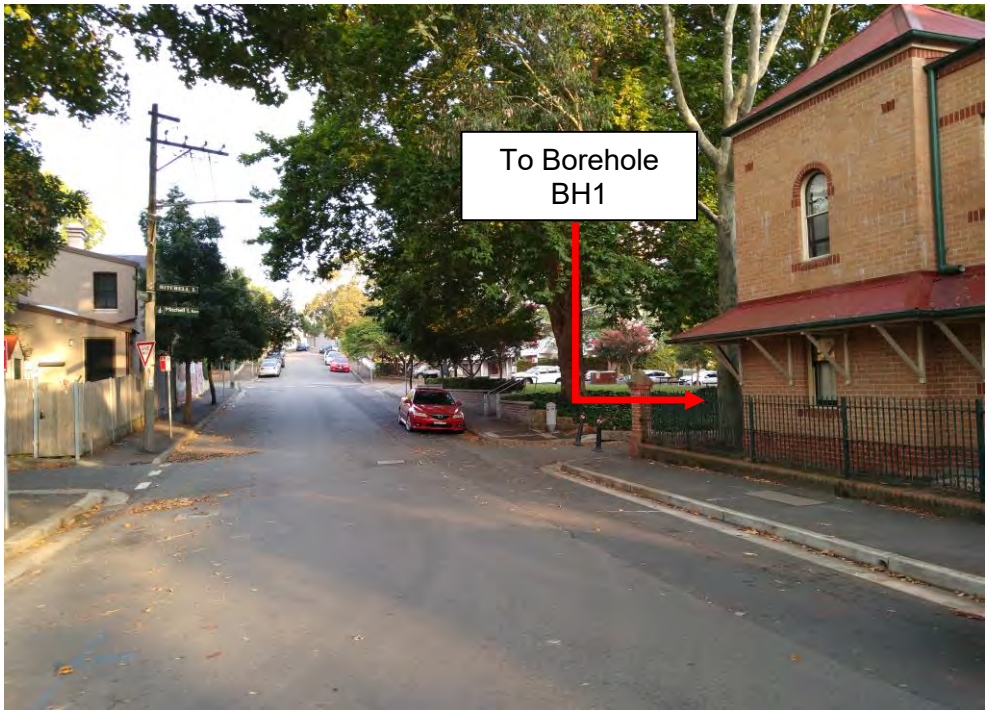
0 4
Horizontal Scale (metres)
Vertical Exaggeration = 2.0

Douglas Partners
Geotechnics | Environment | Groundwater

CLIENT: New South Wales Land and Housing Corporation		TITLE: **Inferred Geotechnical Cross-Section B-B'**	PROJECT No: 99554.00
OFFICE: Sydney	DRAWN BY: IT/HDS	**Glebe Mid-Rise Project**	DRAWING No: 3
SCALE: 1:200 (H) 1:100 (V) @ A3	DATE: 11.05.2020	**31 Cowper St and 2A-2D Wentworth Park Rd, Glebe**	REVISION: 1

Appendix B

Site Photographs



Photograph 1 – View west along Wentworth Street. The approximate position of Borehole BH1 along Mitchell Lane is indicated as shown.

Photograph 2 – View north along Mitchell Lane. The approximate position of Borehole BH1 is indicated as shown.

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **31 Cowper Street & 2A-2D Wentworth Park Road** **Glebe**	PROJECT: 99554.01 PLATE No: B1 REV: 0
	CLIENT: New South Wales Land and Housing Corporation	DATE: 12/02/2020

Photograph 3 – View north-east at the location of Borehole BH1.

Photograph 4 – View west across Cowper Street. The approximate position of Borehole BH2 is indicated as shown.

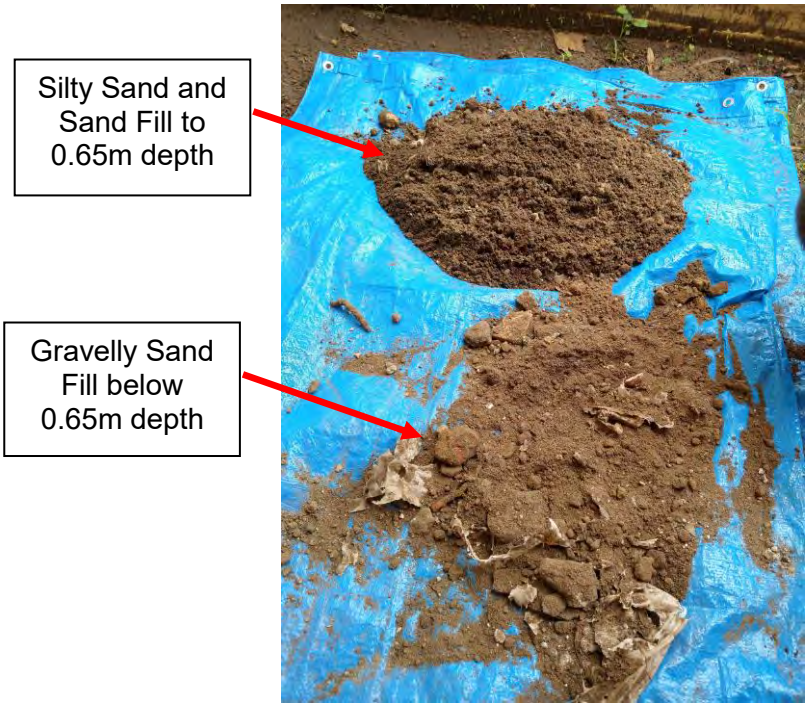
Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **31 Cowper Street & 2A-2D Wentworth Park Road** **Glebe**	PROJECT:	99554.01
		PLATE No:	B2
		REV:	0
	CLIENT: New South Wales Land and Housing Corporation	DATE:	12/02/2020

Photograph 5 – View north-west across Cowper Street. The approximate position of Boreholes BH2 and BH6 are indicated as shown.

Photograph 6 – View north along Cowper Street at Borehole BH2.

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **31 Cowper Street & 2A-2D Wentworth Park Road** **Glebe**	PROJECT:	99554.01
		PLATE No:	B3
		REV:	0
	CLIENT: New South Wales Land and Housing Corporation	DATE:	12/02/2020

Photograph 7 – View south within the 31 Cowper Street property. The position of Borehole BH3 is indicated as shown.



Photograph 8 – View of drilling spoil obtained from Borehole BH3.

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **31 Cowper Street & 2A-2D Wentworth Park Road** **Glebe**	PROJECT:	99554.01
		PLATE No:	B4
		REV:	0
	CLIENT: New South Wales Land and Housing Corporation	DATE:	12/02/2020

Photograph 9 – View west within the 31 Cowper Street property, with Park Lane in the background. The approximate position of Borehole BH4 is indicated as shown.

Photograph 10 – View west along Park Lane. The approximate positions of Boreholes BH4 to BH7 are indicated as shown.

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **31 Cowper Street & 2A-2D Wentworth Park Road** **Glebe**	PROJECT:	99554.01
		PLATE No:	B5
		REV:	0
	CLIENT: New South Wales Land and Housing Corporation	DATE:	12/02/2020

Photograph 11 – View south within the rear of the 2D Wentworth Park Road property, with Park Lane in the background. The approximate position of Borehole BH5 is indicated as shown.

Photograph 12 – View north within the rear of the 2B Wentworth Park Road property. The approximate position of Borehole BH6 is indicated as shown.

Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **31 Cowper Street & 2A-2D Wentworth Park Road** **Glebe**	PROJECT:	99554.01
		PLATE No:	B6
		REV:	0
	CLIENT: New South Wales Land and Housing Corporation	DATE:	12/02/2020

Photograph 13 – View south across Wentworth Park Road towards the position of Borehole BH7, which is indicated as shown.

Photograph 14 – View of drilling spoil obtained from Borehole BH7.

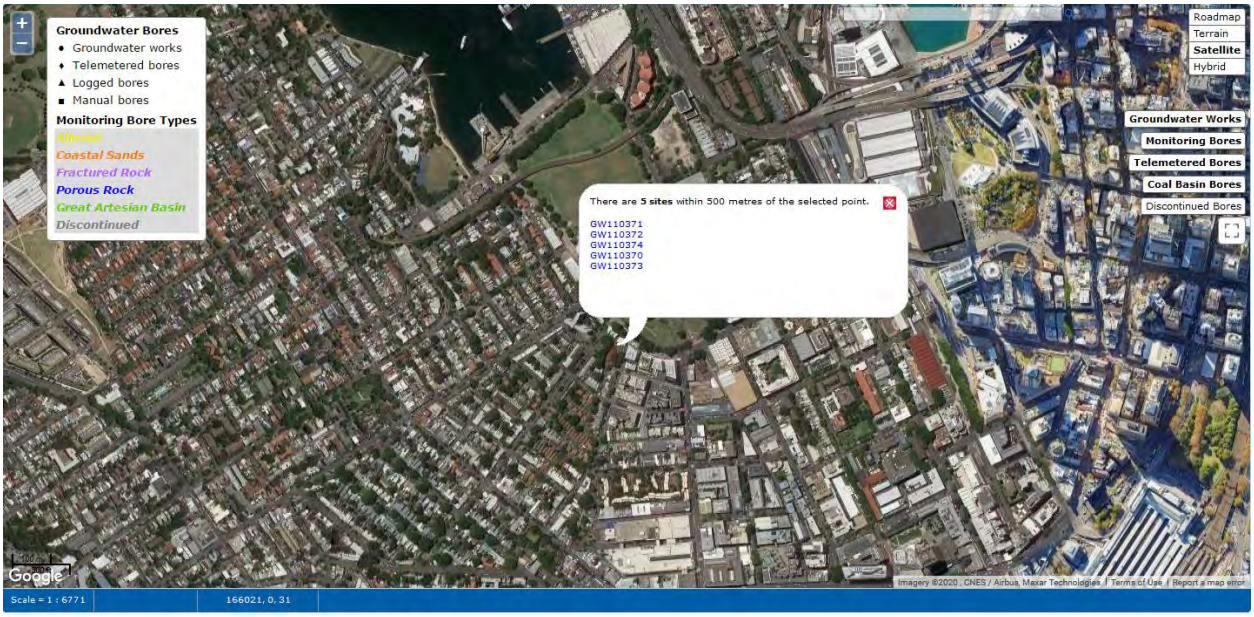
Douglas Partners Geotechnics / Environment / Groundwater	**Site Photographs** **31 Cowper Street & 2A-2D Wentworth Park Road** **Glebe**	PROJECT:	99554.01
		PLATE No:	B7
		REV:	0
	CLIENT: New South Wales Land and Housing Corporation	DATE:	12/02/2020

