Appendix H

Preliminary Site Investigation and Declaration prepared by Land and Water Consulting





Preliminary Site Investigation

42-46 Unley Road, Unley, South Australia

Otello Projects

April 2023



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EXECUTIVE SUMMARY

Background & Objectives

Land and Water Consulting (LWC) was engaged by Otello Projects to undertake a Preliminary Site Investigation (PSI) of the property located at 42-46 Unley Road, Unley, South Australia (the Site).

It is understood that the Site is currently occupied by offices and a showroom – with respect to Table 1 of *State Planning Commission Practice Direction 14 (Site Contamination Assessment 2021)* ("Practice Direction 14"), this land use is aligned with *Item 5: Commercial class 1- shops, offices, consulting rooms and the like.*

The Site is proposed to be developed as a ground floor commercial tenancy with upper level (high density) residential apartments and a rear (ground level) carpark. As the proposed land use includes residential (i.e. sensitive, as defined in Section 3-1 of the *Environment Protection Act 1993*), this would constitute a change in land use sensitivity (i.e. to *Item 1: Residential class 1*).

The objective of the PSI was to identify potential sources of contamination and associated contaminants of potential concern (COPC) arising from current and historical activities undertaken on the Site, and/or within its immediate vicinity, that may give rise to site contamination (as defined in Section 5B of the *Environment Protection 1993*), with respect with respect to the proposed redevelopment of the Site for residential use.

Key Findings

The following conclusions were reached on the basis of the PSI results:

- The Site was previously used for commercial purposes over time whereas the existing main eastern Site building was constructed sometime prior to 1935 (and was most recently used as office and showroom space), the western warehouse was constructed during the 1980s (and most recently used for storage purposes).
- With reference to Schedule 3 of the Environment Protection Regulations 2009 and Schedule 1 of Practice Direction 14, no potentially contaminating activities (PCAs) have been identified as having occurred on the Site.
- Although the following may have been undertaken on the Site, none of these activities are considered likely to represent a potential risk of significant harm with respect to on-site human or environmental receptors under the proposed land use scenario or to represent a potential source of off-site contamination:
 - possible historical importation of soil or fill materials only considered as a PCA under Schedule 3 of the *Environment Protection Regulations* 2009 (but not Schedule 1 of Practice Direction 14) if the material was sourced from another site at which a PCA had occurred;
 - o possible historical use of termiticides beneath building slabs;
 - possible use of asbestos building products and/or lead-based paints in buildings; and/or
 - possible use of weedicides in any unpaved areas.
- For the purposes of Practice Direction 14, which specifies that only Class 1 activities undertaken within 60 m of the Site need to be considered, the following (historical) off-site PCAs have been identified as representing potential off-site sources of Site contamination:
 - several dry cleaning facilities;



- o a metal coating, finishing or spray painting business;
- a service station;
- o a tyre retreading and/or vulcanising business; and
- o a printing works.
- Although none of the surrounding properties are listed on the SA EPA Site Contamination Index (i.e. of having been notified with respect to identified groundwater contamination), the occurrence of multiple Class 1 PCAs within 60 m of the Site could have resulted in groundwater impacts (possibly including volatile contaminants) that may extend beneath the Site.
- Should volatile contaminants be present within groundwater as a result of the identified off-site PCAs, this could represent a potential source of vapour intrusion into future indoor air spaces on the Site.
- The following were taken into account when assessing potential exposure pathways:
 - future access to soils by Site occupants (i.e. residents and commercial workers) is likely to be limited due to the presence of building slabs and paving;
 - given the proposed use of the Site, and the fact that that a water mains supply is available, future groundwater extraction for any beneficial use is considered unlikely; and
 - as the proposed Site development is all slab on grade, with no basements or other underground features, and the depth to groundwater is assumed to be ≥ 5 m BGL, it is unlikely that the uppermost aquifer will be intercepted during future construction/ maintenance works.
- Whereas the health and safety of the Site construction workers can be covered via the development and instigation of an appropriate Construction Environmental Management Plan (CEMP), future maintenance workers would be expected to adhere to standard Occupational Health & Safety (OH&S) procedures.

Site Contamination for Planning Purposes

For the purposes of Schedule 2 of Practice Direction 14, it is considered that site contamination **may exist** with respect to the proposed sensitive land use (*Item 1: Residential class 1*) – i.e. although there are no identified on-site Class 1, 2 or 3 activities, a number of off-site Class 1 activities have been identified as historically undertaken within 60 m of the Site.

Recommendations

Based on the results of the recent PSI, it is recommended that:

- a passive soil vapour assessment be undertaken at the Site, specifically targeting future indoor air spaces; and
- a CEMP be prepared, and instigated, for the proposed development program.



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1 INTRODUCTION

1.1 OVERVIEW

Land and Water Consulting (LWC) was engaged by Otello Projects to undertake a Preliminary Site Investigation (PSI¹) of the property located at 42-46 Unley Road, Unley, South Australia (the Site). Site locality and layout plans are attached as Figures 1 and 2, respectively.

It is understood that the Site is currently occupied by offices and a showroom – with respect to Table 1 of *State Planning Commission Practice Direction 14 (Site Contamination Assessment 2021)* ("Practice Direction 14"), this land use is aligned with *Item 5: Commercial class 1- shops, offices, consulting rooms and the like.*

The Site is proposed to be developed as a ground floor commercial tenancy with upper level (high density) residential apartments and a rear (ground level) carpark. As the proposed land use includes residential (i.e. sensitive, as defined in Section 3-1 of the *Environment Protection Act 1993*), this would constitute a change in land use sensitivity – refer to Table 1-1.

Table 1-1 Land Use Sensitivity as per Table 1 of Practice Direction 14

Stage	Land Use	Inferred Land Use pursuant to Table 1 of Practice Direction 14	
Current	Office and showroom	Item 5: Commercial class 1	
Proposed Ground floor: commercial Upper levels: residential		Item 1: Residential class 1	
Change in sensitivity of land use		Yes	

1.2 OBJECTIVE

The objective of the PSI was to identify possible sources of contamination and associated contaminants of potential concern (COPC) arising from current and historical activities undertaken on the Site, and/ or within its immediate vicinity, that may have resulted in Site contamination², with respect to the proposed redevelopment of the Site for mixed commercial and residential use.

The objectives of this assessment are also in accordance Practice Direction 14 which states that a PSI under the relevant regulations must be sufficient to:

- a) identify potential on-Site and off-Site sources of contamination (known as potentially contaminating activities PCAs); and
- b) determine potential chemical substances of concern; and
- c) identify areas of potential contamination; and
- d) identify potentially affected media (being soil, water and/or vapour).

¹ in accordance with Schedule B2 of the *National Environment Protection (Assessment of Site Contamination) Measure* (1999 as amended 2013) – the ASC NEPM (1999)

² where Site contamination is defined in Section 5B of the *Environment Protection 1993* – refer to Appendix A



Practice Direction 14 also states that a PSI report must be sufficient to provide an assessment of whether Site contamination *exists*, *may exist* or *is unlikely to exist*³.

1.3 SCOPE OF WORK

The PSI was prepared with reference to:

- Schedule B(2) 'Guidelines on Site Characterisation' outlined in the National Environment Protection (Assessment of Site Contamination) Measure 1999; and
- SA EPA (2019) Guidelines for the Assessment and Remediation of Site Contamination.

The scope of work was as follows:

- review current and previous Certificates of Title (CT) to assess ownership and former use/s of the Site;
- review information obtained under Section 7 of the Land and Business (Sale and Conveyancing) Act
 1994, from the South Australian Environment Protection Authority (SA EPA) for the Site's CT;
- review historical maps and surveys of the Site, historical business directories and other relevant records (where available);
- review Department for Environment and Water (DEW) groundwater bore data within a 2 km radius of the Site;
- compile all details of the topography, hydrology, geology and hydrogeology pertaining to the Site and surrounds;
- review current and historical uses of the Site through inspection of aerial photographs (at a minimum of 10 year intervals);
- identify the class/es of activities that are confirmed, or suspected, to have occurred on, and/or within 60 m of, the Site, with reference to Schedule 1 of Practice Direction 14;
- prepare a report that documents the following:
 - the outcomes of the PSI including a statement of whether Site contamination (subject to Section 5B of the *Environment Protection Act 1993*) is likely, may or is unlikely to exist – i.e. given the proposed land use and aligned with Practice Direction 14 requirements;
 - o a completed Schedule 2 of Practice Direction 14; and
 - o any additional recommendations (as considered necessary).

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³ For the purposes of Practice Direction 14, the potential for Site contamination to exist is based on the occurrence, or possible occurrence of Class 1, 2 and/or 3 activities on a Site and/or the occurrence of a Class 1 activity on adjacent land (within 60 m of a Site) – where the classes of activities are detailed in Schedule 1 of Practice Direction 14.



2 SITE DETAILS

2.1 SITE IDENTIFICATION

A summary of Site particulars is presented as Table 2-1.

Table 2-1 Summary of Site Particulars

Site Location	42-46 Unley Road, Unley, SA 5061
Certificate of Title (CT)	Volume 5564 Folio 801
Property Description	Allotment 138 Filed Plan 13556 In The Area Named Unley Hundred Of Adelaide
	Copies of the current and former CT are provided in Appendix B.
Area of Site	Approximately 1,100 m ² (0.11 ha)
Local Government Authority	City of Unley
Zoning	Urban Corridor (Main Street) (refer to Appendix C, including the South Australian Property and Planning Atlas (SAPPA) report)
Current Site Usage	Commercial (non-sensitive)
Ownership	Otello Unley Pty Ltd
Proposed Land Use	Mixed commercial (non-sensitive) and residential (sensitive)

2.2 SITE SETTING AND LAYOUT

The current surrounding land uses are detailed in Table 2-2.

Table 2-2 Surrounding Land Uses

Boundary	Description of Surrounding Land Use
North	Commercial – offices, shops and restaurants fronting Unley Road
East	Unley Road, with various commercial properties fronting the eastern side of the road Residential properties further east
South	Commercial – offices, shops and restaurants fronting Unley Road
West	Irwin Lane, beyond which lie residential properties

A Site inspection was conducted by Land and Water Consulting (LWC) personnel on 21 March 2023. Site photographs have been included in Appendix D while a Site layout plan is provided as Figure 2 (attached).

At the time of the inspection, an office building was within the eastern portion of the Site, with showrooms fronting Unley Road (Plate 1). Three businesses occupied the premises, including *Blag Homes* (construction company, Plate 2), *Stiebel Eltron* (hot water and bathroom supplier, Plate 3) and *Fagor* (commercial kitchen equipment suppliers, Plate 4). Blag homes also occupied a warehouse within the western potion on the Site (Plate 5). The remainder of the Site was paved with concrete and used for car parking – minor garden beds were located along the western boundary.



The three companies that occupied the Site used the main eastern building as office space, showrooms and general storage areas, with no obvious signs of contamination identified throughout. Domestic amounts of cleaning products were located in the kitchens and bathrooms.

Although multiple petrol canisters and jerry cans of up to 20 L were present within the warehouse (Plate 6), there was no staining on the concrete slab or evidence of spillage. General storage of cement, surplus building equipment, furniture and power tools was also noted within the warehouse. Anecdotal information indicated that there was paint stored behind a locked door within the warehouse, to which access could not be obtained at the time of the Site inspection. Minor spills of grease were identified within the warehouse – however, they were considered to be recent and limited in extent (Plate 7).

The car park areas were paved with concrete (Plates 5 and 8), with evidence of a minor/ localised paint spill at one location (Plate 9). Materials stored along the western and northern boundaries of the car park areas included plaster board, timber, tyres, roof tiles, office furniture and scrap building materials (Plates 10 and 11). Evidence of former extensions to the western side of the offices were noted. A disused stormwater drain was present along the southern boundary, behind the main office building.



3 REGIONAL SETTING

3.1 TOPOGRAPHY & HYDROLOGY

The Site is located at an elevation of approximately 50 m Australian Height Datum (AHD) and is relatively flat. The surrounding land is generally of similar elevation (refer to Appendix E).

An unnamed creek and Glen Osmond Creek lie approximately 320 m to the north-west and 370 m to the south, respectively, and represent the closest fresh surface water bodies to the Site. The closest marine water body (Spencer Gulf) is located over 9.5 km to the west.

3.2 GEOLOGY

The Department of Environment, Water and Natural Resources (DEWNR) surface geological map (1:100,000), as included in Appendix F, indicates that the Site is underlain by Keswick Clay (refer to Table 3-1), with the Pooraka Formation and an unnamed Pleistocene calcrete unit located 525 m south-east and 825 m north-east of the Site, respectively.

The Atlas of Australian Soils indicates the soils are classified as Chromosol (refer to Table 3-1). As also included in Appendix F, the CSIRO Atlas of Australian Acid Sulfate Soils indicates that there is an extremely low probability (1-5%) of occurrence of acid sulfate soils within small, localised areas.

Map Unit Code	Name	Description	Province	Age
Qpas	Keswick Clay	Clay, smectite-rich, grey-green, with red or yellow mottling and rare sand lenses.	St Vincent Basin	Pleistocene
01	Chromosol	Outwash plains of hard alkaline red soils with small areas of cracking clay soils. Hard alkaline yellow mottled soils within minor areas and various alluvial soils in the stream valleys are also present.		

3.3 HYDROGEOLOGY

A sedimentary rock aquifer comprising limestone and often cavernous sandstone with sand, shale and clay is expected to be present beneath the Site (refer to Appendix G).

With reference to Location SA MapViewer, the depth to the uppermost aquifer within the vicinity of the Site is expected to be approximately 5 to 10 m below ground level (BGL).

A search of the DEW (2023) *WaterConnect* database for a 2 km radius around the Site identified the following (refer to Appendix G):

- There are 814 registered bores, the recorded depths of which range from 0.61 to 224 m BGL.
- With respect to the registered groundwater bores considered most likely to be targeting the uppermost (Quaternary) aquifer (i.e. those installed to a maximum depth of ≤15 m BGL (where recorded) – the closest of which is located approximately 118 m to the west of the Site):
 - o recorded standing water levels (SWLs) range from approximately 0 to 13 m BGL;



- o salinity values range from about 385 to 10,839 mg/L total dissolved solids (TDS); and
- listed purposes include domestic (21), drainage (35), environmental/ investigation/observation/monitoring (204) and recreational (1) – the remaining bores have no purpose listed.
- The closest registered domestic bore is located 689 m east of the Site while a recreational bore is located 1,271 m to the north-east.
- No irrigation or stock watering bores were identified within a 2 km radius of the Site.
- Although a registered town water supply bore is located 445 m to the north-west of the Site, it had been installed to 32 m BGL and is therefore not considered to be accessing the upper Quaternary aquifer.

3.4 GROUNDWATER ENVIRONMENTAL VALUE ASSESSMENT

3.4.1 Overview

When determining whether there is actual or potential harm to water that is not trivial, environmental values of water need to be considered, as prescribed in *Environment Protection (Water Quality) Policy* 2015 (WQEPP). SA EPA (2019) acknowledges the importance of being clear on the approach to make determinations of 'actual or potential harm to water that is 'not trivial' and has developed a process to simplify making determinations of environmental values of groundwater at a Site (Figure 3-1). For conservatism, where multiple environmental values of groundwater are identified, the most sensitive environmental value is considered.



Figure 3-1 Process to Determine Environmental Values of Groundwater at a Site

3.4.2 Step 1: Determination of Protected Environmental Values using the WQEPP

As detailed in Figure 3-2, the first step in determining the environmental values of groundwater at a Site involves an initial assessment of salinity (measured as mg/L TDS in the analytical laboratory and/or calculated from field electrical conductivity (EC) readings), so as to apply Clause 3 of Schedule 1 of the WQEPP, as shown in Table 3-2.

Based on the available registered bore data (refer to Section 3.3), the salinity of the uppermost aquifer within 2 km of the Site is variable but is recorded as ranging from about 385 to 10,839 mg/L TDS – therefore potentially relevant environmental values (for groundwater with background salinity values less than 1,200 mg/L) are as follows:

- drinking water for human consumption (potable);
- primary industries irrigation;
- primary industries livestock drinking water; and
- primary industries aquaculture and human consumption of aquatic foods.



Environmental value	Notes		
Drinking water - human	Determination is based on TDS ranges shown in clause 3, Schedule		
Primary industry – irrigation and general use	of the WQEPP: selection of the most conservative salinity level		
Primary industry – livestock drinking water	salinity measured by an accredited analytical laboratory and reported in TDS mg/L.		
Primary industry - aquaculture	roposited in 190 mg.E.		

Figure 3-2 Table 1 of SA EPA (2019): Application of the WQEPP to determine protected environmental values of groundwater

Table 3-2 Summary of Environmental Values of Underground Waters as per the WQEPP

Salinity levels of underground waters	Aquatic ecosystem	Recreation and aesthetics	Drinking water for human consumption	Primary industries— irrigation and general water uses	Primary industries— livestock drinking water	Primary industries— aquaculture and human consumption of aquatic foods
Background TDS level of less than 1,200 mg/L	N/A	N/A	Yes	Yes	Yes	Yes
Background TDS level of 1,200 mg/L or more, but less than 3,000 mg/L	N/A	N/A	N/A	Yes	Yes	Yes
Background TDS level of 3,000 mg/L or more, but less than 13,000 mg/L	N/A	N/A	N/A	N/A	Yes	Yes

3.4.3 Step 2: Application of a Buffer Distance for Protection of Surface Waters

Step 2 addresses the application of a buffer distance for the protection of surface waters. Table 2 of SA EPA (2019) has been devised so as to offer a practical approach for the consideration of surface water impacts when making a determination of the environmental values of groundwater.

Some chemical substances are highly mobile when present as a dissolved phase and can migrate in groundwater over large distances (aerially) and depths (vertically). As detailed in Figure 3-3, the SA EPA recommends that a 2 km radius be set to establish a 'buffer distance' around the Site in order to make adequate determinations of the environmental value of groundwater with respect to relevant surface water receptors.



Environmental value	Notes
Aquatic ecosystems (fresh)	
Aquatic ecosystems (marine)	The environmental value is determined based on proximity to the nearest surface water body as the receptor, where the 'buffer distance' is
Recreational (non-domestic)	represented by a 2-km radius of the site.

Figure 3-3 Table 2 of SA EPA (2019): Application of a buffer distance for protection of surface waters

Based on the closest surface water receptor (refer to Section 3.1), potentially relevant environmental values are as follows:

- protection of aquatic ecosystems (fresh); and
- recreational (non-domestic).

3.4.4 Step 3: Review of Available Groundwater Data Using WaterConnect

Using the 2 km buffer distance established in Step 2, registered bore users are identified via the *WaterConnect* database as detailed in Figure 3-4.

Registered use ⁴⁵	Notes
Domestic (DOM)	The environmental value of groundwater should be determined based on registered groundwater wells (bore) for extractive uses, where the status is either active or unknown. Information and data from abandoned or decommissioned
Town water supply (TWS)	bores is not recommended. DOM registered bores can be used as a potable water supply by residential properties. Drinking water would be the applicable environmental value for
Recreational/aesthetics (IRR)	domestic registered bores. TWS bores are likely to be used for potable water supply. Drinking water would be the applicable environmental value for town water supply registered bores.
Industrial (IND) (IRR)	Monitoring and investigation registered bores have no environmental value that requires protection; rather, the data associated with these registered bores may be useful in determining the environmental values of groundwater ie by using salinity information.

Figure 3-4 Table 3 of SA EPA (2019): Application of WaterConnect (groundwater data) to determine environmental values of groundwater

As discussed in Section 3.3, registered groundwater bores located within a 2 km radius of the Site and likely to have been installed within the uppermost aquifer have listed purposes including domestic and recreational.

3.4.5 Step 4: Actual or Potential Harm to Water That is Not Trivial – Application of EPA Recognised Criteria

Step 4 involves the identification of relevant environmental values of groundwater (based on the preceding steps) and the application of EPA recognised criteria – an assessment of the potential environmental values is provided in Table 3-3.



Table 3-3 Summary of Groundwater Environmental Values and Likelihood of Such Use

Environmental	Likelihood of Realising Environment	Realising Environmental Values (Current & Realistic Future Potential)		
Values	On-Site	Off-Site		
Potable	UNLIKELY	POTENTIAL		
	Given the availability of a mains water supply and the proposed future commercial/high density residential use of the Site, it is considered unlikely that groundwater will be extracted on-site in the future for domestic use.	The WaterConnect groundwater database indicates that groundwater in the area may be accessed for domestic use. In addition, the observed range of groundwater salinity values within the 2 km buffer zone indicates its potential suitability for potable use.		
Recreation and	UNLIKELY	POTENTIAL		
Aesthetics	Given the availability of a mains water supply and the proposed future commercial/high density residential use of the Site, it is considered unlikely that groundwater will be extracted on-site in the future for recreational use.	The WaterConnect groundwater database indicates that groundwater in the area is potentially used for recreational purposes. In addition, surface water bodies that may be used for recreational purposes are located within a 2 km radius of the Site – although it is not known if they are hydraulically connected to the uppermost aquifer.		
Aquatic	NONE	POTENTIAL		
Ecosystems (Freshwater)	No surface freshwater bodies are located on the Site.	Although not confirmed as being hydraulically connected to the uppermost aquifer, an unnamed creek and Glen Osmond Creek are located within the 2 km buffer zone.		
(Primary	UNLIKELY	UNLIKELY		
industries) — irrigation and general water uses	Given the availability of a mains water supply and the proposed future commercial/high density residential use of the Site, it is considered unlikely that groundwater will be extracted on-site in the future for irrigation use.	The WaterConnect groundwater database indicates that groundwater in the area is not accessed for irrigation use. Although the observed range of groundwater salinity values in the 2 km buffer zone indicates it is potentially suitability for irrigation use, a mains water supply is available.		
(Primary	UNLIKELY	UNLIKELY		
industries) – livestock drinking water	As the Site is proposed to be redeveloped as a mixed use (commercial/residential) property, it is considered unlikely that this would include livestock grazing.	The WaterConnect groundwater database indicates that groundwater in the area is not accessed for stock use. Although the observed range of groundwater salinity values in the 2 km buffer zone indicates it is potentially suitability for stock use, a mains water supply is available.		
(Primary	UNLIKELY	UNLIKELY		
industries) Aquaculture and Human Consumption of Aquatic Foods	The proposed commercial development of the Site is considered unlikely to include aquaculture.	No commercial aquaculture activities, involving either surface water or groundwater, have been identified within 2 km of the Site.		
Environmental Value	es not prescribed in WQEPP but included for	completeness of assessment		
Human Health in	POTENTIAL	POTENTIAL		
Non-Use Scenarios (i.e. vapour flux) if volatiles present	The presence of volatile contaminants within the uppermost aquifer beneath the Site has not been assessed – given the Site's historical commercial/ light industrial use, volatiles may be present.	The Site is located in an established commercial/ light industrial area.		



Environmental	Likelihood of Realising Environmental Values (Current & Realistic Future Potential)		
Values	On-Site	Off-Site Off-Site	
Buildings and Structures (contact)	and/or the presence of potentially corrosive	nigh/low pH, excessive sulfate/chloride concentrations contaminants, could affect the aggressiveness of the uildings and structures that it comes into contact with.	

3.4.6 Summary of Environmental Values Assessment

According to the four-step process adopted to determine environmental values of groundwater, the following are considered to be potentially relevant with respect to the Site and/or surrounding area:

- potable;
- recreation (domestic and non-domestic) and aesthetics; and
- protection of aquatic ecosystems (freshwater).

Although not strictly groundwater environmental values, the following are usually also considered (depending on factors such as past land uses, groundwater depth etc.):

- human health in non-use scenarios (i.e. vapour flux); and
- buildings and structures.



4 SITE HISTORY ASSESSMENT

4.1 HISTORICAL OWNERSHIP

Information obtained via the South Australian Land Information Service (SAILIS) website regarding historical Site ownership is presented in Appendix B.

The results indicate that the Site was largely owned by private entities from at least 1880 until 2017, with owners' occupations including architect, chaff merchant, solicitor, gentleman and shop proprietor. Between 2017 and 2022 the Site was transferred between private companies – although their dealings could not be determined, it is considered most likely that they used and/or leased the Site out solely for commercial purposes. In June 2022, the Site was transferred to its current owners, *Otello Unley Pty Ltd*.

4.2 HISTORICAL BUSINESS DIRECTORIES

A review of the Sands & McDougall and Universal Business Directories (as available) for on-site and nearby (within 250 m) historical businesses for the period 1910 to 1991 was undertaken (refer to (refer to Appendix H and **Error! Not a valid bookmark self-reference.**). Historically, businesses conducted on the site have included various retail business such as fish merchants, children's wear, bookseller, confectioners, green grocers, tobacconists and hairdressers. No historical business considered likely to be PCAs were identified to have occurred on the Site.

