# **Appendix V**

Phase 1 Preliminary Site Investigation





# **Phase I Preliminary Site Investigation**

Cudgegong Road Station Precinct South, Rouse Hill NSW

Prepared for: Landcom



**Prepared for:** 

# Landcom

# **Phase I Preliminary Site Investigation**

Cudgegong Road Station Precinct South, Corner of Schofields Road and Cudgegong Road, Rouse Hill NSW

Version	Details	Date
v1d	Written by Alec Palmer	05.02.2018
v1f	Written by Alec Palmer	09.02.2018
v2f	Updated by Kyle McClintock	28.02.2018
v3f	Updated by Kyle McClintock	15.03.2018

**Report No:** STC-1023-13390 / PSI1 / v3f

Date: 15<sup>th</sup> March 2018

Written by:

Alec Palmer

B. Sc. (Environment)
Environmental Consultant

Reviewed by:

Ben Withnall

B.Sc. B.A. (Geology, Geophysics)

**Project Manager** 

Dr Santo Ragusa (PhD)

Dr of Philosophy (Applied Science)

This report is copyright. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying without permission in writing from ADE Consulting Group Pty Ltd.

# **TABLE OF CONTENTS**

EXE	CUTIVE SUMMARY	6
1	INTRODUCTION	8
1.1	Background & General Information	8
1.2	Objectives	
1.3	Scope of Work	9
1.4	Legislative Requirements	9
2.1	Site Location	. 10
2.2	Summary of Site Details	. 10
	Site Inspection and Description	
2.3.1	Site Observations	. 11
	Surrounding Land Use	
	Previous Reports and Anecdotal Information	
2.5.1	Contamination and Salinity Assessment for Proposed Rapid Transit Rail Facility, Tallawong Road, Rouse Hill	
2	NSW, 114071, Environmental Earth Sciences, 2014 (EES 2014).	
2.5.2	2 9141 NRT Work Site, Tallawong Road and Cudgegong Road, Rouse Hill NSW.SCA1.v1 final, dated 10 <sup>th</sup> June 2 (ADE 2015a)	
2.5.3		
2.5.4	· · · · · · · · · · · · · · · · · · ·	
	Northwest Operations, Trains and Systems PPP, Report No: NWELOTS-NRT-PRD-PM-PLN-000854, dated 30	
	October 2015 (NRT 2015)	
2.5.5		
	Plan for Sydney Metro Northwest Operations, Trains and Systems PPP, Report No: NWELOTS-NRT-PRD-PM	
2 - 4	PLN-000852, dated 28 <sup>th</sup> August 2017 (NRT 2017)	
2.5.6	Secretary's Environmental Assessment Requirements, Application Number SSD 9063, dated 16 <sup>th</sup> February 2 (SEAR 2018)	
3	PHYSICAL SETTING	. 16
4	SITE HISTORY	. 18
4.1	Historical Land and Title Search	10
4.1	NSW Office of Environment and Heritage	
4.3	Aerial Photographs Review	
_	Contaminated Land Register Search	
	Section 149's	
	Dial Before You Dig	
	SafeWork NSW	
	Assessment of Historical Information Integrity	
	- · · · · · · · · · · · · · · · · · · ·	
5	PROVISIONAL CONCEPTUAL SITE MODEL	
5.1	Potential Contamination Types	. 23
6	DISCUSSION	. 25
7	CONCLUSION AND RECOMMENDATIONS	. 27
8	LIMITATIONS	. 29
9	REFERENCES	. 30

# **LIST OF APPENDICES**

APPENDIX I – AERIAL PHOTOGRAPHS	31
APPENDIX II – PHOTOGRAPHS	37
APPENDIX III – LTO RECORDS	42
APPENDIX IV – DIAL BEFORE YOU DIG (DBYD)	43
APPENDIX V – SUPPORTING DOCUMENTS	44
APPENDIX VI – SECTION 149	46
LIST OF TABLES	
Table 1. Site Details and Information.	10
TABLE 2. SURROUNDING LAND USE.	12
TABLE 3. REGIONAL SETTING INFORMATION.	16
TABLE 4. SUMMARY OF LTO RECORDS FOR LOT 13 DP 1168129.	18
Table 5. Summary of LTO Records for Lot 14 DP 1168129.	19
Table 6. Summary of LTO Records for Lot 15 DP 1168129.	19
Table 7. Summary of LTO Records for Lot 10 DP 1185116.	20
TABLE 8. SUMMARY OF ITEMS LISTED IN THE ENVIRONMENT AND HERITAGE PUBLIC REGISTER NEAR THE SITE	20
Table 9. Summary of Aerial Photography	20
TABLE 10. SUMMARY OF UTILITIES LOCATED ON OR ADJACENT TO THE SITE.	22
TABLE 11. POTENTIAL SOURCES, LOCATIONS AND TYPES OF CONTAMINANTS.	24
LIST OF FIGURES	
FIGURE 1 AERIAL PHOTOGRAPH OF THE SITE	10
FIGURE 2. AERIAL PHOTOGRAPH OF THE SITE WITH SITE OBSERVATION MARKERS	12
FIGURE 3. A REVIEW OF THE AUSTRALIAN SOIL RESOURCE INFORMATION SYSTEM (ASRIS)	45
FIGURE 4. NSW OFFICE OF ENVIRONMENT AND HERITAGE (OEH) 'CONTAMINATED LAND – RECORD OF NOTICES'	45

# **ABBREVIATIONS**

ADE	ADE Consulting Group Pty Ltd
- 132	<u> </u>
ACM	Asbestos Containing Materials
BGL	Below ground level
BTEX	Benzene, toluene, ethyl-benzene, xylene
COC	Chain of Custody
CLRR	Contaminated Land Risk Ranking
DCP	Development Control Plan
DEC	Department of Environment and Conservation
DSI	Detailed Site Investigation
DQO	Data Quality Objectives
EPA	Environment Protection Agency
GILs	Groundwater Investigation Levels
HILs	Health Investigation Levels
HSLs	Health Screening Levels
LEP	Local Environment Plan
LPI	Land Property Information
LTO	Land Titles Office
LEP	Local Environmental Plan
NATA	National Association of Testing Authorities
NEPC	National Environmental Protection Council
NEPM	National Environmental Protection Measure
NSW EPA	New South Wales Environmental Protection Authority
OCPs	Organochlorine Pesticides
OEH	Office of Environment and Heritage
OPPs	Organophosphorus Pesticides
PAHs	Polycyclic Aromatic Hydrocarbons
PSI	Preliminary Site Investigation
PCB	Polychlorinated Biphenyl
TRH	Total Recoverable Hydrocarbons

#### **EXECUTIVE SUMMARY**

ADE Consulting Group Pty Ltd (ADE) was engaged by Landcom to undertake a Phase I Preliminary Site Investigation (PSI) to assess soil conditions and the potential for contamination at the proposed Cudgegong Road Station Precinct South, located at the corner of Schofields Road and Cudgegong Road, Rouse Hill NSW, 2155 (hereafter referred to as 'the Site').

The Site entails Lot 13, 14 & 15 in Deposited Plan (DP) 1168129, and Lot 10 in DP 1185116 within the local government area of Blacktown City Council and is approximately 7.8 ha. The Site is currently zoned as 'Zone B4 – Mixed Use', 'Zone R3 – Medium Density Residential' and 'Zone SP2 – Infrastructure' as per the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006*, and there are no planned changes to this zoning proposal under the planned development.

The purpose of the investigation was to address the Secretary's Environmental Assessment Requirements for the Stage 1 concept proposal for a mixed use development at Cudgegong Road Station Precinct South. This includes requirements to:

- Outline measures to remediate the Site so it is suitable for the intended land uses, in accordance with State Environmental Planning Policy No.55 - Remediation of Land; and
- Provide a description of local soils and consider the presence, extent and severity of soil salinity and acid sulfate soils on the Site, any impacts on groundwater resources and hydrology and any necessary mitigation measures.

This project was undertaken in general accordance with the Guidelines for Consultants Reporting on Contaminated Sites, NSW Office of Environment and Heritage (OEH), 2011.

The Scope of Work for the investigation broadly involved the following:

- Conduct a desktop review of all available information for the Site;
- Conduct a Site walkover to identify potential areas of concern; and
- Preparation of a PSI report outlining the results of these investigations.

Areas that may be impacted by potential contamination were identified on the basis of the available Site information and during the Site inspection undertaken on the 16<sup>th</sup> January 2018. The qualitative assessment of the Site undertaken during this investigation has indicated the potential for contamination to be low with regards to the development and use of land as a town centre. Based on the information available it is likely that the Site can be made suitable.

A previous report conducted by Environmental Earth Sciences (2014), found the potential for contamination within the Site to be low, however did note that some ACM material was identified on the surface of the Site. A previous report conducted by ADE (2017) concluded that the soil within the dam in the centre of the Site was found to contain asbestos.

In 2012 Transport for NSW purchased the Site as part of the North West Rail Link project. The Site has been predominantly cleared, with extensive cut and fill activities raising the site by up to 8 m. Two (2) dams are located within the Site, where surface water runoff is expected to flow. A large stockpile of topsoil material was observed in the south west corner of site, with presumed ACM fragments observed on the surface.

Given the current earthworks and the construction of Cudgegong Road Metro Station, constant alterations to the Site condition make it problematic to fully assess the Sites' suitability for future plans of development of Cudgegong Road Station Precinct South. On Completion of current development works, a

Detailed Site Investigation (DSI) targeting imported fill material onto site, stockpiled material within the south west of the Site, and two dam footprints should be conducted to confirm the suitability of the Site for the proposed development.

Based on the information available it is likely that the Site can be made suitable for the proposed development. Measures to ensure the Site is suitable for the intended land use are available, in accordance with the State Environmental Planning Policy No.55 - Remediation of Land.

Following completion of works on Site associated with the Sydney Metro North West proposal, and prior to further development applications associated with the proposal, a Phase II Detailed Site Investigation of soil and groundwater in accordance with National Environmental Protection Measure (NEPM 2013), Acid Sulfate Soils Assessment Guidelines (Acid Sulfate Soil Management Advisory Committee ((ASSMAC 1998) and ESS (2014) recommendations is required.

#### 1 INTRODUCTION

#### 1.1 Background & General Information

The NSW Government is currently building the Sydney Metro Northwest (SMNW) that is due to start operations in 2019. The SMNW is Stage 1 of the overall Sydney Metro project and involves the construction of eight new metro stations supporting infrastructure between Cudgegong Road and Epping and converting five existing stations between Epping and Chatswood. Stage 2 will deliver a new metro rail line from Chatswood through Sydney's CBD to Sydenham (Sydney Metro City and Southwest).

Landcom and the Sydney Metro Delivery Office (SMDO), part of Transport for NSW (TfNSW), are working in collaboration to develop walkable, attractive, mixed use places around the SMNW stations. This includes using the surplus government owned land located around the Cudgegong Road Station.

The subject site, the Cudgegong Road Station Precinct South (hereafter referred to as the 'Site') is located between Cudgegong Road, Tallawong Road, Schofields Road and the Metro corridor and comprises around 7.8ha of government owned land (*refer to Figure 1*). It is within the southern part of the broader Cudgegong Road Station Precinct (Area 20) of the North West Priority Growth Area, a substantial land release area for homes and jobs in Sydney's northwest.