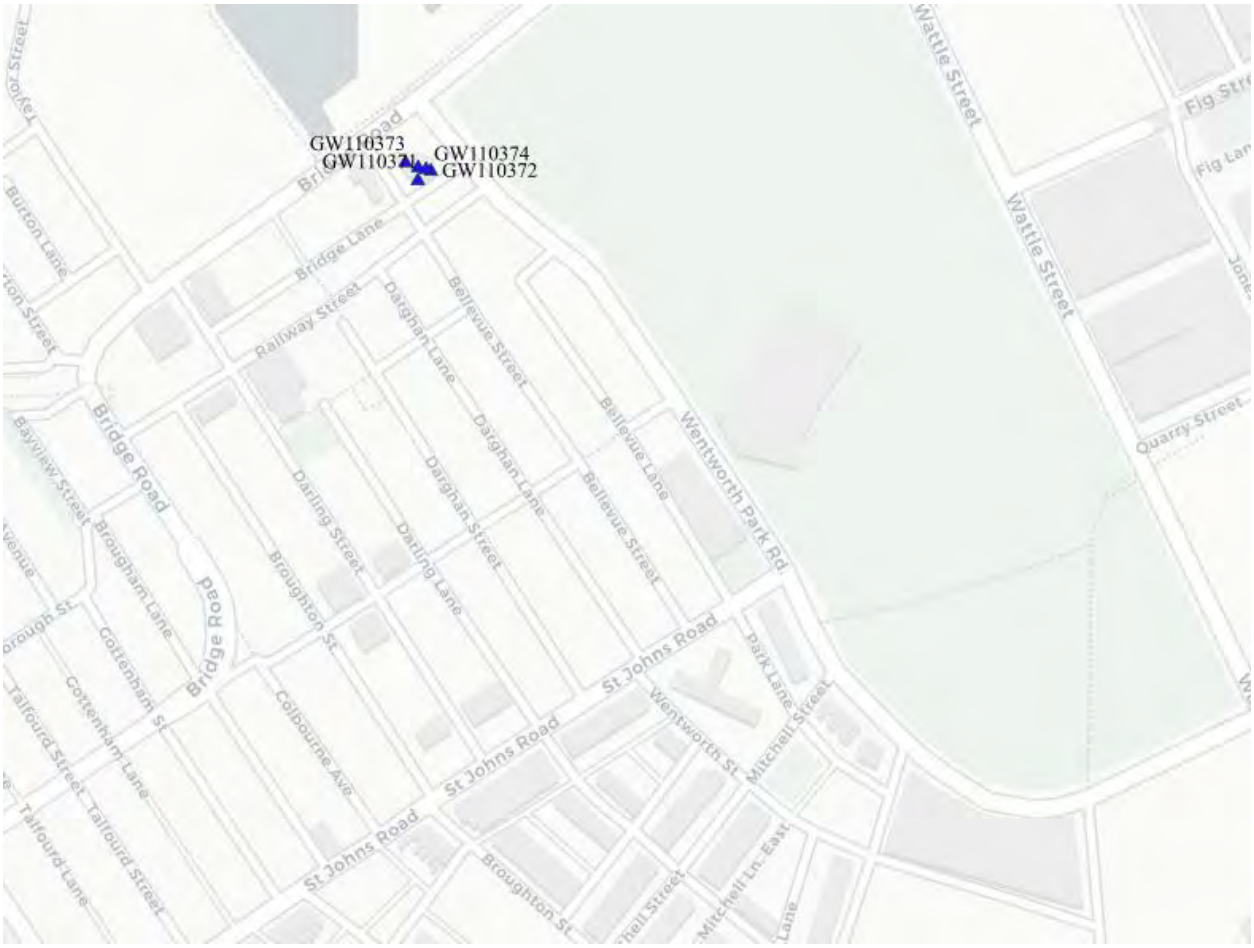
Appendix C

Groundwater Bore Records

Groundwater Boreholes, identified within 500m of site

https://realtimedata.waternsw.com.au/water.stm





WaterNSW
Work Summary

GW110370

Licence:
Licence Status:
Authorised Purpose(s):
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status:
Construct.Method: Auger
Owner Type: Private

Commenced Date:
Completion Date: 24/04/2001
Final Depth: 4.00 m
Drilled Depth: 4.00 m

Contractor Name: (None)
Driller: Unkown Unknown
Assistant Driller:

Property:
GWMA:
GW Zone:
Standing Water Level (m): 0.600
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBERLAND	PETERSHAM	//75702
Licensed:			

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6250123.000
Easting: 332598.000
Latitude: 33°52'33.5"S
Longitude: 151°11'24.0"E

GS Map: -
MGA Zone: 56
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	4.00	100			Auger
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded, Q:2.000m3
1	1	Casing	Pvc Class 18	0.00	0.50	50			Screwed
1	1	Opening	Slots	0.50	4.00	50		0	Casing - Machine Slotted, PVC Class 18, Screwed, SL: 3.5mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
0.60	4.00	3.40	Unknown	0.60					

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	2.10	2.10	FILL,SANDY CLAY	Fill	
2.10	3.30	1.20	SILT,BLACK	Silt	
3.30	3.50	0.20	SAND CLAYEY	Sand Grains (Lithic)	
3.50	4.00	0.50	CLAY SANDY	Clay Loam	

***** End of GW110370 *****

realtimedata.waternsw.com.au

4-5 minutes

WaterNSW

Work Summary

GW110371

Licence:		Licence Status:	
		Authorised Purpose(s):	
		Intended Purpose(s):	MONITORING BORE
Work Type:	Well		
Work Status:			
Construct.Method:	Auger		
Owner Type:	Private		
Commenced Date:		Final Depth:	4.00 m
Completion Date:	24/04/2001	Drilled Depth:	4.00 m
Contractor Name:	(None)		
Driller:	Unkown Unknown		
Assistant Driller:			
Property:		Standing Water Level	0.700

		(m):	
GWMA:		Salinity Description:	
GW Zone:		Yield (L/s):	

Site Details

Site Chosen By:					
			County	Parish	Cadastre
		Form A:	CUMBERLAND	PETERSHAM	//75702
		Licensed:			
Region:	10 - Sydney South Coast	CMA Map:			
River Basin:	- Unknown	Grid Zone:		Scale:	
Area/District:					
Elevation:	0.00 m (A.H.D.)	Northing:	6250115.000	Latitude:	33°52'33.7"S
Elevation Source:	Unknown	Easting:	332598.000	Longitude:	151°11'24.0"E
GS Map:	-	MGA Zone:	56	Coordinate Source:	Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement

of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interva
1		Hole	Hole	0.00	4.00	100		
1		Annulus	Waterworn/Rounded	0.00	0.00			
1	1	Casing	Pvc Class 18	0.00	0.50	50		
1	1	Opening	Slots	0.50	4.00	50		0

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
0.70	4.00	3.30	Unknown	0.70					

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	2.50	2.50	FILL,SANDY CLAY	Fill	
2.50	3.10	0.60	SILT,SATURATED BLACK	Silt	
3.10	4.00	0.90	SILTY SAND	Sand	

*** End of GW110371 ***

Warning To Clients: This raw data has been supplied to the

WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW
Work Summary

GW110372

Licence:
Licence Status:

Authorised Purpose(s):
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status:
Construct.Method: Auger
Owner Type: Private

Commenced Date:
Completion Date: 24/04/2001
Final Depth: 4.00 m
Drilled Depth: 4.00 m

Contractor Name: (None)
Driller: Unkown Unknown
Assistant Driller:

Property:
GWMA:
GW Zone:
Standing Water Level (m): 0.600
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBERLAND	PETERSHAM	//75702
Licensed:			

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6250121.000
Easting: 332606.000
Latitude: 33°52'33.5"S
Longitude: 151°11'24.3"E

GS Map: -
MGA Zone: 56
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	4.00	100			Auger
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded
1	1	Casing	Pvc Class 18	0.00	0.50	50			Screwed
1	1	Opening	Slots	0.50	4.00	50		0	Casing - Machine Slotted, PVC Class 18, Screwed, A: 0.40mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
0.60	4.00	3.40	Unknown	0.60					

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	2.20	2.20	FILL,SILTY CLAY	Fill	
2.20	2.70	0.50	SANDY CLAY	Sandy Clay	
2.70	3.30	0.60	SILT,SOFT BLACK	Silt	
3.30	4.00	0.70	SILTY SAND	Silty Sandstone	

***** End of GW110372 *****

WaterNSW
Work Summary

GW110373

Licence:
Licence Status:
Authorised Purpose(s):
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status:
Construct.Method: Auger
Owner Type: Private

Commenced Date:
Completion Date: 24/04/2001
Final Depth: 4.00 m
Drilled Depth: 4.00 m

Contractor Name: (None)
Driller: Unkown Unknown
Assistant Driller:

Property:
GWMA:
GW Zone:
Standing Water Level (m): 0.600
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBERLAND	PETERSHAM	//75702
Licensed:			

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6250126.000
Easting: 332590.000
Latitude: 33°52'33.4"S
Longitude: 151°11'23.7"E

GS Map: -
MGA Zone: 56
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	4.00	100			Auger
1		Annulus	Waterworn/Rounded	0.00	0.00				Graded
1	1	Casing	Pvc Class 18	0.00	0.50	50			Screwed
1	1	Opening	Slots	0.50	4.00	50		0	Casing - Machine Slotted, PVC Class 18, Screwed, A: 0.40mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
0.60	4.00	3.40	Unknown	0.60					

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	1.60	1.60	FILL,SANDY CLAY	Fill	
1.60	3.40	1.80	SILT,SATURATED BLACK	Silt	
3.40	3.70	0.30	SILTY SAND	Silty Sandstone	
3.70	4.00	0.30	SANDY CLAY	Sandy Clay	

***** End of GW110373 *****

WaterNSW
Work Summary

GW110374

Licence:
Licence Status:

Authorised Purpose(s):
Intended Purpose(s): MONITORING BORE

Work Type: Well
Work Status:
Construct.Method: Auger
Owner Type: Private

Commenced Date:
Completion Date: 24/04/2001
Final Depth: 4.00 m
Drilled Depth: 4.00 m

Contractor Name: (None)
Driller: Unkown Unknown
Assistant Driller:

Property:
GWMA:
GW Zone:
Standing Water Level (m):
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

	County	Parish	Cadastre
Form A:	CUMBERLAND	PETERSHAM	//75702
Licensed:			

Region: 10 - Sydney South Coast
River Basin: - Unknown
Area/District:
CMA Map:
Grid Zone:
Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown
Northing: 6250122.000
Easting: 332603.000
Latitude: 33°52'33.5"S
Longitude: 151°11'24.2"E

GS Map: -
MGA Zone: 56
Coordinate Source: Unknown

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	4.00	100			Auger

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.80	0.80	SILTY SAND WITH MINOR CLAY	Silty Sandstone	
0.80	2.80	2.00	CLAYEY SAND,WITH MINOR GRAVEL	Clayey Sand	
2.80	4.00	1.20	SANDY CLAY WITH MINOR SHELLS	Sandy Clay Loam	

