



Preliminary Site Investigation – Phase I Environmental
Site Assessment

Grangefields (Melton East) PSP

Prepared for 3L Alliance
19 November 2019

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EXECUTIVE SUMMARY

This report must be read as a whole. The executive summary is not a substitute for this. Any subsequent report must be read in conjunction with this report.

SMEC Australia Pty Ltd (SMEC) was engaged by 3L Alliance to undertake a Preliminary Site Investigation (PSI) for the area designated as the future Grangefields Precinct Structure Plan (PSP), currently identified as Melton East PSP (the 'study site'). 3L Alliance has secured the control of 260 hectares of farmland (initially comprising 23 land parcels) within the PSP and is initiating the preliminary studies required for the PSP to be progressed to the approval stage.

The review of Precinct history found that the land within the Precinct was previously used primarily for grazing and agricultural purposes. Main road corridors such as the Western Freeway and Melton Highway which are along and within the precinct boundaries have been in use throughout the history of the site. The surrounding land has been and is currently subject to similar uses as land within the Precinct.

Based on the information reviewed, the potential sources of contamination identified as part of this PSI are as follows:

- Onsite:
 - Agriculture – heavy metals, pesticides/herbicides (OC/OPs), Total Petroleum Hydrocarbons (TPH), volatile hydrocarbons benzene, toluene, ethyl-benzene and xylenes (BTEX), Polycyclic Aromatic Hydrocarbons (PAHs), Poly Chlorinated Biphenyls (PCBs)
 - Fuel and oil storage and use – TPH, TRH, BTEX, lead
 - Importation of fill, illegal dumping, stockpiling – TPH, TRH, BTEX, MAH, heavy metals, asbestos
 - Livestock Carcasses and Burial Pits – BOD, nutrients, oil and grease
 - Septic Tanks and Grey Water Tanks – detergents, enteric and faecal bacteria, nutrients
 - Service Station - Storage use and leakages of fuels (heavy metals, TPH, BTEX).
 - Main road corridors - asbestos, metals, TPH, BTEXN.
- Offsite:
 - Melton Recycling Centre, which contained landfilling of the Readymix Quarry (decomposition of wastes to leachate – metals, nutrients).
 - Use of adjacent land by the Defence Force, now the Rockbank residential development (UXO/XO ordnances – UXO, metals).

The review of current and previous site uses have identified the following activities associated with the site's use for grazing and agricultural purposes, having a "medium potential for contamination" as defined in Table 1 of the DSE (2005) guideline:

- Possible storage and use of chemicals and fuels; and
- Waste and Building materials.

This triggers assessment level 'B' which has the requirement of "a site assessment from a suitably qualified environmental professional if insufficient information is available to determine if an audit is appropriate. If advised that an audit is not required, default to C". Should these road corridors be retained (i.e. not developed into residential land), the assessment level would default to level 'C'.

A high potential for significant contaminant to be (or become) present has been identified for:

- The service station within Lot 1PS537638 (for the activity of "service stations/fuel storage")

This triggers assessment level 'A' which requires "an environmental audit as required by Ministerial Direction No. 1 or the Environmental Audit Overlay when a planning scheme amendment or planning permit application would allow a sensitive use to establish on potentially contaminated land." However, based on the age of the service station and the likelihood the construction adhered to stringent guidelines, a trigger assessment level 'B' may be more appropriate.

The remainder of the precinct has been indicated to be a low potential for significant contamination, triggering assessment level C requiring "General duty under Section 12(2)(b) and Section 60(1)(a)(iii) of the Planning and Environment Act 1987". It should be noted however that this assessment was a high level review and there is potential for contamination to be present in areas where potential was not identified.

It is understood that some of the land may be developed for less sensitive purposes, which would then reduce the level of assessment required e.g. where a proposed redevelopment land use includes "Other Uses" e.g. agriculture, or commercial/industrial e.g. retail or office, industry or warehouse.