ADE Consulting Group Pty Ltd (ADE) is engaged to carry out a Phase I Preliminary Site Investigation (PSI) to support the State Significant Development Application (SSDA) for the Station Precinct South concept proposal. The concept proposal is for approximately 1,100 dwellings and 9,000 m<sup>2</sup> of retail, commercial and community uses. It also includes a central park, new streets and supporting public domain.

The Site is currently under construction as part of the Sydney Metro Northwest Project, with the Site to be transformed into the proposed Cudgegong Town Centre upon completion of Cudgegong Road Metro Station.

The purpose of the PSI was to assess the environmental condition of the Site and suitability for the proposed future land use. This was undertaken through:

- i. Review of the Site's history; and
- ii. A Site walkover and visual inspection.

The Site walkover and visual inspection was undertaken by an experienced environmental consultant on the 16<sup>th</sup> of January 2018. This report summarises the findings from the Site walkover and discusses the outcomes of the desktop investigation.

#### 1.2 Objectives

The objectives of the investigation were to:

- Identify past and present potentially contaminating activities;
- Identify potential sources of contamination and types of contaminants;
- Discuss the Site condition;
- Provide a preliminary assessment of Site contamination; and
- Outline measures to ensure the site is suitable for the intended land use, including considering potential requirements for remediation with *State Environmental Planning Policy No.* 55 Remediation of Land (SEPP No. 55).

#### 1.3 Scope of Work

The scope of work required to achieve the objectives of the investigation involved the following:

- Completion of a Health & Safety Plan;
- Desktop Site review of:
  - Land title records;
  - Section 149 Planning Certificates;
  - Environment Protection Agency (EPA) contaminated lands register for notations and list of sites notified to EPA:
  - Dial Before You Dig service search;
  - Review of past and current activities on the Site;
  - Review of past and current activities on neighbouring sites and identification of any potential on-site/off-site sources of contamination;
  - Review of past aerial photographs of the Site and its surrounds to identify the locations of any previous buildings and/or other infrastructure associated with activities that could be onsite/off-site sources of contamination;
  - Review of local geology and hydrogeology (including groundwater bore search);
- Site inspection by an experienced environmental consultant;
- Preparation of a Phase I PSI report outlining:
  - Detailed information on the results of the desktop review and site inspection;
  - Conclusions regarding the potential for contamination at the Site;
  - Conclusions regarding measures to ensure the Site is suitable for the proposed development;
     and
  - Recommendations for a Phase II Detailed Site Investigation (DSI), should it be warranted.

### 1.4 Legislative Requirements

The legislative framework for the report is based on guidelines that have been issued and/or endorsed by the NSW (EPA) formerly the Office of Environment and Heritage (OEH) under the following Acts/Regulations:

- Contaminated Land Management Act 1997;
- State Environmental Planning Policy No. 55 Remediation of Land (SEPP No. 55); and
- Protection of the Environment Operations Act 1997.

The relevant guidelines issued under the provisions of the aforementioned Acts/Regulations include:

- Guidelines for Consultants Reporting on Contaminated Sites, NSW OEH 2011;
- Guidelines for the Assessment and Management of Groundwater Contamination, NSW DEC, 2007;
- Guidelines for the NSW Site Auditor Scheme, NSW 2017;
- National Environmental Protection Measure (Assessment of Site Contamination), 1999, as amended 2013 (NEPM 2013); and
- Sampling Design Guidelines NSW EPA, 1995.

The following local government plans have also been taken into consideration for preparation of this PSI:

- Blacktown Growth Centre Precincts Development Control Plan (DCP) 2010; and
- Blacktown Local Environmental Plan (LEP) 2015.

### **2 SITE IDENTIFICATION**

### 2.1 Site Location

The Site subject to the current investigation is located at the corner of Schofields Road and Cudgegong Road, Rouse Hill NSW as is shown in **Figure 1** on the following page.



Figure 1. Aerial photograph of the Site (image provided by Landcom).

For ease of representing locations, the Site is considered to be off Schofields Road, with a nominal north-south direction assumed and all reference to points of the compass within the report are based on these approximate bearings.

### 2.2 Summary of Site Details

Table 1 below provides a summary of details pertaining to the Site.

Table 1. Site Details and Information.

Site Details	
Site Address	Corner of Schofields Road and Cudgegong Road, Rouse Hill NSW 2155
Title Identification	Lot 13, 14 & 15 of DP 1168129 and Lot 10 of DP 1185116
Land Use Zoning	B4 – Mixed Use, R3 – Medium Density Residential & SP2 - Infrastructure
Proposed Land Use	B4 – Mixed Use, R3 – Medium Density Residential & SP2 - Infrastructure
Site Area	Approximately 7.8 ha

#### 2.3 Site Inspection and Description

An Environmental Consultant from ADE carried out a site inspection on the 16<sup>th</sup> January 2018 in order to make a visual assessment of the Site and provide information on potential Site contamination issues, some of which are as follows:

- Surrounding land uses and potential contamination sources;
- Presence of hazardous or dangerous goods storage;
- Presence of Underground or Aboveground Storage Tanks, Generators or associated fuel transfers systems i.e. fuel lines;
- Condition of current structures, stockpiles, vegetation and soil;
- Proximity to water bodies/courses; and
- Visible and/or olfactory evidence of contamination.

# 2.3.1 <u>Site Observations</u>

The Site is a rectangular parcel of land comprised of an approximate area of 7.8 ha.

The Site is currently in the construction phase of the Sydney Metro Northwest Project. A majority of the topsoil appears to have been stripped, with only a small dam and vegetation in the south west of site, adjacent the site offices remaining. Surface water is expected to flow into drainage channels and into the large dam in the south east corner of the Site which has been recently excavated into the natural soil profile.

Carpark construction, hardstand, service roads and trenching for service installation are currently in progress throughout the western section of Site. An unlined concrete washout was observed in a laydown area to the east of the small existing dam.

The northern section of the site, adjacent to Cudgegong Road Metro Station, appears to have been raised by up to 8 m above the adjacent Cudgegong Road footprint, with a large retaining wall installed along the boundary. The fill material used in raising the Site appears to be predominantly clays and shale. No contamination was observed on the surface of the raised soil profile.

A large stockpile of soil, trace building debris and vegetation was observed in the south west corner of the Site. Three (3) potentially asbestos containing fibre cement fragments were observed on the soil surface of the western side of the stockpile, and asbestos is presumed to be present beneath the surface of the stockpile.

Photographs from the Site inspection taken on the  $16^{th}$  of January 2018 can be found in *Appendix II – Photographs*.

# 2.4 Surrounding Land Use

At the time of inspection the primary surrounding land-uses were observed as described in Table 2 on the following page.

Table 2. Surrounding Land Use.

<b>Orientation with Site</b>	Description of Use and Sensitive Receptors				
North Cudgegong Road Metro Station runs along the entire northern bour					
	Site. Beyond this are low density residential properties, agricultural land and				
	small market gardens.				
East	Cudgegong Road followed by Second Ponds Creek and further infrastructure				
	and earthworks projects. Rural residential properties and light agricultural land				
	observed beyond this.				
South	Schofields Road. Immediately south is a new medium density residential				
	development, south west is continued housing developments.				
West	Tallawong Road and Sydney Metro Trains Facility in construction as part of the				
	North West Rail Link project.				



Figure 2. Aerial photograph of the Site with Site observation markers (image provided by Landcom).

- 1. Existing dam in use for Site water. Flow channel from the north. Healthy vegetation surrounding the dam. No odour or sheen;
- 2. Recently excavated dam. Excavated walls are virgin material. Water flow following site gradient with in channels from the north east / north west, and out channels south / south east. Hydrochloric Acid containers observed adjacent dam. Majority of the Sites surface water run off drains into the dam. No hydrocarbon sheen or odours. Water slightly cloudy;
- 3. Large stockpile of fill material observed west of the Site offices. Three (3) potential asbestos containing fibre cement fragments observed on the soil surface;
- 4. Site drainage channel, majority of surface water runoff will flow from the north / north west, into this channel and south into the excavated dam. No sheen or odour. Healthy vegetation present;

- 5. Large retaining wall present along Cudgegong road. Site raised towards the station approximately 5-8 m with fill material;
- 6. Lay down area. Large concrete pipes, construction material and storage containers. Un-lined concrete washout observed;
- 7. Imported fill materials (DGB) and landscaping materials such as topsoil stockpiled;
- 8. Large stockpile of soil material to the north west of Site, possibly used as fill material on Site; and
- 9. Site compound and carparks. Filled with compacted DGB approximately 1 m above Schofield's road.

#### 2.5 Previous Reports and Anecdotal Information

2.5.1 <u>Contamination and Salinity Assessment for Proposed Rapid Transit Rail Facility, Tallawong Road, Rouse Hill NSW, 114071, Environmental Earth Sciences, 2014 (EES 2014).</u>

Environmental Earth Sciences (EES) previously conducted a preliminary contamination and salinity assessment of the proposed Rapid Transit Rail Facility, encompassing the current Site. The investigation was limited to a depth of approximately 0.15 m below ground level (BGL), and recommends further intrusive investigation works are conducted.

Four (4) test pits were sampled within the Site area between 0.0 - 0.15 m BGL. Two asbestos fibre cement samples were collected from the test pits located within Lot 13, with both being found to contain Chrysotile asbestos. In Lot 14, a layer of farm demolition waste was observed along the southern boundary.

The salinity potential map of Western Sydney (DLWC, 2002) indicated that the Site is situated over a range of potential zones, from high to moderate salinity potential. During sampling, no observational indications of potential salinity impacts were observed. Surface soil testing for Electrical Conductivity (EC) indicated there was a negligible potential salinity rating, and aggressivity results had a "non-aggressive' rating. However, due to the lack of information for soils deeper in the profile, it is recommended additional investigation into these soils is undertaken.

The proposed land use for the Site is consistent with the categories outlined within NEPM (2013) for residential within minimal soil access, and public open space. The chemical data indicates no exceedances to Health Investigation Level (HIL) B or C were detected within the samples collected.

114071EES identified Second Ponds Creek and future workers or residents of the area as the main receptors for contamination; however the contamination risk was determined to be low.

2.5.2 <u>9141 NRT Work Site, Tallawong Road and Cudgegong Road, Rouse Hill NSW.SCA1.v1 final, dated</u> 10<sup>th</sup> June 2015 (ADE 2015a)

The objective of the soil characterisation assessment report were to conduct analysis of specific contaminant concentrations for the subject materials located at several NRT Work Sites, including the Site off Cudgegong Road, Rouse Hill NSW. The assessment was undertaken in accordance with the criteria outlined in the 'National Environment Protection (Assessment of Site Contamination) Measure (1999), 2013 Amendment' (NEPM 2013).

The soil characterisation assessment report concluded the following:

• "The subject materials consisted of dark grey clay. Paint chips, sulphidic ores, asbestos and foreign materials were not observed in any of the subject materials.

- The concentrations of metals (As Cd, Cu, Cr, Hg, Ni, Pb, Zn), TRH, BTEX, PAHs, PCBs, OCPs and OPPs in the soil samples collected from the subject materials meet the Tier 1 Screening criteria (HIL-D) outlined in NEPM 2013.
- Asbestos was not observed within any of the soil materials and was not detected within any of the samples collected."