***** End of GW110374 *****

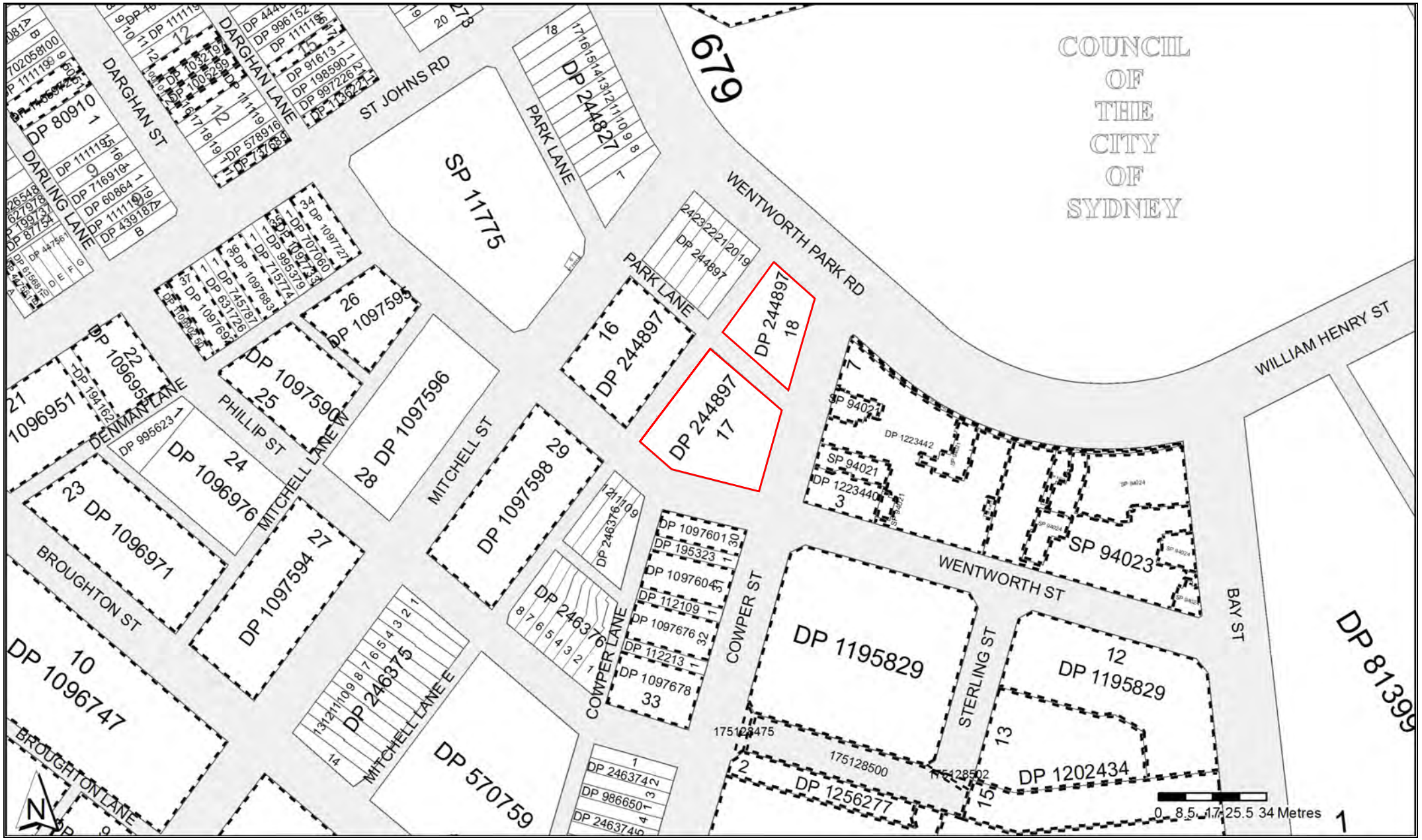
Appendix D

Historical Title Deeds

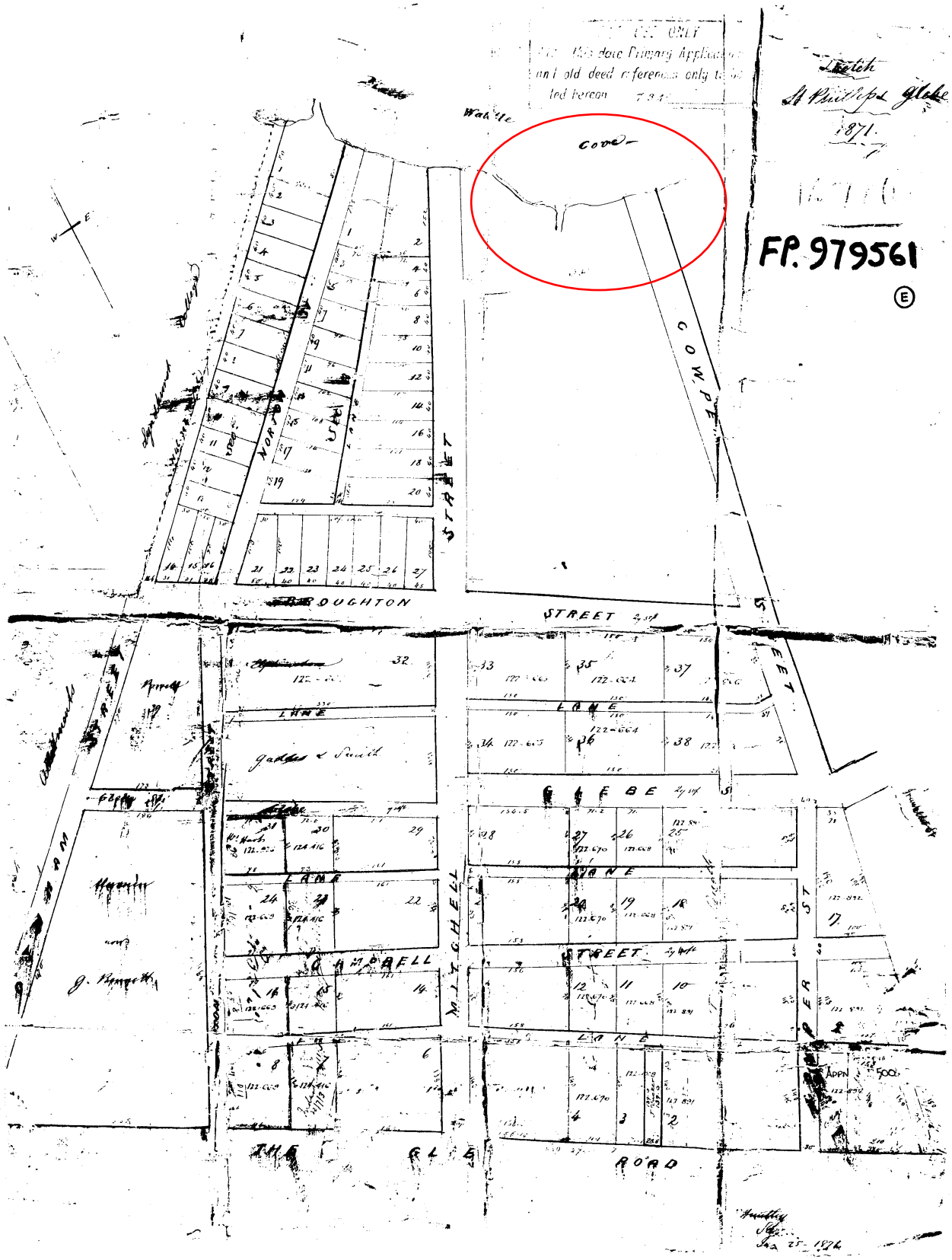
Cadastral Records Enquiry Report : Lot 17 DP 244897