Based on this assessment, the majority of the site is considered generally suitable for proposed redevelopment for urban uses including residential, provided the following investigations (and subsequent remediation if required) are actioned:

- Investigation Level A sites: requirement of an environmental audit. Alternatively, these sections could be utilised for land uses of lower sensitivities, such as open space, agriculture, retail/office or industry/warehouse. This would negate the requirement for an environmental audit and lower the triggered assessment to Level B, as described above.
- Investigation Level B sites: requirement of site assessments from a suitably qualified person, potentially including site walkovers limited surface/intrusive soil sampling and/or intrusive groundwater investigation.
- Investigation Level C sites: addressed by general duty of care.

Based on this review and the conclusions above, SMEC recommends liaison with a suitably qualified and experienced consultant to assess the level of further assessment required at the Precinct (or portion of land within the Precinct) to comply with requirement for a site assessment and duty of care requirements as per DSE (2005) guidance, including detailed site inspections and walkovers and dependant on findings, further assessment may include intrusive soil assessment and/or intrusive groundwater investigation, if considered appropriate. This would serve to assess the potential presence, severity and extent of contamination at specific areas within the Precinct as identified (if any) and inform on the potential hazards to environmental or human health and requirements for any further assessment or site clean-up to ensure the Site is suitable for the proposed redevelopment.

This should be targeted to ensure detailed assessment of land proposed for more sensitive uses and/or where land has been developed/disturbed or subject to more intensive agricultural uses.

Figures provided within this report presents the portions of the Precinct where Level 'C' assessment as per DSE (2005) is required; this is based on low risk of the presence of contamination and where assessment is likely to have already been conducted as part of the Planning Permit application process. The same figure also presents those areas of the Precinct where Level 'B' and 'A' assessment is required.

DSE (2005) indicates that the planning or responsible authority (e.g. Council and/or EPA) may require some or all of the additional site assessment recommended below be completed as a condition of the planning or development permit application; however, it should be noted that this guidance is clearer in regards to sites where an environmental audit overlay is applicable, or where any preliminary investigations determine an environmental audit is warranted based on potential for contamination and proposed land use as per Table 2 of the guidance.

Limited/targeted intrusive soil assessment would be recommended at the following:

- Any locations where waste has been historically dumped / stockpiled, or fill has been imported e.g. for surface levelling or to fill in former dams. This would include lots 3LP216717, 4PS304449, 1LP127283, 1TP118945, 5LP137020 and 3-7\PP2927;
- Any locations where intensive agricultural activities have been identified, including areas where fertilisers have been stockpiled, market gardens/nurseries, farming operations, intensive livestock pasturing operations;
- Any locations where inspection of farm storage sheds/buildings identifies the potential presence of contamination or potentially contaminating activities (mechanical workshops, heavy equipment storage and maintenance);
- Any locations where chemical handling/mixing/storage has been identified, or where there is evidence of spills/losses of fuels/oil/pesticides/herbicides;
- Service station; and
- Former building/structure locations where demolition may have caused impacts from asbestos or other materials associated with vintage structures (PCBs, lead-based paints etc).

Any further assessment should be completed prior to any development permit application process.

1 Introduction

SMEC Australia Pty Ltd (SMEC) was engaged by 3L Alliance to undertake a Preliminary Site Investigation (PSI) for the area designated as the future Grangefields Precinct Structure Plan (PSP), currently identified as Melton East PSP (the 'precinct'). 3L Alliance has secured the control of 928 hectares of farmland (comprising 78 land parcels) within the PSP and is initiating the preliminary studies required for the PSP to be progressed to the approval stage.

A preliminary study site boundary, presenting the potentially affected lots, is presented in **Appendix A, Figure 1**.