# 2.5.3 9717 NRT Work Site, Tallawong Road, Rouse Hill NSW.WAC1.v1 final, ADE, 2015 (ADE 2015b)

ADE previously conducted an in-situ Waste Analysis and Classification of the soil material within the northern embankment of the central dam. Three (3) test pits were excavated into the fill material within the northern wall of the dam to a maximum depth of 1.0 m BGL, where natural soil material was observed. Chemical data indicates no exceedance of HIL—B or HIL—C. Asbestos containing fibre cement fragments and building debris were identified within the top 1.0 m of fill.

2.5.4 Northwest Rapid Transit, Project Integrated Management System, Spoil Management Plan for Sydney Metro Northwest Operations, Trains and Systems PPP, Report No: NWELOTS-NRT-PRD-PM-PLN-000854, dated 30<sup>th</sup> October 2015 (NRT 2015)

The Spoil Management Plan outlines how NRT are to manage spoil during the delivery of the project. The Site is considered within 'Phase 1' of the project, as such only references to Phase 1 will be summarised in this section.

A reuse hierarchy for spoil materials is provided within the report. It identifies the reuse of spoil materials within the project as the preferred option. With regards to spoil testing and classification, spoil would be reused on site in accordance with the NEPM (2013).

2.5.5 Northwest Rapid Transit, Project Integrated Management System, Construction Soil and Water Management Plan for Sydney Metro Northwest Operations, Trains and Systems PPP, Report No: NWELOTS-NRT-PRD-PM-PLN-000852, dated 28<sup>th</sup> August 2017 (NRT 2017)

The Construction Soil and Water Management Plan outlines how NRT are to soil and water issues during the delivery of the project. The Site is considered within 'Phase 1' of the project, as such only references to Phase 1 will be summarised in this section.

The NRT (2017) report describes the existing environment at the Site i.e. existing soil landscape, geology and groundwater which are agreeance with the outcomes of this PSI.

With regards to salinity and acid sulfate soils (ASS) conditions of the soil, the NRT (2015) report states:

"The results of Electrical Conductivity (EC) from surface soil testing generally indicated a negligible potential salinity rating. Soil aggressively testing for sulfate in surface soils indicated that all surface areas of the site had a "non-aggressive" rating.

Review of the NSW Natural Resource Atlas acid sulfate soils risk maps for coastal NSW, shows the site is located in an area of no known occurrence of acid sulfate soils."

The NRT (2017) continues to assess contamination at the Site, the initial assessment was considered 'not comprehensive' as 'not all of the Areas of Environmental Concern in this area were specifically targeted'. NRT engaged Environmental Earth Services to complete a further assessment of each individual plot. The map depicting each plot is difficult to understand (due to the small nature), but it can be concluded that plots 14, 15 and 16 relate approximately to the Site.

There was no evidence of any current of historical industrial land uses on the Site. However, potential non-industrial sources of contamination were identified as farm waste/stockpiles.

It appears that from the analytical results, there were no exceedances of the site assessment criteria within the Site (plot 14, 15 & 16).

Based on the findings above, the NRT (2017) report determines 'that no specific management or remediation is required, or the requirement to engage a site auditor.' However, asbestos should be managed 'in accordance with the WHS [Work Health & Safety] Management Plan, Asbestos Management Plan, and a task specific Asbestos Removal Control Plan.' It should be noted that with regards to asbestos, there is no reference to plots 14, 15 & 16.

# 2.5.6 <u>Secretary's Environmental Assessment Requirements, Application Number SSD 9063, dated 16<sup>th</sup> February 2018 (SEAR 2018)</u>

The Environmental Impact Statement (EIS) must address the *Environmental Planning and Assessment Act* 1979 and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.* Eighteen (18) key issues were identified within the SEAR (2018) document. Of note to this PSI was key issue number fifteen (15) which in particular the issues regarding soil which outlined the following:

"The EIS shall:

- include a description of local soils, topography, drainage and landscapes;
- determine the presence, extent and severity of soil salinity affecting the site. This hall include the
  assessment of impacts of the proposal on soil salinity and how it may affect groundwater resources
  and hydrology; and
- include an assessment in accordance with the ASSMAC Guidelines for the presence and extent of acid sulfate soils on the site and, where relevant, appropriate mitigation measures."

Regarding the key issues, the SEAR (2018) document provides these general requirements:

"Notwithstanding the key issues specific below, the EIS must include an environmental risj assessment to identify the potential environmental impacts associated with the development.

Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:

- adequate baseline data;
- consideration of potential cumulative impacts due to other development in the vicinity; and
- measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment."

# **3 PHYSICAL SETTING**

A desktop study was conducted to review Site topography, geology, hydrogeology and other relevant information. The information gathered during desktop study is described in Table 3 below.

Table 3. Regional Setting Information.

Attribute	Description
Topography	The Site is elevated in the north western section at 58 m Australian Height Datum
	(AHD) and slopes towards the east to approximately 50 m AHD.
Site Drainage	The surface area of the Site is predominantly cleared and covered with fill material and
	some large soil stockpiles. ADE would surmise that rainwater falling on this area is likely
	to flow south easterly across the soil surface towards Second Ponds Creek. One (1)
	sediment basin / dam is located in the south east section of the Site, and under current
	conditions is likely to entrap surface water flowing across the site. One (1) existing dam
	is located in the centre of the site, which is being used as a water source.
Local Geology	The natural soil in the investigation area is related to the Site geology and is classified in
and Soil	the Soil Landscapes of the Sydney 1:100 000 Sheet (Chapman and Murphy, 1989) as
	belonging to the Blacktown Soil Landscape.
	The soil type around the Site identified to be Podzolic (Australian Soil Classification,
	Interactive map, accessed on 15.01.2018). This soil types are usually formed at shallow
	to moderate depth (>100 cm). The soil variation involves hard setting mottled texture
	contrast soils, red and brown podzolic soil on crests grading to yellow podzolic soils on
	lower slopes and in drainage lines.
	The underlying geology of the area is classified as Wianamatta Group—Ashfield Shale
	consisting of laminite and dark grey siltstone, Bringelly Shale which consists of shale
	with occasional calcareous claystone, laminite and infrequent coal, and Minchinbury
	Sandstone consisting of fine to medium-grained quartz lithic sandstone.
	Characteristics of this soil include low to moderate fertility with low to moderate
	available water capacity, low CEC values, very low phosphorus and low to very low
	nitrogen levels. The topsoils are less erodible as they have high fine sand, silt content
	and organic matter content whereas the subsoils are highly erodible as they are very
	low in organic matter, highly dispersible and occasionally sodic.
	The topography in the area comprises of gently undulating rises on Wianamatta Shale
	with local relief 10–30 m and slopes generally >5% but occasionally up to 10%. Crests
	and ridges are broad (200-600 m) and rounded with convex upper slopes grading into
	concave lower slopes. Outcrops of shale do not occur naturally on the surface.
ASS Risk	ASS are the common name given to naturally occurring sediments and soils containing
	iron sulfides that, when disturbed and exposed to oxygen, generate sulfuric acid which
	could potentially mobilise toxic quantities of heavy metals into soils and groundwater
	The sulfuric acid and heavy metals are produced in forms that can be readily released
	into the environment, with potential adverse effects on the natural and built
	environment and human health. The majority of ASS are formed by natural processes
	under specific environmental conditions. This generally limits their occurrence to low
	lying sections of coastal floodplains, rivers and creeks where surface elevations are less
	than about five metres Australian Height Datum (AHD).

Table 3. Continued...

Attribute	Description
ASS Risk	The Australian Soil Resource Information System (ASRIS 2015) provides online access to the best publicly available information on soil and land resources across Australia. ASRIS provides a national map of available ASS mapping that is classified with a nationally consistent legend that includes risk assessment criteria and correlations between Australian and International Soil Classification Systems.
	A review of the ASRIS (2015) ASS map shows that the Site is classified as C $4$ – extremely low probability in regards to ASS (refer to Appendix $V$ – Supporting documents).
Soil Salinity	Soil a salinity is a complex issue relating to salt and water cycles both above and below the ground. Surface waters and groundwater can dissolve and mobilise salts and cause their accumulation in other areas. Excessive concentrations of salt in such areas can affect plant growth, soil chemistry and cause weakening and degradation of construction materials such as masonry, concrete and bitumen.
	An assessment of the salinity potential within the Site was undertaken using the map of Salinity Potential in Western Sydney (Department of Infrastructure, Planning and Natural Resources, 2002).
	The Site and surrounding areas are classified as having a high salinity potential (refer to Appendix V – Supporting documents).
Hydrogeology	A search for registered groundwater wells within a 500 m radius of the Site was undertaken by ADE via the NSW Office of Water (Allwaterdata.water.nsw.gov.au). No registered groundwater wells were identified within 500 m of the Site.
Nearest	Two (2) dams were observed within the southern section of the Site, with other small
Surface Water	dams identified in aerial images serving local properties. The underlying soil in the area
Feature	is generally observed to contain high clay content that impedes the downward
	movement of water. The local groundwater is expected to flow south east towards Second Ponds Creek (located 280 m to the south east of the Site).

# 4 SITE HISTORY

The Site history has been compiled from information gathered from various sources including Tri Search, approved information brokers with the Land and Property Information (LPI), NSW Government, Department of Finance and Blacktown City Council.

### 4.1 Historical Land and Title Search

The Site entails a section of Lot 13, 14 & 15 of DP 1168129 and Lot 10 of DP 1185116 in the Local Government Area of Blacktown City Council, Parish of Gidley, County of Cumberland.

Table 4. Summary of LTO Records for Lot 13 DP 1168129.

	·	Records for Lot 15				
Date	Transfer / Lease	From	То	Transfer No.	Certificate reference	Inferred Land Use
13.01.1818	Crown Grant	-	John Faultless			Unknown
19.12.1901	Transfer	-	Edwin Rouse (Farmer)		Vol. 1381 Fol. 133	Agricultural
22.10.1948	Transfer	Edwin Rouse	Nina Beatrice Terry (Farmer)	D906480	Vol. 138 Fol. 133	Agricultural
9.07.1952	Transfer of Part	Nina Beatrice Terry	Shire of Blacktown	F123122	Vol. 6601 Fol. 113	Unknown
19.06.1953	Transfer of Part	Nina Beatrice Terry	Richard	F8079	Vol. 6910 Fol. 109	Unknown
01.06.1956	Transfer	Richard	Roderick, Edwin and Gerald Terry (Farmers)	G494029	Vol. 7779 Fol. 154	Agricultural
03.01.1961	Transfer	Roderick, Edwin and Gerald Terry	Arthur Middleton and Mary Middleton	Н653165	Vol.8069 Fol.185	Unknown
20.12.1963	Transfer	Arthur Middleton and Mary Middleton	Harold James and Jane James	J552570	Vol.8069 Fol.185	Unknown
16.11.1972	Transfer	Harold James and Jane James	Thomas Galvin	M975488	Vol.8069 Fol.185	Unknown
14.09.1984	Transfer	Thomas Galvin	Sandra Wyn	V346712	Vol.8069 Fol.185	Unknown
11.12.1985	Transfer	Sandra Wyn	Alison Raymond	W93400	Vol.8069 Fol.185	Unknown
06.09.1991	Transfer	-	-	Z898652	Folio: 19/27220	Unknown
25.07.2013	Transfer	-	Presumed Transport for NSW	AH781421	Folio: 13/1168129	Development

**Table 5.** Summary of LTO Records for Lot 14 DP 1168129.

Date	Transfer / Lease	From	То	Transfer No.	Certificate reference	Inferred Land Use
01.04.1961	Transfer	Roderick, Edwin and Gerald Terry	Eric Smith and Patricia Smith	H714166	Vol. 8418 Fol. 82	Unknown
21.12.1961	Transfer	Eric Smith and Patricia Smith	Joseph Zammit	H938055	Vol. 8418 Fol. 82	Unknown
9.12.1975	Transfer	Joseph Zammit	Francesco Ardizzi and Antonietto Ardizza	P508227	Vol. 8418 Fol. 82	Unknown
10.10.2011	Transfer	-	-	AG545145	Folio: 14/1168129	Unknown
01.03.2012	Transfer	-	Transport for NSW	AG843887	Folio: 14/1168129	Development

<sup>•</sup> Please refer to table 4 for LTO records between 1818 and 1960 as all properties were listed within the same folio.