Identified off-site businesses considered likely to be PCAs, based on a premise match are also presented in **Error! Not a valid bookmark self-reference.**, while potential off-site PCAs identified by a road match (and therefore not considered accurate in terms of location relative to the Site) have been presented in Table 4-2.

Table 4-1 Business Directory Records 1910-1991 – Premise Matches

Business Activity	Premise	Year	Distance to Site boundary	Direction
Spray painters & finishers	Simpson T, 48 Unley Rd Unley	1973 - 1965	0 m	South-
Dyers and cleaners	Marsh C R, 48 Unley Rd Nth Unley	1930	UIII	east
Galvanized iron and sheet metal workers	Farr C W, 52 Unley Rd Nth Unley	1930	18 m	South
Motor tyre dealers retreaders &/or vulcanisers	Murphy John Tyre & Battery Service, 36 Unley Rd Unley	1991	18 m	North
Hardware merchants & ironmongers	Farr C W, 36 Unley Rd Nth Unley	1940	10 111	NOTH
Dressmakers and Milliners	Turner E M, 41 Salisbury St Nth Unley	1920	25 m	West
Printers - general	Snap The on Time Printer, 37 Unley Rd Parkside	1991	32 m	South- east
Dressmakers and milliners	Dollar L, 58 Unley Rd Nth Unley	1940 – 1920	33 m	South
Dry cleaners, dyers & laundries	Tip Top Dry Cleaners, 58 Unley Rd Unley	1965	33 111	South
Motor Garages &/or Engineers &/or Service Stations	BP South Park, 17 Unley Rd Parkside	1984	59 m	North-
Motor garages & service stations	Automagic Car Wash, 17 Unley Rd Parkside	1973	39 111	east



Business Activity	Premise	Year	Distance to Site boundary	Direction
Motor garages & service stations	BP South Park Service Station, 17 Unley Rd Parkside	1973		
Motor engineers, garages & service stations	South Park Service Station, 17-21 Unley Rd Parkside	1965		
Dry cleaners, dyers & laundries	Torch Dry Cleaners, 17 Unley Rd Parkside	1955		
Dressmakers & milliners	Thompson A M, 15 Unley Rd Parkside	1973 - 1965		
Dressmakers and milliners	Barry A M, 17 Unley Rd Parkside	1940		
Dressmakers & milliners	Wall E R, 64 Unley Rd Unley	1955	60 m	South- east
Dressmakers and milliners	Walton H, 68 Unley Rd Nth Unley	1940	73 m	South
Dry cleaners, dyers & laundries	Barker Bros Dry Cleaners, 55 Unley Rd Parkside	1965 - 1955	80 m	South- east
Dry cleaners, dyers & laundries	Bowden Dry Cleaners,70 Unley Rd, Unley	1955	83 m	South
Dry cleaners, dyers & laundries	Eats M R, 212 Young St Unley	1955	108 m	South- west
Motor Garages &/or Engineers &/or Service Stations	Parkside Mobil Service Station, 59 Unley Rd, Parkside	1984		
Motor garages & service stations	Mobil Oil Aust, 57 Unley Rd Parkside	1973	120 m	South- east
Motor engineers, garages & service stations	Waverley Service Station, 57-59 Unley Rd Parkside	1973 - 1965		
Motor engineers, garages & service stations	Malthouse A R, 11 Clyde St Parkside	1965	148 m	East
Motor engineers, garages & service stations	Morgan J R, 13 Palmerston Rd Unley	1965	167 m	North- west
Motor garages, engineers & service stations	Lwnett, A J & Co, 1 Unley Rd Parkside	1950	192 m	North
Dry cleaners, dyers & laundries	Unley Wonder Wash Laundry, 67 Unley Rd Parkside	1965 - 1955	194 m	South- east
Motor engineers, garages & service stations	Sibly J S C, 5 Clyde St Parkside	1955	194 m	East

Table 4-2 Business Directory Records 1930-1991 – Road Matches

Business Activity	Premise	Year	Distance to Site boundary
Dry cleaners, dyers & laundries	Glenelg Dry Cleaners, 112 Unley Rd Unley	1955	
Sheet metal workers	Swan W A & Sons, Unley Rd Unley	1950	
Motor engineers, garages and service stations	Cross Roads Service Station, Unley Rd Unley	1940	
Dressmakers and milliners	Dick & Jackson, Unley Rd Unley	1940	0
Dressmakers and milliners	Walters D, Unley Rd Unley	1940	9 m
Petrol storage systems and service stations	Gross Roads Service Station, Unley Rd Unley	1930	
Dressmakers and milliners	Goldring, Unley Rd Unley	1930	
Dressmakers and Milliners	Gillis H, Unley Rd Unley	1910	
Motor engineers, garages and service stations Jackson A T, Unley Rd Nth Unley		1940	11 m



Business Activity	Premise	Year	Distance to Site boundary
Dressmakers and Milliners	Eunson D M, Salisbury St Nth Unley	1910	
Motor engineers, garages & service stations	Waverley Service Station, Young St Parkside	1965	112 m

4.3 AERIAL IMAGERY

A review of historical aerial photographs for the period 1935 to 2022 was undertaken – observations are presented in Table 4-3 and the aerial imagery is provided in Appendix I.

Table 4-3 Interpretation of Aerial Imagery

Date	Quality /	Observations – On-Site	Observations – Off-Site
	Format		
1935	Poor / Black and White	A building within the eastern portion of the Site fronts Unley Road, whereas sheds appear to be present within the central and western portions.	The surrounding land has been developed for either housing or shop fronts (along Unley Road). A commercial/ factory building appears to be present approximately 200 m to the north of the Site.
1949	Poor / Black and White	Generally consistent with previous image.	Generally consistent with previous image.
1959	Poor / Black and White	The western portion of the main building may have been extended.	Generally consistent with previous image.
1968	Fair / Black and White	Generally consistent with previous image, although it appears (based on this clearer image) that the eastern Site building could comprise three semi-detached constructions, possibly separated by fences.	Some larger, likely commercial, buildings have been constructed to the south and north-north-east of the Site. The factory to the north appears to have been partially demolished.
1979	Poor / colour	A veranda may have been added to the eastern building, fronting Unley Road.	A group of row-houses has been demolished to the south-east of the Site and replaced with a car park and (likely) commercial building. In addition, likely commercial development has occurred to the north of the Site.
1989	Poor / colour	A building has been erected within the western portion of the Site, spanning from the northern to southern boundary.	Further development has occurred to the north and east of the Site, comprising larger, likely commercial, buildings.
1999	Poor / colour	Generally consistent with previous image.	Generally consistent with previous image.
2002	Good / colour	Generally consistent with previous image.	Generally consistent with previous image.
2004	Good / colour	Generally consistent with previous image.	Generally consistent with previous image.
2007	Good / colour	Generally consistent with previous image.	Generally consistent with previous image.



Date	Quality / Format	Observations – On-Site	Observations – Off-Site
2010	Good / colour	Generally consistent with previous image.	Generally consistent with previous image.
2013	Good / colour	Generally consistent with previous image.	Generally consistent with previous image.
2016	Good / colour	Generally consistent with previous image.	Generally consistent with previous image.
2019	Good / colour	A small extension along the southern boundary has been demolished.	Generally consistent with previous image.
2022	Good / Colour	Generally consistent with previous image.	Generally consistent with previous image.

4.4 HISTORICAL MAPS

A review of historical maps from the period 1873 to 1982 was undertaken - observations are presented in Table 4-4 whereas the maps are presented as Appendix J.

Table 4-4 Review of Historical Maps

Date	Observations - On-site	Observations – Off-site		
1873	There are no discernible onsite features.	The surrounding area is subdivided into as a series of large allotments (i.e. designated Sections). Major roads, such as Glen Osmond Road (to the east of the Site) and Greenhill Road (to the north), have been outlined.		
1889	There are no discernible onsite features.	A tramway is marked as extending north to south on Unley Road. Howard Road (now Greenhill Road) has been marked and various hotels, a church and town hall have been identified along Unley Road. A railway/ tram line has been marked to the west of the Site, extending from north to south-west along King William Road.		
1900- 1970	There are no discernible onsite features.	Sewer lines are located to the east and west of the Site. Surrounding property boundaries and buildings have been outlined to the south and east.		
1914	There are no discernible onsite features.	Major roadways and secondary roads have been outlined, with the tramline removed from Unley Road; however, the King William Road tram/ railway line is still present.		
1926	There are no discernible onsite features.	Major roadways and secondary roads have been outlined while the King William Road tram/ railway line is still present to the west.		
1927*	There are no discernible onsite features.	Individual parcels of land have been outlined. A tramline/ railway line has extends down Unley Road (directly to the east of the Site boundary) as well as along King William Road to the west.		
1937	There are no discernible onsite features.	Major roadways and secondary roads have been outlined; no obvious indicators of tram/ railway lines have been included.		
1959	There are no discernible onsite features.	A tramway is marked to the west of the Site, extending along King William Road. Watercourses are marked to the west and south of the Site.		
1982	There are no discernible onsite features.	A tramway is marked to the west of the Site, extending along King William Road. Watercourse are marked to the north, west and south.		



Notes:

*The 1927 map extends over two pages.

4.5 PREVIOUS ASSESSMENT REPORTS

No previous assessments or reports have been identified in relation to the Site as held by the SA EPA on the Public Register.



5 REGULATORY RECORDS

5.1 SA EPA SECTION 7 RECORDS

A review of the SA EPA records relevant to Section 7 of the *Land and Business (Sale and Conveyancing) Act* 1994, was undertaken as part of the PSI. The Section 7 records were reviewed for information regarding the following:

- environmental performance agreements, protection orders, clean-up orders or clean-up authorisations:
- environmental assessment reports held by the EPA that had been prepared by or on behalf of an owner or occupier of the land, by the EPA, or by an Environmental Auditor (Contaminated Land);
- whether the Site is/was licensed by the EPA to operate as a waste depot;
- whether the Site is/was issued with a licence by the EPA to produce waste of a prescribed kind or to carry out an activity that produces a listed waste on the land; and
- records on the Public Register of waste being deposited on the land between 1 January 1983 and 30 April 1995.

The Section 7 record (refer to Appendix K) indicate that no agreements, orders, licenses or other authorisations exist for the Site.

5.2 SA EPA SITE CONTAMINATION INDEX

A review of the SA EPA Site contamination index for records relevant to the Site and a 1 km buffer zone (refer to Appendix K) indicates that there are no records associated with the Site itself. Although multiple properties within the 1 km buffer zone are listed (as summarised in Table 5-1), the closest to the Site is located 154 m to the east – given the distance (>150 m) of the listed properties from the Site, they are considered unlikely to pose a significant risk to groundwater beneath the Site.

Table 5-1 SA EPA Site Contamination Index Records

Notification No	Туре	Address	Activity	Distance	Direction
11854	Pre 1 July 2009 Audit Notification & Termination	16-18 Townsend St, Parkside	Not recorded	154 m	East
12406	S83 Notification	135 Greenhill Rd, Unley	Listed Substances (storage)	198 m	North- west
62469	109 Notification	Lot 6020 South Tce, Adelaide	Fill or soil importation	297 m	North- west
12299	109 Notification	56-58 Charles St, Unley	Not recorded		
12451	Pre 1 July 2009 Audit Notification	Proposed Allotments 1-10 of	Furniture restoration	436 m	South- west
12451 - 001	Pre 1 July 2009 Audit Report	Lots 108-110 Charles St, Unley	Furniture restoration		Woot
12850	Pre 1 July 2009 Audit Notification & Termination	Charles St, Unley	Not recorded	449 m	South-
13676	Pre 1 July 2009 Audit Notification & Termination	60 Charles St, Unley	Not recorded	449 M	west



Notification No	Туре	Address	Activity	Distance	Direction
60503	109 Notification	Lot 44 Leicester St, Parkside	Fill or soil importation	482 m	South- east
12248	SAHC	Mary St, Unley	Not recorded	483 m	South- west
12061	Pre 1 July 2009 Audit Notification	50 Mary St, Unley	Not recorded	492 m	South-
12061 - 001	Pre 1 July 2009 Audit Report	30 Mary St, Stricy	Not recorded	432 III	west
12168	Pre 1 July 2009 Audit Notification	Portion of Lot 60, 6 Tyne PI,	Furniture restoration		
12168 - 001	Pre 1 July 2009 Audit Report	Unley	Furniture restoration	495 m	South- west
13696	109 Notification	6 Tyne PI, Unley	Furniture restoration		
60002	109 Notification		Not recorded		
60132 - 01	S83A Notification		Service stations		West
60132 - 02	S83A Notification		Service stations		
60132 - 03	S83A Notification	17-19 King St, Unley	Service stations	499 m	
60132 - 04	S83A Notification		Listed Substances (storage); Service stations		
61082 - 02	S83A Notification	Portion Lot 3, Charles Walk, Unley		503 m	South- west
12828	Pre 1 July 2009 Audit Notification & Termination	Lots 51, 52, 59 & Portion Lots 60, 63, 6 Tyne PI, Unley	Not recorded	550 m	
60993	Audit Notification & Termination	Lot 7 Tyne PI, Unley	Fill or soil importation; Furniture restoration; Wood preservation works		South- west
61077	Audit Notification		Metal forging		
61077 - 001	Audit Report		Metal forging		
61082 - 01	S83A Notification		Metal forging		
61676 - 01	S83A Notification	454 40411	Not recorded	500	
61676 - 02	S83A Notification	154-164 Unley Rd, Unley	Textile operations	569 m	South
12175	SAHC	10 Thomas St, Mornington St & Arthur Rd, Unley	Not recorded	670 m	South
62331 - 01	S83A Notification	79-85 Mary St, Unley	Listed Substances (storage)	724 m	South-
62712	Liability Transfer	79-00 Ividity St, Utiley	Fill or soil importation	7 24 111	west
12069	SAHC	40-42 Thomas St, Unley	Not recorded	846 m	South
61191 - 01	S83A Notification	46 Glen Osmond Rd, Parkside	Motor vehicle repair or maintenance; Service stations	992 m	East



5.3 SA EPA ENVIRONMENT PROTECTION AND CLEAN UP ORDERS

As detailed in Appendix K and summarised in Table 5-2, two SA EPA Environment Protection Orders were identified as having been issued for properties within 1 km of the Site. The activities involved (noise nuisance and wastewater discharge) are not considered likely to have impacted on the Site.

No Environment Clean Up Orders were identified for properties located within 1 km of the Site.

Table 5-2 SA EPA Environment Protection Orders

Record No.	Record Status	Site Address	Activity	Distance*	Direction
11076	Issued	Young St, Parkside	Caused environmental nuisance in the form of noise from an air conditioner.	101 m	East
11677	Cancelled	Greenhill Rd, Wayville	Discharged wastewater into the stormwater drainage system.	581 m	West

Notes:

indicates closest distance to road match

5.4 SA EPA AUTHORISATIONS AND APPLICATIONS

A review of SA EPA authorisations and applications for the Site and a 1 km buffer zone (refer to Appendix K) indicates that, although no records exist for the Site, there are listings for off-site properties (as summarised in Table 5-3) – the closest EPA licence, for activities producing listed wastes, is for a property located 375 m to the north-west.

Table 5-3 SA EPA Authorisations and Licensing

Record No.	Record Type	Record Status	Entity	Site Address	Activity	Distance	Direction
24322	Licence	Issued	Idexx Laboratories	117 Greenhill Rd, Unley	Activities producing listed wastes	375 m	North-west
50940	Licence	Transferred	Shahin Enterprises	17-19 King			
51108	Licence	Issued	On The Run	William Rd,	Petrol stations	499 m	West
ENL0A 2G0J	Licence application	Authorisation Updated	Shahin Enterprises	Unley			
24043	Exemption	Cancelled	Corporation of the City of Adelaide		Chemical Dosing of Treated Wastewater	599 m	North-west
15830	Licence	Issued	Corporation of the City of Unley	75 King William Rd, Unley	Waste recycling depot (waste for resource recovery or transfer)	630 m	South-west
31182*	Licence	Issued	Adelaide City Council	Various Locations Within The Corporation Of The City Of Adelaide Boundaries, SA	Dredging - for each day on which dredging occurs during the licence period	-	-

Notes:

^{*}Record 31182 was identified as a suburb match.



5.5 SA EPA ASSESSMENT AREAS AND GROUNDWATER PROHIBITION AREAS

As detailed in Appendix K, no SA EPA Groundwater Prohibition Areas were identified with respect to the Site or surrounding areas. In addition, no EPA Assessment Areas were identified with respect to the Site; however, the Unley EPA Assessment Area is located 320 m to the south-west.

The SA EPA had three assessment reports available on the Public Register detailing the works completed as part of the Assessment Area including Tierra Environment (2017), Kleinfelder (2018) and Golder (2019). The Unley assessment area was bounded by Charles Lane, Little Charles Street, Mary Street and Tyne Place. The works comprised three stages completed between May 2017 and June 2019 to assess whether legacy contamination issues resulting from past industrial practices posed a potential risk to current residents.

Based on the assessments completed by Tierra Environmental (2017) and Kleinfelder (2018), chlorinated hydrocarbon compound (CHC) concentrations in groundwater exceeded the drinking water guidelines. However, it was determined that the surrounding residents could use bore water provided that regular testing of groundwater was completed with respect to its intended use. In addition, Golder (2019) did not identify an unacceptable vapour intrusion risk to residents living within the assessment area and it was deemed that no further works were required.

5.6 WASTE MANAGEMENT FACILITIES

One National waste management facility was listed, as detailed in Table 5-4 (refer to Appendix L). Given that this is a transfer station located a considerable distance from the Site, the risk of contamination to groundwater beneath the Site is considered to be negligible.

No EPA Approved Container Collection Depots were identified within 1 km of the Site.

Table 5-4 National Waste Management Site

Name	Address	Distance	Direction
City of Unley Waste Depot	75 King William Rd, Unley	630 m	South-west

5.7 NATIONAL LIQUID FUEL FACILITIES

One National liquid fuel facility is located within 1 km of the Site (refer to Appendix L and Table 5-5).

Table 5-5 National Liquid Fuel Facilities

Owner	Name	Address	Class	Status	Distance	Direction
Peregrine Corporation		17 King William Rd, Unley	Petrol Station	Operational	499 m	West

5.8 HERITAGE

A search of Commonwealth, National and South Australian heritage databases was undertaken for a 1 km radius around the Site. As detailed in Appendix M, two properties are listed on the National Heritage List as the Adelaide Park Lands – City Layout and Additional Area and Values. Within the SA Heritage Places database, 192 properties have been identified on either the local, state or contributory level. Most include dwellings, fences, offices, shop fronts, halls, banks, hotels, halls, churches, bridge balustrades, bomb shelter



or contributory Item. The closest location is 37 m to the north, listed as an office which was formerly a dwelling build by WC Torode in 1908.

No Aboriginal land has been identified within the vicinity of the Site.

5.9 PFAS INVESTIGATION AND MANAGEMENT PROGRAMS

No Defence per- and poly-fluoroalkyl substances (PFAS) Investigation and Management Program Sites are located within 1 km of the Site (refer to Appendix N).

5.10 DEFENCE CONTAMINATION INVESTIGATION PROGRAM

No Defence 3 Year Regional Contamination Investigation Programs are located within 1 km of the Site (refer to Appendix N).

5.11 NATURAL HAZARDS

A review of the Bushfire Hazard Overlay and Bushfire and Prescribed Burns History Database was undertaken for an approximate 1 km radius around the Site, with no bushfire hazard or historical bushfires or prescribed burns identified.

Flooding overlays indicate there is no risk to the Site. However, flooding hazards have been identified within the surrounding area (refer to Table 5-6 and Appendix O).

Table 5-6 Flooding Overlays

Name	Description	Distance	Direction
Hazards (Flooding - General)	The overlay seeks to minimise impacts of general flood risk through appropriate siting and design of development.	159 m	North-east
Hazards (Flooding)	The overlay seeks to minimise flood hazard risk to people, property, infrastructure and the environment.	246 m	North-west
Hazards (Flooding - Evidence Required)	The overlay adopts a precautionary approach to mitigate potential impacts of potential flood risk through appropriate siting and design of development.	296 m	North

5.12 ECOLOGICAL CONSTRAINTS

No Groundwater Dependant Ecosystems (GDE), Ramsar Wetlands or Inflow Dependent Ecosystems were identified within 1 km of the Site (refer to Appendix P).



6 POTENTIALLY CONTAMINATING ACTIVITIES

6.1 ON-SITE

Based on the desktop review of historical information for the Site, there is no evidence that any PCAs have occurred on the Site, with reference to Schedule 3 (Site Contamination) of the *Environment Protection Regulations 2009* and/or Schedule 1 of Practice Direction 14.

Although it is possible that fill or soil importation may have occurred prior to the development of the Site, this is only a PCA under Schedule 3 of the *Environment Protection Regulations 2009* (but not Schedule 1 of Practice Direction 14) if the material was sourced from another site at which a PCA had occurred. Even if fill or soil was imported to the Site at some time in the past, it is unlikely to have comprised a significant amount given that the Site is located at a similar topography to the surrounding area.

Other activities that may have occurred at the Site (but are not scheduled PCAs) include the following:

- possible historical use of termiticides beneath building slabs;
- possible use of asbestos building products and/or lead-based paints in Site buildings; and/or
- possible use of weedicides in any unpaved areas.

As discussed in Table 6-1, none of these (unconfirmed) activities are considered to represent a potentially significant risk to future Site users under the proposed mixed commercial/ high density residential land use scenario Error! Reference source not found.

Table 6-1 Summary of (Unconfirmed) On-Site Activities

Activity	COPC	Potential Qualitative Risk Level
Possible historical importation of contaminated fill materials	Various – could include metals, TRH, BTEX, PAH, phenols, pesticides, asbestos	Given that the Site is relatively flat and of a similar elevation to the surrounding properties, there is no evidence that substantial filling occurred prior to the development of the Site.
Possible use of termiticides beneath former building slabs	Arsenic, OCPs, OPPs	Should termiticides have been used beneath the building slabs, any potential residues (if present) would be confined to surface soils and would not be expected to represent a significant issue with respect to either human health or the environment under the proposed land use scenario.
Possible use of asbestos building products and/or lead-based paints in Site buildings	Asbestos, lead	The historical use of such products has not been confirmed and, since there is no evidence of any building demolition having occurred on the Site.
Possible use of weedicides in any unpaved areas	Herbicides	Although herbicides may have been applied in areas of the Site, it is expected that these would have been used in accordance with manufacturer instructions – any residues (if present) would therefore most likely be confined to surface soils and would not be expected to represent a significant issue with respect to either human health or the environment under the proposed land use scenario.

Notes:

<u>Abbreviations:</u> BTEX = benzene, toluene, ethylbenzene and xylenes, OCPs = organochlorine pesticides, OPPs = organophosphate pesticides, PAH = polycyclic aromatic hydrocarbons, TRH = total recoverable hydrocarbons



6.2 OFF-SITE

Based on a review of historical and recent information obtained for the area surrounding the Site, PCAs undertaken on 'adjacent land' (i.e. within 60 m of the Site⁴) that may have impacted the quality of groundwater beneath the Site are listed in Table 6-2 – Class 1 activities are shaded grey.

Table 6-2 Summary of PCAs Undertaken Within 60 m of the Site

PCA	EP Regs Schedul e 3	Practice Direction 14 Schedule 1	Years (approx)	Business/location	Distance from Site
			1930	Marsh C R, 48 Unley Rd, Nth Unley	0 m south-east
Dry cleaning	☑	Class 1	1965	Tip Top Dry Cleaners 58 Unley Rd, Unley	33 m south
			1955	Torch Dry Cleaners, 17 Unley Rd, Parkside	59 m north-east
Metal coating, finishing or spray painting	Ø	Class 1	1930	Farr C W, 52 Unley Rd, Nth Unley	18 m south
Service Station	Ø	Class 1	1965- 1984	F0 m no	
Motor tyre retreaders &/or vulcanisers	Ø	Class 1	1991	John Murphy Tyre & Battery Service, 36 Unley Rd, Unley	18 m north
Printing works	Ø	Class 1	1991	Snap the on Time Printer, 37 Unley Rd, Parkside 32 m so	
Spray painting	Ø	Class 2	1965 - 1973	Simpson T, 48 Unley Rd, Unley	0 m south-east
Motor vehicle repair or maintenance	Ø	Class 2	1965- 1984	South Park Service Station, 17-19 Unley Rd, Parkside	59 m north-east
			1920	Turner E M, 41 Salisbury St, Nth Unley	25 m west
Hat			1920 - 1940	Dollar L, 58 Unley Rd, Nth Unley	33 m south
manufacture or felt processing	☑	Class 2	1965 - 1973	Thompson A M, 15 Unley Rd, Parkside	59 m north-east
			1940	Barry A M, 17 Unley Rd, Parkside	59 m north-east
			1955	Wall E R, 64 Unley Rd, Unley	60 m south-east

 $^{^{\}mathrm{4}}$ i.e. as defined in the Planning, Development and Infrastructure Act 2016



7 PRELIMINARY CONCEPTUAL SITE MODEL (CSM)

7.1 CONTEXT

As per the ASC NEPM (1999) and Part 5 of Practice Direction 14, the development of a CSM is as essential part of the Site assessment process.