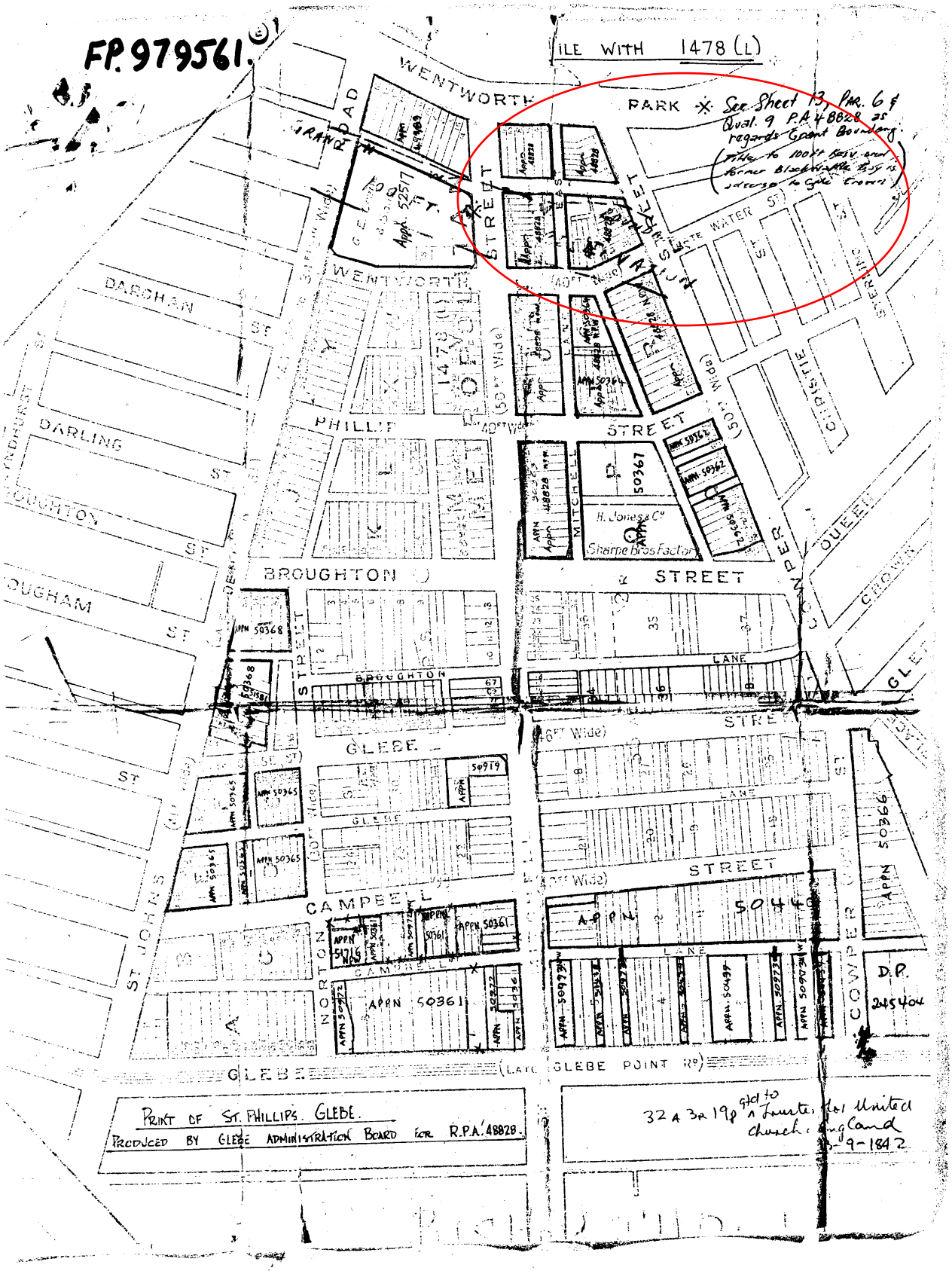
Ref : glebe Cowper St

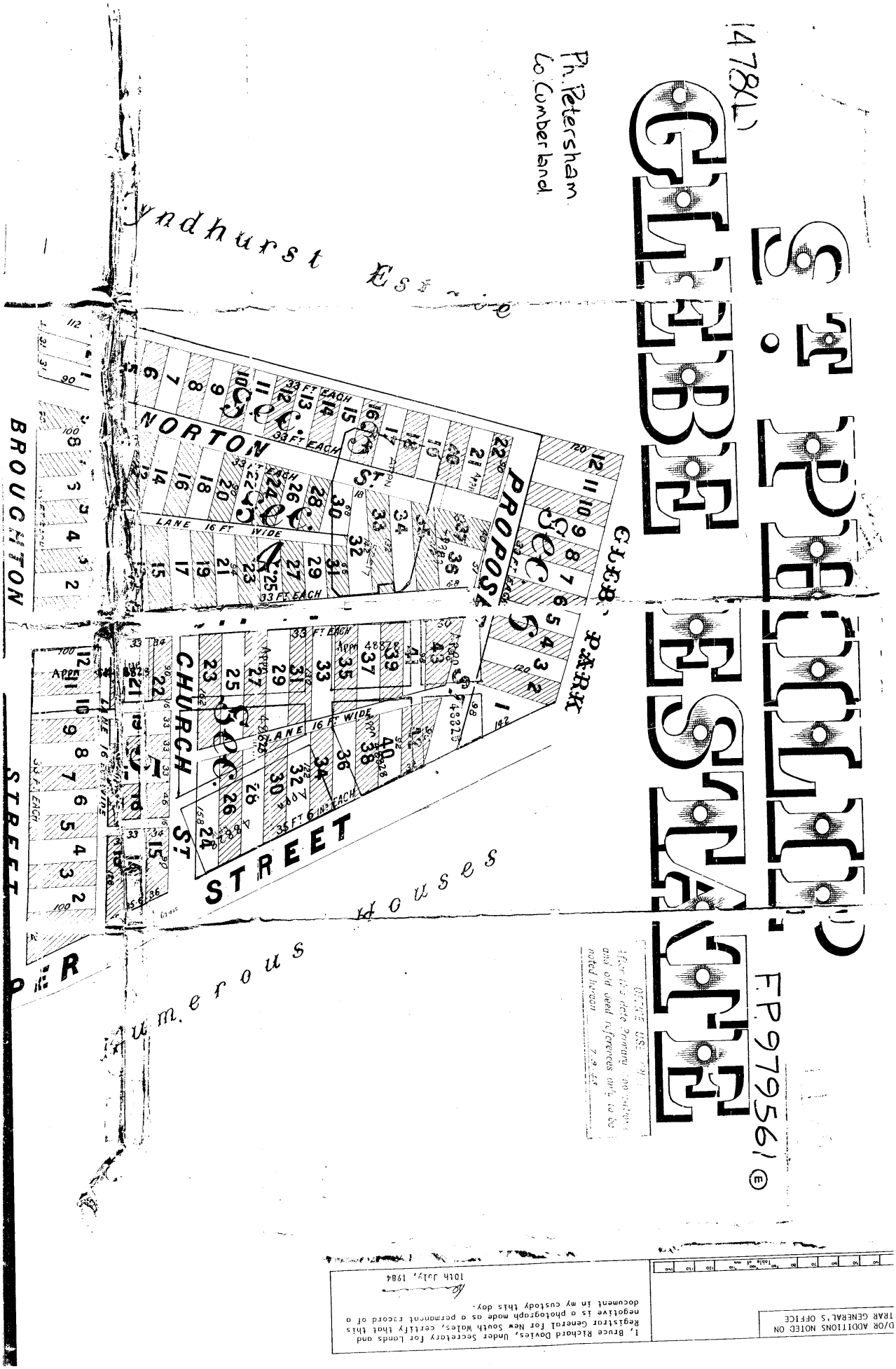
Locality : GLEBE
Parish : PETERSHAM
LGA : SYDNEY
County : CUMBERLAND



This information is provided as a searching aid only.Whilst every endeavour is made to ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For ALL ACTIVITY PRIOR TO SEPTEMBER 2002 you must refer to the RGs Charting and Reference Maps







No. 15, 1930.

AN ORDINANCE to provide for the vesting trusts management and control of St. Philip's Glebe and St. James's Glebe and for other purposes incidental thereto.

(Assented to 20th October, 1930.)

WHEREAS by Crown Grant dated the thirteenth day of September One thousand eight hundred and forty-two certain land was granted to Trustees upon trust for the appropriation thereof as the Glebe annexed to the Church erected at Sydney and known as St. Philip's.

AND WHEREAS in or about the year One thousand eight hundred and eighty-four part of the said land was resumed and a sum of Nine hundred and seventy-five pounds was received in respect thereof.

AND WHEREAS a further part of the said land was recently resumed but the compensation moneys payable in respect thereof have not yet been received.

AND WHEREAS the said land excluding the resumed areas and the said sum of Nine hundred and seventy-five pounds became vested in the Church of England Property Trust Diocese of Sydney (hereinafter called "the Corporate Trustees").

AND WHEREAS by St. Philip's Glebe Land Vesting and Management Ordinance 1920 one portion of the said land (hereinafter referred to as "Portion A") became and still is vested in the Board of Trustees constituted thereunder and was thereby placed under its management and control.

AND WHEREAS the remaining portion of the said land (hereinafter referred to as "Portion B") is still vested in the Corporate Trustees subject however to a certain Lease the term of which expires on the thirty-first day of July One thousand nine hundred and thirty-one and by The St. James's Glebe Vesting and Management Ordinance 1926 the government and control thereof was committed to the Sydney Diocesan Board of Finance.

AND WHEREAS portions A and B and all moneys received or receivable in respect of the resumed areas are hereinafter referred to as St. Philip's Glebe.

AND WHEREAS by Crown Grant dated the third day of September One thousand eight hundred and forty-two two parcels of land containing respectively twenty-nine acres and eleven acres as therein described were granted to Trustees upon trust for the appropriation thereof as the Glebe annexed to the Church erected at Sydney and known as St. James's.

AND WHEREAS in or about the year One thousand eight hundred and fifty-eight a parcel of land containing about three roods five perches forming portion and known as Lot 8 of the said twenty-nine acres of land was granted to the Trustees of St. Mark's Church, Double Bay as a site for a School-house, and in lieu thereof the Crown granted to the Trustees of St. James's Glebe a parcel of land also containing three roods five perches fronting Old South Head Road and adjoining the said eleven acres of land which since then has been deemed to be part of St. James's Glebe and has been held upon the trusts thereof (and which together with the said eleven acres of land and the remainder of the said twenty-nine acres of land is hereinafter referred to as "St. James's Glebe").

AND WHEREAS St. James's Glebe is subject to several leases for terms of ninety-nine years which expire on the thirty-first day of December One thousand nine hundred and sixty-four.

AND WHEREAS by The St. James's Glebe Vesting and Management Ordinance 1926 St. James's Glebe became and still is vested in the Corporate Trustees and the government and control thereof was also thereby committed to the Sydney Diocesan Board of Finance.

AND WHEREAS certain Ordinances mentioned in the Schedule hereto provide for the vesting trusts management and control of the said Glebes.

AND WHEREAS it is expedient that the said Ordinances should be consolidated and amended and that other provision should be made for and in respect of St. Philip's Glebe and St. James's Glebe hereinafter referred to as "the said Glebes."

AND WHEREAS by reason of circumstances subsequent to the creation of the trusts to which the said Glebes are now subject it has become inexpedient to carry out and observe such trusts in so far as the same are hereby varied and it is expedient to vary such trusts in manner hereinafter mentioned and to make the further provisions hereinafter contained.

Now therefore the Synod of the Diocese of Sydney ordains, directs, declares and rules as follows:—

1. By reason of circumstances subsequent to the creation of the trusts to which the said Glebes are now subject it has become inexpedient to carry out or observe such trusts to the extent to which the same are varied by this Ordinance and it is expedient that such trusts should be varied accordingly.

2. (1) The Ordinances mentioned in the Schedule hereto are hereby repealed to the extent therein set forth, but such repeal shall not affect any matter or thing done under or pursuant to any such Ordinance.

(2) Except so far as there is anything in this Ordinance inconsistent therewith this Ordinance shall apply to all matters and things made done or commenced under the Ordinances mentioned in the Schedule hereto and at the commencement of this Ordinance of any force or effect or capable of acquiring any force or effect by virtue of the Ordinances mentioned in the Schedule hereto as if this Ordinance had been in force at the time they were made done or commenced and they were made done or commenced hereunder.

3. The Synod hereby consents to Portion "A" of St. Philip's Glebe being vested and the same is vested accordingly in the Corporate Trustees.

4. There shall be a Board to be known as the "Glebe Administration Board" (hereinafter called "the Board").

5. The Board shall consist of seven persons of whom not less than four shall be laymen and who shall be elected by the Standing Committee. The first election shall be held within two months after this Ordinance has been assented to by the President and subsequent elections shall be held within two months after the first session of every succeeding Synod. Members for the time being of the Board shall continue to hold office until their successors are elected. Amended No. 10, 1935

6. It shall be lawful for the Standing Committee by resolution to declare the existence of a vacancy or vacancies on the Board by reason of one or more of its members having died or resigned office refused neglected or having become incapable to act in the said office or having for a space of six months

ceased to reside within the Diocese or by reason of some other matter to be specified in such resolution and thereupon or, at any time thereafter the Standing Committee may elect a person or persons to be and such person or persons shall upon such election become a member or members in the place or places of the member or members referred to in the said resolution.

7. No omission to elect any member or members nor any informality or error in the method of such election nor any vacancy or vacancies in the office of a member shall affect the authority or powers of the Board and Subject to the provisions as to a quorum such authority and powers may be exercised by the members for the time being holding office.

8. At Meetings of the Board three members shall form a quorum.

9. Each year a Chairman may be appointed by the Board from among its members who shall preside at all meetings of the Board and in his absence the members present shall from amongst their number elect a Chairman of the day.

10. Subject to the provisions hereof the Board may regulate its own proceedings and for that purpose shall have power to make rescind or alter regulations from time to time.

11. The members of the Board shall be indemnified out of the revenues of the said Glebes against all loss or liability to which they or any of them may be subject by reason only of his being or having been a member of the Board.

12. The Board at least once in each year and also when required by resolution of the Synod shall report their proceedings to the Synod and at the same time present a statement of receipts and disbursements duly audited by auditors appointed by the Synod and such other accounts and information as may be required by resolution of Synod.

13. The Board shall have absolute and full powers of managing and controlling the said Glebes and without limiting the generality of such powers the Board and so far as may be necessary or convenient in the name and on behalf of the Corporate Trustees may:—

(a) Let or demise the said Glebes or any part or parts thereof for any term not exceeding ten years or on building lease for any term not exceeding fifty years at such rents fixed or progressive and subject to such conditions as the Board shall think fit save and except as hereinafter provided.

(b) Accept surrenders of leases and tenancies and release tenants from claims thereunder.

(c) Receive and give effectual receipts for all moneys accruing from the said Glebes for rent or on any account whatsoever.

(d) Sub-divide the said Glebes or any part or parts thereof and lay out and make roads streets and ways to be dedicated to the Public or not and close existing roads streets and ways and grant easements rights of way or drainage.

(e) Carry out repairs renovations and alterations of existing buildings in the said Glebes and erect thereon new building or buildings.

(f) Borrow such sum or sums of money on the security of the said Glebes or of the future rents profits and other income arising therefrom as it may deem necessary for any of the purposes set forth in this clause.

(g) Use the revenues of the Glebes not otherwise appropriated for any of the purposes aforesaid and for the payment of all costs charges and expenses of and incidental to the management and control of the said Glebes.

(h) Appoint and remove officers servants and agents and fix their remuneration if any.

(i) Determine by whom and in what manner all or any documents and instruments shall be signed and executed by for or on behalf of the Board.

(j) Give or procure the giving of indemnities guarantees or undertakings.

(k) Establish special funds in the nature of reserve funds sinking funds or otherwise.

(l) Provided that no part of the said Glebes shall be let or used for the manufacture sale or distribution of any wine spirits beer or other intoxicating liquors nor for

Sunday trading of any kind except in the case of qualified chemists or restaurants.

14. The rents issues and profits of St. Philip's Glebe shall be applied yearly as from the thirty-first day of December One thousand nine hundred and thirty within the Diocese of Sydney as follows:—

(1) Up to and inclusive of the thirty-first day of July One thousand nine hundred and thirty-one in the same manner as they are now being applied under and pursuant to the Ordinances mentioned in the First Schedule hereto or otherwise.

(2) After the thirty-first day of July One thousand nine hundred and thirty-one.

(a) In paying and satisfying all rates taxes and other statutory outgoings and obligations payable in respect of St. Philip's Glebe or its revenues.

(b) In satisfying the amounts which are charged thereon by virtue of the original trusts of St. Philip's Glebe and the Church Acts Repealing Act of 1897.

(c) In discharging all obligations incurred by the Board in the exercise of its powers in respect of St. Philip's Glebe.