Table 6. Summary of LTO Records for Lot 15 DP 1168129.

Date	Transfer / Lease	From	То	Transfer No.	Certificate reference	Inferred Land Use
17.01.1962	Transfer	-	Reginald William Locke, John Fry and John Walker	H886122	Vol.8330 Fol. 41	Unknown
06.04.1964	Transfer	Reginald William Locke, John Fry and John Walker	Jack Rich and Jill Rich	J582685	Vol. 9675 Fol. 11	Unknown
01.06.1973	Transfer	Jack Rich and Jill Rich	Eric and June Gabb	N257294	Vol. 9675 Fol. 11	Unknown
01.11.1976	Transfer	Eric Gabb and June Gabb	Henry Tyrer and Cecilia Tyrer	P945830	Vol. 9675 Fol. 11	Unknown
25.01.1978	Transfer	Henry Tyrer and Cecilia Tyrer	Jennie Demspey- Smith, John Mandelberg and Susan Horlsey	Q494535	Vol. 9675 Fol. 11	Unknown
09.05.1990	Transfer	-	-	Y981136	Vol. 9675 Fol. 11	Unknown
25.07.2013	Transfer	-	Transport for NSW	AH781421	Folio: 15/1168129	Development

Please refer to table 4 for LTO records between 1818 and 1962 as all properties were listed within the same folio.

**Table 7.** Summary of LTO Records for lot 10 DP 1185116.

Date	Transfer / Lease	From	То	Transfer No.	Certificate reference	Inferred Land Use
03.06.1964	Transfer	-	Domenico Dasso and Paolo Dasso (Poultry Farmers)	H886122	Vol. 9611 Fol. 69	Poultry Farm
28.11.1967	Transfer	Presumed Domenico Dasso and Paolo Dasso	William Bonomo and Bernadine Bonomo	K892887	Vol. 9611 Fol. 69	Unknown
29.07.2013	Transfer	-	Presumed Transport for NSW	AH813356	Folio: 10/1185116	Development

<sup>•</sup> Please refer to table 4 for LTO records between 1818 and 1962 as all properties were listed within the same folio.

### 4.2 NSW Office of Environment and Heritage

A search of the NSW Office of Environment and Heritage public register of state heritage inventory items identified the following heritage items listed by local councils and shires and state government agencies.

**Table 8.** Summary of Items Listed in the Environment and Heritage Public Register Near the Site.

Item Name/SHR No	Type of Item/Group/ Category	Location	Approximate location from the Site
Rouse Hill House and Farm/ 00002	Landscape	33°40'32.9369"S 150°54'27.4622''E	1800 m north east of the Site
Rouse Hill House Estate	Built	33°40'33.73"S 150°54'29.64"E	1700 m north east of the Site

## 4.3 Aerial Photographs Review

A review of aerial photographs was conducted and is summarised in Table 9 below. Aerial photographs from 1947, 1961, 1982, 1998, 2009, 2012, 2015 and 2017 were examined (refer to Appendix I - Aerial Photographs).

**Table 9.** Summary of Aerial Photography.

Date	Туре	Subject Site Description	Adjacent Site Description	
1947	Black and White	Bushland.	Bushland to the north, east and west. Cleared agricultural land to the south.	
1961	Black and White	Partially cleared land, western section remains bushland. Small dam adjacent southern boundary of site.	Development of rural residential properties on the lands surrounding the Site. Dams created south of site.	
1982	Colour	Site predominantly cleared and developed into rural farm land with some market gardens. Four dams to the south and north east of site. Main residential structures and two	Further development of rural residential properties, agriculture and farm lands. Market gardens to the east. Small dams scattered throughout surrounding land. Roads surrounding the site sealed.	

Table 9. Continued...

Date	Туре	Subject Site Description	Adjacent Site Description
1982	Colour	(2) large chicken sheds created along southern boundary. Two (2) dams, one in the centre of the Site, and one in the north east corner of Site.	
1998	Colour	Large shed from Lot 14 has been demolished from western end of site. One dam in Lot 15 has been filled in.	Further development to the east, with a large cleared area and medium density housing.
2009	Colour	Two small dams have been filled in. Evidence of agricultural use in Lot 10 and Lot 13. Remainder of site remains consistent.	Large scale land clearing and development of medium density residential properties to the south of the Site.
2012	Colour	Southern half of Lot 14 developed into a carpark and site compound with the northern section cleared for earth works and development. Remainder of site remains consistent.	Roads to the south of the Site have been sealed. Earthworks and land clearing adjacent the northern boundary of Site.
2015	Colour	Large scale earthworks and development of the Transport for NSW Site. Excavation of a dam in the south east corner. Cudgegong road moved west of original location. Large soil stockpile situated in the south west corner of Site. Pool of water along the western boundary.	Medium density residential properties developed south of Schofields Road. Major earth works and initial development of the Sydney Metro Trains Facility to the east and north. Train line being constructed running adjacent to the northern boundary of the Site.
2017	Colour	Earth works throughout the Site ongoing. Cudgegong Road Metro station in construction. Dam along eastern boundary filled in, with a dam constructed in the south east corner. Large stockpiles of soil materials stored on site.	Continued construction of the Cudgegong Road Metro station and Sydney Trains Maintenance Facility. Further development of medium density residential properties to the south of Site.

# 4.4 Contaminated Land Register Search

A review of the NSW Office of Environment and Heritage (OEH) 'Contaminated Land – Record of Notices' listed by the NSW EPA under the *Contaminated Land Management Act 1997* does not identify notices related to the source Site (*refer to Appendix V – Supporting Documents*).

A review of the 'List of NSW Contaminated Site Notified to the EPA' does not identify the source site as being notified as a contaminated site.

# 4.5 Section 149's

The Site is currently zoned as 'B4 – Mixed Use, R3 – Medium Density Residential & SP2 – Infrastructure' under the Blacktown LEP 2015. The Planning Certificate under Section 149 of the *Environmental Planning and Assessment Act* 1979 (refer to Appendix VI – Section 149 Certificate) provides the state and local environmental planning instruments which affect the Site.

The Section 149 certificates states that the land is not affected by any of the matters contained in Clause 59(2) as amended in the *Contaminated Land Management Act* 1997 – as listed:

- a) The land is not significantly contaminated land within the meaning of the Act;
- b) The land is not subject to a management order within the meaning of the Act;
- c) The land is not subject to a voluntary management proposal within the meaning of the Act;
- d) The land is not subject to an ongoing maintenance order; and
- e) The land is not subject to a Site Audit Statement within the meaning of the Act.

#### 4.6 Dial Before You Dig

An online search for utilities located within the Site was conducted and is summarised in the following table. Asset owners were notified and provided information on their utilities (refer to Appendix IV – Dial Before You Dig).

Table 10. Summary of Utilities Located on or Adjacent to the Site.

Asset Owner	Utility Type	Utility Location		
Endeavour Energy	Electricity	Endeavour Energy records indicate underground assets are located adjacent to the southern and eastern boundaries. Proposed underground service lines are also present throughout the northern half of Site.		
Jemena	Gas	Jemena underground network mains are identified running parallel to Schofields Road through the centre of the Site		
NBNCO	Services	NBNCO identified in-service cables along the southern boundary of the Site.		
Optus	Fibre Optic Cable	Optus records indicate that there are underground Optus Fibre Optic Telecommunication assets along Cudgegong Road on the eastern boundary of the Site.		
Sydney Metro	Services	Sydney Metro identified services throughout the Site.		
Sydney Water	Water mains	Sydney Water services are identified along the southern and eastern boundaries of the Site.		

#### 4.7 SafeWork NSW

A search in the SafeWork NSW database was undertaken on the  $28^{th}$  February 2018, which has not located any records pertaining to Storage of Hazardous Chemicals on Site (refer to Appendix V - Supporting Documents).

### 4.8 Assessment of Historical Information Integrity

The Site history assessment has been obtained from a variety of resources including government records from the NSW land titles office, local council, historical archives, historical aerial photographs and EPA. The veracity of the information from these sources is considered to be moderate to high. The Site history assessment is generally considered to be of high integrity.

#### 5 PROVISIONAL CONCEPTUAL SITE MODEL

### **5.1** Potential Contamination Types

**Table 11** on the following page provides details of potential contamination sources that were identified during the investigation. These Contaminants of Potential Concern (COPC) were noted for each have the potential to have migrated to or be found on the Site, based on the Site's history.

For the purposes of this PSI, the following qualitative risk assessment has been applied:

- Low Risk the activities and related COPC are likely to pose no or a low potential human health/environmental impact. Any impact is likely localised to a specific area of the Site;
- Moderate Risk the activities and related COPC are likely to pose potential for moderate human health/environmental impact. Any impact is likely localised to a specific area of the Site; and
- High Risk –the activities and related COPC could pose a significant environmental impact. There is potential for impacts of the immediate local area of the Site or off-Site migration impacting surrounding human and/or environmental receptors.