1.1 Objectives

The objective of this scope is to understand the nature and extent of any potential contamination on property parcels within the overall PSP area and assess the potential risk to human health and the environment associated with contamination sources both on site and off site in accordance with Ministerial Direction No. 1 – *Potentially Contaminated Land*, the NEPM (2013) and Ministerial Direction No. 19 – *Information requirements for amendments that may result in impacts on the environment, amenity and human health* (Direction No. 19)

1.2 Scope of Works

SMEC conducted a desktop site history investigation and a brief site walkover, which included the following scope of works:

- Site identification to identify the Site boundaries and the location of potential contaminated land parcels.
- Identification of current and proposed uses identified through a review of current and historical land zoning plans.
- Reviewed available Site plans, historical maps and other available information, provided by Council and publicly available.
- Reviewed historical aerial photographs from first available photographs held by the Land Information Office of the Department of Environment, Land, Water and Planning (DELWP), and at nominal ten-year intervals after that to 2009 or 2012, and 2018 or 2019. SMEC also reviewed available aerial photography from other sources (e.g. Google Earth Pro, NearMap) for 2015 to assess any changes in land uses and potential contamination in between available imagery.
- Reviewed previous land use activities recorded by Council.
- Obtained EPA Victoria records including licensed land uses, environmental audit overlays, publicly available Audit reports including Statements of environmental audit, Pollution Abatement Notices and the Priority Site Register;
- Assessed for the presence Groundwater Quality Restricted Use Zones (GQRZ).
- Reviewed waste disposal locations and areas of imported fill (including review of EPA public former landfill database).
- Reviewed the Site environmental setting, to determine the surrounding environment and potential off-Site receptors to contamination, including:
 - ecological mapping
 - acid sulfate soil mapping;
- Reviewed local geology and hydrogeology mapping as this information can influence the fate and transport of contaminants and potential receptors to contamination; searches included:
 - surface elevation mapping
 - regional and site-specific soil and geology records
 - existing soil bore and groundwater well data.
- Reviewed and summarised any previous reports or studies regarding environmental, geological or ground water conditions within the precinct made available by Council.
- Reviewed any other information deemed appropriate to include in the desktop review.

Preparation of this report, including:

- Summary of findings and recommendations of the desktop review.
- Issues summary and resultant recommendations for management and/or remediation in terms of environmental contamination, geology/geotechnical and hydrology/groundwater.

- Outline of any future testing and more detailed investigations if recommended.
- Evaluation of the suitability of the Precinct for proposed use and what level of further assessment (if any) would be required to determine suitability.
- A simple “traffic-light” system of property classification in accordance with Table 2 (Assessment Matrix) of DSE (2005):
 - (i) **A** – Requires an environmental audit under Section 53X of the Environment; Protection Act (1970, as amended 2018) (the EP Act)
 - (ii) **B** – Requires a site assessment from a suitably qualified environmental professional
 - (iii) **C** – General duty under Section 12(2)(b) and Section 60(1)(a)(iii) of the Planning and Environment Act (1987) (the P&E Act).
- Clear and concise drawings/maps, to illustrate existing conditions and support the report as required.

1.3 Legislative and Regulatory Framework

Relevant legislation, guidance and other assessment framework references for the assessment are as follows:

- National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013) (NEPM, 2013).
- NEPM Schedule B2 Site Characterisation.
- Ministerial Direction No. 1 – Potentially Contaminated Land (Direction No. 1).
- Ministerial Direction No. 19 – Information requirements for amendments that may result in impacts on the environment, amenity and human health (Direction No. 19).
- Victorian Department of Sustainability and Environment, Potentially Contaminated Land, General Practice Note, 2005 (DSE, 2005).
- State Environmental Protection Policy (SEPP), Prevention and Management of Contamination of Land, 2002 (the Land SEPP).

1.4 Limitations

Site conditions can vary from those encountered and reported herein. The information and findings in this report are based on data obtained by SMEC.

Within the approved scope, SMEC performed this PSI in a manner consistent with the level of care and expertise ordinarily exercised by members of the environmental consulting profession. No other warranties, expressed or implied, are made or intended.