(d) In repayment of the principal sums borrowed under the authority of sub-clause (f) of clause thirteen of this Ordinance or in the formation of a sinking fund or sinking funds for the repayment of such principal sums by means of equal annual amounts spread over a period not exceeding twenty years from the date of borrowing. Provided that such annual amounts so paid and the contributions to the sinking fund shall not in the aggregate exceed one-fifth of the total amount received in rents during the preceding financial year.

(e) In paying an additional One hundred and fifty pounds (£150) yearly to the Minister for the time being of the said St. Philip's Church and in paying One hundred and fifty pounds (£150) yearly to the curate or other assistant of such Church.

(f) In paying wholly or in part as directed by the Standing Committee the stipend of the Bishop

Coadjutor for the time being until his appointment is determined; and thereafter on the direction of the Standing Committee, in paying wholly or in part such stipend to him if his appointment determines with the voidance of the See during such time, if any, as he shall be the Administrator of the Diocese, or, not being Administrator, shall be required by the Administrator to continue to perform episcopal duties.

See Amending Ordinance No. 10, 1935 (ff)

(g) In paying all or any of the rates taxes and other outgoings in respect of St. James's Glebe and in making payments in relief of any onerous conditions to which it is or may be subject and so far as it may be necessary in making up to the full amount the endowment of One hundred and fifty pounds per annum payable to the Minister for the time being of St. James's Church and of One Hundred pounds per annum payable to the Minister for the time being of St. David's Church Surry Hills.

(h) As to an amount not exceeding Two thousand pounds in any one year in payment to such of the persons hereinafter mentioned of such amounts not exceeding One hundred pounds per annum for each such person as the Home Mission Society of the Diocese of Sydney with the sanction of the Archbishop shall direct.

The aforesaid persons shall be as follows:—

(i.) Clergymen licensed to a Parish or Mission or other recognised Ecclesiastical District.

(ii.) Clergymen licensed in any form as assistants to such first-mentioned Clergymen.

(iii.) Catechists.

(iv.) Deaconesses.

(i) In payment to each of the Clergymen comprised within the class hereinafter mentioned for each half-year ending respectively on the last days of June and December all such sums as during such half-year he shall pay for subscriptions to the Clergy Provident Fund (Sydney) in respect of such half-year, provided as follows:—

(i.) Whenever a clergyman is in arrear with his subscription the Board may pay such arrears or portion thereof to the said Fund; and

(ii.) No payment hereunder to or for the benefit of any Clergyman shall exceed Fifteen pounds (£15) for any one half-year; and

(iii.) The class of clergyman referred to shall comprise those who for the time being are licensed to a Parish or Mission or other recognised Ecclesiastical District and those licensed in any form as assistants to such first-mentioned clergymen and who are also members whether old or new of both a Superannuation Fund and a Widows' and Orphans' Fund under the Clergy Provident Fund Ordinance of 1906 (Sydney) or any Ordinance amending or taking the place of the same; and

(iv.) All such payments whether made to a clergyman himself or to the Clergy Provident Fund in respect of such clergyman shall be deemed to be and be in the nature of an addition to the stipend of such clergyman.

(j) In paying to the Diocesan Missioner or Missioners a stipend or stipends at such rate or rates and during such periods as shall be determined by the Standing Committee and sanctioned by the Archbishop.

(k) In continuing the payment to Mrs. Yeates the wife of the Reverend Ainslie Arthur Yeates of the allowance at the rate of Three hundred and fifty pounds (£350) per annum now being paid to her pursuant to St. John's Ashfield Repayment Ordinance 1929 for so long as the Standing Committee may direct.

(l) In paying to the Board of Education of the Diocese of Sydney a sum not exceeding one thousand pounds per annum by such instalments as the Board shall determine.

(m) In paying a sum not exceeding three thousand five hundred pounds per annum for the purpose of making such payments by way of pensions or retiring allowances to retired and incapacitated clergymen to the widows of clergymen and to retired deaconesses as may be determined by the Home Mission Society of the Diocese of Sydney and be sanctioned by the Archbishop.

(n) In setting aside a sum not exceeding Five hundred pounds per annum for establishing a Free Fund which shall be applied by the Board in such manner and for such religious or charitable purposes as the Archbishop shall decide.

(o) To an amount not exceeding Five hundred pounds per annum in making grants for the erection or repair of buildings as may be determined by The Home Mission Society of the Diocese of Sydney and be sanctioned by the Archbishop.

(p) To setting aside a sum not exceeding Three hundred pounds per annum to provide for the superannuation of the members of the Staff of the Diocesan Registry and which Fund shall be applied as directed by the Standing Committee.

(q) In paying to the Trustees of Moore Theological College a sum not exceeding Five hundred pounds per annum by such instalments as the Board shall determine to be applied by the Trustees in assisting students to secure a theological training at the said College.

(r) As to the remainder of the said rents issues and profits for such purposes as shall be determined by Synod.

Provided however as follows:—

(1) Any portion of rents issues or profits appropriated as aforesaid but not expended in any financial year may be used for the purpose to which it is so appropriated in the next or any succeeding financial year.

(2) That after the thirty-first day of July One thousand nine hundred and thirty-one the rents from Portion "B" of St. Philip's Glebe or so much thereof as

the Board shall determine shall be applied by the Board in paying the principal and interest moneys charged thereon and unless the Board shall otherwise determine no part of the nett rents of Portion "B" shall be otherwise applied until all such principal and interest has been paid and satisfied.

(3) No appropriation or payment under this Ordinance shall be deemed to create a permanent endowment or a vested right in favour of the person or office in respect of which such appropriation or payment is made.

15. The rents issues and profits of St. James's Glebe shall be applied yearly as from the thirty-first day of December One thousand nine hundred and thirty within the Diocese of Sydney as follows:—

(a) In paying and satisfying all rates taxes and other statutory outgoings and obligations payable in respect of St. James's Glebe or its revenues.

(b) In discharging all obligations incurred by the Board in the exercise of its powers in respect of St. James's Glebe.

(c) In satisfying the amounts which are charged thereon by virtue of the original trusts of St. James's Glebe and the Church Repealing Act of 1897 in favour of the respective Ministers of the said St. James's Church and the said St. David's Church.

(d) As to the remainder of the said rents issues and profits for such purposes as shall be determined by Synod.

16. Any moneys receivable by the Board and not immediately required to be applied hereunder may until such application be invested in any one or more of the following investments that is to say:—

(1) Investments for the time being allowed by law for investment of trust funds.

(2) Purchase of real or leasehold estate situated within the Commonwealth.

(3) Mortgage of land situated within the Commonwealth.

(4) Debentures of any Harbour Trust or Board of Works within the Commonwealth.

(5) Mortgage Bonds under any of the Savings Bank Acts of the Federal Government or any State within the Commonwealth.

(6) Deposit in any Government Savings Bank within the Commonwealth.

(7) Fixed deposit in any Bank carrying on business within the State of New South Wales.

and the Board may from time to time vary release or raise money on the security of such investments.

17. The Synod hereby directs that any Lease for a term not exceeding ten years hereby authorised and entered into in the name of the Corporate Trustees may be executed on their behalf by any three members of the Board or any two members and the secretary thereof. Any lease so executed shall in favour of a lessee be conclusive evidence that such lease was duly executed on behalf of the Corporate Trustees and was in fact authorised by the Board.

18. The Board is authorised to take all appropriate steps for the incorporation of the Board and vesting the said Glebes in such corporation.

19. Nothing in this Ordinance shall vary any trust of either of the said Glebes if the variation would deprive any part of the same or of the income thereof of any exemption or immunity from taxation under any law of the Commonwealth or the State for the time being in force with respect to the taxation of land or income and any provision of this Ordinance which but for this provision might be construed as purporting to make any such variation shall to the extent if any that it might be so construed be of no force and effect and this Ordinance shall be construed accordingly.

20. This Ordinance shall not come into force until the first day of January One thousand nine hundred and thirty-one except so much of clause five hereof as provides for the first election of members of the Board.

21. This Ordinance may be cited as the "Glebe Administration Ordinance 1930."

THE SCHEDULE

Short Title of Ordinance	Extent of Repeal
Sydney Church Ordinance 1912.	So far as relates to the said Glebes.
St. Philip's Glebe Land Vesting Management Ordinance 1920.	The Whole.
St. Philip's Glebe Land Amending and Supplemental Ordinance 1920.	The Whole.
The St. James's Glebe Vesting and Management Ordinance 1926.	The Whole.
St. Philip's Glebe Land Further Amending and Supplemental Ordinance 1927.	The Whole.
The Bishop Coadjutor Stipend Ordinance of 1925.	The Whole.
The Diocesan Missioners' Stipend Ordinance of 1927.	The Whole.
St. John's Ashfield Repayment Ordinance 1929.	The Whole.
The St. Philip's Glebe Mortgage Ordinance 1930.	The Whole.

William Andrews Printing Co. Ltd., 433 Kent Street, Sydney.

I certify that the Ordinance as printed is in accordance with the Ordinance as reported.

A. J. GOULD,
Chairman of Committees.

We certify that this Ordinance was passed this seventeenth day of October, 1930.

S. H. DENMAN
HARINGTON B. COWPER } Secretaries of the Synod.

I assent to this Ordinance.

GERARD D'ARCY-IRVINE,
Bishop Coadjutor, Commissary.

20th October, 1930.

William Andrews Printing Co. Ltd., 433 Kent Street, Sydney.


Football Ground
WENTWORTH
WARD
Cricketing Oval
PARK
BISHOPTHORPE
OUTER
GLEBE WARD
LODGE
QUARRY
DARLING
WILLIAM

Laid before the Executive Council for alignment on the 18th March 1890.
Alex C. Stuart
Clerk of the Council

Laid before the Executive Council on the 4th June 1889.
Alex C. Stuart
Clerk of the Council