7.2 POTENTIAL SOURCES

On-Site

With reference to Schedule 3 of the *Environment Protection Regulations 2009* and Schedule 1 of Practice Direction 14, no PCAs have been identified as having occurred on the Site.

The only PCA identified as possibly historically undertaken at the Site (as listed in Schedule 3 of the *Environment Protection Regulations 2009*, but not within Schedule 1 of Practice Direction 14, and unable to confirmed during the Site inspection) is as follows:

• *Fill or soil importation*: importation to premises of a business, of soil or other fill originating from a Site at which another PCA has taken place.

Other activities that may have occurred at the Site (but are not scheduled PCAs) include the following:

- possible historical use of termiticides beneath building slabs;
- possible use of asbestos building products and/or lead-based paints in buildings; and/or
- possible use of weedicides in any unpaved areas.

None of these (unconfirmed) activities are considered to represent a potentially significant risk to future Site users under the proposed mixed commercial/ high density residential land use scenario.

Off-Site

For the purposes of Practice Direction 14, which specifies that only Class 1 activities undertaken within 60 m of the Site need to be considered, the following PCAs have been identified:

- Dry cleaning: Three dry cleaning/ laundry/ fabric dyeing business have been identified as having operated in the vicinity of the Site between about 1930 and 1965.
- Metal coating, finishing or spray painting: A galvanized iron and sheet metal working business operated 18 m south of the Site in 1930.
- Service station: Between about 1965 and 1984 a service station (trading under various names) operated 59 m to the north-east of the Site.
- Tyre retreading and/or vulcanising: A motor tyre business was located 18 m to the north in 1991.
- Printing works: A printing business was located 32 m to the south-east in 1991.



7.3 POTENTIAL RECEPTORS

The following potential receptors are based on the proposed future non-sensitive use of the Site and the current surrounding land uses:

- future Site residents and visitors (adults and children);
- future commercial Site workers (adults);
- on- and off-site construction and maintenance workers;
- on-site terrestrial ecosystems;
- the uppermost groundwater aquifer beneath the Site;
- occupants/users of surrounding properties;
- users of down-gradient registered and/or unregistered groundwater bores; and
- down-gradient surface water bodies.

7.4 POTENTIAL TRANSPORT MECHANISMS & EXPOSURE PATHWAYS

Contaminant transport mechanisms can include the following:

- leaching of chemical substances from soil to groundwater;
- lateral migration of chemical substances in groundwater and discharge to surface water;
- generation of dust containing chemical substances from disturbance of exposed surface soils; and
- upward migration of vapour to indoor/outdoor air from soil and/or groundwater containing chemical substances.

The potential exposure pathways linking sources to future receptors are consistent with those pathways used to derive the ASC NEPM (1999) human and ecological investigation/screening levels and include the following:

Human exposure pathways:

- dermal contact with soil, groundwater and/or surface water containing chemical substances;
- incidental or purposeful (i.e. pica behaviour by young children) ingestion of soil containing chemical substances;
- incidental or purposeful ingestion of groundwater containing chemical substances;
- incidental ingestion/inhalation of dust containing chemical substances; and
- inhalation of volatile chemical substances (as soil vapour) from soil and/or groundwater containing chemical substances.

Ecological exposure pathways:

 direct contact with soil, groundwater and/or surface water containing chemical substances (terrestrial, aquatic and avian fauna); and



translocation of chemical substances from impacted soil and/or groundwater via plant roots (flora).

7.5 LINKAGES

A risk may only eventuate where all three elements of the CSM are present - i.e. a source, a valid receptor and a pathway connecting the source to the receptor. Where these three elements are present, a complete exposure pathway or 'linkage' is formed.

Since none of the (unconfirmed) activities identified for the Site in Section 7.2 are considered to represent a potentially significant risk to future Site users under the proposed mixed commercial/ high density residential land use scenario, and the Site has not been identified as a potential source of contamination, only potential linkages associated with off-site PCAs are listed in Table 7-1.

The following has also been taken into account when assessing potential exposure pathways:

- future access to soils by Site occupants (i.e. residents and commercial workers) is likely to be limited due to the presence of building slabs and paving;
- given the proposed use of the Site, and the fact that that a water mains supply is available, future groundwater extraction for any beneficial use is considered unlikely; and
- as the proposed Site development is all slab on grade, with no basements or other underground features, and the depth to groundwater is assumed to be ≥ 5 m BGL, it is unlikely that the uppermost aquifer will be intercepted during future construction/ maintenance works.

Table 7-1 Potential Linkages – On-Site Receptors

Linkage	Potential Source/s	Receptor	Pathway	Potentially significant?
L1	Historical Class 1 PCAs on surrounding properties (60 m radius)	Future Site residents, workers and visitors Future construction/ maintenance workers	Vapour inhalation (as generated from impacted groundwater)	Although none of the surrounding properties are listed on the SA EPA Site Contamination Index (i.e. of having been notified with respect to identified groundwater contamination), multiple Class 1 PCAs that could have resulted in groundwater impacts (including with volatile contaminants) have been identified within 60 m of the Site. Whereas the health and safety of the Site construction workers can be covered via the development and instigation of a Construction Environmental Management Plan (CEMP), future maintenance workers
				would be expected to adhere to standard Occupational Health & Safety (OH&S) procedures.



8 CONCLUSIONS & RECOMMENDATIONS

8.1 CONCLUSIONS

The following conclusions are based on the results of the recent PSI undertaken for the Site, taking into account its proposed redevelopment for mixed commercial (non-sensitive) and high density residential (sensitive) purposes:

- The Site was previously used for commercial purposes over time whereas the main eastern Site building was constructed sometime prior to 1935 (and was most recently used as office and showroom space), the western warehouse was constructed during the 1980s (and most recently used for storage purposes).
- With reference to Schedule 3 of the Environment Protection Regulations 2009 and Schedule 1 of Practice Direction 14, no PCAs have been identified as having occurred on the Site.
- Although the following may have been undertaken on the Site, none of these activities are considered likely to represent a potential risk of significant harm with respect to on-site human or environmental receptors under the proposed land use scenario or to represent a potential source of off-site contamination:
 - possible historical importation of soil or fill materials only considered as a PCA under Schedule 3 of the *Environment Protection Regulations 2009* (but not Schedule 1 of Practice Direction 14) if the material was sourced from another site at which a PCA had occurred;
 - possible historical use of termiticides beneath building slabs;
 - o possible use of asbestos building products and/or lead-based paints in buildings; and/or
 - possible use of weedicides in any unpaved areas.
- For the purposes of Practice Direction 14, which specifies that only Class 1 activities undertaken within 60 m of the Site need to be considered, the following (historical) off-site PCAs have been identified as representing potential off-site sources of Site contamination:
 - o several dry cleaning facilities;
 - o a metal coating, finishing or spray painting business;
 - o a service station;
 - o a tyre retreading and/or vulcanising business; and
 - o a printing works.
- Although none of the surrounding properties are listed on the SA EPA Site Contamination Index (i.e. of having been notified with respect to identified groundwater contamination), the occurrence of multiple Class 1 PCAs within 60 m of the Site could have resulted in groundwater impacts (possibly including volatile contaminants) that may extend beneath the Site.
- Should volatile contaminants be present within groundwater as a result of the identified off-site PCAs,
 this could represent a potential source of vapour intrusion into future indoor air spaces on the Site.
- The following has also been taken into account when assessing potential exposure pathways:



- o future access to soils by Site occupants (i.e. residents and commercial workers) is likely to be limited due to the presence of building slabs and paving;
- given the proposed use of the Site, and the fact that that a water mains supply is available, future groundwater extraction for any beneficial use is considered unlikely; and
- o as the proposed Site development is all slab on grade, with no basements or other underground features, and the depth to groundwater is assumed to be ≥ 5 m BGL, it is unlikely that the uppermost aquifer will be intercepted during future construction/ maintenance works.
- Whereas the health and safety of the Site construction workers can be covered via the development and instigation of an appropriate CEMP, future maintenance workers would be expected to adhere to standard OH&S procedures.

8.2 SITE CONTAMINATION FOR PLANNING PURPOSES

For the purposes of Schedule 2 of Practice Direction 14, it is considered that site contamination **may exist** with respect to the proposed sensitive land use (*Item 1: Residential class 1*) – i.e. although there are no identified on-site Class 1, 2 or 3 activities, a number of off-site Class 1 activities have been identified as historically undertaken within 60 m of the Site.

A completed Practice Direction Schedule 2 document is included in Appendix Q.

8.3 RECOMMENDATIONS

Based on the results of the recent PSI, it is recommended that:

- a passive soil vapour assessment be undertaken at the Site, specifically targeting future indoor air spaces; and
- a CEMP be prepared, and instigated, for the proposed development program.

Please also refer to the statement of limitations associated with these works (Appendix R).



9 REFERENCES

CSIRO *Australian Soil Resource Information System* (ASRIS) website: http://www.asris.csiro.au/mapping/viewer.htm.

Department for Environment and Water (2023) *WaterConnect* database: https://www.waterconnect.sa.gov.au/Systems/GD/Pages/Default.aspx.

Environment Protection Act 1993.

Environment Protection Regulations 2009.

Environment Protection (Water Quality) Policy 2015.

Golder Associates (2019) *Unley Stage 3 Environmental Assessment Program.* Report prepared for SA EPA, dated 20 June 2019.

Kleinfelder (2018) *Unley Stage 2 Environmental Assessment.* Report prepared for SA EPA, dated 5 September 2018.

Land and Business (Sale and Conveyancing) Act 1994.

Location SA Map Viewer. http://location.sa.gov.au/viewer/.

National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended in 2013).

Planning, Development and Infrastructure (General) Regulations 2017

Planning, Development and Infrastructure Act 2016.

SA EPA (2019) Guidelines for the Assessment and Remediation of Site Contamination.

South Australian Property and Planning Atlas website: https://sappa.plan.sa.gov.au/.

State Planning Commission (2021) *Practice Direction 14 (Site Contamination Assessment)*, as amended in June 2022.

Tierra Environment (2017) *Unley Stage 1 Assessment Works - Passive Soil Vapour Investigations.* Report prepared for the SA EPA, dated 19 June 2017.

Refer also to Appendix S for a list of the databases accessed by Lotsearch.

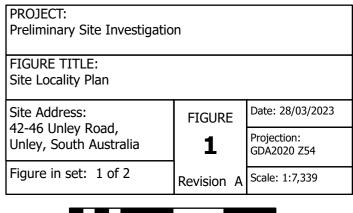


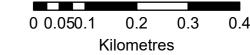
FIGURES











Legend

Site Boundary
Land Use Generalised 2020

Agriculture

Commercial Education

Industry- Food

Non-Private Residential

Public Institution

Recreation

Reserve

Residential

Retail

Utility

Vacant

Vacant Residential

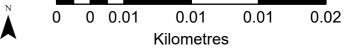




Land & Water Consulting
Email: enquiries@lwconsulting.com.au
Web: www.lwconsulting.com.au



PROJECT:						
Preliminary Site Investigation						
· · · · · ·						
FIGURE TITLE:						
Site Layout and Building Loo	Site Layout and Building Locations					
Site Address:	FIGURE	Date: 28/03/2023				
42-46 Unley Road,	_	Projection:				
Unley, South Australia	2	GDA2020 Z54				
Figure in set: 2 of 2	Revision A	Scale: 1:281				
	•					



Legend





APPENDIX A REGULATORY FRAMEWORK



REGULATORY FRAMEWORK ENVIRONMENT PROTECTION ACT 1993

All assessment, management and remediation of Site contamination within South Australia is regulated by the EP Act. Section 5B of the EP Act defines Site contamination as follows:

- 1) For the purposes of this Act, Site contamination exists at a Site if—
 - (a) chemical substances are present on or below the surface of the Site in concentrations above the background concentrations (if any); and
 - (b) the chemical substances have, at least in part, come to be present there as a result of an activity at the Site or elsewhere; and
 - (c) the presence of the chemical substances in those concentrations has resulted in
 - i. actual or potential harm to the health or safety of human beings that is not trivial, taking into account current or proposed land uses; or
 - ii. actual or potential harm to water that is not trivial; or
 - iii. other actual or potential environmental harm that is not trivial, taking into account current or proposed land uses.
- 2) For the purposes of this Act, environmental harm is caused by the presence of chemical substances—
 - (a) whether the harm is a direct or indirect result of the presence of the chemical substances; and
 - (b) whether the harm results from the presence of the chemical substances alone or the combined effects of the presence of the chemical substances and other factors.
- 3) For the purposes of this Act, Site contamination does not exist at a Site if circumstances of a kind prescribed by regulation apply to the Site.

Based on the above, the first stage in determining whether Site contamination exists is to assess whether chemical substances have been added to the Site through an activity and whether these substances are above background concentrations. The second stage is to assess whether the chemical substances have resulted in actual or potential harm to the health or safety of human beings or the environment that is not trivial.

Site contamination assessment and human health risk assessment is also undertaken with regard to the following publications:

- National Environment Protection (Assessment of Site Contamination) Measure, (National Environment Protection Council (NEPC), 1999) (ASC NEPM (1999, as amended 2013)).
- Environment Protection Regulations 2009, under the Environment Protection Act 1993.
- Australian Standard 4482.1-2005 Guide to the investigation and sampling of Sites with potentially contaminated soil (Standards Australia, 2005)).

If Site contamination is determined to be present at a Site, the EP Act provides mechanisms to assign responsibility for the contamination and appropriate assessment and/or remediation of the contamination. The EP Act defines 'remediation' as follows:

Remediate a Site means treat, contain, remove or manage chemical substances on or below the surface of the Site so as to—



- (a) eliminate or prevent actual or potential harm to the health or safety of human beings that is not trivial, taking into account current or proposed land uses; and
- (b) eliminate or prevent, as far as reasonably practicable—
 - (i) actual or potential harm to water that is not trivial; an
 - (ii) any other actual or potential environmental harm that is not trivial, taking into account current or proposed land uses.

It is important to note that, should Site contamination be identified, management of the chemical substances present may only require an assessment of risk to human health.

State Planning Commission Practice Direction 14 (Site Contamination Assessment 2021)

This practice direction is part of a scheme that provides for requirements that apply to the assessment of potential Site contamination when land use changes to a more sensitive use or where a land division proposes a sensitive use.

Section 42 of the *Planning, Development and Infrastructure Act 2016* allows the State Planning Commission (the "Commission") to issue practice directions for the purposes of the Act. Generally, practice directions specify procedural requirements or steps in connection with a matter arising under the Act. In certain cases, the Act provides that a particular matter may be addressed or dealt with by a practice direction.

Section 4 of the Act sets out rules that relate to a change in the use of land, which is a form of development under the Act. This practice direction is part of a scheme that provides for requirements that apply in relation to the assessment of potential Site contamination when land use changes to a more sensitive use or where a land division proposes a sensitive use. Because Site contamination is linked to land use, bringing about a change in land use can cause Site contamination (under section 103D(2) of the *Environment Protection Act* 1993 and regulation 51 of the *Environment Protection Regulations* 2009) even though the person who brought about the change of use may not be the original polluter.

The objects of this practice direction are to:

- support Site contamination assessment steps that must be taken when land use is proposed to be changed to a more sensitive use or, with respect to land division, where a sensitive use is proposed, and there is reason to believe that Site contamination exists or may exist because of various activities or conditions
- set out forms and other requirements that are contemplated by provisions of the Planning, Development and Infrastructure (General) Regulations 2017 that relate to assessment and remediation of Site contamination in connection with applications for planning consent
- specify conditions that will apply in connection with a planning consent for land that may be subject to Site contamination
- provide guidance and other information associated with the assessment and remediation of Site contamination.

THE ASC NEPM

The National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM) provides recommended methods for assessment in Australia and was amended in 2013. A review of existing Site contamination guidance was initiated by the EPA to support the amendment to the ASC NEPM. The



guidance described in EPA information sheet 1025/16 provides a framework for the implementation of the ASC NEPM, prior to the completion of the EPA review.

The ASC NEPM is a significantly updated and extensive series of health and environmental documents comprising a policy framework (the Measure) supported by a flow chart of the recommended process for Site assessment (Schedule A) and a series of nine technical guidelines:

- Schedule B1 Guideline on investigation levels for soil and groundwater
- Schedule B2 Guideline on Site characterisation
- Schedule B3 Guideline on laboratory analysis of potentially contaminated soils
- Schedule B4 Guideline on Site-specific health risk assessment methodology
- Schedule B5a Guideline on ecological risk assessment
- Schedule B5b Guideline on methodology to derive ecological investigation levels in contaminated soils
- Schedule B5c Guideline on ecological investigation levels for arsenic, chromium (III), copper, DDT, naphthalene, nickel and zinc
- Schedule B6 Guideline on the framework for risk-based assessment of groundwater contamination
- Schedule B7 Guideline on derivation of health-based investigation levels
- Schedule B8 Guideline on community engagement and risk communication
- Schedule B9 Guideline on competencies and acceptance of environmental auditors and related professionals.

The ASC NEPM provides a suite of Tier 1 investigation levels, screening levels and management limits. Each Tier 1 level has specific application considerations (including land-use scenarios, depth, soil type and properties) with limitations required to be considered on a Site-specific basis.

In relation to the appropriate application of Tier 1 levels, appropriate data analysis including summary statistics should be applied as described in Schedule B1 and B2 (Section 13). As a minimum, the maximum and 95% UCL of the arithmetic mean should be compared to the Tier 1 levels.



APPENDIX B

CERTIFICATE OF TITLE AND HISTORICAL OWNERSHIP SEARCH

CT 5564/801

Transferred to: OTELLO UNLEY PTY LTD Dated: 08/06/2022

Transferred to: PMFM PTY LTD Dated: 21/06/2018

Transferred to: TWO BLUES (SA) PTY LTD Dated: 25/10/2017

Leased to: TWO OLD NANNAS Dated: 8/03/2017

Issued to: Michael Gravas and Anastasia Gravas (Wife)

Dated: 13/8/1998



CT 3633/200

Portion leased to: DHARAN INVESTMENTS PTY LTD (for 7 years)

Dated: 15/10/1987

Transferred to: Michael Gravas and Anastasia Gravas (Wife)

Dated: 14/11/1980

Transferred to: Michael Gravas (Shop Proprietor)

Dated: 22/02/1979

Issued to: John Goutziamanis and Michael Gravas (Shop Proprietors)

Dated: 15/05/1969



CT 335/218

Transferred: John Goutziamanis and Michael Gravas (Shop Proprietors)

Dated: 15/05/1969

Transmitted to: EXECUTOR TRUSTEE AND AGENCY COMPANY OF SOUTH AUSTRALIA LTD

Dated: 03/11/1941

Portion leased to: Walter John Hill (for 14 years)

Dated: 3/12/1918

Portion leased to: Thomas Rose (for 10 years)

Dated: 9/8/1912

Transferred to: David Williams the Younger (Architect)

Dated: 12/06/1908

Transferred to: Luke Tighe (Chaff Merchant)

Dated: 15/05/1896

Transferred to: Francis Joseph Fisher (Solicitor) and James Day (Gentleman)

Dated: 05/05/1896

Transferred to: Charles Day Dated: 26/10/1891

Issued to: Joseph Fogg Proctor and Charles Day (Gentleman)

Dated: 23/06/1880





Product
Date/Time
Customer Reference
Order ID

Register Search (CT 5564/801) 07/03/2023 09:47AM MM-02

20230307001400

REAL PROPERTY ACT, 1886



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Certificate of Title - Volume 5564 Folio 801

Parent Title(s) CT 3633/200

Creating Dealing(s) CONVERTED TITLE

Title Issued 13/08/1998 Edition 4 Edition Issued 08/06/2022

Estate Type

FEE SIMPLE

Registered Proprietor

OTELLO UNLEY PTY. LTD. (ACN: 658 940 295)
OF 5-9 RUNDLE STREET KENT TOWN SA 5067

Description of Land

ALLOTMENT 138 FILED PLAN 13556 IN THE AREA NAMED UNLEY HUNDRED OF ADELAIDE

Easements

NIL

Schedule of Dealings

Dealing Number Description

13802271 MORTGAGE TO POLICE CREDIT UNION LTD. (ACN: 087 651 205)

Notations

Dealings Affecting Title NIL

Priority Notices NIL

Notations on Plan NIL

Registrar-General's Notes

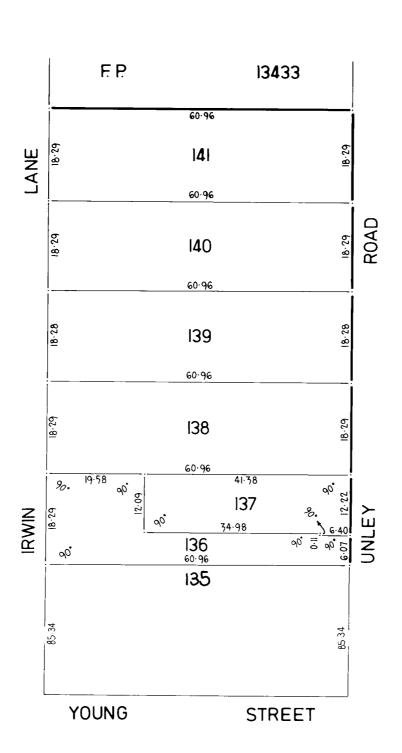
PLAN FOR LEASE PURPOSES VIDE G36/1986

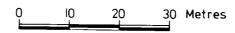
Administrative Interests NIL

Land Services SA Page 1 of 2











Product Date/Time **Customer Reference** Order ID

Historical Search 07/03/2023 09:47AM MM-02 20230307001400

Certificate of Title

Title Reference: CT 5564/801

Status: **CURRENT**

Parent Title(s): CT 3633/200

Dealing(s) Creating Title:

CONVERTED TITLE

Title Issued: 13/08/1998

Edition:

Dealings

Lodgement Date	Completion Date	Dealing Number	Dealing Type	Dealing Status	Details
03/06/2022	08/06/2022	13802271	MORTGAGE	REGISTERE D	POLICE CREDIT UNION LTD. (ACN: 087 651 205)
03/06/2022	08/06/2022	13802270	TRANSFER	REGISTERE D	OTELLO UNLEY PTY. LTD. (ACN: 658 940 295)
03/06/2022	08/06/2022	13802269	DISCHARGE OF MORTGAGE	REGISTERE D	12938959
13/06/2018	21/06/2018	12938959	MORTGAGE	REGISTERE D	NATIONAL AUSTRALIA BANK LTD. (ACN: 004 044 937)
13/06/2018	21/06/2018	12938958	TRANSFER	REGISTERE D	PMFM PTY. LTD. (ACN: 625 117 731)
17/10/2017	25/10/2017	12811688	TRANSFER	REGISTERE D	TWO BLUES (SA) PTY. LTD. (ACN: 617 406 694)
16/12/2016	08/03/2017	12652095	LEASE	WITHDRAWN	TWO OLD NANNAS (ACN: 616 103 569)

Land Services SA Page 1 of 1

South Australia

CERTIFICATE OF TITLE

Register Book,

3633 Folio 200



New Certificate of Title for the whole of the Land in Vol.335 Folio 218

JOHN GOUTZIAMANIS and MICHAEL GRAVAS both of 42 Unley Road North Unley 5061 Shop Proprietors

the proprietors are

of an estate in fee simple

AS TENANTS IN COMMON

subject nevertheless to such encumbrances liens and interests as are notified by memorial underwritten or endorsed hereon in

THAT piece of land situate in the HUNDRED of

ADELAIDE

COUNTY of

ADELAIDE

being the ALLOTMENT 90 of the subdivision of portion of Section 239 laid out as NORTH UNLEY and

bounded as appears in the plan in the margin hereof and therein coloured green and in the plan deposited in the Lands Titles Registration Office, No. which said Section is delineated in the public map of the said Hundred deposited in the Land Office at Adelaide.

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

day of

12th Signed the

The land in this Certificate REDESIGNATED

as ALLOTMENT(S) in FILED PLAN

1909, in the presence of A. Mc Lenny

Registrar-General



91 B 90 UNLEY 89

G.R.O. PLAN No. 36 of 1986 FOR LEASING PURPOSES DEPOSITED TION OF THE WITHIN LAND

\$ 3000

MORTGAGE No. 3003488

TO AUSTRALIA AND NEW ZEALAND BANK LIMITED PRODUCED 15.5. 19 69 AT 11.5 am

DEP. REG. GEN.

3142559 A 3123344

THE WITHIN LAND IS DISCHARGED FROM MORTGAGE BY ENDORSEMENT THEREON.

DEP. REG. GEN.

TRANSFER No. Gravas of 24 stanley had malengourie a source igowice 504 & chop!