SMEC takes no responsibility for interpretations or opinions made by 3L or other third parties and based wholly or in part on the information in this report.

This report is issued on the condition that, without our prior approval:

- it will not be altered, amended or abbreviated by 3L.
- it will not be issued in part or issued incomplete to third parties by 3L.

This report was prepared to meet the purpose and objectives presented in Section 1.1. This report is not any of the following:

- a quantitative groundwater, leachate, landfill gas, ecological, human health or environmental risk assessment
- a limited or detailed site investigation
- an environmental audit
- a geotechnical assessment
- a hydrogeological assessment.

2 Site Identification

2.1 General Information

The Precinct is comprised of a number of land parcels as presented in the Precinct Location Plan in **Appendix A**, Figure 1.

Due to considerable size, the desktop site history investigation has been broken up into five Precinct Parts (PP) –PP1 to PP5; as shown in **Appendix A**, Figure 1.

Site identification and general Site setting are summarised in **Table 2-1**.

Table 2-1: Site Details – Part 1

DETAIL	DESCRIPTION
Total Precinct Area	Approximately 928 (ha) in total
Lot/Plans included within Precinct Parts	PP1: <ul style="list-style-type: none"> • 1LP200559 • 1PS317226 • 1TP139677 • 2LP200559 • 2PS317226 • 3LP200559 • 3PS317226 • 4LP200559 • 4PS317226 • 5LP200559 • 5PS317226 • 6LP200559 • 7PS317226 PP2: <ul style="list-style-type: none"> • 1LP216717 • 1PS446475 • 1PS516065 • 1PS523007 • 10LP218298 • 12LP218298 • 15LP218298 • 16LP218298 • 17LP218298 • 18LP218298 • 1A~13PP2927 • 2LP216717 • 2LP98912 • 2PS516065 • 2PS520699 • 2PS523007 • 2001PP2927 • 2E~8APP2927
	<i>Please note, due to the areas of the reports for each Precinct Part not conforming strictly with parcel/property boundaries to provide adequate coverage of the Precinct, there is some overlap across Precinct Part boundaries.</i>

DETAIL	DESCRIPTION
	<ul style="list-style-type: none"> • 2F~8APP2927 • 3LP216717 • 4PS304449 • 5PS304449 • 6LP218298 • 7LP218298 • 8LP218298 • 9LP218298 • RES1LP216717
	<p>PP3:</p> <ul style="list-style-type: none"> • 1LP217378 • 1PS446475 • 1PS516977 • 1PS537638 • 2LP217378 • 2PS446475 • 2PS537638 • 3LP137020 • 3LP217378 • 3PS446475 • 4LP137020 • 4LP217378 • 5LP137020 • 6PS317226
	<p>PP4:</p> <ul style="list-style-type: none"> • 1LP122822 • 1LP127283 • 1LP141752 • 1PS446475 • 1PS518411 • 1TP118945 • 1TP213863 • 1TP242245 • 1TP542527 • 1TP562688 • 1TP613184 • 2LP122822 • 2LP127283 • 2LP141752 • 2LP98912 • 2PS446475 • 2PS518411 • 2001PP2927 • 2E~8APP2927 • 2F~8APP2927