PLAN

OF FIVE STREETS IN THE MUNICIPALITY OF THE GLEBE

PARISH OF PETERSHAM

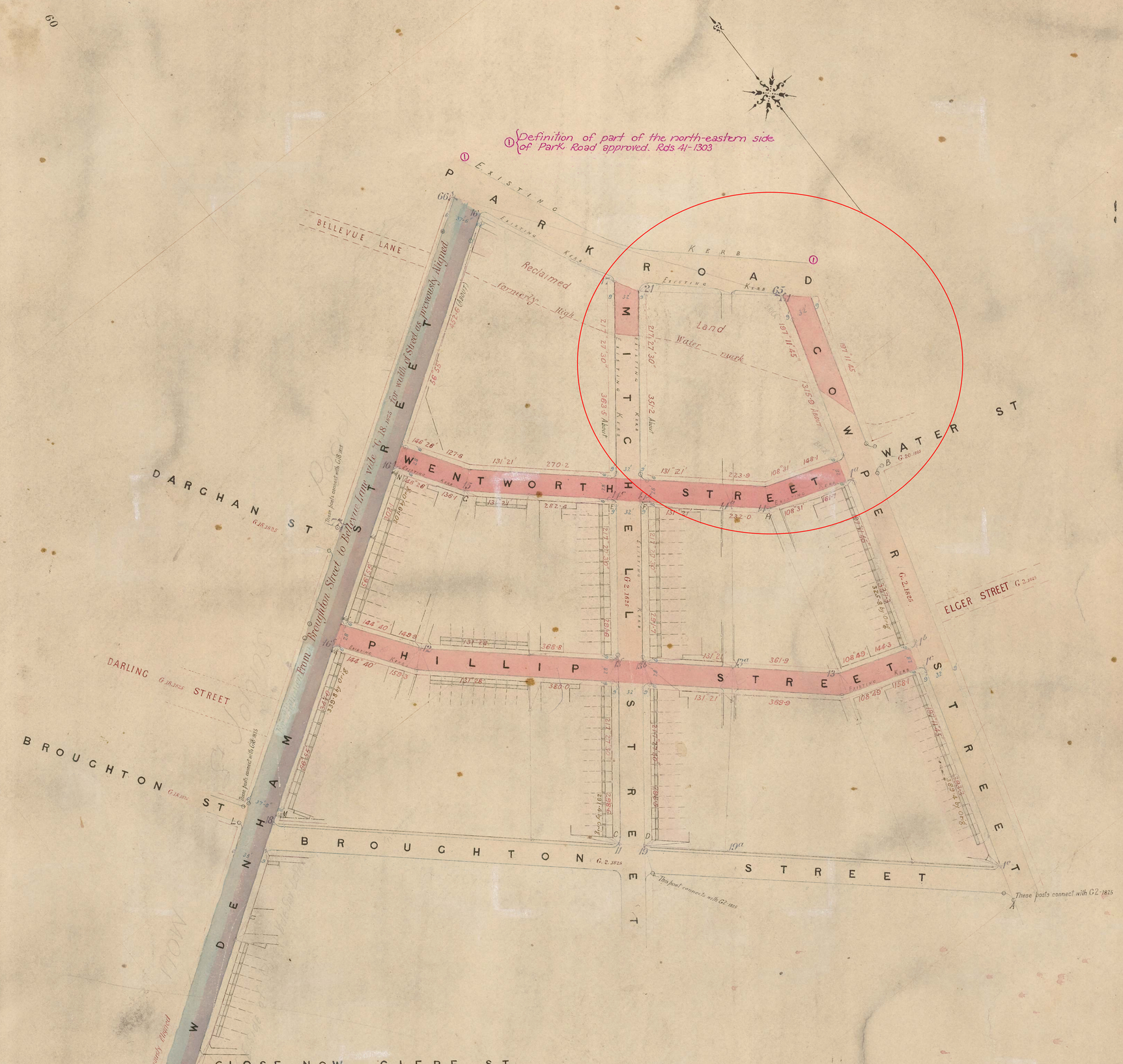
SHEWING THE WIDTHS OF THE CARRIAGE AND FOOTWAYS

PROPOSED TO BE ALIGNED UNDER THE ACT OF COUNCIL 2nd Vic No 2

AFTER HAVING BEEN CONFIRMED UNDER THE ACT OF COUNCIL IV William IV No XI

Preliminarily Notified in Gov. Gazette of 5th July 1889 folio 4644.
Confirmation do do 14th Jan. 1890 folio 355.
Alignment do do 21st Mar. 1890 folio 2504.

SCALE ONE CHAIN TO AN INCH



TRAVERSE TABLE

LINE	BEARING	LENGTH	LAT	COR	DEP	COR	CO-ORDINATES	STN
65 to 1	173° 30' 00"	9·0	S 8·9		E 1·0		S 10811·0 W 5221·7	1
1 to 1e	197° 11' 45"	1172·8	S 1120·4	+1	W 346·7	+1	11931·5 5568·5	1e
1e to 1b	17° 11' 45"	456·2	N 435·8		E 134·9		11495·7 5433·6	1b
18 to 11	131° 21' 15"	674·2	S 445·5		E 506·1		11444·8 6120·3	11
16b to 12	144° 40'	161·4	S 131·7		E 93·3		10908·3 6191·9	12
1b to 13	288° 49'	158·4	N 51·4		W 150·9		11444·3 5584·5	13
15 to 14	131° 21'	587·3	S 388·0		E 440·9		11110·4 5495·7	14
16a to 15	146° 28' 00"	145·1	S 120·9		E 80·2		10722·4 5936·6	15
17 to 16	334° 06'	290·8	N 261·7		W 127·0		10320·8 5586·6	16
16 to 16a	236° 52' 45"	513·7	S 280·7		W 430·2		10601·5 6016·8	16a
16a to 16b	236° 52' 45"	320·5	S 175·1		W 268·4		10776·6 6285·2	16b
11 to 17	37° 27' 30"	1086·1	N 862·2	+1	E 660·6	+1	10582·5 5459·6	17
16 to 18	236° 52' 45"	1241·5	S 678·4		W 1039·8		10939·3 6626·4	18
65 to 21	309° 53'	273·3	N 175·3		W 209·7	+1	10626·8 5432·5	21
16a to 77	253° 10'	150·6	S 28·3		W 147·9		10629·8 6164·7	77
77 to 66	56° 35' 57"	670·6					10280·6 5604·9	66
66 to 65	144° 47' 18"	662·8					10902·2 5222·7	65
18 to 6	236° 10' 10"	1253·3	S 637·6	+1	W 1041·3		11696·9 7667·7	6
6 to 7	237° 24' 04"	53·4	28·8		45·0		11725·7 7712·7	7
7 to 78	754° 46'	16·3	4·3		15·7		11730·0 7728·4	78

NOTES

The lines in Red denote the Building line
The lines in Blue denote the Curbstone line
The figures in Blue denote the Carriage and Footways in feet
The existing fences are shewn thus
Houses built of Stone are tinted Yellow
do Brick do Red
do Wood do Brown
do Iron do Blue
Verandahs are tinted Light Indian Ink
The circles in blue denote the positions of the Alignment Posts
Connections shewn in Neutral color
The circles in black denote the existing Alignment Posts
Stations shewn thus ⁂ were fixed by Mr Sur Roberts.
All writing on this plan by F. Watkins Licensed Surveyor

PLAN NOT ANNOTATED FOR COLOUR

SCHEDULE OF STREETS IN THE MUNICIPALITY OF THE GLEBE
to be aligned under Act of Council 2 Victoria No 2.

NAME OF STREET	FROM	TO	WIDTH OF CARRIAGE WAY	WIDTH EACH FOOTWAY	TOTAL WIDTH	REMARKS
Cowper Street	Park Road	Phillip Street	32FT	9FT	50FT	
* Denham Street	Park Road	Broughton St (Cowper as previously Aligned)	37FT 6IN	6FT 6IN	50FT	Fences encroach from 2½ to 5½ inches South East side only Aligned — Not included in alignment notices vide Subjoined
* Denham "	Broughton St	Glebe Point Road	35FT	9FT	50FT	
Mitchell "	Park Road	Phillip Street (Mitchell as previously Aligned)	32FT	9FT	50FT	
Phillip "	Cowper Street	Denham "	28FT	6FT	40FT	
Wentworth "	Cowper "	Denham "	28FT	6FT	40FT	

* Denham St not to be aligned until the previous alignment has been set aside by Act of Parliament

Transmitted to the Surveyor General with my letter of 9th June 1888 No 8
William Mc Thomas
Govt Surveyor

Plotting Examined J.H. 20.9.88.

No. 40828 48828

OFFICE USE ONLY

R.P. 2

REGISTRAR GENERAL · NEW SOUTH WALES

NEW SOUTH WALES $ =03.00 STAMP DUTY

LODGED 30 APR 1973 $ 11.50

RECEIVED 10.50

Fees:—
$ c
Lodgment 12.00
addl 5.00
17.00
3/12/71

Addl. fee $20.00 paid 6-10-72. See Rec. No F50571

New South Wales.

APPLICATION TO BRING LANDS UNDER THE PROVISIONS OF THE REAL PROPERTY ACT, 1900

FEE SIMPLE(a)

(a) If a less estate, strike out "fee simple" and substitute the appropriate estate.

CAUTION.—Severe penalties are provided by the Crimes Act, 1900, and the Real Property Act, 1900, for procuring a certificate of title through fraud.

(b) Here state full name, postal address and occupation of declarant.

I/WE(b) GRAHAM BRINDLEY VERNON KING of 275 George Street Sydney Chief Executive Officer of Glebe Administration Board

do solemnly and sincerely declare, that

(c) Here state full name of person or corporation entitled. Where a person is entitled, the full postal address and occupation (if such person is male) or social status (if female) should be stated.

(c) GLEBE ADMINISTRATION BOARD

is/are seised for an Estate in fee simple(a) of all that piece of land situated at Glebe in the County of Cumberland and Parish of Petersham being(d) parts of St. Philip's Glebe Estate originally granted by the Crown to Right Rev. William Grant Broughton Bishop of Australia or the Bishop of Australia for the time being, John Campbell and Francis Mitchell as trustees of the Glebe annexed to the Church of St. Philip's Sydney and being Lots ~~1, 2, 3, 4, 5, 6, 7 and 8 shown on plan of Mr. Surveyor Ayres lodged herewith being Deposited Plan No. 242235~~ 16 and 17 shown on Plan of Mr. Surveyor Ayres being Deposited Plan 244897. ~~as follows:~~
~~Lot 1 Being Lot N on plan of St. Philip's Glebe.~~
~~2 " " " "~~
~~3 Shown on plan of St. Philip's Glebe unnumbered.~~
~~4 "~~
~~5 "~~
~~6 "~~
~~7 Being Lot R on plan of St. Philip's Glebe.~~
~~8 Being Lots S and T on plan of St. Philip's Glebe.~~

GBVK

(d) The application should be accompanied by a plan of survey unless the Registrar General has previously dispensed therewith. Give full description of the land, e.g., "Lot — in Deposited Plan No. — (or as the case may be) — plan No. —"; or "Lot — in plan lodged herewith"; or "The whole — (or specified part) — of the land described in deed registered Book — No. —". If any appurtenant easement is claimed, it must be specified in this description and in the plan. If there be any rights of way or other rights or easements affecting the premises the particulars should be stated.

RG 13/1/72

Ser 19T P 256 333

(e) State whether "the whole" or "part".
(f) Insert reference to portion or allotment, or if none, to number of acres granted.
(g) Name of Grantee.

which land is(e) part 32a 3r 17p of(f) the said Crown Grant originally granted to(g) the said trustees by Crown grant, under the hand of the Governor of the Colony, dated the Thirteenth day of September 1842. AND ALSO unalienated Crown land being Lots 18, 19, 20, 21, 22, 23 & 24 in said Deposited Plan No 244897 GBVK

And I/~~We~~ hereby apply to have the land described in the above declaration brought under the provisions of the Real Property Act, and request you to issue the Certificate of Title in the name of

(h) As in marginal note (c) above. If two or more are entitled, state whether as joint tenants or tenants in common; if as tenants in common, state shares.

(h) GLEBE ADMINISTRATION BOARD
~~subject as to Lot 3 to two leases, first, 19th February 1953 to the Council of the City of Sydney 20 years from 19th February 1953 registered Book 2229 No 702 and second 17th December 1957 to the Council of the City of Sydney for a term commencing 17th December 1957 and ending 19th February 1973 registered Book 2929 No 207~~

GBVK

and I/We further declare that the owners and occupiers of adjacent lands are as follows

State whether on North, South, East or West	Name and postal address of owner	Name and postal address of occupier
	The subject Lots are adjacent to streets the fee simple of which is vested in the Council of the Municipality of Leichhardt.	

Cert. of T., issued 12304 Fol. 58-66
Dated 24 DEC 1973 CBM

No alterations should be made by erasure. The words rejected should be scored through with the pen, and those substituted written over them, the alteration being verified by signature or initials in the margin, or noticed in the attestation.

63593B

And I/We further declare, that:—

(1) There is no person in possession or occupation of the said land or any part thereof adversely to my/our interest of the Glebe Administration Board therein, and that the land is now[i] occupied as shown in document No. 16.

(i) Insert "unoccupied" or "in the occupation of" adding names and addresses of tenants in full. State also nature of tenancy.