TRANSFER No. 4644099 to
the within named Michael Gravas and to
Anastasia Gravas his wife

OF THE WITHIN LAND. PRODUCED 14.11.4980 AT 11.20 am

M4968373



MORTGAGE No. 4968373

TO THE NATIONAL BANK OF AUSTRALASIA LIMITED PRODUCED 17. 11. 1982 AT 10.1544.



LEASE NO. 6425504 To Dharan

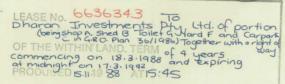
Investments Pty. Ltd. of pation

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OF THE WITHIN LANDATERM of 3 years commonary

on 18.3.1985 and septing at midnight on

PRODUCED 15.10.1987 AT 11:30





PA 6895215

VIDE 1994105 PRODUCED 9-10-1990AT 10-45



CANCELLED
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(CERTIFICATE OF TITLE.)



Vol. Register Book,

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APPENDIX C PLANNING INFORMATION

4/11/23, 9:11 AM Parcel Report

SAPPA Parcel Report

Date Created: April 10, 2023

The South Australian Property and Planning Atlas is available at the Plan SA website https://sappa.plan.sa.gov.au/



Address Details

Unit Number:

Street Number: 46

Street Name: UNLEY

Street Type: RD

Suburb: UNLEY

Postcode: 5061

Property Details:

Council: CITY OF UNLEY

State Electorate: UNLEY (2014), UNLEY (2018), UNLEY (2022)

Federal Electorate: ADELAIDE (2013), ADELAIDE (2016),

ADELAIDE (2019)

Hundred: ADELAIDEValuation Number: 0908017961Title Reference: CT5564/801Plan No. Parcel No.: F13556A138

Zoning details next page

Scale \approx 1:1128 (on A4 page)

50 metres≈

The information provided, is not represented to be accurate, current or complete at the time of printing this report.

printing this report.

The Government of South Australia accepts no liability for the use of this data, or any reliance placed on it.

This report and its contents are (c) copyright Government of South Australia.



4/11/23, 9:11 AM Parcel Report

Zone Details

Zones

Urban Corridor (Main Street) (Z6305) - UC(MS)

Overlays

Airport Building Heights (Regulated) (O0303) - All structures over 45 metres

The Airport Building Heights (Regulated) Overlay seeks to ensure building height does not pose a hazard to the operation and safety requirements of commercial and military airfields.

Advertising Near Signalised Intersections (00305)

The Advertising Near Signalised Intersections Overlay seeks to ensure advertising near signalised intersections does not pose an unacceptable risk to pedestrian or road safety.

Affordable Housing (00306)

The Affordable Housing Overlay seeks to ensure the integration of a range of affordable dwelling types into residential and mixed use development.

Building Near Airfields (00601)

The Building Near Airfields Overlay seeks to ensure development does not pose a hazard to the operational and safety requirements of commercial and military airfields.

Design (01203)

The Design Overlay seeks to ensure significant development positively contributes to the liveability, durability and sustainability of the built environment through high-quality design.

Noise and Air Emissions (O4201)

The Noise and Air Emissions Overlay seeks to protect new noise and air quality sensitive development from adverse impacts of noise and air emissions.

Prescribed Wells Area (O4804)

The Prescribed Wells Area Overlay seeks to ensure sustainable water use in prescribed wells areas.

Regulated and Significant Tree (O5404)

The Regulated and Significant Tree Overlay seeks to mitigate the loss of regulated trees through appropriate development and redevelopment.

Traffic Generating Development (O6001)

The Traffic Generating Development Overlay aims to ensure safe and efficient vehicle movement and access along urban transport routes and major urban transport routes.

Urban Transport Routes (06301)

The Urban Transport Routes Overlay seeks to ensure safe and efficient vehicle movement and access along urban transport routes.

Variations

Maximum Building Height (Metres) (V0002) - 18.5

Maximum building height is 18.5m

Minimum Building Height (Levels) (V0003) - 3

Minimum building height is 3 levels

Maximum Building Height (Levels) (V0008) - 5

Maximum building height is 5 levels

Minimum Building Height (Metres) (V0009) - 11.5

Minimum building height is 11.5m

Minimum Primary Street Setback (V0010) - 0

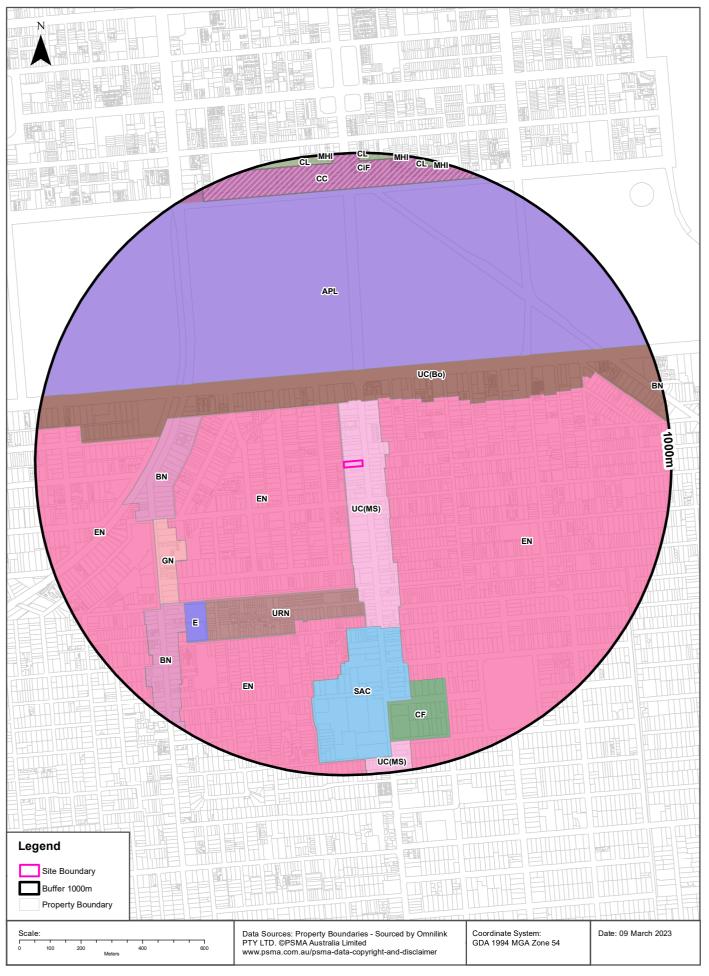
Minimum primary street setback is 0m

Interface Height (V0013) - 30.3

Development should be constructed within a building envelope provided by a 30 degree plane, measured 3m above natural ground at the boundary of an allotment

Planning and Design Code Zones 46 Unley Road, Unley, SA 5061





Planning

46 Unley Road, Unley, SA 5061

Planning and Design Code - Zones

Planning and Design Code zones within the dataset buffer:

Map Id	Zone Code	Zone Name	Legal Start Date	Status	Distance	Direction
UC(MS)	Z6305	Urban Corridor (Main Street)	19/03/2021	0	0m	On-site
EN	Z1506	Established Neighbourhood	19/03/2021	0	3m	South West
EN	Z1506	Established Neighbourhood	19/03/2021	0	69m	South East
UC(Bo)	Z6302	Urban Corridor (Boulevard)	19/03/2021	0	191m	North
APL	Z0302	Adelaide Park Lands	08/12/2022	0	296m	North
URN	Z6307	Urban Renewal Neighbourhood	19/03/2021	0	393m	South West
BN	Z0601	Business Neighbourhood	19/03/2021	0	483m	West
EN	Z1506	Established Neighbourhood	19/03/2021	0	483m	South West
SAC	Z5705	Suburban Activity Centre	19/03/2021	0	523m	South
GN	Z2102	General Neighbourhood	19/03/2021	0	566m	South West
E	Z1501	Employment	19/03/2021	0	624m	South West
BN	Z0601	Business Neighbourhood	19/03/2021	0	679m	South West
CF	Z0903	Community Facilities	19/03/2021	0	713m	South
CC	Z0905	Capital City	19/03/2021	0	883m	North
UC(MS)	Z6305	Urban Corridor (Main Street)	19/03/2021	0	900m	South
BN	Z0601	Business Neighbourhood	19/03/2021	0	963m	East
CL	Z0908	City Living	19/03/2021	0	972m	North
CL	Z0908	City Living	19/03/2021	0	973m	North

Planning and Design Code Zones Data Source: Attorney-General's Department - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Planning and Design Code - Subzones

Planning and Design Code subzones within the dataset buffer:

Map Id	Subzone Code	Subzone Name	Legal Start Date	Status	Distance	Direction
CiF	S0901	City Frame	19/03/2021	0	883m	North
МНІ	S3902	Medium-High Intensity	19/03/2021	0	970m	North
MHI	S3902	Medium-High Intensity	19/03/2021	0	971m	North

Planning and Design Code Subzones Data Source: Attorney-General's Department - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Land Use Generalised

46 Unley Road, Unley, SA 5061





Planning

46 Unley Road, Unley, SA 5061

Land Use Generalised

Land use classes within the dataset buffer:

Description	Distance	Direction
Retail Commercial	Om	On-site
Commercial	0m	North
Residential	6m	North West
Utilities or Industry	120m	North East
Vacant	130m	South
Food Industry	223m	North East
Public Institution	245m	South West
Vacant Urban Land	246m	North East
Reserves	298m	North East
Recreation	313m	North
Non Private Residential	532m	East
Education	538m	East

Land Use Generalised Data Source: Dept of Planning, Transport and Infrastructure - South Australia Creative Commons 4.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/4.0/au/deed.en

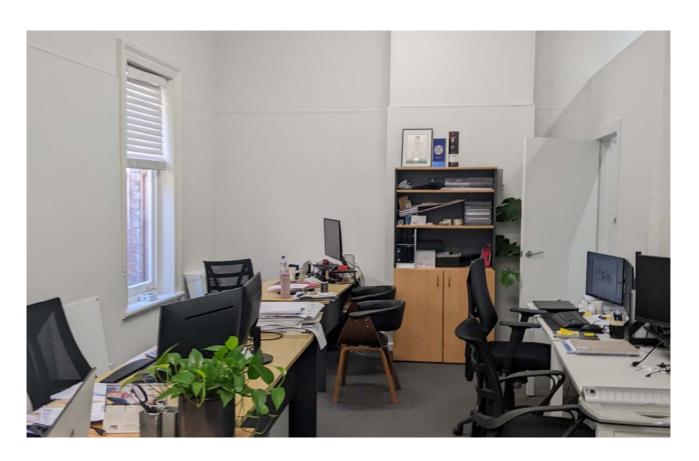


APPENDIX D SITE INSPECTION PHOTOGRAPHS





Plate 1—View from Unley Road, facing north.



 ${\it Plate 2-General of fice within Blag Homes}.$





Plate 3— View from inside Stiebel Eltron, facing east.

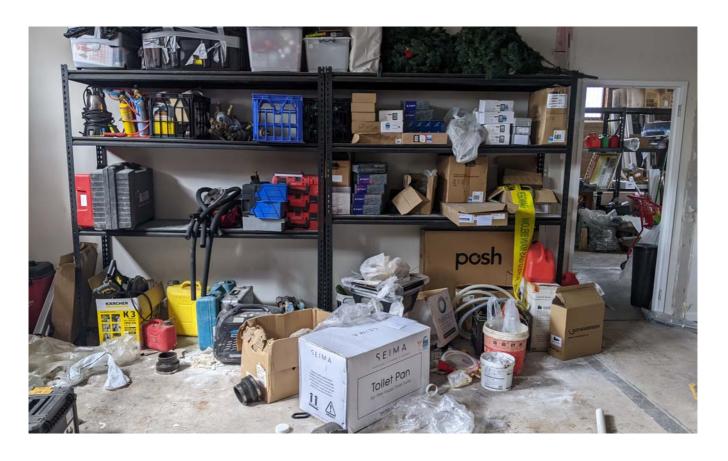


Plate 4—View inside Fagor Industrial Kitchen Supplies, facing east.





Plate 5—Central car park section, facing west, with the warehouse in the background.



 ${\it Plate 6-Storage\ within\ the\ warehouse,\ including\ petrol\ jerry\ cans.}$





Plate 7—Minor spill within the warehouse.



Plate 8—View of the warehouse, facing east.





Plate 9—Minor spill within central carpark.



 $Plate\ 10-Storage\ of\ roof\ tiles,\ metal\ and\ plaster\ board\ within\ central\ car\ park,\ along\ norther\ boundary$





Plate 11—Storage of tyres, timber and plaster board along the northern boundary, within the western car park.



APPENDIX E TOPOGRAPHICAL FEATURES

Topographic Features

46 Unley Road, Unley, SA 5061

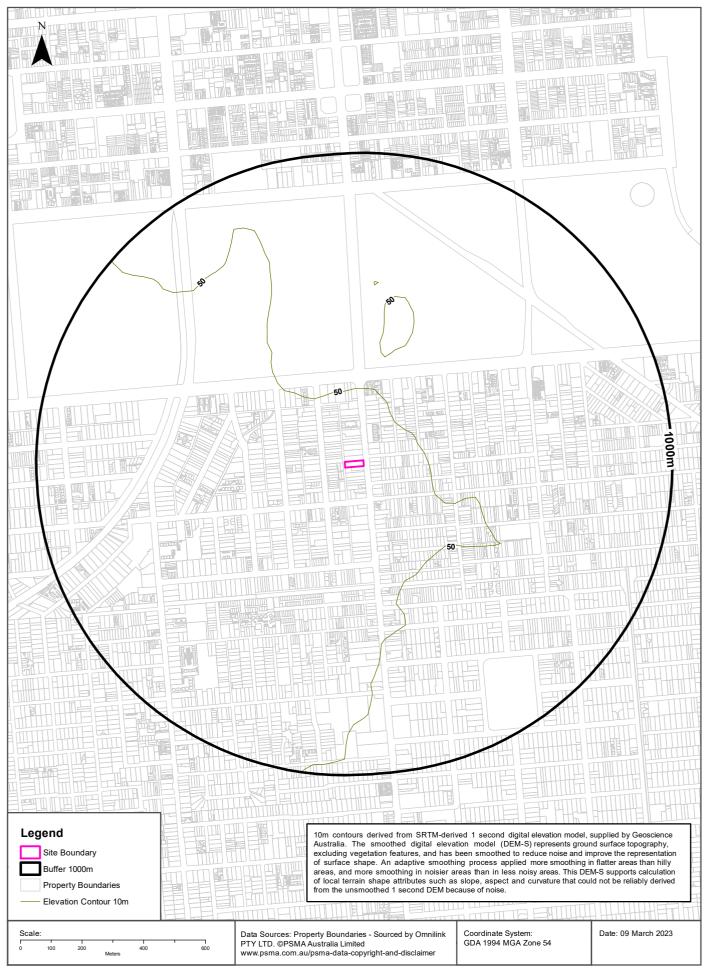




Elevation Contours

46 Unley Road, Unley, SA 5061



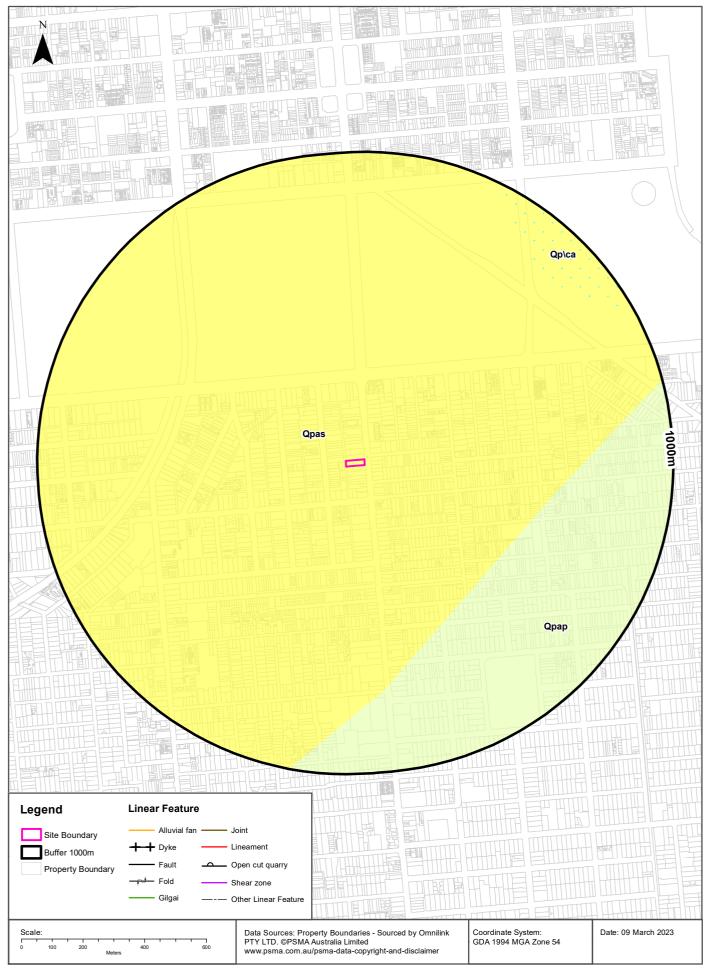




APPENDIX F GEOLOGICAL & SOIL INFORMATION

Geology 1:100,000 46 Unley Road, Unley, SA 5061





Geology

46 Unley Road, Unley, SA 5061

Surface Geology 1:100,000

Surface Geology Units within the dataset buffer:

Map Unit Code	Name	Description	Parent Name	Province	Age	Min Age	Max Age	Dist	Dir
Qpas	Keswick Clay	Clay, smectite-rich, grey- green, with red or yellow mottling and rare sand lenses.	Unnamed GIS Unit - see description	ST VINCENT BASIN	PLEISTOCENE	Pleistocene	Pleistocene	0m	On- site
Qpap	Pooraka Formation	Clay, sand and carbonate earth, silty, with gravel lenses.	Unnamed GIS Unit - see description	ST VINCENT BASIN	PLEISTOCENE	Pleistocene, Late	Pleistocene, Late	525m	South East
Qp\ca	Unnamed GIS Unit - see description	Undifferentiated Pleistocene calcrete.	Unnamed GIS Unit - see description	UNKNOWN	PLEISTOCENE	Pleistocene	Pleistocene	825m	North East

Geology Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 4.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/4.0/

Linear Structures 1:100,000

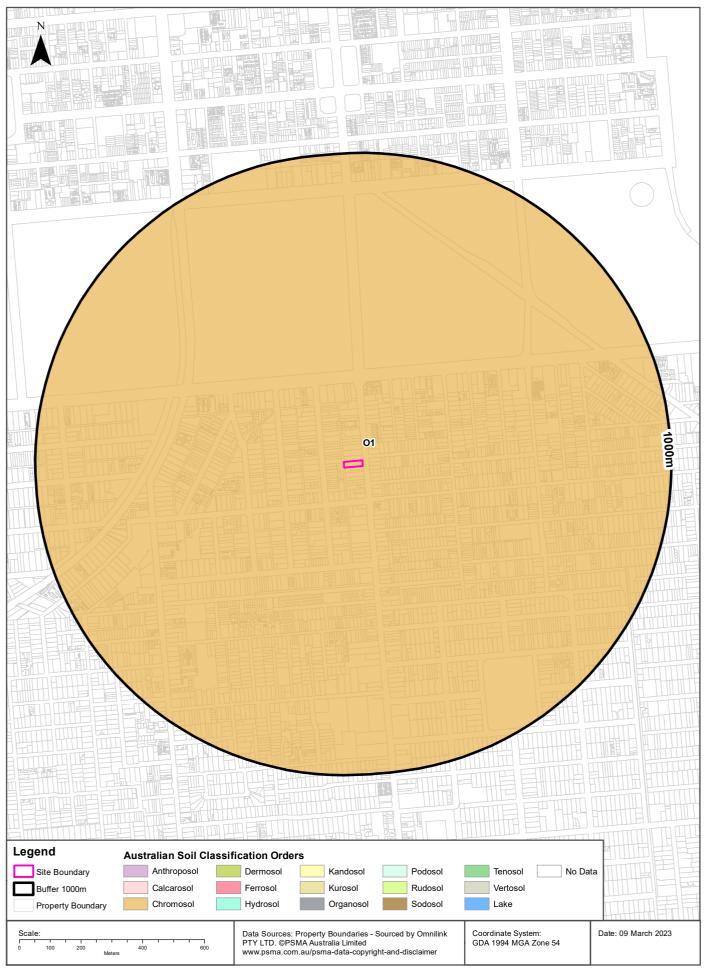
Linear geological structures within the dataset buffer:

Map Code	Description	Distance	Direction
N/A	No records in buffer		

Geology Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 4.0 © Commonwealth of Australia https://creativecommons.org/licenses/by/4.0/

Atlas of Australian Soils





Soils

46 Unley Road, Unley, SA 5061

Atlas of Australian Soils

Soil mapping units and Australian Soil Classification orders within the dataset buffer:

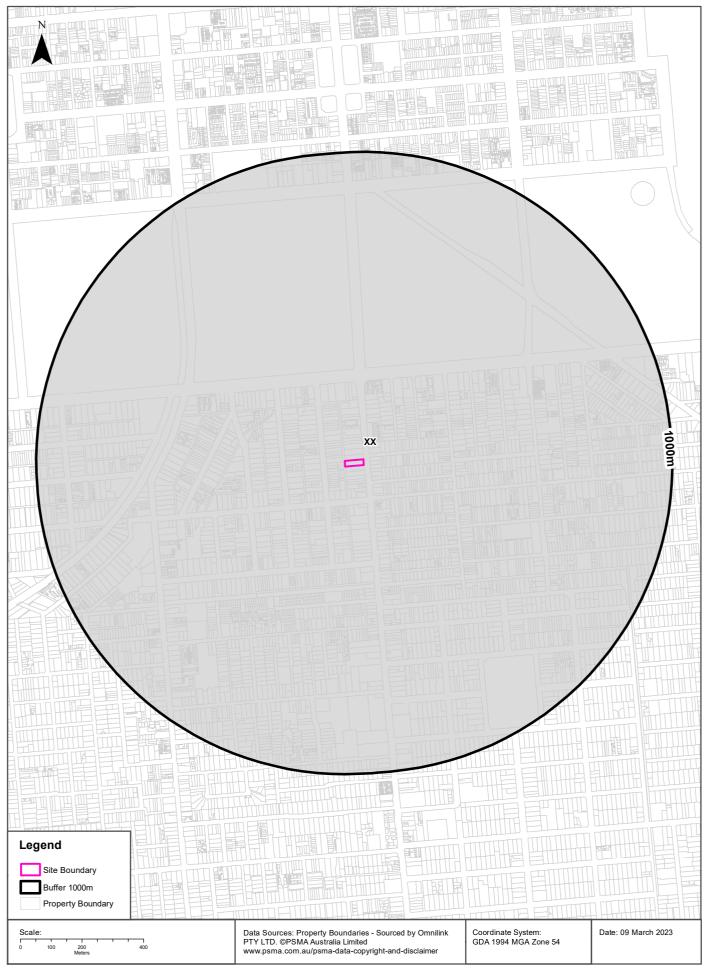
Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
O1	Chromosol	Outwash plains: hard alkaline red soils (Dr2.23 with small areas Dr2.33); small areas cracking clay soils (Ug5.15, Ug5.16, and Ug5.2), also hard alkaline yellow mottled soils (Dy3.43); minor areas (Um6.21) and (Uf6.11); various alluvial soils (unclassified) in the stream valleys.	0m	On-site

Atlas of Australian Soils Data Source: CSIRO

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Soil Types





Soils

46 Unley Road, Unley, SA 5061

Soil Types

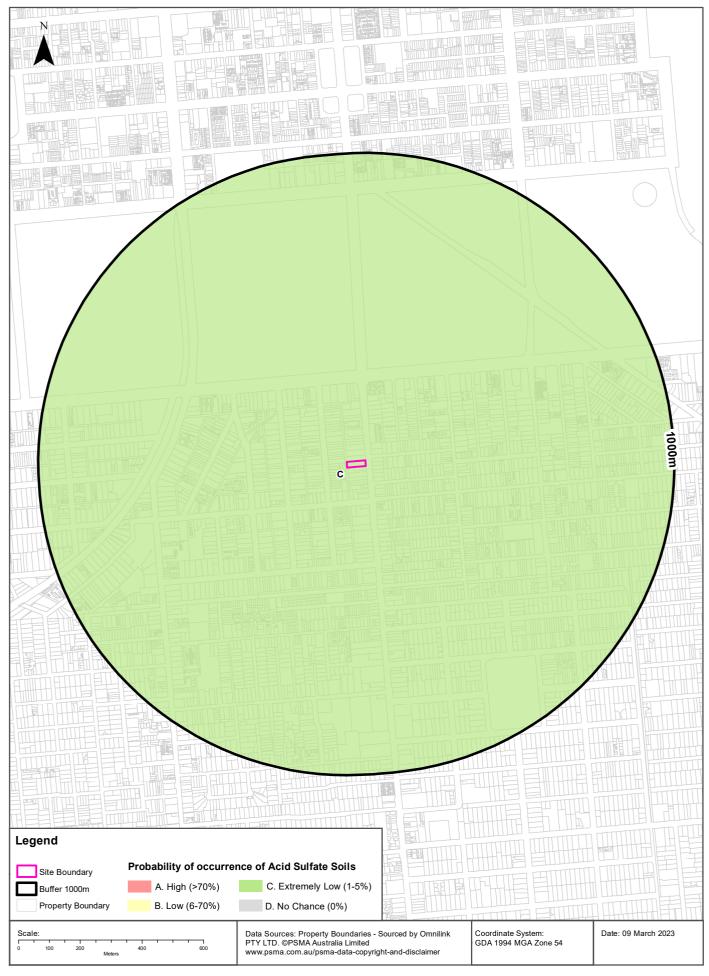
Soil types within the dataset buffer:

Map category code	Soil type description	Distance	Direction
XX	Not applicable - No assessment/analysis undertaken	0m	On-site

Soil Types Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Atlas of Australian Acid Sulfate Soils





Acid Sulfate Soils

46 Unley Road, Unley, SA 5061

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

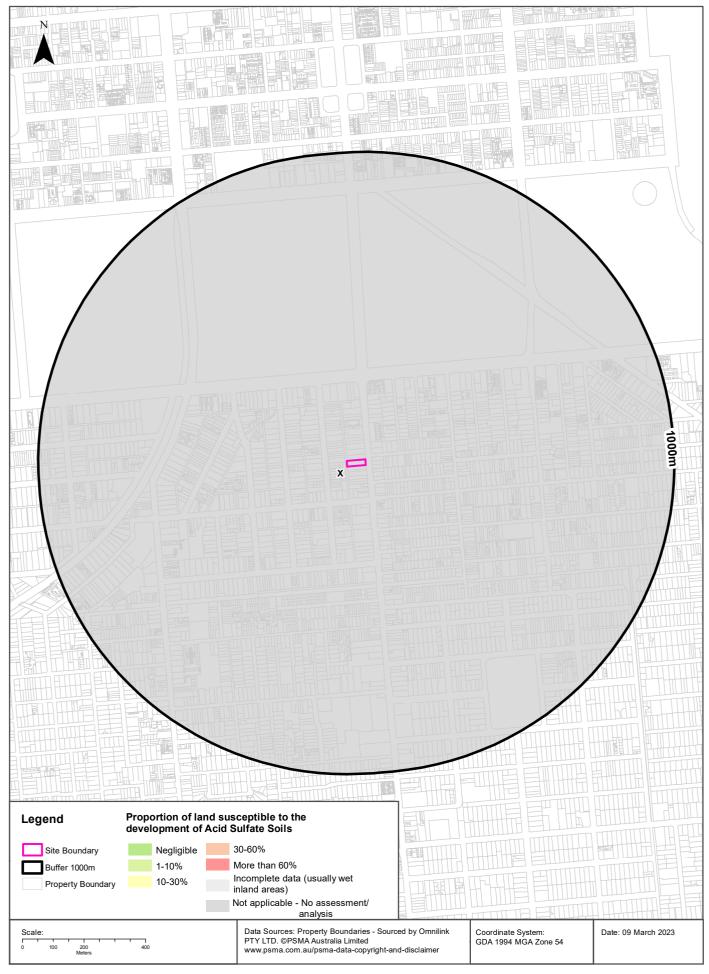
Class	Description	Distance	Direction
С	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m	On-site

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO

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Acid Sulfate Soils Potential





Acid Sulfate Soils

46 Unley Road, Unley, SA 5061

Acid Sulfate Soil Potential

Acid sulfate soil potential within the dataset buffer:

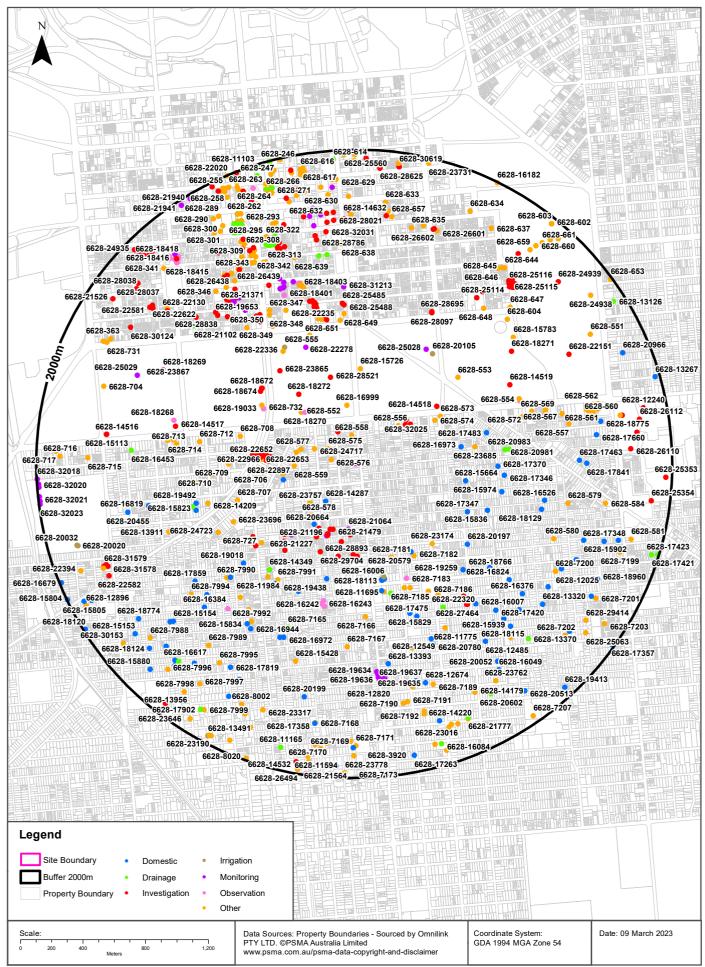
Map category code	Proportion of land susceptible to the development of acid sulfate soils	Distance	Direction
X	Not applicable - No assessment/analysis undertaken	0m	On-site

Acid Sulfate Soils Data Source: Dept of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en



APPENDIX G HYDROGEOLOGICAL INFORMATION





Groundwater and Drillholes

46 Unley Road, Unley, SA 5061

Groundwater Aquifers

Groundwater aquifers within the dataset buffer:

Aquifer Code	Description	Distance	Direction
20	Sedimentary Rocks - basins include limestone, often cavernous, sandstone, sand shale and clay	0m	On-site

Groundwater Aquifers Data Source: Dept. of Environment, Water and Natural Resources - South Australia Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Drillholes

Drillholes within the dataset buffer:

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 576	47673				1914-09-09	7.77	42.00					0.150 0	5.18	5.18	36.82	118m	West
6628- 575	47672				1914-09-22	7.31	42.00					0.190 0	5.18	5.18	36.82	161m	North West
6628- 558	47655					9.75		41.90	7.00	800	1451		7.92	7.92	33.98	174m	North
6628- 21870	201056	MW 9		Investigation	2003-11-24	8.00		41.00								211m	North West
6628- 24717	247055				2008-09-06	25.00		39.81		603	1097	0.666 6	7.50	7.50	32.31	241m	West
6628- 14287	61256		Operational	Domestic	1988-07-22	17.00	42.00		8.00	2234	4010	1.000 0	0.00	0.00	42.00	275m	South West
6628- 20664	186463			Drainage	2001-07-09	17.50		41.84		2358	4230	0.750 0	3.00	3.00	38.84	304m	South West
6628- 577	47674				1934-01-01	9.14		39.34	7.00	2030	3652		3.66	3.66	35.68	320m	West
6628- 27069	277898				2013-09-19	30.00				682	1239	0.700 0				343m	West
6628- 556	47653					6.10		45.20	8.00	736	1334		1.98	1.98	43.22	344m	North East
6628- 23757	241489			Drainage	2008-03-04	32.00		40.84		634	1151	1.200 0	12.00	12.00	28.84	346m	South West
6628- 23758	241490				2008-02-29	36.00		40.80		611	1109	1.200 0	12.00	12.00	28.80	350m	South West
6628- 559	47656					6.10		38.87	7.00	3385	6032					352m	West
6628- 16999	148163	SZ 1			1993-08-02	9.95	41.00									367m	North
6628- 32037	371295			Investigation	2022-08-23	8.50										381m	North East
6628- 32025	371269		Dry	Investigation	2022-08-22	6.00										402m	North East
6628- 578	47675				1914-03-14	7.31	42.00			1985	3572	0.320 0	3.35	3.35	38.65	404m	South West
6628- 21064	195366			Monitoring	2002-05-23	7.00		43.32					3.10	3.10	40.22	408m	South
6628- 32026	371270		Dry	Investigation	2022-08-24	8.50										409m	North East
6628- 21139	195742			Domestic	2002-02-19	17.00		38.75		1457	2630	0.800	4.00	4.00	34.75	411m	West
6628- 21479	198083	MW 17		Investigation	2003-04-07	8.00		42.53					5.50	5.50	37.03	420m	South

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 21480	198084	MW 16		Investigation	2003-04-07	8.00		42.40					5.50	5.50	36.90	426m	South
6628- 23687	240314				2008-05-07	26.00		39.09		1117	2022	0.700 0	6.00	6.00	33.09	429m	West
6628- 18270	164088			Observation	1996-10-17	18.50		41.01								432m	North West
6628- 31203	354714			Domestic	2021-02-23	24.00				693	1259		8.00	8.00		432m	West
6628- 17430	152914			Domestic	1995-10-21	24.00		41.45					5.90	5.90	35.55	437m	South West
6628- 29703	312724			Investigation	2018-06-19	6.00										442m	South
6628- 552	47649		Operational	Town Water Supply (Public/Mun cipal)	1934-09-01	32.00		41.16		800	1451	2.530	8.84	8.84	32.32	445m	North West
6628- 29693	312612			Investigation	2018-06-26	8.00										446m	South West
6628- 21196	196545	MW 19		Monitoring	2003-04-14	7.50		42.37					3.03	3.03	39.34	458m	South
6628- 22725	220576	MW 18		Investigation	2006-10-04	7.00		42.35					3.70	3.70	38.65	463m	South
6628- 21481	198085	MW 15		Investigation	2003-04-07	8.00		42.39					5.60	5.60	36.79	465m	South
6628- 21229	196721			Monitoring	2003-04-14	8.00		42.35					4.13	4.13	38.22	470m	South
6628- 29696	312615			Investigation	2018-06-19	6.00										489m	South
6628- 29694	312613			Investigation	2018-06-20	6.00										503m	South West
6628- 24605	245745	MW 33		Investigation	2009-02-03	14.00		40.19					10.10	10.10	30.09	505m	West
6628- 24603	245743	MW 31		Investigation	2009-02-02	14.00		40.18					9.40	9.40	30.78	511m	West
6628- 22898	230072	GMW 23		Investigation	2007-05-31	12.00		40.19					8.20	8.20	31.99	512m	West
6628- 22897	230036	GMW 24		Investigation	2007-05-31	12.00		40.18					8.30	8.30	31.88	515m	West
6628- 22970	231183	MW 14		Investigation	2006-11-22	11.00		40.04					9.20	9.20	30.84	525m	West
6628- 706	47780							40.10		2713	4857					526m	West
6628- 23800	241629	MW 27		Investigation	2008-07-11	14.00		40.04					12.00	12.00	28.04	529m	West
6628- 24607	245747	MW 35		Investigation	2009-02-04	14.00		40.01					8.00	8.00	32.01	531m	West
6628- 22967	231180	MW 11		Investigation	2006-11-21	11.00		39.99					9.10	9.10	30.89	532m	West
6628- 23799	241628	MW 26		Investigation	2008-07-10	14.00		40.03					12.00	12.00	28.03	532m	West
6628- 24606	245746	MW 34		Investigation	2009-02-03	14.00		39.98								534m	West
6628- 22966	231179	MW 10		Investigation	2006-11-21	11.00		39.99					9.10	9.10	30.89	537m	West
6628- 23802	241631	MW 29		Investigation	2008-07-11	14.00		39.96					12.00	12.00	27.96	540m	West
6628- 22654	219268	GWM 9		Investigation	2006-11-20	11.00		39.94					9.10	9.10	30.84	542m	West
6628- 24611	245751	MW 39		Investigation	2009-02-05	14.00		39.94					10.80	10.80	29.14	542m	West
6628- 24608	245748	MW 36		Investigation	2009-02-04	14.00		39.93					11.40	11.40	28.53	544m	West
6628- 18272	164090		Abandoned	Investigation	1996-10-17	18.20		42.02								545m	North West
6628- 23798	241627	MW 25		Investigation	2008-07-10	14.00		39.90					12.00	12.00	27.90	550m	West
6628- 574	47671					6.10		47.60		3570	6355					555m	North East

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 23801	241630	MW 28		Investigation	2008-07-11	14.00		39.85					12.00	12.00	27.85	557m	West
6628- 22971	231184	MW 15		Investigation	2006-11-22	11.00		39.83					9.10	9.10	30.73	559m	West
6628- 23803	241632	MW 30			2008-07-11	14.00		39.81					12.00	12.00	27.81	560m	West
6628- 24609	245749	MW 37		Investigation	2009-02-04	14.00		39.83					11.30	11.30	28.53	560m	West
6628- 28521	289793			Investigation	2016-09-20	35.00										560m	North
6628- 22652	219256	GMW 7		Investigation	2006-09-14	10.10		39.81					9.10	9.10	30.71	561m	West
6628- 24610	245750	MW 38		Investigation	2009-02-05	14.00		39.81					11.00	11.00	28.81	562m	West
6628- 22969	231182	MW 13		Investigation	2006-11-22	11.00		39.79					9.10	9.10	30.69	563m	West
6628- 24602	245742	MW 30		Investigation	2009-02-02	14.00		39.79					11.40	11.40	28.39	565m	West
6628- 22653	219267	MW 8		Investigation	2006-11-21	11.00		39.77					9.25	9.25	30.52	567m	West
6628- 24604	245744	MW 32		Investigation	2009-02-03	14.00		39.73					11.20	11.20	28.53	571m	West
6628- 22968	231181	MW 12		Investigation	2006-11-21	11.00		39.71					9.20	9.20	30.51	572m	West
6628- 28894	295089			Investigation	2017-07-16	6.50										572m	South
6628- 21227	196719			Monitoring	2003-05-09	8.00		40.36					0.00	0.00	40.36	577m	South West
6628- 24612	245752	MW 40		Investigation	2009-02-05	14.00		39.70					11.00	11.00	28.70	578m	West
6628- 22976	231189	MW 22		Investigation	2006-11-24	11.00		39.69					9.10	9.10	30.59	579m	West
6628- 28893	295088			Investigation	2017-07-16	7.00										581m	South
6628- 29704	312725			Investigation	2018-06-20	6.00										581m	South
6628- 22972	231185	MW 16		Investigation	2006-11-22	11.00		39.63					9.20	9.20	30.43	585m	West
6628- 29695	312614			Investigation	2018-06-20	6.00										585m	South
6628- 22974	231187	MW 18		Investigation	2006-11-23	11.00		39.55					9.00	9.00	30.55	592m	West
6628- 22973	231186	MW 17		Investigation	2006-11-23	11.00		39.51					9.20	9.20	30.31	594m	West
6628- 15726	62695		Operational	Recreational	1991-11-09	54.00		42.93	7.70	972	1760	2.500	12.50	12.50	30.43	596m	North
6628- 573	47670		Backfilled			6.10		48.08		2271	4079					599m	North East
6628- 29692	312611			Investigation	2018-06-18	6.00										603m	South West
6628- 22975	231188	MW 19		Investigation	2006-11-24	11.00		39.45					9.30	9.30	30.15	611m	West
6628- 14518	61487	GH 6	Abandoned	Investigation	1980-05-28	10.50	47.00									613m	North East
6628- 22978	231191	MW 20		Investigation	2006-11-24	11.00		39.41					9.30	9.30	30.11	614m	West
6628- 22977	231190	MW 21		Investigation	2006-11-24	11.00		39.33					9.30	9.30	30.03	620m	West
6628- 7181	54150					7.30		46.05		2199	3950					627m	South
6628- 29690	312609			Investigation	2018-06-18	6.00										639m	South West
6628- 20579	185661			Domestic	2001-03-27	18.00		47.20		2334	4190	0.000	4.50	4.50	42.70	647m	South East
6628- 732	47806			Observation	1976-07-02	123.00	40.40	39.50	7.50	2835	5070					647m	North West
6628- 16973	147785			Domestic	1995-01-19	24.00		49.20	7.00	1597	2880					662m	East

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 19033	169551				1992-11-01	23.00		39.77		2200	3952	3.788 4				668m	North West
6628- 29691	312610			Investigation	2018-06-18	6.00										680m	South West
6628- 7182	54151					9.14		47.38		3031	5414					681m	South East
6628- 15664	62633		Operational	Domestic	1991-10-19	15.00		49.55	7.40	1049	1900		5.20	5.20	44.35	689m	East
6628- 23174	235592				2007-09-24	24.00		48.15		1418	2560	0.500 0	9.00	9.00	39.15	689m	South East
6628- 14360	61329		Operational	Domestic	1988-02-01	11.00	42.00		7.40	1373	2480	0.030 0	3.00	3.00	39.00	707m	South West
6628- 708	47782					44.81		38.74		2860	5114					716m	West
6628- 18512	165714			Investigation	1997-04-10	29.00		39.81		1776	3200	4.000 0	10.00	10.00	29.81	729m	North West
6628- 18672	167087		Abandoned	Investigation ; Managed Aquifer Recharge (incl ASR)	1997-11-05	30.00		39.89	7.80	1496	2700	2.000				732m	North West
6628- 18673	167088			Investigation	1997-11-05	30.00		39.89								732m	North West
6628- 18674	167089			Investigation	1997-11-05	30.00		39.89								732m	North West
6628- 18675	167090			Investigation	1997-11-05	30.00		39.89								732m	North West
6628- 18765	167544			Irrigation	1997-10-18	30.00		46.22		1434	2590	0.500 0	9.00	9.00	37.22	732m	South
6628- 23865	241835			Investigation	2008-12-18	25.00		40.72		1799	3240	3.000	12.00	12.00	28.72	738m	North West
6628- 19438	174363			Domestic	1999-03-01	21.00		43.08		1412	2550	1.000	4.50	4.50	38.58	739m	South
6628- 727	47801							39.17								746m	South West
6628- 30602	333202			Environment al	2020-01-31	8.00				1580	2850		3.80	3.80		747m	South West
6628- 16006	62975		Operational	Domestic	1992-04-09	18.00		46.33	7.20	1428	2579		6.80	6.80	39.53	748m	South
6628- 23685	240312				2008-04-28	24.00		50.13		1490	2690	0.200	8.00	8.00	42.13	748m	East
6628- 707	47781				1934-09-01	11.58		36.37		742	1347		8.53	8.53	27.84	748m	West
6628- 18558	165955			Domestic	1997-01-16	21.00		46.22				0.500 0	10.00	10.00	36.22	751m	South
6628- 17347	151225			Domestic	1995-08-15	30.00		49.83	7.10	1726	3110	0.500				754m	South East
6628- 18113	162774			Domestic	1996-11-23	30.00		46.27		1378	2490	0.500 0	8.00	8.00	38.27	755m	South
6628- 30307	312727			Investigation	2018-06-21	8.00										767m	South West
6628- 709	47783				1914-10-01	14.94		37.98		2860	5114		8.23	8.23	29.75	771m	West
6628- 7183	54152			Observation		6.10	47.23		6.70	1455	2627		1.76	1.76	45.47	788m	South East
6628- 29705	312726			Investigation	2018-06-26	7.00										789m	South West
6628- 25026	253374	SBGW 17		Monitoring	2009-12-01	11.90	41.63			2465	4420		7.26	7.26	34.37	791m	North
6628- 18768	167547			Domestic	1997-12-01	15.00		46.34		1703	3070		3.50	3.50	42.84	818m	South
6628- 22278	206492	SITE 2				60.00		42.48		1005	1820	1.500 0	13.00	13.00	29.48	822m	North
6628- 23696	240371				2008-09-03	32.00		36.50		1183	2141	1.000	8.00	8.00	28.50	825m	South West
6628- 11695	58664				1980-12-16	18.00		46.50	7.50	1934	3480	0.130 0	3.00	3.00	43.50	828m	South
6628- 22336	209644				2005-10-21	30.00		41.09		1384	2500	8.000 0	12.00	12.00	29.09	829m	North West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 553	47650				1913-08-04	40.23		48.90		742	1347		18.29	18.29	30.61	833m	North East
6628- 17483	153197			Domestic	1995-09-22	30.00		51.00	7.20	1575	2840	0.500				836m	East
6628- 20105	178739			Irrigation	1999-12-23	90.00		46.52	7.40	320	581	2.500	9.00	9.00	37.52	838m	North East
6628- 14349	61318		Operational	Drainage	1988-03-29	15.00		40.01	8.30	799	1450	2.750 0	8.30	8.30	31.71	840m	South West
6628- 14404	61373			Drainage	1989-03-29	15.00		40.01	8.30	799	1450	1.880	8.30	8.30	31.71	840m	South West
6628- 7184	54153					7.01		47.70		1155	2090		2.74	2.74	44.96	840m	South
6628- 25028	253376	SBGW 26		Monitoring	2009-12-03	11.86	46.78			763	1384		5.17	5.17	41.61	842m	North East
6628- 25603	262381			Drainage	2003-05-23	16.20				446	810	0.100	2.27	2.27		847m	South
6628- 555	47652	PULTNEY GRAMMA R	Operational	Irrigation		29.26		41.28	6.50	1166	2110					848m	North West
6628- 7185	54154				1906-01-01	7.01	48.00					0.630 0	4.27	4.27	43.73	852m	South East
6628- 22277	206491	SITE 1			2005-09-25	30.00		42.56		1452	2620	0.250 0	11.00	11.00	31.56	856m	North
6628- 20197	180889			Domestic	2000-05-18	24.00		50.41		1692	3050	0.500 0	6.00	6.00	44.41	861m	South East
6628- 7991	54960					9.75	40.00			2156	3875	1.890 0	3.05	3.05	36.95	863m	South West
6628- 19330	173829			Domestic	1999-01-22	15.00		42.08		1698	3060	1.000	3.80	3.80	38.28	868m	South West
6628- 15836	62805		Operational	Domestic	1992-01-07	18.00		51.11					0.00	0.00	51.11	871m	East
6628- 11984	58953				1982-05-10	12.10		40.19	7.50	1692	3050	0.500 0	2.40	2.40	37.79	881m	South West
6628- 16243	130792	BH 8		Observation		5.00		43.50								881m	South
6628- 710	47784				1954-01-01	11.28		37.01		2044	3677		4.88	4.88	32.13	882m	West
6628- 17370	151251			Domestic	1995-06-23	22.00		51.85	7.40	1317	2380	2.000				887m	East
6628- 15882	62851		Operational	Domestic	1992-02-01	9.30		40.74	7.50	1714	3090		2.90	2.90	37.84	893m	South West
6628- 16244	130793	BH 12		Observation		5.00		43.57								904m	South
6628- 18246	163083			Domestic	1997-01-16	30.00		48.09		1340	2420	0.500 0	9.00	9.00	39.09	906m	South
6628- 16242	130791	BH 6		Observation		5.00		43.82								914m	South
6628- 650	47739	PARK ROYAL HOTEL	Backfilled		1964-09-14	9.35		44.34								914m	North
6628- 19018	169401			Domestic	1998-06-06	25.00		38.43		927	1680	0.500 0	9.00	9.00	29.43	920m	South West
6628- 7186	54155						49.00		7.50	1320	2387	4.550 0	3.05	3.05	45.95	921m	South East
6628- 28522	289794			Investigation	2016-09-15	35.00										927m	North
6628- 15974	62943		Operational	Domestic	1992-03-26	18.00		52.54	7.50	1765	3181		7.50	7.50	45.04	928m	East
6628- 17346	151224			Domestic	1995-06-21	26.00		52.47	7.50	1872	3370	0.500				932m	East
6628- 14209	61178				1991-12-03	16.10		36.06	7.50	1640	2870	1.000	6.10	6.10	29.96	935m	West
6628- 651	47740	TRAVEL ODGE MOTEL	Abandoned		1965-12-22	12.27		43.60								936m	North
6628- 20981	194484			Drainage	2002-06-30	3.00		52.42								939m	East
6628- 24723	247062				2008-10-02	25.00		35.39		1490	2690	1.000				941m	South West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 19259	172754		Abandoned	Domestic	1998-11-11	36.00		50.34								943m	South East
6628- 652	47741	TRAVEL ODGE MOTEL	Abandoned		1965-12-30	12.65		43.51								943m	North
6628- 28523	289795			Investigation	2016-09-16	15.00										953m	North
6628- 649	47738	PARK ROYAL HOTEL	Backfilled		1964-09-11	9.35		44.75								954m	North
6628- 20983	194554			Drainage	2002-06-30	3.00		52.74								965m	East
6628- 712	47786				1934-09-01	9.45		37.31		2313	4152		6.40	6.40	30.91	965m	West
6628- 18160	162896			Domestic	1996-08-14	14.00		48.38		1328	2400	0.250 0	3.00	3.00	45.38	971m	South
6628- 7166	54135					7.32		46.48		1759	3170					971m	South
6628- 7187	54156					68.58		49.83	8.50	361	656					973m	South East
6628- 711	47785					9.14		36.15		2545	4563					977m	West
6628- 27908	285939		Backfilled	Investigation	2015-08-25	22.70							6.00	6.00		986m	North
6628- 349	47449					11.58		42.80		1083 9	1846 7					1000 m	North West
6628- 15829	62798		Operational	Domestic	1991-12-19	19.80		48.62	7.90		2371	1.000	8.70	8.70	39.92		South
	175126			Domestic	1999-02-20	30.00		35.77		1367	2470	0.500	9.00	9.00	26.77		West
6628- 27508	280884	MW 1	Backfilled	Investigation		15.00							8.50	8.50		1011 m	North
6628- 25488	262042			Investigation	2010-10-08	15.50							10.00	10.00		1012 m	North
6628- 27513	280907	MW 6	Backfilled	Investigation		3.07							1.58	1.58		1012 m	North
6628- 27509	280885	MW 2	Backfilled	Investigation	2014-06-26	3.16							1.32	1.32		1016 m	North
6628- 15823	62792		Operational	Domestic	1991-12-19	17.40		35.57	7.70	1703	3070	2.500	5.20	5.20	30.37	1020 m	West
6628- 25485	262037			Investigation	2010-10-08	16.00							9.00	9.00		1022 m	North
6628- 27518	280987	MW 8	Backfilled	Investigation		15.00							9.00	9.00		1022 m	North
6628- 27396	280466																North
6628- 27510	280886	MW 3	Backfilled	Investigation	2014-06-26	3.00							1.48	1.48		1025 m	North
	280887	MW 4	Backfilled	Investigation	2014-06-26	3.26							1.92	1.92		1026 m	North
	175133			Drainage	1999-02-14	30.00		35.59		1351	2440	0.500	9.00	9.00	26.59		West
	153189			Domestic	1995-11-14	24.00		49.19	7.20	1390	2510	0.500					South
6628- 27512	280888	MW 5	Backfilled	Investigation	2014-07-11	3.13							1.34	1.34		1038 m	North
	135636			Domestic	1993-06-05	14.20		38.63	6.60	1855	3341	0.750				1044 m	South West
6628- 31293	355261			Investigation	2020-12-15	15.00										1048 m	North
	280986	MW 7	Backfilled	Investigation	2014-09-16	15.00							9.00	9.00		1049 m	North
6628- 22235	206405	GW 1			2005-08-19	11.00		43.33					8.25	8.25	35.08		North West
	207350			Drainage		30.00		50.37		2199	3950	0.500	9.00	9.00	41.37	1059	South
6628-	54959					11.89		38.51		2730	4888	U				m 1061	South
7990																m	West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 28097	288196		Decommiss ioned	Investigation	2015-12-01	25.00										1063 m	North East
6628- 31295	355263			Investigation	2020-12-15	15.00										1063 m	North
6628- 21216	196655			Domestic	2002-11-04	30.00		52.52		2138	3840	0.500	9.00	9.00	43.52	1064 m	South East
6628- 31294	355262			Investigation	2020-12-15	15.00										1065 m	North
6628- 27892	285631	MW 17		Investigation	2014-11-07	9.00							5.90	5.90		1068 m	North West
6628- 28695	288501		Backfilled	Investigation	2015-12-01	25.00										1069 m	North East
6628- 18766	167545			Domestic	1997-10-11	27.00		52.65		1468	2650	0.500 0	9.00	9.00	43.65	1074 m	South East
6628- 28188	288546	MW 16		Investigation	2015-07-06	6.00							3.40	3.40		1074 m	South East
6628- 348	47448	WATERM AN 1	Unknown		1956-10-05	18.29		43.58								1076 m	North West
6628- 27891	285630	MW 13		Investigation	2014-11-07	8.50							5.90	5.90		1078 m	North West
6628- 28187	288545	MW 15		Investigation	2015-07-03	6.00										1079 m	South East
6628- 14519	61488	GH 7	Abandoned	Investigation	1980-05-29	10.00	52.00									1084 m	North East
6628- 26400	270219					21.00										1084 m	East
6628- 27890	285629	MW 10		Investigation	2014-11-07	8.50							5.90	5.90		1085 m	North West
6628- 350	47450		Abandoned		1914-10-09	10.67		42.99					9.75	9.75	33.24	1085 m	North West
6628- 18402	164409			Observation	1996-01-30	26.00		43.67					21.00	21.00	22.67	1091 m	North
6628- 23825	241714				2008-09-04	21.00		39.63		1923	3460	0.750 0	5.00	5.00	34.63	1093 m	South West
6628- 27889	285628	MW 7		Investigation	2014-11-07	8.50							5.90	5.90		1095 m	North West
6628- 27767	285121	MW 4		Investigation	2014-08-08	6.00										1099 m	South East
6628- 28186	288544	MW 14		Investigation	2015-07-03	6.00							4.80	4.80		1100 m	South East
6628- 347	47447	WATERM AN 2	Unknown		1956-10-10	9.70		43.77								1100 m	North West
6628- 27465	280736			Investigation		8.00										1101 m	South East
6628- 27888	285627	MW 6		Investigation	2014-11-07	8.50							5.90	5.90		1101 m	North West
6628- 554	47651			Observation		135.00	52.47	52.10	7.70	1224	2214	0.830 0	18.52	18.16	33.95	1101 m	East
6628- 25030	253378	SBGW 29			2009-12-07	11.88	52.09			1105	2000		7.89	7.89	44.20	1103 m	East
6628- 28185	288543	MW 13		Investigation	2015-07-03	6.00							2.50	2.50		1105 m	South East
6628- 27887	285626	MW 3		Investigation	2014-11-07	8.50							5.90	5.90		1106 m	North West
6628- 7165	54134		Operational	Drainage	1960-11-23	10.97		42.69					1.83	1.83	40.86	1107 m	South
6628- 28182	288540	MW 10		Investigation	2015-06-10	5.00							3.00	3.00		1108 m	South East
6628- 713	47787							37.33		2216	3981					1108 m	West
6628- 572	47669					52.43		53.49		757	1374	1.510 0	14.33	14.33	39.16	1110 m	East
6628- 27886	285625	MW 1		Investigation	2014-11-07	8.50							5.90	5.90		1111 m	North West
6628- 27463	280734	SITE 1		Investigation	2014-08-01	8.00										1112 m	South East
6628- 27768	285122	MW 5		Investigation	2014-08-08	7.00										1112 m	South East