DETAIL	DESCRIPTION
	<ul style="list-style-type: none"> • 3LP137020 • 3PS446475 • 3~7PP2927 • 4A~7PP2927 <p>PP5</p> <ul style="list-style-type: none"> • 1LP122822 • 1PS648107 • 1TP562688 • 2LP122822 • 2PS648107 • 3LP122822 • 3LP137020 • 3PS648107 • 3~7PP2927 • 4LP131415 • 4LP137020 • 4A~7PP2927 • 4B~7PP2927 • 5LP131415 • 5LP137020 • 6B~7PP2927 • R1PS648107 • R2PS648107 • RES1PS648107 • RES2PS648107
Current zoning	<p>PP1:</p> <ul style="list-style-type: none"> — Predominantly Urban Growth Zone (UGZ), except for the road corridors zoned as RDZ1. <p>PP2:</p> <ul style="list-style-type: none"> — Predominantly Urban Growth Zone (UGZ), except for the Kororoit Creek waterway which consists of a rural conservation zone (RCZ), an urban floodway zone (UFZ) and a public park and recreation zone (PPRZ). <p>PP3:</p> <ul style="list-style-type: none"> — Predominantly Urban Growth Zone (UGZ), except for the road corridors zoned as Road Zone – Category 1 (RDZ1). <p>PP4:</p> <ul style="list-style-type: none"> — Predominantly Urban Growth Zone (UGZ), except for the Kororoit Creek waterway which consists of a rural conservation zone (RCZ) and an urban floodway zone (UFZ). <p>PP5:</p> <ul style="list-style-type: none"> — Predominantly Urban Growth Zone (UGZ), except for the road corridors zoned as RDZ1 and small component zoned as Urban Growth zone – Schedule 7.
Current Site use	PP1:

DETAIL	DESCRIPTION
	<ul style="list-style-type: none"> – Consists of urban residential, grazing or agricultural land. PP2: <ul style="list-style-type: none"> – Consists of urban residential, grazing or agricultural land. PP3: <ul style="list-style-type: none"> – BP Service station on Lot 1PS537638, with restaurants including MacDonaldis and RoadHaven. The remainder of PP3 consists of urban residential, grazing or agricultural land. PP4: <ul style="list-style-type: none"> – Urban residential, grazing or agricultural land. PP5: <ul style="list-style-type: none"> – Western Freeway including Rockbank Nursery and Zambros – Food2go. The remainder of PP5 consists of urban residential, grazing or agricultural land.
Proposed Site Use	Urban development – potentially a mix of residential, light commercial / industrial, and associated roads and infrastructure

2.2 Site Description

The Precinct is adjacent to the town of Melton and within 30 km to the northwest of the Melbourne CBD. The land uses surrounding the Precinct are as follows:

- North – Melton Highway followed by rural residential and grazing land. Residential lots within the suburb of Kurunjang are located to the north of PP1.
- East – Leakes Road followed by rural residential and grazing land. Residential lots within the suburb of Aintree are located to the east of PP5. PP2 and PP4 are bound by Kororoit Creek.
- South – Western Highway, followed by rural residential and grazing land. Residential lots within the suburb of Thornhill Park are to the south of PP3.
- West – The CBD of Melton, consisting of an industrial estate. A Caltex/Woolworths petrol station is on the Melton Highway, within 600 m of the western boundary of PP1.

2.3 Geology and Hydrogeology Maps

Regional geology and hydrogeology can provide useful information regarding potential pathways and receptors for soil and groundwater contamination.

2.3.1 Geology

The Geological Survey of Victoria Map Sheets, 1: 50,000 Scale indicates that the Precinct is underlain by a number of geological units, as summarised in **Table 2-2**.

Table 2-2: Geology of the Land within the Precinct

Geological Unit	Age	Extent / Coverage
Neo – Newer Volcanics Group – basalt flows. Comprised of olivine tholeiite, quartz tholeiite, basanite, basaltic icelandite, hawaiiite, mugearite, minor scoria and ash, fluvial sediments: tholeiitic to alkaline; includes sheet flows and valley flows and intercalated gravel, sand, clay	Miocece to Holocene	<ul style="list-style-type: none"> • Majority of PP2, PP3, PP4 and PP5 • All of PP1
Qa1 – Alluvium. Comprised of gravel, sand, silt: variably sorted and rounded; generally unconsolidated; includes deposits of low terraces; alluvial floodplain deposits	Pleistocene to Holocene	Associated with the Kororoit Creek and riparian zone in PP2 and PP4

Qm1 – swamp and lake deposits (Qm1). Grey to black carbonaceous mud, silt, clay, minor peat: generally unconsolidated; rare dolomite	Pleistocene to Holocene	Small sections of PP3, PP4 and PP5.
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The geological maps are presented in full in database search results in **Appendix B**.