**Table 11.** Potential Sources, Locations and Types of Contaminants.

Potential Source of Contamination / Location	COPCs	Migration Pathway / Exposure Routes	Potential Risk	Receptors
Use of imported fill material – across the Site and previous agricultural use	<ul> <li>Asbestos;</li> <li>Heavy Metals;</li> <li>Polychlorinated Biphenyl (PCBs);</li> <li>Polycyclic Aromatic Hydrocarbons (PAHs);</li> <li>Total Recoverable Hydrocarbons (TRH);</li> <li>Benzene, Toluene, Ethylbenzene, Xylene (BTEX); and</li> <li>Organochlorine and Organophosphorus Pesticides (OCPs &amp; OPPs).</li> </ul>	<ul> <li>Downward migration and leaching of contaminants through soil;</li> <li>Lateral migration via groundwater / surface water runoff towards Second Ponds Creek; and</li> <li>Dispersion airborne particulates due to wind.</li> </ul>	Low - Moderate	<ul> <li>Future construction / utility workers involved in the excavation and construction of the development at the Site;</li> <li>Present and future users of the Site;</li> <li>Neighbouring residents during excavation and construction of the future development at the Site; and</li> <li>Ecological receptors within Second Ponds Creek.</li> </ul>
Uncontrolled demolition of buildings	<ul><li>Asbestos; and</li><li>Heavy Metals.</li></ul>	<ul> <li>Downward migration and leaching of contaminants through soil; and</li> <li>Lateral migration via groundwater towards Second Ponds Creek.</li> </ul>	Low to Moderate	
Surface run-off across the Site	<ul><li>Heavy Metals;</li><li>TRH;</li><li>BTEX; and</li><li>OCPs &amp; OPPs</li></ul>	<ul> <li>Downward migration and leaching of contaminants via infiltration of rain water through soil; and</li> <li>Lateral migration via groundwater to surface waters and off-Site groundwater.</li> </ul>	Low	

#### 6 DISCUSSION

ADE has undertaken a Phase I PSI for the Cudgegong Road Station Precinct South in general accordance with the *Guidelines for Consultants Reporting on Contaminated Sites 2011 OEH*. The following information and observations were obtained during the course of the desktop assessment and field observations:

- The Site comprises a total approximate area of approximately 7.8ha. The Site includes various different settings such as hard standing areas, service roads, stockpiles, Site offices, grassed/vegetation areas and one (1) water dam;
- The Site is situated at elevations between 50 m and 58 m AHD, with the landform sloping generally towards the east. The local groundwater is expected to flow south east towards Second Ponds Creek (located 280 m to the south east of the Site). One (1) sediment basin / dam is located in the south-east section of the Site, and under current conditions is likely to entrap surface water flowing across the site. One (1) existing dam is located in the centre of the Site, which is being used as a water source;
- Historical searches indicate the Site was privately owned until 2012-2013, when Transport for NSW purchased the property to construct Cudgegong Road Metro Station and Cudgegong Road Station Precinct South;
- According to the historical aerial photographs, the Site was predominantly used as four (4) rural
  residential properties, with an indication of agricultural and livestock use throughout prior to
  acquisition. During the construction phase of the North West Rapid Transit project, much of the
  topsoil appears to have been scraped back and potentially stockpiled within the south west corner
  of Site, with fill material imported. The surrounding area was predominantly rural residential
  properties until development, with large scale construction works now surrounding the Site;
- As per the *Soil Landscapes of the Sydney the Sydney 1:100 000 Sheet* (Chapman and Murphy, 1989), the local geology of the Site is classified as belonging to the Blacktown Soil Landscape;
- The Acid Sulfate Soil Probability within the Site was classified as C4 extremely low probability of
  occurrence as per the ASRIS (2015) ASS maps. ASS is therefore not considered to be a risk to the
  project;
- An assessment of the salinity potential within the Site was undertaken using the map of Salinity Potential in Western Sydney (Department of Infrastructure, Planning and Natural Resources, 2002). The Site and surrounding areas are classified as having a high salinity potential. A salinity assessment was previously undertaken (EES 2014). The report concluded there was a negligible potential salinity rating, and aggressivity results had a "non-aggressive' rating. However, due to the lack of information for soils deeper in the profile, it is recommended additional investigation into these soils is undertaken. The EES (2014) investigation targeted shallow soils only (approximately 0.15 m BGL), natural materials unlikely sampled/analysed;
- It should be noted that during the walkover it was noted that the Site has undergone extensive
  importation of fill materials (from across the project area) since the conception of the construction
  phase of the Sydney Metro Northwest Project. As per NRT 2015, excavated materials suitable for
  re-use can be transported from one part of the project to another in accordance with the projects
  environment protection license. Materials would be reused on Site in accordance with the NEPM

(2013). At the time of preparing this report, no records were available as to the location or characterisation (i.e. chemical, ASS, salinity etc.) of imported materials;

- The potential for contamination as a part of chemical vegetation control has been considered low based on the healthy condition of vegetation observed within drainage channels during the walkover.
- Sydney Metro underground services were also found following the DBYD online search;
- A search of the SafeWork Storage of Hazardous Chemicals did not reveal any records pertaining to the Site;
- The Site is not the subject of a Notice issued under the Contaminated Land Management Act 1997, nor are there any sites notified to the EPA as contaminated Sites within a 500 m radius of the Site;
- Following the Site walkover, several potential contamination issues were identified which include the following:
  - o Fill material associated with historical filling and levelling activities and particularly extensive filling toward Cudgegong Road Metro Station;
  - Accumulation of contaminants from the Site both from historical sources and construction activities being deposited within the two dams via surface run-off and through the drainage channels created to channel water flow;
  - o A large stockpile of soil stored in the south west corner of the Site was observed to be containing potential asbestos fibre cement fragments and requires assessment;
  - The potential for contamination as a part of chemical vegetation control has been considered low based on the healthy condition of vegetation observed within drainage channels during the walkover; and
  - o Previous reports conducted by EES (2014) and ADE (2015b) indicate asbestos contamination may be present within the fill material located around the central dam, as well as in any topsoil remaining on Site.
- There is **low** potential for contamination impacts to soil and groundwater as a result of past and present land use, as well as surrounding land use.

#### 7 CONCLUSION AND RECOMMENDATIONS

Areas that may be impacted by potential contamination were identified on the basis of the available Site information and during the Site inspection undertaken on the 16<sup>th</sup> January 2018. The qualitative assessment of the Site undertaken during this investigation has indicated the potential for contamination to be low with regards to the development and use of land as a town centre. Based on the information available it is likely that the Site can be made suitable.

A previous report conducted by Environmental Earth Sciences (2014), found the potential for contamination within the Site to be low, however did note that some ACM material was identified on the surface of the Site. A previous report conducted by ADE (2017) concluded that the soil within the dam in the center of the Site was found to contain asbestos.

In 2012 Transport for NSW purchased the Site as part of the North West Rail Link project. The Site has been predominantly cleared, with extensive cut and fill activities raising the site by up to 8 m. Two (2) dams are located within the Site, where surface water runoff is expected to flow. A large stockpile of topsoil material was observed in the south west corner of site, with presumed ACM fragments observed on the surface.

Given the current earthworks and the construction of Cudgegong Road Metro Station, constant alterations to the Site condition make it problematic to fully assess the Sites' suitability for future plans of development of Cudgegong Road Station Precinct South. On Completion of current development works, a Detailed Site Investigation (DSI) targeting imported fill material onto site, stockpiled material within the south west of the Site, and two dam footprints should be conducted to confirm the suitability of the Site for the proposed development.

Based on the information available it is likely that the Site can be made suitable for the proposed development. Measures to ensure the Site is suitable for the intended land use are available, in accordance with the State Environmental Planning Policy No.55 - Remediation of Land.

Following completion of works on Site associated with the Sydney Metro North West proposal, and prior to further development applications associated with the proposal, a Phase II Detailed Site Investigation of soil and groundwater in accordance with National Environmental Protection Measure (NEPM 2013), Acid Sulfate Soils Assessment Guidelines (Acid Sulfate Soil Management Advisory Committee ((ASSMAC 1998) and ESS (2014) recommendations is required.

The DSI should include, but is not limited to, an intrusive subsurface investigation of the following;

- The fill materials both historically placed and as part of the current development of the Site in order to determine the vertical and lateral extent (if any) of potential contaminants of concern (i.e. Asbestos, Heavy Metals, PAHs, TRH, OCPs, OPPs, PCBs);
- ASS assessment to a maximum of one (1) metre beyond the proposed design depth as per the ASSMAC (1998);
- Salinity assessment (both soil and groundwater) of soil material to be collected and analysed prior
  to the construction phase. This will determine potential impacts of soil salinity on structures i.e.
  foundations and basements;
- The two (2) dam footprints including fill material for dam wall construction and sediments within;
   and
- The large soil stockpile within the south-western sector of the site.

Due to the Site's constant evolution as part of the Sydney Metro Northwest Project, the full extent of contamination is unable to be determined. A revision of the information within this report, and intrusive works for the Phase II DSI should be undertaken following completion of earthworks within the Site. New South Wales Office: Victoria Office: Telephone: Internet: ABN:

#### **8 LIMITATIONS**

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only and has been based on information provided by the client. The advice herein relates only to this project and all results, conclusions and recommendations made should be reviewed by a competent and experienced person with experience in environmental investigations, before being used for any other purpose. These reports that are commissioned for the purposes of divestment need to be relied on by 3rd party (the first point of sale between Transport for NSW and purchaser).

Furthermore, soils, rock and aquifer conditions are often variable, resulting in non-homogenous contaminant distributions across a Site. Boundaries between zones of variable contamination are often indistinct and have been interpreted based on available information and the application of professional judgement. The accuracy with which the subsurface conditions have been characterised depends on the frequency and methods of sampling and the uniformity of subsurface conditions and is therefore limited by the scope of works undertaken.

This report does not provide a complete assessment of the environmental status of the Site and it is limited to the scope defined herein. Should information become available regarding conditions at the Site including previously unknown sources of contamination, ADE reserves the right to review the report in the context of the additional information.

ADE's professional opinions are based upon its professional judgement, experience, training and results from analytical data. In some cases further testing and analysis may be required, thus producing different results and/or opinions. ADE has limited investigation to the scope agreed upon with its client.

ADE has used a degree of care and skill ordinarily exercised in similar investigations by reputable member of the Environmental Industry within Australia. No other warranty, expressed or implied, is made or intended.

#### 9 REFERENCES

- Australian Standard AS 4482.1 Guide to the sampling and investigation of potentially contaminated soil. Part 1: Non-volatile and semi-volatile compounds.
- Australian Standard AS 4482.2 Guide to the sampling and investigation of potentially contaminated soil. Part 2: Volatile substances.
- Acid Sulfate Soils Assessment Guidelines (Acid Sulfate Soil Management Advisory Committee ((ASSMAC 1998)
- Blacktown Growth Centre Precincts Development Control Plan (DCP) 2010.
- Blacktown Local Environmental Plan (LEP) 2015.
- Chapman, G.A. and Murphy, C.L. (1989), Soil Landscapes of the Sydney 1:100000 sheet. Soil Conservation Services of NSW, Sydney.
- Contaminated Land Management Act 1998.
- Cummins Distribution, Distribution Business Unit Environmental Due Diligence and Pollution Prevention Process (*Power Point Presentation*) Individual Sites, July 2013.
- DLWC 1995a, Guidelines for the Use of Acid Sulfate Soils Risk Maps, by S.D. Naylor, G.A. Chapman, G. Atkinson, C.L. Murphy, M.J. Tulau, T.C. Flewin, H.B. Milford, & D.T. Morand, Soil Conservation Service of NSW, Department of Land and Water Conservation, Sydney.
- EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5).
- Guidelines for Assessing Service Station Sites, NSW EPA 1994.
- Guidelines for the Assessment and Management of Groundwater Contamination, NSW DEC, 2007.
- Guidelines for Consultants Reporting on Contaminated Sites, NSW EPA, 2000.
- Guidelines for the NSW Site Auditor Scheme, NSW 2017.
- Guidance for the Preparation of Standard Operating Procedures for Quality-Related Documents (EPA QA/G-6).
- Herbert, C. (ed) (1983), Geology of the Sydney 1:100000 Sheet 9130, New South Wales Department of Mineral Resources, Sydney Stone, Y, Ahern CR, and Blunden B (1998).
- National Environmental Protection Measure (Assessment of Site Contamination), 1999, asamended2013.
- NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2011).
- NSW Code of Practice: How to Safely Remove Asbestos (2011).
- Parsons Brinckerhoff, Hazardous Building Materials Register and Asbestos Management Plan, 2014.
- Protection of the Environment Operations Act 1997.
- Sampling Design Guidelines NSW EPA, 1995.
- Soils Manual 1998. Acid Sulfate Soil Management Advisory Committee, Wollongbar, NSW, Australia.
- Waste Classification Guidelines Part 1: Classifying Waste, EPA, 2014.
- WHS Regulation 2011.
- WHS Act 2017.
- State Environmental Planning Policy No. 55 Remediation of Land (SEPP No. 55).
- Site Investigations for Urban Salinity, Department of Land & Water Conservation, 2002.