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 20259	181457		Decommiss ioned	Environment al	2000-07-03	19.50		43.96								1115 m	North
6628- 20248	181069			Domestic	2000-05-18	18.00		44.76		1804	3250	1.000	4.50	4.50	40.26	1116 m	South
6628- 20258	181456		Decommiss ioned	Environment al	2000-07-01	15.00		44.02								1117 m	North
6628- 28183	288541	MW 11		Investigation	2015-05-11	6.00							3.00	3.00		1120 m	South East
6628- 13885	60854				1987-01-01	6.70		40.16	7.80	1770	3190		3.04	3.04	37.12	1123 m	South West
6628- 31213	354761			Monitoring	2021-03-02	14.50										1126 m	North
6628- 28184	288542	MW 12		Investigation	2015-06-12	5.00							3.00	3.00		1127 m	South East
6628- 27464	280735	SITE 2		Investigation		8.00										1131 m	South East
6628- 718	47792					12.19	36.00		7.00	2030	3652	1.140 0	5.49	5.49	30.51	1131 m	West
6628- 14517	61486	GH 5	Abandoned	Investigation	1980-05-27	9.25	38.00									1133 m	West
6628- 31763	368889			Monitoring	2022-04-10	15.00										1138 m	East
6628- 20257	181455		Decommiss ioned	Environment al	2000-06-30	21.00		44.11								1141 m	North
6628- 571	47668					7.62		53.85		385	700					1148 m	East
6628- 18401	164408			Observation	1996-01-29	22.00		44.06					17.00	17.00	27.06	1151 m	North
6628- 570	47667							53.84		4883	8616					1151 m	East
6628- 18268	164086			Observation	1996-10-16	20.00		38.27								1152 m	West
6628- 19987	177821			Domestic	1999-11-19	27.00		38.21		1872	3370	1.500 0	12.00	12.00	26.21	1153 m	South West
6628- 20262	181460		Decommiss ioned	Environment al	2000-07-05	19.00		44.30								1157 m	North
6628- 16007	62976		Operational	Domestic	1992-04-11	18.00		52.74	7.30	1873	3372		4.80	4.80	47.94	1159 m	South East
6628- 7167	54136					7.01		46.85	7.00	2355	4227		3.66	3.66	43.19	1159 m	South
6628- 20261	181459		Decommiss ioned	Environment al	2000-07-05	20.00		44.34								1167 m	North
6628- 714	47788					18.00		37.08		2356	4229					1167 m	West
6628- 20260	181458		Decommiss ioned	Environment al	2000-07-04	20.00		44.37								1174 m	North
6628- 7992	54961					10.67		40.62		3189	5693		4.57	4.57	36.05	1176 m	South West
6628- 16972	147784			Domestic	1995-01-17	16.00		42.78	6.90	1912	3440					1177 m	South
6628- 20256	181454		Abandoned	Environment al	2000-06-29	17.00		44.34					14.50	14.50	29.84	1179 m	North
6628- 11775	58744							51.09								1180 m	South East
6628- 21374	197658			Monitoring	2003-03-14	12.00		44.42				0.010 0	10.60	10.60	33.82	1183 m	North West
6628- 18928	168542			Domestic	1998-04-03	20.00		42.57		2126	3820	0.375 0	4.50	4.50	38.07	1187 m	South West
6628- 18403	164410			Observation	1996-01-31	23.00		44.44					18.00	18.00	26.44	1192 m	North
6628- 643	47732				1914-09-19	31.85		44.47		1485	2681	0.630 0	18.29	18.29	26.18	1193 m	North
6628- 20242	181063	HFMW 76		Monitoring	2000-04-13	13.00		44.42								1196 m	North
6628- 20245	181066	HFMW 79		Monitoring	2000-04-17	13.00		44.46								1200 m	North West
6628- 18129	162790			Domestic	1996-12-03	30.00		55.70		1233	2230	0.500 0	10.00	10.00	45.70	1201 m	East

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 7993	54962			Observation		7.01	39.36		7.50	1580	2850		3.95	3.95	35.41	1201 m	South West
6628- 20325	182028	HFMW 75		Monitoring	2000-03-24	12.00		44.49					9.50	9.50	34.99	1202 m	North
6628- 23867	241844			Investigation	2008-09-24	26.00		40.61					15.00	15.00	25.61	1204 m	North West
6628- 15834	62803		Operational	Domestic	1991-12-23	17.30		40.41	7.40	7748	1342 0	1.000 0	4.10	4.10	36.31	1205 m	South West
6628- 12608	59577		Operational	Domestic	1983-12-09	12.00	50.00					0.600 0	1.00	1.00	49.00	1206 m	South East
6628- 16526	138552		Abandoned	Domestic	1993-12-01	24.00		55.91								1206 m	East
6628- 16824	146785			Domestic	1994-11-30	24.00		54.72	6.80	1845	3320		3.60	3.60	51.12	1208 m	South East
6628- 18271	164089		Abandoned	Investigation	1996-10-15	20.00		51.21								1208 m	North East
6628- 20243	181064	HFMW 77		Monitoring	2000-04-13	12.00		44.57								1214 m	North
6628- 24329	245269			Investigation	2008-11-27	17.50		43.51					11.00	11.00	32.51	1216 m	North West
6628- 23760	241492				2008-03-26	24.00		49.97		1378	2490	0.200	6.00	6.00	43.97	1218 m	South
6628- 16944	147715			Domestic	1995-02-18	12.60		40.72	7.60	1407	2540	0.750 0				1220 m	South West
6628- 19495	175129			Domestic	1998-09-19	30.00		37.72		1793	3230	0.500	11.00	11.00	26.72	1229 m	South West
6628- 20244	181065	HFMW 78		Monitoring	2000-04-13	12.00		44.77								1229 m	North
6628- 12549	59518			Observation	1983-10-21	114.00	49.68	49.73	7.50	1071	1939	6.090	10.57	10.61	39.11	1230 m	South
6628- 13911	60880				1987-03-01	13.00	34.00		7.40	1732	3120	0.200	7.80	7.80	26.20	1230 m	West
6628- 17859	156316			Domestic	1996-04-23	18.00		37.23	7.10	1434	2590					1232 m	South West
6628- 569	47666					3.35		54.75		1699	3063		1.52	1.52	53.23	1236 m	East
6628- 568	47665					4.88		54.83		3242	5784		3.35	3.35	51.48	1241 m	East
6628- 20780	189077			Domestic	2001-11-10	35.00		51.05		966	1750	1.500 0	3.00	3.00	48.05	1245 m	South East
6628- 24568	245589			Investigation	2009-04-02	15.00		44.96								1249 m	North West
6628- 21370	197654			Monitoring		12.00		44.24				0.010	10.60	10.60	33.64	1251 m	North West
6628- 20246	181067	HFMW 79A		Monitoring	2000-04-20	13.00		45.00								1259 m	North
6628- 28592	290324	MW 12		Investigation	2016-10-12	13.50							10.40	10.40		1262 m	North West
6628- 28838	294426		Decommiss ioned	Investigation	2017-05-19	19.50										1264 m	North West
6628- 19655	176141			Monitoring	1999-04-17	10.80		44.47				0.020	9.60	9.60	34.87	1268 m	North West
6628- 21371	197655			Monitoring	2003-03-14	12.00		44.32				0.010	10.60	10.60	33.72	1268 m	North West
6628- 648	47737					8.23		49.39								1268 m	North East
6628- 22259	206466			Monitoring		15.00		44.90					9.00	9.00	35.90	1270 m	North West
6628- 27904	285766	MW 8			2015-06-22	8.00							4.00	4.00		1270 m	North West
6628- 15783	62752		Operational	Recreational	1991-11-27	12.00		52.00	7.40	1861	3350	1.000	3.10	3.10	48.90	1271 m	North East
6628- 27717	284941	MW 4			2015-03-18	16.00							10.87	10.87		1273 m	North West
	152904			Domestic	1995-10-18	30.00		54.42	8.30	1032	1870	0.500				1276 m	South East
6628- 19653	176139			Monitoring	1999-04-17	10.80		44.76				0.020	9.60	9.60	35.16	1276 m	North West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 27690	284580	BH 7	Backfilled	Investigation	2015-02-12	17.00										1277 m	North West
6628- 21373	197657			Investigation	2003-03-14	12.00		44.78				0.010	10.60	10.60	34.18	1278 m	North West
6628- 19654	176140			Monitoring	1999-04-17	10.80		44.36				0.020	9.60	9.60	34.76	1283 m	North West
6628- 28837	294425		Backfilled	Investigation	2017-05-19	21.00										1288 m	North West
6628- 13393	60362		Operational	Domestic	1985-08-01	8.00		50.34	7.40	1692	3050		3.00	3.00	47.34	1290 m	South
6628- 27689	284579	BH 8	Backfilled	Investigation	2015-02-13	20.00										1291 m	North West
6628- 28415	289408	GW 1		Investigation	2016-04-30	7.50							4.90	4.90		1293 m	North East
6628- 16384	134454			Domestic	1993-02-23	18.00		37.68	7.10	1838	3311					1294 m	South West
6628- 15428	62397				1990-12-07	10.50	45.00		7.60	1963	3531	1.250 0	2.80	2.80	42.20	1297 m	South
6628- 21372	197656			Monitoring	2003-03-14	12.00		44.38				0.010 0	10.60	10.60	33.78	1298 m	North West
6628- 27903	285765	MW 10		Investigation	2015-06-23	14.00							11.40	11.40		1301 m	North West
6628- 7994	54963					8.23		36.76	7.00	2030	3652		5.79	5.79	30.97	1302 m	South West
6628- 27905	285767	MW 9		Investigation	2015-06-23	12.50							10.10	10.10		1307 m	North West
6628- 16819	146780			Domestic	1994-11-25	18.00		34.32	6.90	1647	2970					1309 m	West
6628- 27715	284939	MW 6			2015-03-19	16.00							11.61	11.61		1309 m	North West
6628- 28591	290323	MW 11			2016-10-12	20.00							16.60	16.60		1309 m	North West
6628- 21121	195706			Domestic	2001-12-04	16.00		47.39		2182	3920	0.500 0	5.00	5.00	42.39	1318 m	South
6628- 604	47693	GOVERN MENT BORE			1915-01-01	95.10		50.97		971	1760		18.29	18.29	32.68	1318 m	North East
6628- 20965	194423			Domestic	2002-10-25	46.00		54.92		1005	1820	1.000	18.00	18.00	36.92	1323 m	South East
6628- 21102	195434			Drainage	2002-10-14	18.00		42.49					10.00	10.00	32.49	1325 m	North West
6628- 16376	134446			Domestic	1993-03-25	16.50		56.45	7.60	1518	2740	1.000				1330 m	South East
6628- 19634	176106			Monitoring	1999-03-19	7.00		50.14				0.010	5.00	5.00	45.14	1330 m	South
6628- 27691	284581		Backfilled	Investigation	2015-02-19	20.00										1330 m	North West
6628- 18269	164087		Abandoned	Investigation	1996-10-16	20.00		40.78								1331 m	North West
6628- 27699	284691	BH 10	Backfilled	Investigation	2015-02-21	30.00										1331 m	North West
6628- 28417	289410	GW 3		Investigation	2016-04-30	7.50							5.20	5.20		1332 m	North East
6628- 580	47677					7.62		56.64		2370	4254		1.98	1.98	54.66	1332 m	East
6628- 18115	162776			Domestic	1996-10-01	31.00		55.04	8.00	1116	2020	0.500 0	12.00	12.00	43.04	1334 m	South East
6628- 567	47664					10.06		55.78		1614	2911					1336 m	East
6628- 641	47730		Operational	Drainage		22.86		46.47		1656	2987		12.19	12.19	34.28	1339 m	North
6628- 640	47729		Operational	Drainage	1962-10-22	26.52		46.01		8482	1463 8	0.300	11.43	11.43	34.58	1340 m	North
6628- 642	47731		Abandoned	Drainage		26.12		48.67								1343 m	North
6628- 19635	176107			Monitoring	1999-03-19	7.00		50.30				0.010	5.00	5.00	45.30	1345 m	South
6628- 28416	289409	GW 2		Investigation	2016-04-30	7.50							5.10	5.10		1346 m	North East

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 19641	176113			Monitoring	1999-03-19	7.00		50.63				0.010	5.00	5.00	45.63	1349 m	South
6628- 18114	162775			Domestic	1996-10-10	30.00		55.58	8.10	1300	2350	0.500 0	9.00	9.00	46.58	1350 m	South East
6628- 19638	176110			Monitoring	1999-03-19	7.00		50.76				0.010 0	5.00	5.00	45.76	1351 m	South
6628- 22995	231396			Investigation	2007-01-09	15.60		42.93					15.50	15.50	27.43	1352 m	North West
6628- 579	47676					4.88		57.60		3327	5932		2.90	2.90	54.70	1357 m	East
6628- 639	47728		Abandoned		1963-09-27	6.55		45.97								1357 m	North
6628- 557	47654					6.10	56.00		9.00	1602	2890	0.500 0	2.74	2.74	53.26	1365 m	East
6628- 19636	176108			Monitoring	1999-03-19	7.00		50.54				0.010 0	5.00	5.00	45.54	1366 m	South
6628- 27716	284940	MW 7			2015-03-19	20.00							17.93	17.93		1370 m	North West
6628- 26438	270975	MW 1	Backfilled													1376 m	North West
6628- 19640	176112			Monitoring	1999-03-19	7.00		50.98				0.010	5.00	5.00	45.98	1380 m	South
6628- 20145	180523			Domestic	2000-04-14	18.00		56.58		1146	2074	0.250 0	5.00	5.00	51.58	1381 m	South East
6628- 19639	176111			Monitoring	1999-03-19	7.00		50.86				0.010	5.00	5.00	45.86	1383 m	South
6628- 647	47736		Backfilled			18.59		51.20		1685	3038					1384 m	North East
6628- 19637	176109			Monitoring	1999-03-19	7.00		50.78				0.010	5.00	5.00	45.78	1386 m	South
6628- 346	47446				1914-11-24	43.59		44.39		929	1685					1388 m	North West
6628- 12485	59454		Operational	Domestic	1982-09-21	10.00	54.00			1244	2250	1.500 0	2.50	2.50	51.50	1389 m	South East
6628- 345	47445	SOIL ENG. LABS.			1960-05-25	6.10		46.07								1390 m	North West
6628- 26445	270982	MW 6	Backfilled													1391 m	North West
6628- 16453	135726			Drainage	1993-09-14	21.00		35.65	8.00	1917	3450	0.200				1394 m	West
6628- 344	47444	SOIL ENG. LABS.			1960-05-25	5.94		46.04								1394 m	North West
6628- 638	47727					10.06		47.73		3584	6380					1402 m	North
6628- 17463	152971			Domestic	1995-11-28	20.00		57.53	8.00	1676	3020	0.125 0				1408 m	East
6628- 15939	62908		Operational	Domestic	1992-02-25	18.00		56.69	7.20	1024	1854		0.00	0.00	56.69	1416 m	South East
6628- 343	47443	NCR 1	Unknown		1955-09-06	12.19		45.82								1419 m	North West
6628- 22130	204721		Backfilled		2005-05-30	12.00		44.05		8870	1525 0	0.000	10.20	10.20	33.85	1421 m	North West
6628- 26893	275637	MW 9		Investigation	2011-12-15	7.00							3.60	3.60		1421 m	North West
6628- 12820	59789				1984-01-24	8.00		51.58		1552	2800		3.00	3.00	48.58	1422 m	South
6628- 342	47442	NCR 2	Unknown		1955-09-08	12.19		45.66								1424 m	North West
6628- 26439	270976	MW 2	Backfilled													1426 m	North West
	270981	MW 5	Backfilled													1426 m	North West
6628- 26440	270977	MW 3	Backfilled													1427 m	North West
6628- 26447	270984	MW 8	Backfilled													1428 m	North West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 28365	289158		Backfilled	Domestic												1428 m	South
6628- 7200	54169					6.10		58.35		428	778		2.13	2.13	56.22	1428 m	South East
6628- 12025	58994	NO SCHEDU LE AVAI				6.00		58.42		1005	1820		2.10	2.10	56.32	1431 m	South East
6628- 26895	275639	MW 8		Investigation	2012-01-16	20.00							17.50	17.50		1431 m	North West
6628- 26448	270985	MW 9	Backfilled													1432 m	North West
6628- 26894	275638	MW 7		Investigation	2011-12-14	19.00							17.00	17.00		1432 m	North West
6628- 20194	180886			Domestic	2000-03-13	20.00		58.52		1468	2650		5.00	5.00	53.52	1437 m	South East
6628- 29943	314500			Investigation	2018-10-11	30.00										1438 m	North
6628- 26446	270983	MW 7	Backfilled													1441 m	North West
6628- 28786	293878	GW 1		Investigation	2016-11-03	14.50							11.00	11.00		1443 m	North
6628- 30371	325553			Investigation	2019-08-23	30.00										1443 m	North
6628- 20455	184034			Domestic	2000-12-02	21.00		32.72		1390	2510	1.000	7.00	7.00	25.72		West
6628- 30372	325554			Investigation	2019-08-27	30.00										1447 m	North
	47454	LAW COURTS 4	Unknown		1968-01-18	19.51	76.90									1450 m	North West
6628- 29927	314474			Investigation	2018-10-15	30.00										1452 m	North
6628- 16704	145577			Domestic	1994-10-05	24.00		58.72	7.00	2143	3850					1455 m	South East
6628- 21042	195091			Domestic	2002-07-21	30.00		58.89		5316	9350	0.500				1455 m	South East
6628- 17841	156156			Domestic	1996-01-17	30.00		58.11	7.00	1575	2840					1456 m	East
6628- 12674	59643		Operational	Domestic	1984-01-16	16.20	52.00		7.60	1535	2770	2.500	4.50	4.50	47.50	1459 m	South
6628- 7989	54958					6.71		40.02		2470	4429		5.79	5.79	34.23	1459 m	South West
6628- 28561	290204				2016-09-16	20.00				2008	3610	1.500	5.20	5.20		1462 m	South
	253377	SBGW 5		Monitoring	2009-12-04	20.40	40.16			1664	3000		15.91	15.91	24.25		West
6628- 353	47453	LAW COURTS 2	Unknown		1968-01-10	21.49	76.87									1465 m	North West
6628- 23172	235590				2007-09-19	10.00		57.11		1250	2260	0.500	6.00	6.00	51.11	1467 m	South East
6628- 27000	276001	BH 6	Backfilled		2013-11-27	40.00										1467 m	North West
	270978	MW 4	Decommiss													1469 m	North West
6628- 26442	270979	MW 4	Decommiss													1469 m	North West
	270980	MW 4	Decommiss ioned													1469 m	North West
6628- 28787	293879	GW 2		Investigation	2016-11-03	14.50							13.00	13.00		1469 m	North
6628- 13320	60289		Operational	Domestic	1985-05-19	8.00		58.99	7.70	1132	2050		5.00	5.00	53.99	1473 m	South East
6628- 26449	270986	MW 10	Backfilled													1473 m	North
	135507			Domestic	1993-10-25	23.00		59.07	7.00	1917	3450					1475 m	South East
6628- 333	47433			Drainage	1965-06-07	6.10		46.46								1475 m	North
555																111	