(2) There does not exist any lease or agreement for lease of the said land for any term exceeding a tenancy for one year, or from year to year,[j] ~~except the said leases of Lot 7 dated 19th February 1953 and 17th December 1957 shown on the first page hereof.~~

(j) If there be any lease, add the words "except as follows" and insert particulars thereof.

(3) There does not exist any mortgage, lien, writ of execution, charge or encumbrance, will or settlement, or any deed or writing, contract, or dealing (other than such lease or tenancy as aforesaid), giving any right, claim, or interest in or to the said land, or any part thereof, to any other person than myself/ourselves,[k] Glebe Administration Board

(k) If there be any mortgage, lien, etc., add the words "except as follows" and insert particulars thereof.

(4) The Schedule hereon* to which my/our signature is/are affixed, and which is to be taken as part of this Declaration contains a full and correct list[l] from the Crown Grant

(l) The declaration may be qualified as the extent to which applicant's title has been previously passed by the Registrar General by inserting the words "Commencing with Conveyance dated ..... registered ....." or as the case may be. Otherwise all documents from the Crown Grant onwards must be entered in the Schedule.

of all settlements, deeds, documents, or instruments, maps, plans and papers relating to the land comprised in this application, so far as I/we have any means of ascertaining the same, distinguishing such as being in my/our possession or under my/our control, are herewith lodged and indicating where or with whom, so far as known to me/us, any others thereof are deposited. Also, that there does not exist any fact or circumstance whatever material to the title, which is not hereby fully and fairly disclosed to the utmost extent of my/our knowledge, information, and belief; and that there is not, to my/our knowledge and belief, any action or suit pending affecting the said land, nor any person who has or claims any estate, right, title or interest therein, or in any part thereof, otherwise than by virtue and to the extent of some lease or tenancy hereby fully disclosed,[m]

(m) If there be any exception add the words "except as follows" and insert necessary particulars.

And I/We make this solemn Declaration, conscientiously believing the same to be true and by virtue of the Oaths Act, 1900.[n]

(n) If made outside N.S.W. strike out Oaths Act, 1900, and insert reference to local Act.

And I/We certify that the within application is correct for the purposes of the Real Property Act, 1900.[o]

(o) Section 117 requires that this certificate be signed by applicant or his solicitor. Any person falsely or recklessly certifying is rendered liable to a penalty as well as any damages recoverable by parties injured.

(RULE UP ALL BLANKS BEFORE SIGNING)

Made and subscribed by the abovenamed Graham Brindley Vernon King this 26th day of October 1971 in the presence of[p]

Signature of Applicant

A Justice of the Peace.

(p) If made in N.S.W., this declaration must be attested by a Notary Public, Justice of the Peace or Commissioner for Affidavits. If made outside N.S.W., the declaration should be made according to the law of the State in which it is made and before a person authorised by that law to take declarations.

SCHEDULE REFERRED TO*

(TO BE SIGNED BY APPLICANT IMMEDIATELY BELOW THE LAST DOCUMENT SCHEDULED)

To include not only Title Deeds, Probates, Letters of Administration, Statutory Declarations, etc., but also the Surveyor's Plan or Statement in lieu thereof

The documents in the Schedule refer only to Lots 16 and 17 in Deposited Plan

TO BE COMPLETED BY APPLICANT:— The title to Lots 18, 19, 20, 21, 23 and 24 in the same Deposited Plan depend upon proof of possessory title.

(A) Documents Nos. 10, 13, 14, 15, 16 and 17. hereunder LODGED HEREWITH.

(B) Documents Nos. 2, 3, 5 and 11. hereunder ~~WHEREABOUTS UNKNOWN.~~ NOT PRODUCED,

(C) Documents Nos. hereunder PERMANENTLY LODGED. Receipt Nos.

(D) Documents Nos. 1, 4, 6, 7, 8, 9 & 12 hereunder TO BE LODGED BY:— Allen, Allen & Hemsley, Solicitors.

(E) Document No. 17 - original of this document produced in R.P.A. No. 47302.

I FURTHER DECLARE that at the time of the execution by me of this instrument I have no notice of the revocation of the Power of Attorney dated 20th December 1967 from Glebe Administration Board to me which is registered in the Miscellaneous Register No. 97074 under the authority of which I have executed the said instrument.

MADE AND SUBSCRIBED by the above named Graham Brindley Vernon King this twenty sixth day of October 1971 before me)

A Justice of the Peace.

Should any transaction affecting the land in this application be entered into or any alterations in the buildings or fences be made subsequent to the date of the application, but prior to the issue of the Certificate of Title, the Registrar General should be informed immediately, and all documents evidencing such transaction should be lodged.

SCHEDULE REFERRED TO—(*continued*)*

(TO BE SIGNED BY APPLICANT, IF UTILISED, IMMEDIATELY BELOW THE LAST DOCUMENT SCHEDULED)

No.	Date	Nature of Instrument	Parties	Registration Book	Registration No.	For Office use only By whom Produced
1	13 Sep 1842	Crown Grant	To Right Rev. William Grant Broughton Bishop of Australia or the Bishop of Australia for the time being John Campbell and Francis Mitchell. c of e. Bk 4 p 9 See Tarleton P 284.	Entered in register of Grants of C/E No.78 p. 17.		Sheet 1 $10/1
2	31 Mar 1881	Act of N.S.W. Parliament	By Church of England Trust Property Incorporation Act 1881 assented to this date it was provided by Section 4 that all real property vested in any person or persons as trustee or trustees for the purposes of the said Church in any diocese shall upon the consent of such trustee or trustees become vested in the corporate body with a proviso that in case of the death of any trustee his consent cannot be obtained then it shall be lawful for the Bishop of a diocese to consent in the place of such trustee (see document No. 8). SYDNEY 1837 Private Act P.293.			
3	22 June 1887	ditto	By Bishopric and Church Property Act 1887 assented to this date it was provided by Section 1 that the Bishop of Sydney should be deemed to be the successor of the Bishop of Australia. (See also Church of England Trust Property Act 1917 Section 18).	William G. Broughton first bishop of Sydney 25.6 1847 Letters Patent by Sovereign		
	17 July 1875		NOTE. On this date the said Francis Mitchell died and Probate of his Will was granted to Stanley Mitchell.			
	22 Jan 1886		NOTE. On this date the said John Campbell died and Probate of his Will was granted to Charles Campbell (who died on 17th August 1888) Robert Campbell Close and Frederick Campbell.			
4	25 June 1896	Convey ance	William Saumarez Smith ~~Archbishop~~ bishop of Sydney and the said Robert Campbell Close, Frederick Campbell and Stanley Mitchell to Andrew Houison, Thomas Claydon and Frederick Resolute Strange the trustees of St. Philip's Church at Sydney.	580	287	Sheet 1 $10/1
	15 Dec 1899		NOTE. The said Thomas Claydon having died on this date Alfred Whetton (Junior) was appointed a trustee of St. Philip's Church at Sydney in his place and stead.(See document No. 6).			
5	24 Nov. 1897	Act of N.S.W. Parliament	No 12 of 1897 By Church Acts Repealing Act 1897 assented to this dete it was provided by Section 5 that a Certificate signed by the Bishop of a diocese shall be conclusive evidence that the persons named in such Certificate are the duly constituted trustees of the lands mentioned in such Certificate.			
6	22 Dec. 1909	Certificate	Given by the Archbishop of Sydney on this date certified that as at 21st December 1909 Andrew Houison, Frederick Resolute Strange and Alfred Whetton (Junior) were at that date the duly constituted trustees of the land known as St. Philip's Glebe being the residue unresumed of the land comprised in Crown Grant document No. 1.			
7	21 Dec. 1909	Mortgage	Andrew Houison, Frederick Resolute Strange and Alfred Whetton (Junior) to Permanent Trustee Company of N.S.W. Limited. with discharge endorsed thereon.	896 1099 5	906 7	Sheet 1 $10/1
	22 Aug 1912		NOTE. On this date Andrew Houison died.			
8	31 Mar 1914	Deed of Consent	By this Deed the Archbishop of Sydney in the place of the said Andrew Houison deceased and pursuant to the proviso to Section 4 of Church of England Trust Property Incorporation Act 1881 together with Frederick Resolute Strange consented to the property described in the Schedule thereto (being the land comprised in the said Crown Grant excepting dedications and resumptions) becoming vested in Church of England Property Trust Diocese of Sydney, a body corporate incorporated under the provisions of Church of England Trust Property Incorporation Act 1881.	1024	142	Sheet 1 $10/1
9	10 Dec 1926	Mortgage	Church of England Property Trust Diocese of Sydney to Bank of New South Wales. with discharge endorsed thereon.	1455 1453 2982	450 563 812	

No. 48828 DP244897

~~D.P. 244235~~ Suen

Lots 16 to 24 inc 3606.7m

lots 1-8 incl within

19.4.73

Lodged by: G.B.V. King

Address: C/O Glebe Administration Board 275 George Street Sydney.

Phone No.: 290-1111.

Justice Richardson

SCHEDULE REFERRED TO—*(continued)**

(TO BE SIGNED BY APPLICANT, IF UTILISED, IMMEDIATELY BELOW THE LAST DOCUMENT SCHEDULED)

No.	Date	Nature of Instrument	Parties	Registration Book	Registration No.	For Office use only By whom Produced
10	20 Oct 1930	Ordinance	By Ordonance of the Synod of Church of England Diocese of Sydney intituled Glebe Administration Ordinance 1930 assented to this date by clause 4 thereof Glebe Administration Board was created and by clause 13 thereof the said Glebe Administration Board was given absolute and full powers of managing and controlling this Glebe.	3025	418	✓
11	26 Oct 1938	Act of N.S.W. Parliament	By Church of England (Bodies Corporate) Act 1938 assented to this date by Section 3 it was provided that the members of the Board appointed under Glebe Administration Ordinance 1930 shall be a body corporate under the name of Glebe Administration Board and by Section 9 (1) it was provided that all real property which immediately before the commencement of this Act was vested in or held by any person (including Church of England Property Trust Diocese of Sydney) upon any trust for the management, government or control for which Glebe Administration Board was constituted shall without any conveyance vest in Glebe Administration Board and by Section 9 (2) it was further provided that when the property referred to in subsection 1 is vested in or held by the corporate trustee and is subject to any mortgage such property shall not vest in the body corporate unless either the mortgage is discharged or the corporate trustee and the person entitled to the benefit of the mortgage consent in writing to the vesting.			
12	19 July 1963	Deed of Consent	By Deed of Consent of this date pursuant to Section 9 (2) of Church of England (Bodies Corporate) Act 1938 Church of England Property Trust Diocese of Sydney and Bank of New South Wales consented to the vesting of the land comprised in the mortgage dated 10th December 1926 registered Book 1453 No. 563 in Glebe Administration Board.	2667	~~812~~ 887	Sheet 1 & 10/11
13	19 Feb 1953	Lease	Glebe Administration Board to Council of the City of Sydney (affecting Lot 3 only).	3028	782	✓
14	17 Dec 1957	Lease	Glebe Administration Board to Council of the City of Sydney (affecting Lot 3 only).	3028	781	✓
15		Copy plan	Prepared by Mr. Surveyor Ayres.			
16	25 Oct 1971	List of occupants	Contained in Statutory Declaration of Graham Brindley Vernon King declared on this date.			
17	20 Dec 1967	Power of Attorney copy.	Glebe Administration Board to Graham Brindley Vernon King.	Misc. reg. 97074		✓

On 14th December 1971 it was appropriate to refer to this Deed of Mortgage but at this date certain lands have been excluded from this R.P.A. which now refers to lands never the subject of this Mortgage. Hence reference to this Deed of Mortgage is struck out. See my letter dated 10 April 1973.