Appendix I – Aerial Photographs ABN: New South Wales Office: Victoria Office: Telephone: Internet: NSW: (02) 8541 7214 14 617 358 808 ADE Consulting Group Pty Ltd ADE Consulting Group Pty Ltd site: www.adenvirotech.com.au 6 / 7 Millennium Court Unit 4 / 95 Salmon Street VIC: 1300 796 922 e-mail: <a href="mailto:info@adenvirotech.com.au">info@adenvirotech.com.au</a>



Aerial Photograph 1. Aerial photograph of the Site dated 1947 with approximate Site boundary.



Aerial Photograph 2. Aerial photograph of the Site dated 1961 with approximate Site boundary.



Aerial Photograph 3. Aerial photograph of the Site dated 1982 with approximate Site boundary.



Aerial Photograph 4. Aerial photograph of the Site dated 1998 with approximate Site boundary.



**Aerial Photograph 5.** Aerial photograph of the Site dated 20<sup>th</sup> October 2009 with approximate Site boundary.



**Aerial Photograph 6.** Aerial photograph of the Site dated 21<sup>st</sup> November 2012 with approximate Site boundary.



**Aerial Photograph 7.** Aerial photograph of the Site dated 5<sup>th</sup> July 2015 with approximate Site boundary.



**Aerial Photograph 8.** Aerial photograph of the Site dated 12<sup>th</sup> March 2017 with approximate Site boundary.



**Aerial Photograph 9.** Aerial photograph of the Site and surrounding area dated 7<sup>th</sup> September 2017 with approximate Site boundary.

Appendix II – Photographs Victoria Office: ADE Consulting Group Pty Ltd **Telephone:** NSW: (02) 8541 7214 ABN: New South Wales Office: Internet: 14 617 358 808 ADE Consulting Group Pty Ltd site: www.adenvirotech.com.au e-mail: info@adenvirotech.com.au VIC: 1300 796 922



Photograph 1. Southern Boundary of Site, Adjacent to Schofields Road, as observed on 16.01.2018.



**Photograph 2.** Large excavated dam in the south eastern corner of Site, as observed on 16.01.2018.



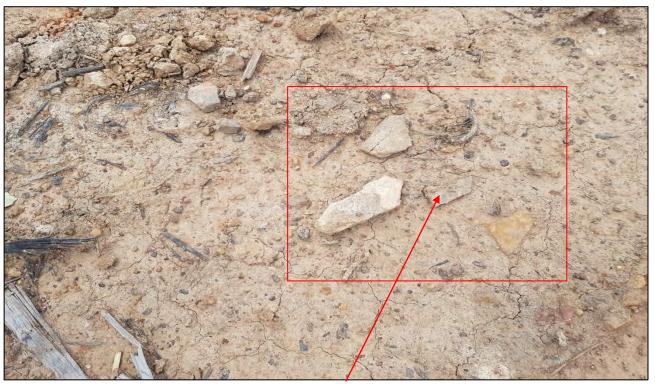
**Photograph 3.** Un-lined concrete washout bay, as observed on 16.01.2018.



**Photograph 4.** Compacted roads and carparks along the western boundary of Site, as observed on 16.01.2018.



**Photograph 5.** Large stockpile of soil materials observed in the south western corner of the site, as observed on 16.01.2017.



**Photograph 6.** Potential ACM fragment observed on the soil surface of the stockpile, as observed on 16.01.2017.



**Photograph 7.** Drainage channel with healthy vegetation, no odour or sheen, leading to the main dam, as observed on 16.01.2017.



**Photograph 8.** Centre dam located adjacent to the Site office, with riparian vegetation surrounding, as observed on 16.01.2017.

Appendix III – LTO Records Victoria Office: ADE Consulting Group Pty Ltd **Telephone:** NSW: (02) 8541 7214 ABN: New South Wales Office: Internet: 14 617 358 808 ADE Consulting Group Pty Ltd site: www.adenvirotech.com.au e-mail: info@adenvirotech.com.au VIC: 1300 796 922





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

\_\_\_\_\_\_

SEARCH DATE

5/1/2018 8:00AM

FOLIO: 10/1185116

\_ \_ \_ \_ \_

First Title(s): OLD SYSTEM
Prior Title(s): 16/27220

Recorded	Number	Type of Instrument	C.T. Issue
6/5/2013	DP1185116	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
29/7/2013	AH813356	TRANSFER	FOLIO CREATED EDITION 1
11/2/2015	AJ187753	REQUEST	EDITION 2





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

------

SEARCH DATE
----5/1/2018 8:18AM

FOLIO: 16/27220

\_ \_ \_ \_ \_

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 9611 FOL 69

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
11/10/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
1/9/2011	DP1168129	DEPOSITED PLAN	
30/8/2012	AH105414	REQUEST	
31/10/2012	AH333049	DEPARTMENTAL DEALING	
17/12/2012 17/12/2012	AH258218 AH441321	REQUEST DEPARTMENTAL DEALING	EDITION 1
6/5/2013	DP1185116	DEPOSITED PLAN	
29/7/2013	AH813356	TRANSFER	FOLIO CANCELLED

Bt 1906	1		· ALL	GISTRATION MEMORIALS OF	TO A TO A STATE OF	,,	III COIII	cetton with the A	Linear V	within described.
Number of Instrument.	Name of Instrument.	Date of Instrument.	R.B.R. Derry & athres to	Particulars of Property.		Date	and Time o	f Registration.		Momo. of Cancellation and Reference to fresh Certificate.  Vol. Folio.  Signature of Registrar General or Deputy Registrar General.
		22. august	Aginal William Locke John Richard D	bulged to bovenant.	Entered	1/5th	Jan	nary 1962		551879 lot 4 1.
1886/22	Transfer	1967	and John Paymond Walker as joint tono	to of Sets 160-17 in D.P. 21220		19 at	J mts.	o'clk. in the	noon	Cancelled as regards this Transfer 1330 4/
	Transfer		NO. H799058 NO	TICE OF BESUMPTION		19 at	mte.	o'ck. in the	noon	J103639 M Rot 6 D/0 27220 MC  Cancelled as regards this Transfer
	Transfer		is the proprietor of AR	There of Black town of the Land within		19 at	mts.	o'clk. in the	noon	Cancenda as regards this Transies
	Transfer		hoorded by Letter	mes and dehnibas		19 at	mts-	o'clk. in the	noon	J772296. Lot 11 ) 727220. R  Cancelled as regards this Transfer
	Transfer		act 19 19 freed from	allother interests				,		
	Transfer		harilato	en Gara		19 at		o'clk. in the		Cancelled as regards this Transfer
						19 at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer
	Transfer		Regist	rar General.		19 at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer
J249870	Transfer	barea	thoy 628094 has been w	the drawn Entered	7- Lebruan	1963et	mts.	o'elk-in-the	noon.	Cancelled as regards this Transfer
J91781	Transfer	1962	Thomas George Walker and Eilen Walker as Join Lenant	Sulyich to bounant)	Euteree 7- February	1963 at	mts.	o'elk in the	200D	Cancelled as regards this Transfer 76/7 88
J51879	Transfer	20th December	Rouse Hell Estate Hty. Limited of Canterna, authorise Capital Territory	Let-4, D. P27220		19 at	Jela mts.	wary o'clk. in the	noon	Cancelled as regards this Transfer 745 107
5772296	Transfer	5th deptember	Yosef Kovaic	Lot 11 in D.P 27220. (Subject)	ENTERED ISTORION	196 4at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer 9876 170.
T927039				Lot 23 in DP. No. 27220	Entered	1965at	mts.	o'clk. in the		Cancelled as regards this Transfer 0021 208.
1	Transfer	22 nd September	Alberd Edward Gallakar and Sydney			25 l	Februar			K173090 lot 1 DP 27220 H
K485324	Transfer	14 11 to loc		20 th 729 058 (subject to loverant)	Entered		·			Cancelled as regards this Transfer 10252 24  K 485344 6525 86 3222  Caucelled as regards this Transfer 104711 19
18 4853-24	1.14		Ivan Jole.	(Subject to Covenant)				o'clk. in the	noon	Cancelled as regards this Transfer 0474 12
M999063	-immerez,	Caveat 1	to H700409 has been without		eary 1973	19 st	mte.	e'olk in the	noon	Washington and Total States of The Total State
Na 38379	Transfer	£ 1973.	alister memillan of Schotields. Transport priver	Being Lot 10 in D.P. 27220. Subject to Covenant)	Registered	19 at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer 2/72 178
( ( ) 34	Transfer					19 at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer
	Transfer					19 at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer
	Transfer			*		19 at.	mts.	o'clk. in tho	noon	Cancelled as regards this Transfer
	Transfer					19 at	mts.	o'clk. in the		Cancelled as regards this Transfer
	Transfer					19 at		o'clk. in the		
	Transfer				<u>.</u>					Cancelled as regards this Transfer
	Transfer				1 /	19 at		o'clk. in the		Cancelled as regards this Transfer  Cancelled as regards this Transfer
	Transfer				: :	19 at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer
						19 at	mts-	o'clk. in the	noon	Cancelled as regards this Transfer
~4	Transfer					19 at.	m ta.	o'clk. in the	noon	Cancelled as regards this Transfer
	Transfer					19 at	mts.	o'clk. in the	noon	Cancelled as regards this Transfer
						1	i man i M	" A CONTRACTOR OF THE SAME OF		

o£ /Seq:4 /Prt:04-Jan-2018 14:42 /Sts:OK.OK /Rev:11-Aug-2012 CIReq:R912883 /Doc:CT 07779-154 Ref:STC-1023-13390 /Src:T Req:R913402 /Doc:CT 08330-041 CT /Rev:11-Aug-2012 /Sts:OK.OK /Prt:04-Jan-2018 16:28 /Seq:1 of 2 Ref:STC-1023-13390 /Src:T 202 New South Wales [CERTIFICATE OF TITLE] Primary Appn No. 11541 JOINT TENANCY Reference to Last Title REGISTER BOOK Vol. 7779 Fol. 154 8330 Fol. 41 ID Issued on Transfer No. H886122 REGINALD WILLIAM LOCKE, Plant Operator, JOHN RICHARD FRY, Plant Operator, and JOHN RAYMOND WALKER, Labourer, all of Regents Park, are now the proprietors of anEstate in Fee Simple as JointTenants, subject nevertheless to the reservations and conditions, if any, contained in the Grant hereinafter referred to, and also subject to such encumbrances liens, and interests as are notified hereon, in That piece of land in the Municipality of Blacktown Parish and County of Cumberland Gidley shown in the plan hereon being Lots 16 and 17 in Deposited Plan 27220 and being part of Portion 9 granted to John Faultless on 13th January 1818. In witness whereof I bave hereunto signed my name and affixed my Seal, this Seventeenth January , 1962. Signed in the presence of Registrar-General. No J 582685 TRA ST RES 18 February 1964 to Juck Rich and Jell Elizabeth Rich ass of the land within described. REGISTRAR GENERAL to Domenico Braco and lack Busse 16 as joint tenants of the reaidas 17 18 Schofields and new Cortificate in a Vol 96 11 Fol 69 REGISTRAR GENERAL NOTIFICATION REFERRED TO Covenant created by Transfer No. H886122. Registrar General

Req:R913402 /Doc:CT 08330-041 CT /Rev:11-Aug-2012 /Sts:OK.OK /Prt:04-Jan-2018 16:28 /Seq:2 of 2 Ref:STC-1023-13390 /Src:T



9

CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

G. NEW SOUTH WALES

Application No. 11541. Prior Title Vol.8330 Fol.41



<u>lat</u> Edition issued...