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 334	47434			Drainage	1965-06-08	6.10		46.46								1476 m	North
6628- 25114	254196	MW 10		Investigation	2010-02-19	8.00							5.80	5.80		1478 m	North East
6628- 30332	325468			Investigation	2019-08-21	30.00										1480 m	North
6628- 318	47418	DD 22		Drainage	1965-05-31	21.34		46.29					16.46	16.46	29.83	1481 m	North
6628- 332	47432			Drainage	1965-06-04	6.10		46.34								1481 m	North
6628- 314	47414				1965-04-13	9.45		46.27								1482 m	North
6628- 331	47431			Drainage	1965-04-07	21.34	45.00					0.030	16.46	16.46	28.54	1482 m	North
6628- 7189	54158					7.77	52.00			1330	2404	0.760 0	4.27	4.27	47.73	1482 m	South
6628- 320	47420			Drainage	1965-05-17	21.34	45.00					0.450 0	16.76	16.76	28.24	1483 m	North
6628- 317	47417			Drainage	1965-04-22	21.34		46.21					16.76	16.76	29.45	1484 m	North
6628- 313	47413			Drainage	1965-04-12	21.34		46.18					16.76	16.76	29.42	1485 m	North
6628- 32031	371288		Dry	Investigation	2022-09-16	14.50										1486 m	North
6628- 25446	259560	MW 9		Investigation	2009-11-26	8.00							5.20	5.20		1488 m	North East
6628- 26998	275999	BH 4	Backfilled		2013-11-19	40.00										1488 m	North West
6628- 30818	345645			Investigation	2020-08-19	6.50							3.50	3.50		1488 m	North East
6628- 327	47427			Drainage	1965-05-07	7.01		46.21								1488 m	North
6628- 25445	259559	MW 8		Investigation	2009-11-26	8.00							5.20	5.20		1490 m	North East
6628- 25115	254197	MW 11		Investigation	2010-02-18	8.00							6.60	6.60		1491 m	North East
6628- 328	47428			Drainage	1965-05-14	6.10		46.17								1491 m	North
6628- 335	47435			Drainage	1965-06-08	6.10		46.41								1491 m	North
6628- 352	47452	LAW COURTS 3	Unknown		1968-01-10	21.51	76.87									1491 m	North West
6628- 565	47662	ETSA	Abandoned		1960-03-29	12.19		57.80		1613	2909					1493 m	East
6628- 326	47426			Drainage	1965-05-05	4.88		46.13								1494 m	North
6628- 321	47421			Drainage	1965-05-11	22.86	45.00					0.450 0	16.56	16.56	28.44	1495 m	North
6628- 330	47430			Drainage		21.59		46.22		4426	7834					1495 m	North
6628- 17819	156099			Domestic	1996-04-10	16.00		41.05	7.00	1620	2920	1.400 0				1497 m	South West
6628- 566	47663	ETSA	Abandoned		1960-03-15	23.77		57.82		2570	4605					1497 m	East
6628- 25116	254198	MW 12		Investigation	2010-02-19	8.00							6.30	6.30		1498 m	North East
6628- 25444	259558	MW 7		Investigation	2009-11-26	8.00							5.60	5.60		1498 m	North East
6628- 316	47416			Drainage	1965-04-15	10.67		46.08								1498 m	North
	47419			Drainage	1965-05-25	23.47	45.00					0.450 0	16.46	16.46	28.54		North
6628- 351	47451	LAW COURTS 1	Unknown		1968-01-04	28.04	76.81									1498 m	North West
6628- 19241	172406	A 2		Monitoring	1998-08-21	15.00		43.56					10.17	10.17	33.39	1499 m	North West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 26996	275997	BH 2	Backfilled	Investigation	2013-11-14	40.00										1499 m	North West
6628- 30819	345646			Investigation	2020-08-19	6.50							3.70	3.70		1499 m	North East
6628- 15154	62123		Operational	Domestic	1990-01-07	28.00		35.84	7.70	1928	3470		18.00	18.00	17.84	1502 m	South West
6628- 336	47436			Drainage	1965-06-10	6.10		46.32								1502 m	North
6628- 25117	254199	MW 13		Investigation	2010-02-19	8.00							6.30	6.30		1505 m	North East
6628- 582	47679	ETSA	Abandoned		1960-02-15	5.28		57.95								1505 m	East
6628- 25439	259553	MW 2		Investigation	2009-11-23	8.00							5.70	5.70		1506 m	North East
6628- 26999	276000	BH 5		Investigation	2013-11-21	40.00							18.00	18.00		1507 m	North West
6628- 315	47415			Drainage	1965-05-04	22.86	45.00					0.450 0	16.61	16.61	28.39	1507 m	North
6628- 25442	259556	MW 5		Investigation	2009-11-25	8.00							5.60	5.60		1508 m	North East
6628- 20199	180891			Domestic	2000-03-08	20.00		46.08		1832	3300		6.00	6.00	40.08	1509 m	South
6628- 22151	205639	N117A (VPR1- VPR2)	Decommiss ioned	Investigation ; Managed Aquifer Recharge (incl ASR)	2005-03-10	224.00		54.46		2932	5240	8.000				1510 m	North East
6628- 25443	259557	MW 6		Investigation	2009-11-25	8.00							5.40	5.40		1511 m	North East
6628- 329	47429			Drainage		18.82		46.08		171	311					1511 m	North
6628- 7995	54964					8.53		40.40		3274	5839					1511 m	South West
6628- 325	47425			Drainage	1965-06-02	6.40		46.04								1512 m	North
6628- 340	47440			Drainage	1965-06-16	0.61		46.07								1512 m	North
6628- 506	47603			Drainage	1965-06-16	0.61		46.07								1512 m	North
6628- 15902	62871		Operational	Domestic	1992-02-10	19.00		59.03	7.30	1502	2709		0.00	0.00	59.03	1514 m	East
6628- 25440	259554	MW 3		Investigation	2009-11-24	8.00							5.40	5.40		1514 m	North East
6628- 25550	262163	MW 12		Investigation	2009-10-10	6.00										1514 m	North West
6628- 337	47437			Drainage	1965-06-09	6.10		46.24								1514 m	North
6628- 16706	145579			Domestic	1994-10-06	24.00		59.62	6.80	2030	3650					1517 m	South East
6628- 25441	259555	MW 4		Investigation	2009-11-25	8.00							5.70	5.70		1517 m	North East
6628- 24914	252828	GMW 1		Investigation	2009-09-29	10.00							8.00	8.00		1518 m	North East
6628- 338	47438	SZ 74	Backfilled	Drainage	1965-06-11	9.40	3.00						4.88	4.88	-1.88	1518 m	North
6628- 367	47467			Drainage	1965-06-16	12.80		46.28								1518 m	North
6628- 17540	153480			Domestic	1995-12-26	24.00		35.65	7.30	2585	4630	0.500				1520 m	South West
6628- 324	47424			Drainage	1965-06-01	6.10		45.98								1521 m	North
6628- 30821	345648			Investigation	2020-08-19	6.70							3.40	3.40		1523 m	North East
6628- 339	47439		Backfilled	Drainage	1965-06-15	12.80		46.25					2.59	2.59	43.66	1525 m	North
6628- 646	47735				1963-11-22	18.29		50.26								1525 m	North East
6628- 25549	262162	MW 12			2009-10-10	6.00										1526 m	North West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 17660	155122			Domestic	1996-01-29	14.00		58.16	7.24	1917	3450	2.000				1528 m	East
6628- 323	47423			Drainage	1965-06-03	6.10		45.92								1528 m	North
6628- 560	47657	ETSA	Abandoned		1960-03-24	22.86		58.25		1513	2731					1529 m	East
6628- 564	47661	ETSA	Abandoned		1960-03-01	30.48		58.25		1499	2705	1.262 8				1531 m	East
6628- 583	47680	ETSA	Abandoned		1960-03-08	3.96		58.27								1531 m	East
6628- 26995	275995	BH 1		Investigation	2013-11-24	40.00							18.00	18.00		1533 m	North West
6628- 31356	357304			Monitoring	2021-06-10	18.00										1534 m	North
6628- 15832	62801		Operational	Domestic	1991-12-23	9.00		41.63	7.70	1502	2709	1.250 0	3.10	3.10	38.53	1537 m	South West
6628- 310	47410	WESTER N COURTS 1	Unknown		1972-07-05	34.00		45.37		1060	1802 9					1537 m	North West
6628- 322	47422			Drainage	1965-06-03	6.10		45.85								1537 m	North
6628- 20052	178415			Domestic	2000-02-21	24.00		56.44		1210	2190	1.000	4.00	4.00	52.44	1538 m	South East
6628- 635	47724					22.90	50.00		7.80	5118	9014	0.060	13.70	13.70	36.30	1538 m	North
6628- 563	47660	ETSA	Abandoned		1960-04-01	10.97		58.26		2113	3799					1539 m	East
6628- 11283	58252	PUBLIC BULD DEPT	Backfilled		1961-06-09	48.77		45.83								1541 m	North
6628- 645	47734				1963-11-20	18.29		50.24								1544 m	North East
6628- 28020	287374		Backfilled	Investigation	2015-09-30	25.00										1549 m	North
6628- 7191	54160					9.14		53.38		2530	4536					1549 m	South
6628- 7190	54159							53.23		2545	4563					1551 m	South
6628- 13370	60339		Operational	Drainage	1985-07-11	30.00		58.89	7.90	1088	1970	0.500 0	5.00	5.00	53.89	1553 m	South East
6628- 644	47733				1963-11-12	30.17		50.24					3.35	3.35	46.89	1554 m	North East
6628- 311	47411	SUPREM E COURT 2	Unknown		1956-08-03	14.10		45.26								1555 m	North West
6628- 28021	287375		Backfilled	Investigation	2015-09-29	25.00										1557 m	North
6628- 312	47412	SUPREM E COURT 1	Unknown		1956-07-20	30.48		45.23								1557 m	North West
6628- 14516	61485	GH 4A	Abandoned	Investigation	1980-05-26	10.25	36.50									1561 m	West
6628- 15113	62082	SZ 127		Investigation	1980-06-20	10.00	36.00									1561 m	West
6628- 31077	353850		Backfilled	Investigation	2020-02-13	16.60										1561 m	North
6628- 26601	272292	MW			2012-06-13	15.00							11.80	11.80		1562 m	North
6628- 20425	183455	TB 14		Investigation	2000-08-25	20.00		46.17					17.00	17.00	29.17	1563 m	North
6628- 27189	279266	MW 4		Investigation	2014-01-30	13.00							10.50	10.50		1563 m	North West
6628- 27191	279268	MW 2		Investigation	2013-10-22	3.40										1563 m	North West
6628- 26603	272294	MW 3		Investigation	2012-06-15	13.50							11.80	11.80		1564 m	North
6628- 27190	279267	MW 3		Investigation	2014-01-29	13.20							10.60	10.60		1564 m	North West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 27192	279269	MW 1		Investigation	2013-10-22	3.40										1564 m	North West
6628- 18775	167556			Domestic	1998-01-14	18.00		58.78		2642	4730		16.00	16.00	42.78	1567 m	East
6628- 561	47658	ETSA	Abandoned		1960-04-07	12.19		58.66		4941	8714					1568 m	East
6628- 26602	272293	MW 2		Investigation	2012-06-15	13.50							11.80	11.80		1569 m	North
6628- 636	47725							51.39		4869	8594					1569 m	North
6628- 309	47409	WESTER N COURTS 3	Unknown		1972-08-23	57.00		45.13	6.50	1130	2045	0.630 0	21.00	21.00	24.13	1570 m	North West
6628- 562	47659	ETSA	Abandoned		1960-03-08	23.01		58.63		1770	3190					1574 m	East
6628- 22965	231157	SITE 3	Backfilled			15.30		46.18								1576 m	North
6628- 308	47408	WESTER N COURTS 2	Unknown		1972-07-11	25.80		45.10	6.50	1957	3520	0.250 0				1576 m	North West
6628- 20423	183453	TB 12		Investigation	2000-08-24	15.30		46.63					11.38	11.38	35.25	1581 m	North
6628- 31750	368476			Environment al	2022-04-22	14.00										1581 m	North
6628- 26997	275998	BH 3		Investigation	2013-11-17	40.00							12.50	12.50		1583 m	North West
6628- 29586	307622			Investigation	2018-06-15	30.00										1583 m	North West
6628- 657	47746							50.25								1585 m	North
6628- 14632	61601	GH 152	Abandoned	Investigation	1985-02-01	10.20	50.00									1587 m	North
6628- 16049	63018		Operational	Domestic	1992-05-06	30.00		57.06	7.60	1049	1900	0.100	4.50	4.50	52.56	1587 m	South East
6628- 584	47681							60.42		3127	5584					1594 m	East
6628- 29585	307621			Investigation	2018-06-15	25.00										1597 m	North West
6628- 22623	218970	GMW 2		Investigation	2006-09-06	18.00		42.19					15.12	15.12	27.07	1598 m	North West
6628- 31342	357152			Monitoring	2021-06-07	15.00										1598 m	North
6628- 31357	357305			Monitoring	2021-06-11	20.00										1598 m	North
6628- 32032	371289		Dry	Investigation	2022-09-17	15.00										1601 m	North
6628- 31347	357161			Investigation	2021-06-09	18.00										1603 m	North
6628- 18119	162780			Domestic	1996-11-25	18.00		38.79		1614	2910	0.500 0	7.00	7.00	31.79	1607 m	South West
6628- 22963	231155	SITE 1	Backfilled			16.60		46.01								1608 m	North
6628- 22964	231156	SITE 2	Backfilled			16.10		46.21								1608 m	North
6628- 31348	357162			Investigation	2021-06-08	16.50										1608 m	North
6628- 22622	218969	GMW 3		Investigation	2006-09-06	18.00		42.19					15.25	15.25	26.94	1612 m	North West
6628- 22581	218505	GMW 1		Investigation	2006-06-09	16.00		42.10					14.90	14.90	27.20	1615 m	North West
6628- 658	47747							50.11								1615 m	North
6628- 32030	371287		Dry	Investigation	2022-09-13	17.00										1616 m	North
6628- 12572	59541		Operational	Domestic	1983-11-30	25.00		53.61	7.60	2036	3660	0.700 0	4.00	4.00	49.61	1627 m	South

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 31954	370985			Investigation	2022-08-04	15.00										1627 m	North
6628- 11736	58705		Operational	Drainage	1981-05-13	19.00		44.87	7.90	1810	3260		16.50	16.50	28.37	1629 m	North West
6628- 23673	240264				2007-01-30	20.00		54.55		1856	3340	1.000				1632 m	South
6628- 11738	58707		Operational	Drainage	1981-05-14	16.50		44.83	7.60	1821	3280		14.00	14.00	30.83	1634 m	North West
6628- 14179	61148				1988-01-01	6.50	55.00					0.250 0	3.50	3.50	51.50	1634 m	South East
6628- 23762	241494				2008-03-20	36.00		57.20		1222	2210	2.000	10.00	10.00	47.20	1636 m	South East
6628- 11739	58708		Operational	Drainage	1981-05-14	19.00		44.80	8.10	1776	3200		17.50	17.50	27.30	1639 m	North West
6628- 17348	151226			Domestic	1995-08-15	30.00		60.65	7.30	1418	2560	0.500 0				1640 m	East
6628- 18265	164083			Domestic	1997-02-15	20.00		36.45		1597	2880		8.00	8.00	28.45	1644 m	South West
6628- 30124	315883			Investigation	2019-03-06	4.00										1644 m	North West
6628- 704	47778					55.00	38.53	38.23	7.30	1995	3590		16.05	15.75	22.48	1644 m	West
6628- 11734	58703		Operational	Drainage	1981-05-13	19.00		44.75	7.70	1804	3250		16.50	16.50	28.25	1645 m	North West
6628- 11737	58706		Operational	Drainage	1981-05-13	19.50		44.84	7.80	1815	3270		17.00	17.00	27.84	1645 m	North West
6628- 7192	54161					9.14		54.68		1927	3468					1645 m	South
6628- 31358	357306			Monitoring	2021-06-11	14.00										1646 m	North
6628- 11743	58712		Operational	Drainage	1981-05-15	19.00		44.77	7.50	1776	3200		16.50	16.50	28.27	1647 m	North West
6628- 11733	58702		Operational	Drainage	1981-05-13	19.00		44.72	7.70	1804	3250		16.50	16.50	28.22	1648 m	North West
6628- 20424	183454	TB 13		Investigation	2000-08-25	23.00		45.87					17.33	17.33	28.54	1654 m	North
6628- 11731	58700		Operational	Drainage	1981-05-12	18.00		44.80	7.80	1832	3300		15.50	15.50	29.30	1655 m	North West
6628- 11735	58704		Operational	Drainage	1981-05-13	14.50		44.76	7.90	1810	3260		12.00	12.00	32.76	1658 m	North West
6628- 23317	236151				2008-01-09	26.00		43.29		1714	3090	2.000 0	4.00	4.00	39.29	1658 m	South
6628- 11732	58701		Operational	Drainage	1981-05-13	19.00		44.65	8.10	1804	3250		16.50	16.50	28.15	1661 m	North West
6628- 7168	54137							47.11		1716	3094					1661 m	South
6628- 22343	209666			Drainage	2004-05-13	18.00		37.65		1928	3470	0.500 0	8.00	8.00	29.65	1662 m	South West
6628- 11744	58713		Operational	Drainage	1981-05-15	15.00		44.76	7.50	1776	3200		12.50	12.50	32.26	1663 m	North West
6628- 16459	135732			Domestic	1993-09-10	24.00		62.85	7.10	1709	3080					1663 m	South East
6628- 11114	58083	KW 14	Unknown		1979-09-03	16.75	44.74									1664 m	North
6628- 17358	151235			Domestic	1995-07-07	14.50		47.10	7.20	1815	3270	1.400 0				1665 m	South
6628- 18774	167555			Domestic	1997-12-15	19.00		34.96		1832	3300		9.00	9.00	25.96	1665 m	South West
6628- 11727	58696		Operational	Drainage	1981-05-13	17.00		44.64	7.50	1810	3260		14.50	14.50	30.14	1666 m	North West
6628- 20469	184051			Domestic	2001-01-04	37.50		41.00		944	1710	1.500 0	14.00	14.00	27.00	1666 m	South West
6628- 11726	58695		Operational	Drainage	1981-05-11	17.50		44.60	7.60	1804	3250		15.00	15.00	29.60	1670 m	North West
6628- 715	47789					15.24		34.43		5290	9309					1671 m	West
6628- 16617	141365			Domestic	1994-04-26	18.00		37.40	7.20	1541	2780					1672 m	South West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 31578	362107			Investigation	2021-10-26	10.00										1672 m	South West
6628- 11745	58714		Operational	Drainage	1981-05-15	15.00		44.70	8.00	1776	3200		12.50	12.50	32.20	1673 m	North West
6628- 633	47722	CELLAR				42.67		49.90		1157	2094					1673 m	North
6628- 11730	58699		Operational	Drainage	1981-05-13	16.00		44.57	7.60	1832	3300		13.50	13.50	31.07	1674 m	North West
6628- 8002	54971				1967-11-02	12.34		41.93	7.00	1645	2967	0.450 0	3.81	3.81	38.12	1675 m	South West
6628- 11746	58715		Operational	Drainage	1981-05-15	15.10		44.55	8.00	1776	3200		12.50	12.50	32.05	1678 m	North West
6628- 24940	252999	MW 3		Investigation	2009-05-20	10.00							6.00	6.00		1678 m	North East
6628- 31580	362109			Investigation	2021-10-27	11.50										1678 m	West
6628- 11740	58709		Operational	Drainage	1981-05-14	15.00		44.61	7.70	1776	3200		12.50	12.50	32.11	1681 m	North West
6628- 11741	58710		Operational	Drainage	1981-05-14	15.00		44.57	7.60	1776	3200		12.50	12.50	32.07	1683 m	North West
6628- 7988	54957							35.87		2216	3981					1684 m	South West
6628- 11729	58698		Operational	Drainage	1981-05-13	16.50		44.49	7.60	1832	3300		14.00	14.00	30.49	1685 m	North West
6628- 18415	164474			Observation	1996-08-06	3.80		43.06					3.32	3.32	39.74	1688 m	North West
6628- 11742	58711		Operational	Drainage	1981-05-14	15.00		44.50	7.70	1788	3220		12.50	12.50	32.00	1689 m	North West
6628- 18960	169040			Domestic	1998-02-03	8.00		63.37				0.670 0	2.00	2.00	61.37	1690 m	South East
6628- 22582	218506	GMW 1		Investigation	2006-06-09	9.00		32.97					7.50	7.50	25.47	1690 m	South West
6628- 20602	185810			Drainage	2001-05-09	22.00		57.22		1390	2510	0.600 0	9.00	9.00	48.22	1691 m	South East
6628- 551	47648		Unknown		1949-01-01	141.73		56.64		1671	3013	1.890 0	17.07	17.07	39.57	1691 m	North East
6628- 7997	54966					10.97	41.00			1573	2838	0.380	5.18	5.18	35.82	1692 m	South West
6628- 31579	362108			Investigation	2021-10-26	11.50										1694 m	West
6628- 297	47397	GOVT OFFICE WEST 3	Converted to WW		1970-02-23	29.87		44.59	7.50	1832	3300					1696 m	North West
6628- 298	47398	GOVT OFFICE OBS 3	Unknown		1970-03-11	4.57		44.59								1696 m	North West
6628- 301	47401	CENTRA L MARKET 3	Unknown		1964-04-14	27.49		44.34								1696 m	North West
6628- 11728	58697		Operational	Drainage	1981-05-13	16.00		44.41	7.70	1832	3300		13.50	13.50	30.91	1697 m	North West
6628- 17516	153319			Domestic	1995-12-28	18.00		37.59	7.00	1452	2620					1698 m	South West
6628- 30464	330210		Backfilled													1698 m	East
6628- 18417	164476			Observation	1997-03-20	4.50		43.15								1700 m	North West
6628- 31940	370723		Backfilled													1703 m	North
6628- 295	47395	GOVT OFFICE WEST 4	Converted to WW		1970-02-20	24.69		44.47	7.50	2001	3600					1704 m	North West
6628- 296	47396	GOVT OFFICE OBS 4	Unknown		1970-03-06	4.57		44.47								1704 m	North West
6628- 19331	173830			Domestic	1998-12-09	14.50		64.23		1754	3160	0.200	5.00	5.00	59.23	1705 m	South East
6628- 31680	365415			Environment al	2021-12-10	11.50										1705 m	South West