18th April 1973. GBKing

~~To the Registrar General.~~ GBKing

~~Since this Application was signed by me Glebe Administration Board has executed a Deed of Mortgage to Permanent Nominees Limited. The said Deed of Mortgage is dated 9th November 1971 and is registered Book 3030 493 I request you to issue Certificate of Title subject to the said Mortgage which will be produced by Allen, Allen & Hemsley.~~ ✓

~~Attorney under Power of Attorney registered in Miscellaneous Register No. 97074 which remains unrevoked.~~

~~14th December 1971.~~

Recd docs 10, 13-16 31/12/71

CERTIFICATE OF TITLE

NEW SOUTH WALES

PROPERTY ACT, 1900

Vol. 12304 Fol. 59

Edition issued 20-12-1973

Appln. No.48828

I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

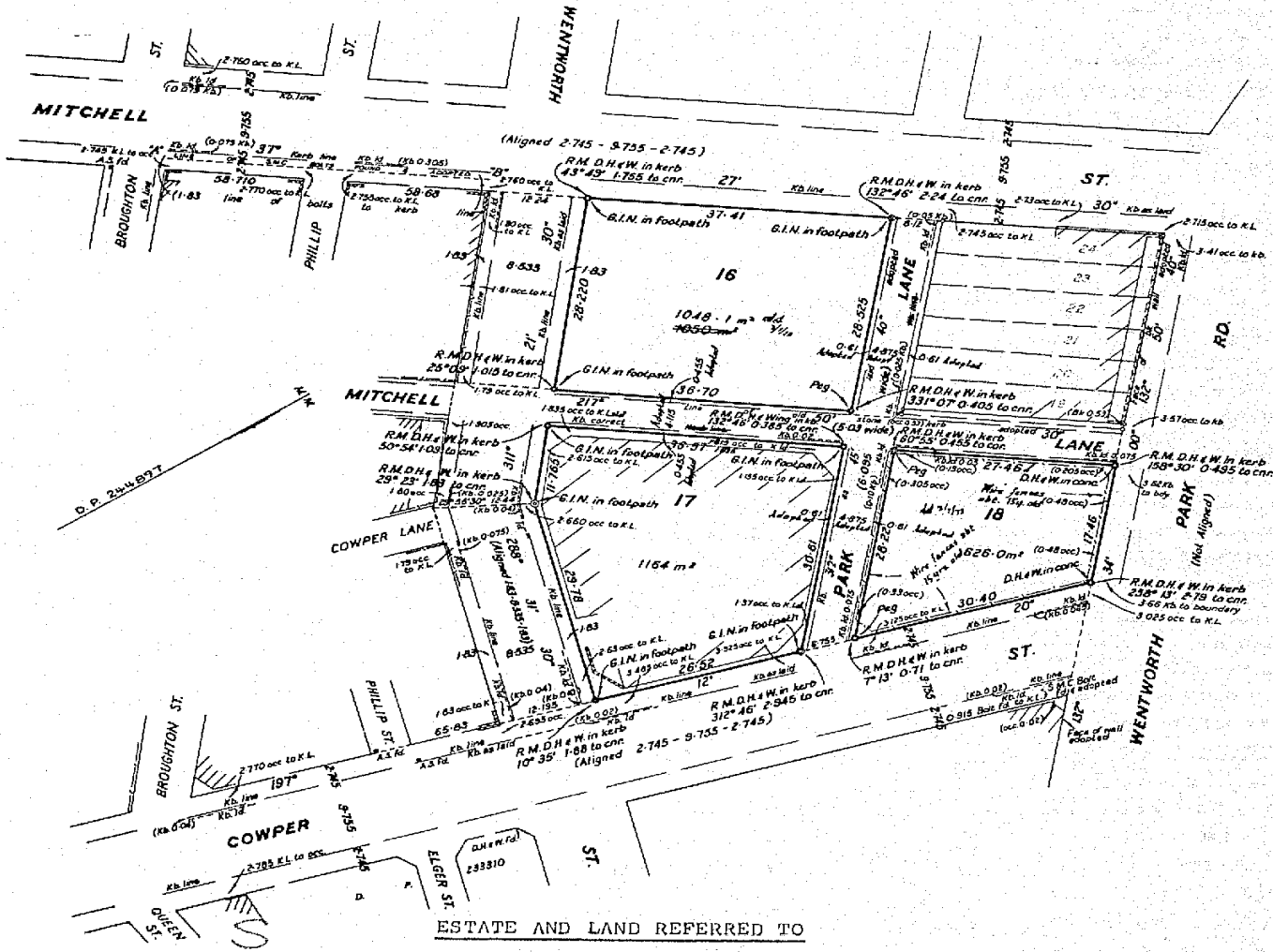
CANCELLED

Registrar General.

SEE AUTO FOLIO

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 17 in Deposited Plan 244897 at Glebe in the Municipality of Leichhardt Parish of Petersham and County of Cumberland being land for which no Crown Grant has issued.

FIRST SCHEDULE

~~GLEBE ADMINISTRATION BOARD.~~

GRN

SECOND SCHEDULE

NIL

Registrar General

Vol. 12304 Fol. 59

N973763 To W871668

W871668 Rejected

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
~~The Commonwealth of Australia~~	Transfer	N973763	12-8-1974	18-12-1974	
New South Wales Land and Housing Corporation by Transfer W871668. Registered 15-5-1987.					

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		

(Page 2 of 2 pages)

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

CERTIFICATE OF TITLE

NEW SOUTH WALES — REAL PROPERTY ACT, 1900

Vol. 12304 Fol. 60

Edition issued 20-12-1973

Appln. No. 48828

I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

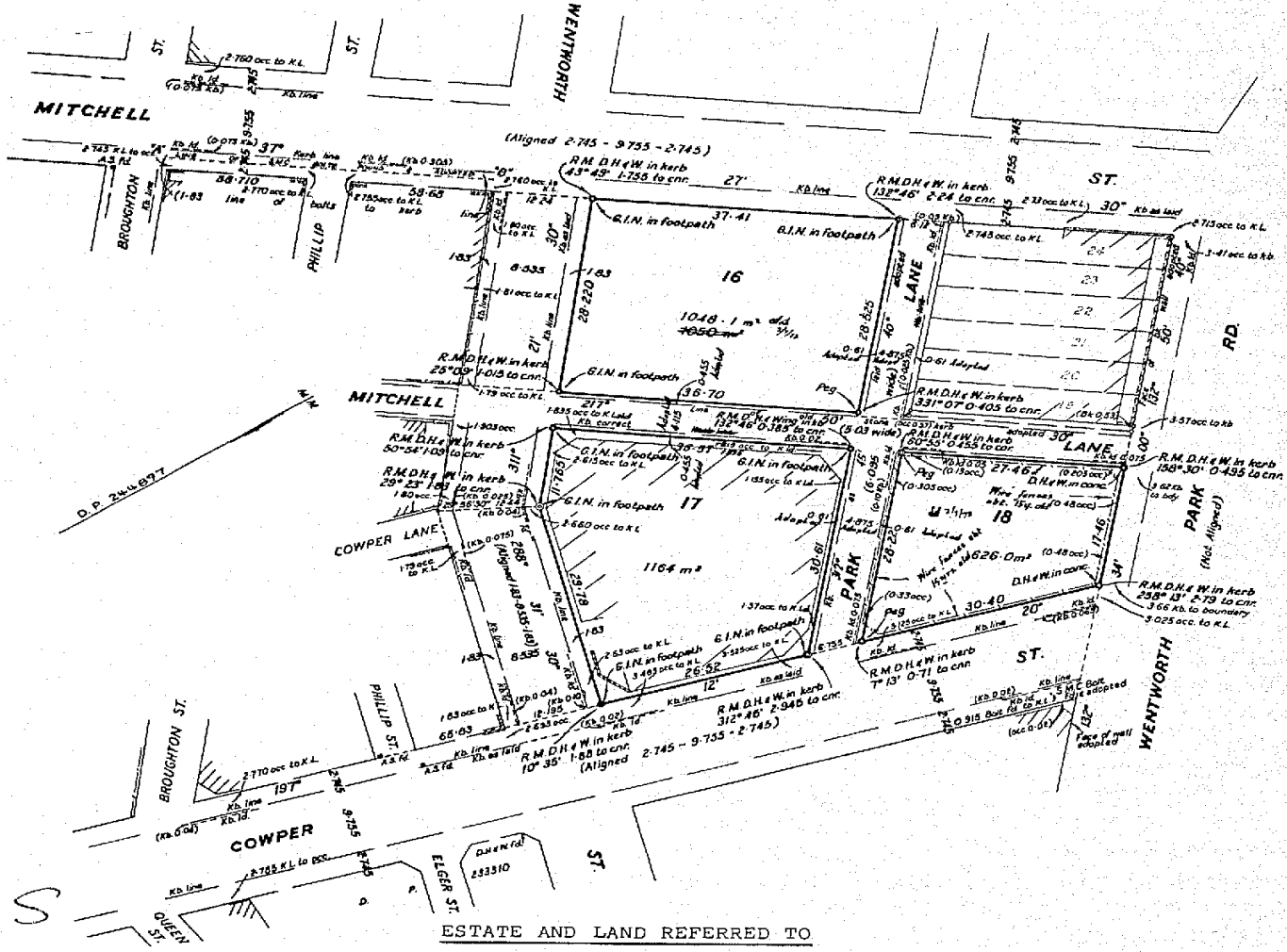
CANCELLED

Registrar General.

SEE AUTO FOLIO

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 18 in Deposited Plan 244897 at Glebe in the Municipality of Leichhardt Parish of Petersham and County of Cumberland being land for which no Crown Grant has issued.

FIRST SCHEDULE

~~GLEBE ADMINISTRATION BOARD.~~

GRN

SECOND SCHEDULE

NIL

Registrar General

Vol. 12304 Fol. 60

N973763 T
W58646
Rejected 10/
W871668-

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT			ENTERED	Signature of Registrar General
	NATURE	NUMBER	DATE		
~~The Commonwealth of Australia~~	Transfer	N973763	12-8-1974	18-12-1974	[signature]
New South Wales Land and Housing Corporation by Transfer W871668. Registered 15-5-1987.					[seal]

SECOND SCHEDULE (continued)

INSTRUMENT			PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION
NATURE	NUMBER	DATE				

(Page 2 of 2 pages)

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

Title Search

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 17/244897

SEARCH DATE	TIME	EDITION NO	DATE
30/1/2020	7:50 AM	-	-

VOL 12304 FOL 59 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 17 IN DEPOSITED PLAN 244897
AT GLEBE
LOCAL GOVERNMENT AREA SYDNEY
PARISH OF PETERSHAM COUNTY OF CUMBERLAND
TITLE DIAGRAM DP244897

FIRST SCHEDULE

NEW SOUTH WALES LAND AND HOUSING CORPORATION (T W871668)

SECOND SCHEDULE (0 NOTIFICATIONS)

NIL

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Title Search

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 18/244897

SEARCH DATE	TIME	EDITION NO	DATE
30/1/2020	7:50 AM	-	-

VOL 12304 FOL 60 IS THE CURRENT CERTIFICATE OF TITLE

LAND

LOT 18 IN DEPOSITED PLAN 244897
AT GLEBE
LOCAL GOVERNMENT AREA SYDNEY
PARISH OF PETERSHAM COUNTY OF CUMBERLAND
TITLE DIAGRAM DP244897

FIRST SCHEDULE

NEW SOUTH WALES LAND AND HOUSING CORPORATION (T W871668)

SECOND SCHEDULE (0 NOTIFICATIONS)

NIL

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Received: 30/01/2020 07:50:36