J656886

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.

Witness \*

Registrar-General.



#### PLAN SHOWING LOCATION OF LAND

CANCELLED 253 £144 in SEE AUTO FOLIO 5 ac.

Scale: 200 feet to one inch.

Rd.

ESTATE AND LAND REFERRED TO

Schofields

Estate in Fee Simple in lot 16 in Deposited Plan No. 27220 in the Municipality of Blacktown, Parish of Gidley and County of Cumberland being part of Portion 9 granted to John Faultless on 13-1-1818.

Registrar General.

FIRST SCHEDULE (Continued overleaf)

Farmer and PAOLO BASSO his wife as Joint Tenants

Registrar General.

GRY

PERSONS ARE

SECOND SCHEDULE (Continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant(s) above referred to.

CV2. Covenant created by Transfer No. H886122.  $\Gamma$ 

FIRST SCHEDULE (continued)		<del></del>	<del></del>		HT. GOVERNMENT PRINTER
REGISTERED PROPRIETOR	NATURE	INSTRUMENT NUMBER	I DATE	ENTERED	Signature of
William Egidio Bonono of Kellynelle, Mechanic and Beneline Danin Bonomo his nufe as joint tenanto	Lamefen			28 11-1967	Registrar-General
CANCELLED					
SEE AUTO FOLIO					

			SECOND SCHEDULE (continued)					
NATURE	INSTRUMENT I NUMBER	E DATE	PARTICULARS	ENTERED	Signature of Registrar-General		CANCELLATION	
Variation	K845894	19.10-1967	By deed dated of October 1967 the operation of the formant					
			contained in Franche No. 4886 122 was modified for more fully		.,			
1	V 2000		set out in the said Instrument.)	3-11-1967	Samutan			
	<del>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </del>	1 957	to Alleno Me on of Lastle Hell, Mettand					
			his mile		and the second	Disal and	-410306	he
Marshan	here hee		1	28 11-1967		Discharged	17340	There should be seen in . In
1-196/200K	187288		Orcharded See Notice of David Office	5-12-19	••	concelled	8479390 5-12-1933	Barrens
							,	
					<del>.</del> .			
		ľ						
e e e e e e e e e e e e e e e e e e e		•	en de la companya de					
#*	•	·	the state of the s	Arrivation of	···• · · · · · · · · · · · · · · · · ·			
***					•			
	e de la companya de l		and the second of the second o			er er er er		
		}	en de la companya de					
	. [							
The second secon			and the contraction of the contr					et trager o grannaner
<u> </u>		_f:				1	1	





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

\_\_\_\_\_\_\_

FOLIO: 13/1168129

\_\_\_\_\_

SEARCH DATE	TIME	EDITION NO	DATE
4/1/2018	11:35 AM	2	11/2/2015

LAND

\_\_\_\_

LOT 13 IN DEPOSITED PLAN 1168129

AT ROUSE HILL

LOCAL GOVERNMENT AREA BLACKTOWN

PARISH OF GIDLEY COUNTY OF CUMBERLAND

TITLE DIAGRAM DP1168129

FIRST SCHEDULE

TRANSPORT FOR NSW

(R AJ187753)

SECOND SCHEDULE (0 NOTIFICATIONS)

\_\_\_\_\_\_

NIL

NOTATIONS

\_\_\_\_\_

UNREGISTERED DEALINGS: NIL





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

4/1/2018 2:11PM

FOLIO: 19/27220

\_ \_ \_ \_ \_

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 8069 FOL 185

Recorded	Number	Type of Instrument	C.T. Issue
29/11/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
17/5/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
6/9/1991	Z898651	DISCHARGE OF MORTGAGE	
6/9/1991	Z898652	TRANSFER	EDITION 1
1/9/2011	DP1168129	DEPOSITED PLAN	
30/8/2012	AH105414	REQUEST	
31/10/2012	AH333049	DEPARTMENTAL DEALING	
17/12/2012	AH258218	REQUEST	
17/12/2012	AH441321	DEPARTMENTAL DEALING	EDITION 2
25/7/2013	AH781421	TRANSFER	FOLIO CANCELLED





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

\_\_\_\_\_\_\_

SEARCH DATE
----4/1/2018 1:42PM

FOLIO: 13/1168129

\_ \_ \_ \_ \_

First Title(s): OLD SYSTEM
Prior Title(s): 19/27220

Recorded	Number	Type of Instrument	C.T. Issue
1 /0 /2011	 DD1160100		
1/9/2011	DP1168129	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
25/7/2013	AH781421	TRANSFER	FOLIO CREATED EDITION 1
11/2/2015	AJ187753	REQUEST	EDITION 2

Req:R912998 /Doc:CT 01381-133 CT /Rev:01-Aug-2012 /Sts:OK.OK /Prt:04-Jan-2018 14:58 /Seq:4 of 4 Ref:STC-1023-13390 /Src:T 9 68 66 44 has been withdrawn Entered a st January See 6872287 35-164 Carear Gradused REGISTRAR GENERAL. No. G872288 TRANSFER dated 6th January 19 58. to Redwers John Launders of Lotg 10. P. 27220 201 to be rate James ballin and as Joint benants of lot 3 Df2 Lof the land within described Entered 2121 January 19 58.
The to had in this transfer than deed in comment of the comment of t of the land within described. Vol. 14.32 Fel 5 9 Entered 20 March REGISTRAR GENERAL 1 No G 898086 Bareat Produced 19th February 1958 REGISTRAR GENERAL and sentened 27d February 1958
(18th regards Lot 40 on plan lodged under Dealing No. 6892119 No. G. 634115 TRANSFER dated 23rd Agreembers 5 to Patrick Bohan and Phillip Duke as joint tenants of Lot 15 J. Hells Subject to Coverant Registrar General Noc-9030 38 - Careat Produced to the Contered yth March 1958
Aoregardo Lot 66 in D. P. G-892 119 No 6 686644 Careat produced 29th March 1959 Extered 18 d april 1957 No/1282023 TRANSFER dated 13th May 1959. to Sunder Fieling and Hannelore Vieling of hat 14 as regards lot 9 D. P. 27220 0 CAXCAT No G 633464 has been Withdrawn Subject to Covenant G 837897 Entered 28th November Entered 10 th September 1959 As to land in this transfer this deed is cancelled and new certificate issued aulateon RECETEAR GENERAL REGISTRAR GENERAL No. 6720843 TRANSFER dated 12th april Fol. 154 for the untransfer 10 Redvers John launders and alice sander as joint tenants of hots of the land within described. H 313868 CREGISTPA subject to Covenant The interest of the Council of the SHIRE in the New Yorks of BLACK FO. WALL 28th Movembet 1957 thatesedue





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

4/1/2018 3:29PM

FOLIO: 18/27220

\_ \_ \_ \_ \_

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 8148 FOL 82

Recorded	Number	Type of Instrument	C.T. Issue
 29/11/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
31/5/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
1/9/2011	DP1168129	DEPOSITED PLAN	
10/10/2011	AG545145	TRANSFER	FOLIO CANCELLED





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

4/1/2018 11:56AM

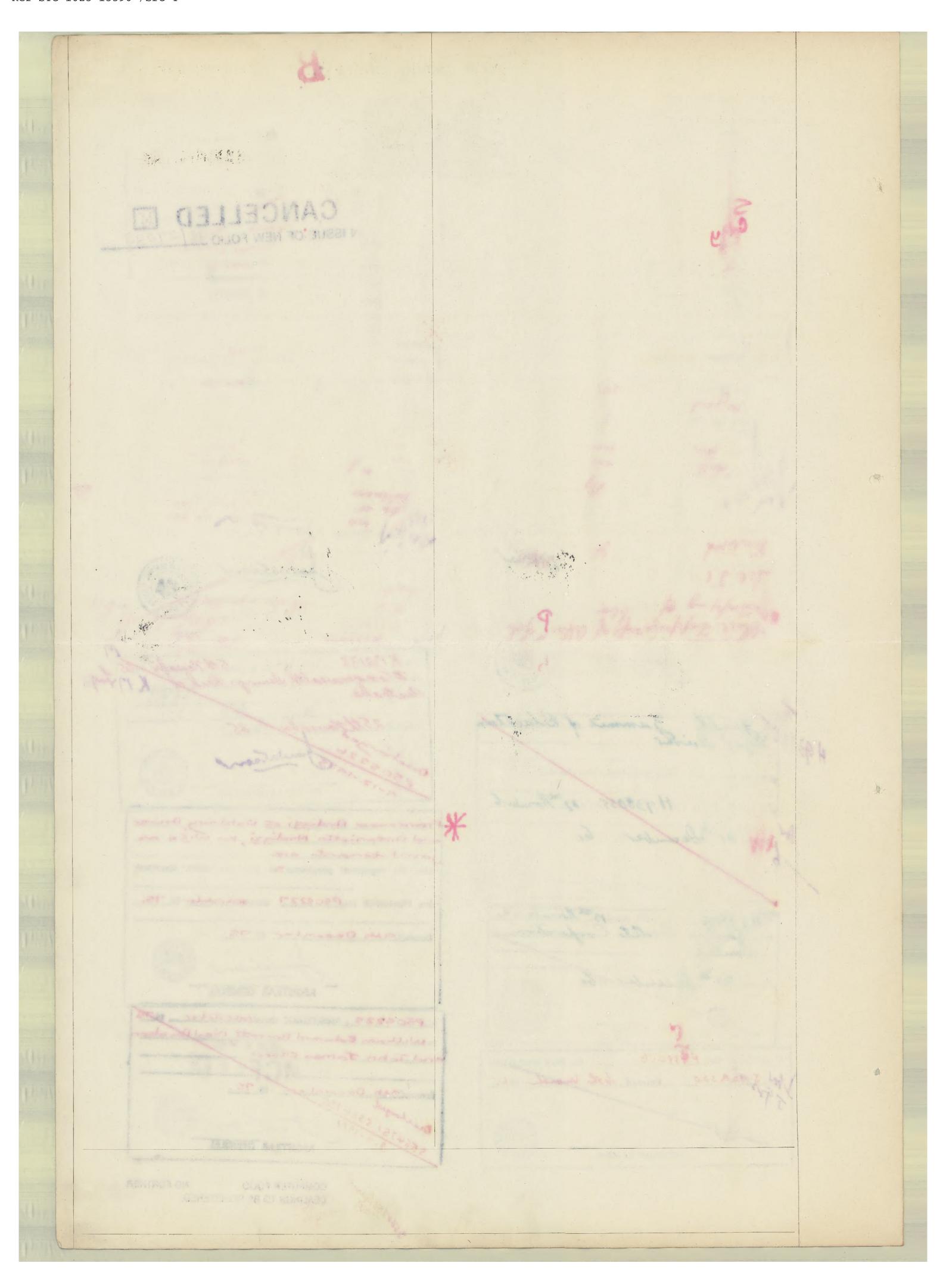
FOLIO: 14/1168129

First Title(s): OLD SYSTEM Prior Title(s): 18/27220

Recorded	Number	Type of Instrument	C.T. Issue
1/9/2011	DP1168129	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
10/10/2011	AG545145	TRANSFER	FOLIO CREATED EDITION 1
1/3/2012	AG843887	TRANSFER	EDITION 2