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 302	47402	CENTRA L MARKET 4	Unknown		1964-04-20	19.20	43.89						14.63	14.63	29.26	1707 m	North West
6628- 25355	258779	MW 6		Investigation	2010-03-18	9.50							6.93	6.93		1708 m	East
6628- 32028	371285		Dry	Investigation	2022-09-08	17.50										1709 m	North
6628- 18418	164477			Observation	1997-03-20	4.50		43.23								1711 m	North West
6628- 27853	285445			Investigation	2015-05-18	21.00										1711 m	North West
6628- 7202	54171					2.13	63.00		7.70	1121	2030	0.020	1.82	1.82	61.18	1711 m	South East
6628- 18416	164475			Observation	1996-08-06	3.80		43.04					2.18	2.18	40.86	1714 m	North West
6628- 28631	290458				2016-12-07	25.00										1714 m	North
6628- 20115	178749			Domestic	2000-02-22	21.00		63.55		1334	2410		4.50	4.50	59.05	1715 m	South East
6628- 14220	61189		Operational	Domestic	1988-05-04	14.00	55.00		7.10	1737	3130	1.600 0	8.20	8.20	46.80	1716 m	South
6628- 632	47721	MOTOR VEHICLE S 3	Unknown		1972-09-20	30.40	44.98									1716 m	North
6628- 363	47463							40.50								1717 m	North West
6628- 24939	252998	MW 2		Investigation	2009-05-20	10.00							7.00	7.00		1718 m	North East
6628- 300	47400				1934-10-03	23.09	44.00			1014	1837	0.510 0				1719 m	North West
6628- 23454	237464				2007-12-08	48.00		42.49		959	1737	1.000	15.00	15.00	27.49	1720 m	South West
6628- 341	47441					33.53		42.61								1720 m	North West
6628- 637	47726					10.36		50.16		5155	9081					1720 m	North East
6628- 28632	290459		Backfilled		2016-12-06	25.00										1722 m	North
6628- 22988	231303				2007-05-18	36.00		56.27		1552	2800	1.200 0	8.00	8.00	48.27	1724 m	South East
6628- 16365	134435			Domestic	1993-03-08	24.00		62.44	8.00	1412	2551					1725 m	East
6628- 23452	237462				2008-03-06	26.00		41.87		1070	1937	0.250 0	14.00	14.00	27.87	1728 m	South West
6628- 731	47805							40.31								1730 m	North West
6628- 18124	162785			Domestic	1996-11-20	24.00		36.58		1468	2650	0.500	8.00	8.00	28.58	1731 m	South West
6628- 7201	54170					6.10		64.92	8.00	1664	3000		1.22	1.22	63.70	1737 m	South East
6628- 18420	164479			Observation	1997-03-20	3.50		42.87								1738 m	North West
6628- 23330	236166				2007-11-23	20.00		63.92				0.000				1738 m	South East
6628- 294	47394	GOVT OFFICE OBS 2	Unknown		1970-03-16	4.57		44.71								1738 m	North West
6628- 20143	180521			Monitoring	2000-05-17	10.00		43.16				0.010	5.50	5.50	37.66	1739 m	North West
6628- 293	47393	GOVT OFFICE WEST 2	Converted to WW		1970-03-07	30.18		44.72	7.50	1130	2045					1739 m	North West
6628- 26110	266971	MW 12		Investigation	2011-05-02	12.00							8.00	8.00		1740 m	East
6628- 15153	62122		Operational	Domestic	1990-01-09	10.00		35.97					4.00	4.00	31.97	1741 m	South West
6628- 32029	371286		Dry	Investigation	2022-09-12	18.00										1743 m	North

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 292	47392	GOVT OFFICE OBS 1	Unknown		1970-04-02	4.57		44.56								1745 m	North West
6628- 659	47748		Abandoned		1957-07-26	10.36		48.66								1745 m	North East
6628- 291	47391	GOVT OFFICE WEST 1	Converted to WW	Drainage	1970-03-10	36.42		44.57								1747 m	North West
6628- 631	47720	MOTOR VEHICLE S 2	Unknown		1972-08-29	30.25	45.54		7.50	2253	4045		15.90	15.90	29.64	1747 m	North
6628- 7996	54965					7.32		37.65		2156	3875					1747 m	South West
6628- 18419	164478			Observation	1997-03-20	4.50		42.89								1748 m	North West
6628- 705	47779					23.47		40.19		3817	6784		15.24	15.24	24.95	1754 m	North West
6628- 286	47386	PUB. BLDGS. DEPT			1965-07-30	9.14		45.50								1755 m	North
6628- 28038	287439	GW 1		Investigation	2015-10-18	20.80							16.16	16.16		1756 m	North West
6628- 634	47723							50.32		1160	2100					1757 m	North East
6628- 7199	54168					11.58	63.00					0.010				1757 m	East
6628- 29414	306744															1760 m	South East
6628- 21777	200355			Drainage	2004-02-24	21.00		56.90				1.000	6.20	6.20	50.70	1761 m	South East
6628- 630	47719	MOTOR VEHICLE S 1	Unknown		1972-08-15	59.00	41.13		7.50	1356	2450	0.630 0	21.50	21.50	19.63	1761 m	North
6628- 25076	253616				2009-08-07	39.00			7.05	1856	3340	1.600 0	11.00	11.00		1765 m	South
6628- 29024	299040				2017-05-19	26.00			6.98	1934	3480	1.000	5.20	5.20		1766 m	South
6628- 20252	181277			Monitoring	2000-05-27	13.00		48.14								1767 m	North
6628- 21776	200354					21.00		57.00		1373	2480					1768 m	South East
6628- 29197	303729				2017-11-08	22.00							18.00	18.00		1772 m	North
6628- 27897	285710				2013-04-18	4.50				2386	4280		2.30	2.30		1773 m	North
6628- 28037	287438	GW 3		Investigation	2015-10-18	19.40							16.00	16.00		1773 m	North West
6628- 23967	245246		Backfilled		1999-01-15	3.04		56.91								1774 m	South
6628- 23016	232424				2007-06-12	69.00		57.03		1278	2310	0.330	22.00	22.00	35.03	1775 m	South
6628- 26585	272272	MW 1		Investigation	2012-08-17	4.50				1889	3400		2.20	2.20		1777 m	North
6628- 26586	272273	MW 2		Investigation	2012-08-17	4.50				1917	3450		2.00	2.00		1778 m	North
6628- 289	47389	CENTRA L MARKET 1	Unknown		1964-04-09	18.29	44.20									1785 m	North West
6628- 7170	54139					7.32	50.00		7.00	1715	3092	0.610	3.51	3.51	46.49	1785 m	South
6628- 26111	266972	MW 13		Investigation	2011-05-02	12.00							7.00	7.00		1787 m	East
	47390	CENTRA L MARKET 2	Unknown		1964-04-03	27.43	44.00									1787 m	North West
6628- 11101	58070	GH 155	Abandoned	Investigation ; Observation	1979-08-14	15.06	45.03						11.04	11.04	33.99	1788 m	North

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 660	47749		Abandoned		1957-07-26	14.93		48.78								1788 m	North East
6628- 625	47714		Abandoned		1973-10-17	19.60	46.00		7.50	1295	2340	0.130	16.20	16.20	29.80	1789 m	North
6628- 23657	240230				2007-12-08	47.50		43.46		1042	1888					1791 m	South
6628- 7171	54140		Unequipped			14.56		52.71		1170	2118		6.33	6.33	46.38	1793 m	South
6628- 7998	54967				1934-08-01	14.63		39.05		1355	2449		7.92	7.92	31.13	1793 m	South West
6628- 20513	184763			Domestic	2001-02-15	24.00		60.57		1401	2530	0.500 0	6.00	6.00	54.57	1794 m	South East
6628- 26311	269284		Backfilled			7.00				1524	2750					1795 m	South
6628- 285	47385	PUB. BLDGS. DEPT			1964-02-17	15.24		46.03								1795 m	North
6628- 283	47383	PUB. BLDGS. DEPT			1964-02-14	4.27		46.01								1796 m	North
6628- 284	47384	PUB. BLDGS. DEPT			1964-02-14	8.53		46.02								1796 m	North
6628- 277	47377	PUB. BLDGS. DEPT			1964-02-13	24.38		46.00								1797 m	North
6628- 5552	52521	PUB. BLDGS. DEPT		Investigation	1964-02-03	25.91		45.92								1798 m	North
6628- 282	47382				1966-09-13	24.38		46.02					17.98	17.98	28.04	1799 m	North
6628- 26312	269285					45.00						1.000	5.00	5.00		1800 m	South
6628- 276	47376	PUB. BLDGS. DEPT			1963-12-17	60.96		45.93					19.81	19.81	26.12	1801 m	North
6628- 275	47375	PUB. BLDGS. DEPT			1964-03-04	27.74		45.96								1802 m	North
6628- 581	47678							63.88		2742	4907					1802 m	East
6628- 281	47381				1966-12-13	10.67		45.92					7.19	7.19	38.73	1804 m	North
6628- 18127	162788		Backfilled	Domestic	1996-11-28	21.00		50.79		1923	3460		8.30	8.30	42.49	1805 m	South
6628- 25063	253593					10.00						0.400				1805 m	South East
6628- 274	47374	PUB. BLDGS. DEPT			1964-01-29	39.62		45.96								1807 m	North
6628- 280	47380			Drainage	1966-10-25	24.38	45.00					0.570	18.59	18.59	26.41	1807 m	North
6628- 20032	178069			Irrigation	2000-01-19	24.00		31.64		1832	3300		7.00	7.00	24.64	1808 m	West
6628- 20020	178057			Irrigation	2000-01-14	54.00		31.78		2841	5080	2.750	14.00	14.00	17.78	1813 m	West
6628- 627	47716	PMG 1	Unknown		1959-03-13	12.19		47.93								1814 m	North
6628- 26112	266973	MW 14		Investigation	2011-05-02	12.00							8.00	8.00		1815 m	East
6628- 629	47718	PMG 2	Unknown		1959-03-23	20.12		48.08								1816 m	North
6628- 7999	54968					6.71		40.34		1427	2578		5.49	5.49	34.85	1817 m	South West
6628- 31744	367843		Dry	Environment al	2022-04-12	17.00										1820 m	North
6628- 15880	62849		Operational	Domestic	1992-01-23	18.00		37.72	7.00	1234	2231		9.00	9.00	28.72		South West
6628- 7169	54138					9.14		48.52	6.40	1455	2627		4.57	4.57	43.95	1823 m	South

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 272	47372	PUB. BLDGS. DEPT			1964-03-13	27.43		45.85								1824 m	North
6628- 24938	252997	MW 1			2009-05-20	10.00							5.00	5.00		1825 m	North East
6628- 279	47379			Drainage	1966-09-06	24.38		45.86					17.98	17.98	27.88	1825 m	North
6628- 20966	194429			Domestic	2002-10-29	24.00		58.04	7.08	2019	3630	0.700	15.00	15.00	43.04	1826 m	North East
6628- 278	47378			Drainage	1966-11-04	24.38	45.00					0.510 0	16.15	16.15	28.85	1826 m	North
6628- 17902	156585			Drainage	1996-05-30	15.00		40.21	6.80	1367	2470	2.200				1827 m	South West
6628- 270	47370	RESERV E BANK 6	Unknown		1963-02-04	24.38		45.81								1828 m	North
6628- 266	47366	RESERV E BANK 2	Unknown		1960-05-23	25.60		45.74		1230	2225		17.22	17.22	28.52	1830 m	North
6628- 661	47750		Abandoned		1957-07-26	4.88		49.34								1830 m	North East
6628- 271	47371	RESERV E BANK 4	Unknown		1960-06-17	36.58		45.81		1015	1838		16.92	16.92	28.89	1831 m	North
6628- 21526	198204			Investigation	2003-09-09	18.00		40.92				0.010	16.20	16.20	24.72	1838 m	North West
6628- 30153	315979			Environment al	2019-04-16	13.50										1838 m	South West
6628- 22394	210970				2006-01-11	20.00		31.86		1923	3460	0.800	6.80	6.80	25.06	1843 m	West
6628- 24932	252966	GW 1		Investigation	2009-08-14	23.00							16.00	16.00		1846 m	North West
6628- 31041	353600	SB17/MW 3		Investigation	2008-03-13	20.80	42.17	42.32					16.90	17.05	25.27	1846 m	North West
6628- 716	47790				1933-03-01	13.11		32.73								1847 m	West
6628- 626	47715		Abandoned		1973-10-24	30.60		46.03	7.50	2309	4145	0.130 0	16.20	16.20	29.83	1850 m	North
6628- 12240	59209	GH 160	Geotechnic ally Equiped	Investigation	1982-06-18	9.75	62.00									1851 m	East
6628- 23607	239798				2008-06-06	27.00		56.96		2097	3770	0.800	7.00	7.00	49.96	1854 m	South
6628- 18723	167422			Domestic	1997-10-24	20.00		47.35		1306	2360	1.000	5.40	5.40	41.95	1855 m	South
6628- 11165	58134			Drainage	1979-10-20	12.00		46.21	8.00	1160	2100					1856 m	South
6628- 268	47368	RESERV E BANK 5	Unknown		1963-01-30	24.92		45.60								1858 m	North
6628- 269	47369	RESERV E BANK 3	Unknown		1960-06-03	27.28		45.63	7.50	787	1427		16.92	16.92	28.71	1858 m	North
6628- 19988	177822			Domestic	1999-11-17	21.00		33.36		1676	3020		7.80	7.80	25.56	1859 m	South West
6628- 23787	241568	MW 2		Investigation	2008-08-22	19.00		41.94					16.00	16.00	25.94	1859 m	North West
6628- 23818	241706				2008-05-30	22.00		51.18		1923	3460	0.500	8.00	8.00	43.18	1859 m	South
6628- 27171	279158		Dry		2013-11-28	11.00										1861 m	North
6628- 11102	58071	DEPT OF TRASIT		Observation	1979-09-13	19.80	45.12						18.05	18.05	27.07	1862 m	North
6628- 16084	63053		Operational	Drainage	1992-06-12	14.30		57.22					6.05	6.05	51.17	1864 m	South
6628- 23786	241567	MW 1		Investigation	2008-08-22	19.00		41.96					16.00	16.00	25.96	1865 m	North West
6628- 267	47367	RESERV E BANK 1	Unknown		1960-05-12	25.22		45.48		1200	2172		16.76	16.76	28.72		North
	284484			Investigation	2015-02-03	20.50				3857	6850		19.00	19.00		1866 m	North
6628- 624	47713	SCOTS CHURCH A 2	Unknown		1956-10-30	12.19		46.86								1867 m	North

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 7203	54172				1967-01-01	5.79	67.00		6.50	1645	2967	0.010	2.13	2.13	64.87	1870 m	South East
6628- 262	47362				1971-01-12	15.47		44.38								1871 m	North West
6628- 621	47710	SCOTS CHURCH A 5	Unknown		1956-11-09	12.19		46.76								1871 m	North
6628- 24933	252967	GW 2		Investigation	2009-08-14	21.00							17.00	17.00		1872 m	North West
6628- 717	47791				1933-03-01	14.33		32.72		5133	9042		12.19	12.19	20.53	1875 m	West
6628- 662	47751		Abandoned		1957-07-26	6.10		50.05								1877 m	North East
6628- 23770	241504				2008-09-03	35.00		48.09		1429	2580	0.065 0				1880 m	South
6628- 25354	258778	MW 5		Investigation	2010-03-15	10.50							8.29	8.29		1881 m	East
6628- 622	47711	SCOTS CHURCH P 1	Unknown		1956-11-19	15.34		46.90								1881 m	North
6628- 265	47365				1954-10-07	22.86		44.89					18.29	18.29	26.60	1886 m	North West
6628- 28627	290446	BH 2	Decommiss ioned	Investigation	2016-11-11	20.50										1886 m	North
6628- 620	47709	SCOTS CHURCH A 6	Unknown		1956-11-09	12.19		46.75								1886 m	North
6628- 21942	202236	MW 9	Backfilled	Monitoring	2004-08-23	19.20		43.06					17.00	17.00	26.06	1887 m	North West
6628- 31039	353598	SB6/MW2		Investigation	2008-03-12	20.00	41.81	41.87					16.90	16.95	24.91	1887 m	North West
6628- 619	47708	SCOTS CHURCH A 4	Unknown		1956-11-08	12.19		46.84								1889 m	North
6628- 28625	290444		Decommiss ioned	Investigation	2016-11-11	22.00										1892 m	North
6628- 17263	150892			Domestic	1995-05-16	20.00		55.79	7.00	2352	4220	3.000				1893 m	South
6628- 27094	278449		Backfilled		2013-08-22	20.00										1894 m	North
6628- 23646	240205				2007-06-18	26.00		39.88		698	1267	1.000	14.00	14.00	25.88	1896 m	South West
6628- 24934	252968	GW 3		Investigation	2009-08-17	20.00							16.50	16.50		1896 m	North West
6628- 618	47707	SCOTS CHURCH P 2	Unknown		1956-11-27	15.44		46.85								1897 m	North
6628- 31040	353599	SB10/MW 1		Investigation	2008-03-11	17.00	41.84	41.91					13.70	13.77	28.14	1900 m	North West
6628- 15805	62774		Operational	Domestic	1991-12-02	15.00		33.08	7.00	1160	2100		6.00	6.00	27.08	1904 m	South West
6628- 264	47364				1954-08-05	22.86		44.97								1905 m	North West
6628- 12896	59865				1984-05-07	11.00		33.37								1906 m	South West
6628- 616	47705	SCOTS CHURCH A 3	Unknown		1956-10-30	12.19		46.73								1906 m	North
6628- 30619	334434		Backfilled	Investigation	2020-01-08	17.00										1908 m	North
6628- 30724	336597		Backfilled	Investigation	2020-01-19	17.00										1908 m	North
6628- 3920	50889				1981-07-15	13.80	53.00		7.40	2030	3650	1.250 0	3.00	3.00	50.00	1909 m	South
6628- 617	47706	SCOTS CHURCH A 1	Unknown		1956-10-30	12.19		46.84								1909 m	North
6628- 27095	278450		Backfilled	Investigation	2013-08-23	20.00										1910 m	North

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 261	47361	CIC 1	Unknown		1957-01-23	12.80		44.38								1911 m	North West
6628- 23346	236200				2007-10-04	18.00		48.38		1295	2340					1912 m	South
6628- 24751	247157				2008-11-18	20.00		57.83		1917	3450	1.000	9.10	9.10	48.73	1912 m	South
6628- 23816	241703				2008-05-28	28.00		40.47		1345	2430	1.500 0				1914 m	South West
6628- 26134	267005	BH 4			2011-01-22	21.20										1914 m	North
6628- 663	47752		Abandoned		1957-07-26	2.74		50.77								1914 m	North East
6628- 260	47360	CIC 2	Unknown		1957-01-24	12.80		44.31								1917 m	North West
6628- 23754	241485				2007-07-18	30.00		42.74		998	1808	0.600	12.00	12.00	30.74	1919 m	South West
6628- 22807	228822				2007-02-05	16.00		49.92		1496	2700	0.500 0	6.30	6.30	43.62	1920 m	South
6628- 7173	54142					8.23		52.10	6.40	1170	2118		5.49	5.49	46.61	1922 m	South
6628- 263	47363				1971-01-13	7.62		44.59								1923 m	North West
6628- 13126	60095		Operational	Drainage	1984-11-20	8.00		56.21	7.50	1418	2560	0.450 0				1925 m	North East
6628- 14532	61501	GH 20	Abandoned	Investigation	1981-12-09	4.80	48.00									1925 m	South
6628- 258	47358	CIC 3	Unknown		1957-01-25	12.80		44.41								1926 m	North West
6628- 257	47357	CIC 5	Unknown		1957-01-29	12.80		44.48								1927 m	North West
6628- 247	47347			Drainage		22.86	45.00					3.030	20.12	20.12	24.88	1928 m	North
6628- 25880	265099		Unknown	Investigation ; Managed Aquifer Recharge (incl ASR)	2010-04-15	166.00				2989	5340	2.000	22.00	22.00		1928 m	South West
6628- 31717	367611			,		17.00										1928 m	North
6628- 21564	198393			Domestic	2003-09-02	25.00		50.13		1322	2390	0.312	6.00	6.00	44.13		South
6628- 28594	290326			Investigation	2016-10-21	25.00										1929 m	North West
6628- 25562	262187	BH 3			2009-08-27	25.40							18.40	18.40		1930 m	North
	352960		Backfilled		2020-01-20	17.00										1930 m	North
6628- 24935	252969	GW 4		Investigation	2009-08-17	20.00							16.50	16.50		1933 m	North West
6628- 255	47355	CIC 4	Unknown		1957-01-29	12.80		44.38								1933 m	North West
6628- 26133	267004	BH 3			2011-01-21	21.00										1933 m	North
6628- 29192	303717		Decommiss ioned													1935 m	North West
6628- 29200	303736		Decommiss													1935 m	North West
6628- 19413	174197			Domestic	1999-03-10	18.00		65.21		1016	1840	0.750	6.00	6.00	59.21	1938 m	South East
	247093				2008-09-19	20.00		39.50		365	663		10.90	10.90	28.60		South
	60925				1987-05-02	18.00		39.49		465	845	0.750	8.00	8.00	31.49		South West
	235863				2007-02-22	20.00		42.22		1365	2465	0.700	9.00	9.00	33.22		South
	235984				2007-02-22	20.00		42.31		1340	2420	0.500	9.00	9.00	33.31		South West
	47703		Abandoned	Drainage		60.96		47.41				J				1944 m	North

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	РН	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 31964	371063		Backfilled	Investigation	2022-07-26											1946 m	North
6628- 13491	60460		Operational	Irrigation	1985-10-21	20.00		42.28	8.20	894	1620	0.500 0	0.00	0.00	42.28	1954 m	South West
6628- 17421	152905			Drainage	1995-10-02	20.50		67.00	7.40	2126	3820	0.500 0				1955 m	East
6628- 7207	54176				1915-01-01	178.31		61.63					22.86	22.86	38.77	1955 m	South East
6628- 602	47691					15.24		49.86		1985	3572					1960 m	North East
6628- 603	47692					10.36		49.86		1514	2732					1960 m	North East
6628- 25353	258777	MW 4		Investigation	2010-03-17	9.00							8.00	8.00		1961 m	East
6628- 23731	241403				2007-12-07	32.00		47.68		1839	3310	32.00 00	17.00	17.00	30.68	1964 m	North
6628- 28756	291841			Investigation	2017-02-24	16.90										1964 m	North West
6628- 21941	202235	MW 5		Monitoring	2004-08-23	20.30		42.70					17.20	17.20	25.50	1966 m	North West
6628- 23778	241518				2008-01-04	26.00		51.13	6.73	1631	2940	0.500 0	10.00	10.00	41.13	1967 m	South
6628- 25561	262186	BH 2			2009-08-25	26.40							15.40	15.40		1969 m	North
6628- 13267	60236		Operational	Domestic	1985-03-16	20.00	62.00		8.30	1244	2250	0.400 0	7.00	7.00	55.00	1970 m	East
6628- 21940	202234	MW 7	Backfilled	Monitoring	2004-08-24	21.90		42.69					17.70	17.70	24.99	1971 m	North West
6628- 25560	262185	BH 1			2009-08-23	25.40										1971 m	North
6628- 26494	271632	MAR	Operational	Managed Aquifer Recharge (incl ASR)	2012-05-07	57.00				1042	1888	2.000	21.20	21.20		1972 m	South
6628- 28593	290325			Investigation	2016-10-20	25.00										1973 m	North West
6628- 17357	151234			Domestic		18.00		70.03	7.20	1345	2430	0.750 0				1982 m	South East
6628- 245	47345			Drainage		22.10	45.00					3.410 0	19.05	19.05	25.95	1982 m	North
6628- 18120	162781			Domestic	1996-11-29	19.00		34.02		633	1150		9.00	9.00	25.02	1986 m	South West
6628- 8020	54989				1914-08-01	76.20		44.65								1986 m	South
6628- 11594	58563			Observation	1979-01-26	13.00	48.95		7.00	1235	2234	1.260 0	3.18	3.18	45.77	1987 m	South
6628- 16679	142376			Domestic	1994-05-12	16.00		31.39	6.80	1452	2620	3.000 0				1988 m	West
6628- 613	47702	STATE BANK			1908-01-01	21.34		45.77								1988 m	North
6628- 32022	371257		Dry	Monitoring	2022-09-19	4.50										1989 m	West
6628- 32024	371266		Dry	Monitoring	2022-09-18	6.00										1989 m	West
6628- 653	47742					7.62	54.00			1413	2552	0.040 0	7.01	7.01	46.99	1989 m	North East
6628- 32020	371255		Dry	Monitoring	2022-09-16	4.50										1990 m	West
6628- 32021	371256		Dry	Monitoring	2022-09-19	6.00										1990 m	West
6628- 32023	371265		Dry	Monitoring	2022-09-18	6.00										1990 m	West
6628- 11103	58072	DEPT OF TRANS		Observation	1979-09-13	30.00	45.31						17.92	17.92	27.39	1991 m	North
6628- 28755	291840			Investigation	2017-02-24	17.00										1992 m	North
6628- 17423	152907			Drainage	1995-10-02	24.00		67.95	7.30	2391	4290	0.250 0				1993 m	East

Unit No	Drillhole No	Name	Status	Purpose	Drill Date	Max Depth	Ref Elev	Groun d Elev	PH	TDS	EC	Yield	DTW	SWL	RSWL	Dist	Dir
6628- 23650	240218				2007-06-01	42.00		45.69		762	1382	0.700 0	4.80	4.80	40.89	1993 m	South
6628- 16182	63151		Backfilled		1992-09-09	92.00		43.30								1995 m	North East
6628- 22020	203235				2005-02-23	24.90		44.95								1995 m	North West
6628- 246	47346			Drainage	1936-01-01	9.14		45.19		2390	4290					1995 m	North
6628- 32018	371253		Dry	Monitoring	2022-09-16	4.40										1995 m	West
6628- 15804	62773		Operational	Domestic	1991-12-03	15.00		32.28	7.10	1373	2481		5.00	5.00	27.28	1996 m	South West

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