END OF SEARCH

New South Males 202 08148086 Primary Appn No. 11541 Reference to Last Title REGISTER BOOK Fol. 154 Vol. 7779 8148 FOL. 82 Issued on Transfer No. H714166 ON ISSUE OF NEW FOLIO 18 27220 ERIC SMITH, of Punchbowl, Mechanical Engineer and PATRICIA SMITH, his wife, are now the proprietors of an Estate in Fee Simple as Joint Tenants, subject nevertheless to the reservations and conditions, if any, contained in the Grant hereinafter referred to, and also subject to such encumbrances piece of land liens, and interests as are notified hereon, in That Parish in the Shire of Blacktown of Gidley and County of Cumberland being Lot 18 in Deposited Plan No. 27220 and being part of Portion 9 granted to John Faultless on 13th January 1818. , 19 61. In witness whereof I have hereunto signed my name and affixed my Seal, this April Seventeenth Signed in the presence of Registrar-General. VOTETICATION REFERRED TO are cautioned against altering or the meistered proprietor of the land within described. REGISTRAR GENERAL 300 TRANSFER NoH 938055 dated 27 Ments 96 anceses Ardizzi of Ashbury Oriver 18 now the registered proprietor of the land within described. REGISTRAR GENERAL See TRANSFER No. 7508227 dated to the 19 75. Not 9 3805 GMORTGAGE dated 15 The 18 50 Custom Credity Confirm Encoral ash December 19 75. France 21 & December 1960 REGISTRAR GENERAL NoPSO8228 MORTGAGE deced 20th October REGISTRAR GENERAL MORTGAGE No. 4 938056 has been discharged. Entered 16th mod REGISTRAR GENERAL REGISTRAR GENERAL NO FURTHER COMPUTER FOLIO DEALINGS TO BE REGISTERED.



202

Primary Appn No. 11541 Reference to Last Title

Vol. 7779

Fol. 154









REGISTER BOOK 8148 Fol. 82

Issued on Transfer No. H714166

CANCELLED W

ERIC SMITH, of Punchbowl, Mechanical Engineer and PATRICIA SMITH, his wife, are now the proprietors of an Estate in Fee Simple as Joint Tenants,

subject nevertheless to the reservations and conditions, if any, contained in the Grant hereinafter referred to, and also subject to such encumbrances

liens, and interests as are notified hereon, in That

picce of land

in the Shire of Blacktown

Parish

Gidley

and County of Cumberland

being Lot 18 in Deposited Plan No. 27220 and being part of Portion 9 granted to John Faultless on 13th January 1818.

In witness whereof I have hereunto signed my name and affixed my Seal, this

Signed in the presence of

NOTIFICATION REFERRED TO

Covenant contained in Transfer No. H714156.

in magister d populator of the land within described.

No 1938056NORTCAGE dans 15 March 10. Custom Credite Conferme

DECLYTRAR GENERAL

MORTGAGE No. # 938056. REGISTRAR GENERAL

CUTTAR GENERAL

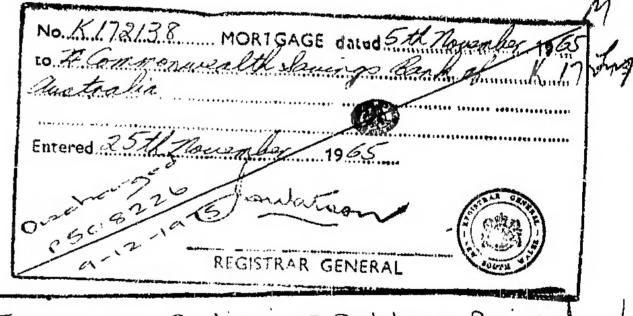
Beventeenth day of

April

, 19 61.

Registrar-General.





now the registered proprietor of the last within described.

See TRANSFER No P 50 8227 derede to the 19 75.

Energiash December 19 75.

REGISTRAR GENERAL

NOPEOSZZZ MORTGIAGE docadzott Ciata REGISTRAL GENERAL

**COMPUTER FOLIO** NO FURTHER **DEALINGS TO BE REGISTERED.** 





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

\_\_\_\_\_\_\_

SEARCH DATE
----4/1/2018 4:12PM

FOLIO: 17/27220

\_\_\_\_\_

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 9675 FOL 11

Recorded	Number	Type of Instrument	C.T. Issue
21/8/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
11/10/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
9/5/1990	Y981134	WITHDRAWAL OF CAVEAT	
9/5/1990	Y981135	DISCHARGE OF MORTGAGE	
9/5/1990	Y981136	TRANSFER	EDITION 1
1/9/2011	DP1168129	DEPOSITED PLAN	
30/8/2012	AH105414	REQUEST	
31/10/2012	AH333049	DEPARTMENTAL DEALING	
17/12/2012	AH258218	REQUEST	
17/12/2012	AH441321	DEPARTMENTAL DEALING	EDITION 2
25/7/2013	AH781421	TRANSFER	FOLIO CANCELLED





Tri-Search hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

Information contained in this document is provided by Tri-Search an approved NSW Information Broker

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE 4/1/2018 4:01PM

FOLIO: 15/1168129

First Title(s): OLD SYSTEM Prior Title(s): 17/27220

Recorded	Number	Type of Instrument	C.T. Issue
1 /0 /2011	 DD1160100		
1/9/2011	DP1168129	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
25/7/2013	AH781421	TRANSFER	FOLIO CREATED EDITION 1
11/2/2015	AJ187753	REQUEST	EDITION 2

END OF SEARCH

器

REMOVED FROM THE LAND TITLES OFFICE.

G.

Ref:STC-1023-13390 /Src:T

**NEW SOUTH WALES** 

Application No.11541 Prior Title Volume 8330 Folio 41. TIFICATE OF TITLE

PERTY ACT, 1900, as amended.

Req:R913377 /Doc:CT 09675-011 CT /Rev:10-Feb-2011 /Sts:OK.SC /Pgs:ALL /Prt:04-Jan-2018 16:20



9675

11

13-4-1964 Edition issued

/Seg:1 of

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.

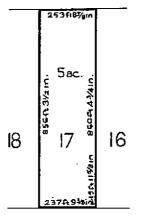
Witness

SMaclennan

SEE AUTO FOLIO

Registrar-General.

#### PLAN SHOWING LOCATION OF LAND



Schofields Rd.

J582685

Scale: 400 feet to one inch

ESTATE AND LAND REFERRED TO

Estate in Ree Simple in Lot 17 Deposited Plan 27220, Municipality of Blacktown, Parish of Gidley and County of Cumberland being part of Portion 9 granted to John Faultless on 13.1.1818.

Registrar General.

FIRST SCHEDULE (Continued overleaf)

of Parramatta, Builders

Registrar General.

SECOND SCHEDULE (Continued overleaf)

CRY

- 1. Reservations and conditions, if any, contained in the Crown Grant(s) above referred to.
- 2. Covenant created by Transfer No. H886122 P

Registrar General.

FIRST SCHEDULE (c	continued)	<del> </del>				]
REGISTERED PROPRIETOR	NATURE	INSTRUMENT	DATE	ENTERED	Signature of	
Eric Roy Gabb of Rouse Hilk Salesman and June Violet Gabb his wife as joint tenants Henry Alfred Tyrer, of Old Toongabbie, Company Director and Jean Cecilia Marion Tyrer,	Transfer .		6.5.1973	1.6.1973	Registrar-General	138261 12991 N256
as-joint-tenants.  Jennie Dempsey-Smith, Sales Representative, John Mandelberg, Film Editing Assistant a		P945830		<del>-11-1</del> 976	Juman	1125/5 15839E
Barbara Horlsey, Production Assistant, all of Schofields, as tenants in common John Mandelberg in 1 share and Susan Barbara Horsley in 1 share as tenants in common	Transfer	Q494535 stered_26-10-1982	2	25 <u>-1-1</u> 978	de	P945
OANOEL!						6 494 T070
	······································					T933
SEE AUTO FO	110				-	

			S	ECOND SCHEDULE (	continued)					
INSTRUMENT NATURE I NUMBER ; DATE		PARTICULARS		ENTERED	Signature of Registrar-General	CANCELLATION				
-Mortgage	J582686	11-2-1964	to Unity Terms Limited			<del>12-4-1964</del>	January January	Discharged	L299121	favetson
Caveat	1	1 <del>6 - 5 - 1973</del>	750			1.6.1973	Somberon	Withdrawn	P583900	Jameste
Caveat	P945831				1	I-1:1-1976	Junitary.	Withdrawn	Q494534	10
Mortgage	Q494536p		to Rural Building and Investme	nt Society		25-1-1978	bearing.			
T97024p Cave	at by State Bar	nk of New \$	outh Wales. Registered 26-10-			The second second second				
				All the second of the second o			- Marian	the secondary requires settle execution		
				of face for a conference of face of the accordance with a second of the con-			*	enteres of the cape of the base of the second		
				and the second of the second o						
				<b>-</b>	i					- Continue per minus in man
•								and the second s	to the second of	
The second secon			The state of the s			er — er er er er er er er er er			Section to the second section of the section of the second section of the section of the second section of the sectio	
			and the second of the second o	candinate process and consistent and					***********************	
to the second manager of the special			in the first contract of the communication of the contract of	No other contract of the contract of					1	]
	İ							Control of the St. Co. Co. Co. Co. Co. Co. Co. Co. Co. Co		
			enter i tempo estro i la compania della compania di constitui di compania di constitui di constitui di constitui	m seems to the second of the con-						
				Contract Contract of the Contr						
			Company to the company of the company	en a la distanción de describir de la companya de l					]	
Activities of Committee Contract Contra										
	<u> </u>									
							The state of the s	The second secon		
			The second section of the second section of the second section of the second section of the second s	معالموط وهارومار درود برده دردان معرب معاملات معاملات المعارف						
	FA			1				1		
				- N						