2.3.2 Groundwater, Hydrology and Hydrogeology

A groundwater database search was conducted for an area within a two-kilometre (2 km) investigation buffer of the Precinct. A summary of the registered groundwater bores in the Department of Environment and Primary Industries (DEPI) Water Measurement Information System (WMIS) within the Precinct Parts is presented in **Table 2-3**.

Table 2-3 On-Site groundwater bore details

Precinct Part	# Bores	Bore ID	Groundwater Use	Depth (m)
1	9	WRK979005, 311297, 311315, 311299, 311298, 311300, 311314, 73235, 73239	Domestic & stock, non-groundwater	–
2	3	73232, WRK985303, WRK966525	Domestic & stock	–
3	12	73324, 73302, 145066, 73222, 139979, 73238, WRK973267, WRK978969, 311292, 73265, 73204, 73257	Domestic, stock, non-groundwater and not known	–
4	13	73223, 73224, 73273, 73197, 73305, WRK956891, WRK956889, WRK956890, WRK970782, WRK971271, WRK970783, 311290, 73264	Domestic, stock, dryland salinity bore network, observation, non-groundwater, not known	2.20 – 2.80
5	10	73333, 73298 109575 109574 73266 73200, 73199, WRK985188, WRK985191, 73336	Stock, state observation network, groundwater investigation, domestic, stock	11.60 – 12.58

Due to overlap of the investigation buffers for the Precinct Parts, registered bores within the investigation buffers are not listed in this report; registered groundwater uses in lands surrounding the Precinct are summarised below to provide information on beneficial uses of groundwater likely to require protection in the region in accordance with the State Environment Protection Policy (*Waters*), 2018 (the ‘Waters SEPP’):

- domestic use
- stock watering
- irrigation
- industrial.

The complete results of the groundwater database searches for the Precinct Parts are presented in **Appendix B**.

A review of the Department of Environment, Land, Water and Planning (DELWP) Depth to Watertable database (DELWP, 2015) indicates that depth to groundwater, aquifer type and groundwater salinity (assessed based on Total Dissolved Solids or TDS) varies across the Precinct, as summarised in **Table 2-4**.

Table 2-4 also summarises the groundwater segment in accordance with the Waters SEPP (2018) where beneficial uses of groundwater to be protected are based on salinity; this is based on the lowest TDS/most sensitive groundwater segment within the Precinct Part.

Table 2-4 Groundwater Depth, Aquifer Type and Groundwater Salinity details

Precinct Part	Depth to Groundwater		Aquifer/s	Salinity range	Groundwater Segment (as per Waters SEPP)
	Range (mbgl)	Coverage (%)		(mg/L)	
1	5 – 10	91	Fractured or fissured, extensive	1,000 - 3,500	A2 – C
	10 – 20	8			

2	> 5	11	aquifers of low to moderate productivity		
	5 – 10	51			
	10 – 20	36			
3	> 5	75			
	5 – 10	24			
4*	> 5	88			
	5 – 10	13			
5	> 5	91			
	5 – 10	9			

Please refer to the complete results of the groundwater database searches for the Precinct Parts presented in **Appendix B** which provide heat maps to show mapped groundwater elevations across each Precinct Part.

Table 2-5 presents all protected beneficial uses of groundwater based on groundwater segment. Possible beneficial uses associated with the groundwater segments present around the Precinct are highlighted.

Some protected beneficial uses are precluded based on quality (salinity); some beneficial uses are considered likely based on registered bore uses in the area (as discussed above); and some are considered as potential or unlikely based on understanding of water use in the area or access to scheme water, meaning likelihood of groundwater for that use is low.

Table 2-5 Groundwater Beneficial Uses based on Groundwater Segment (from Waters SEPP 2018)

GROUNDWATER USE	SEGMENTS (MG/L TDS)						
	A1	A2	B	C	D	E	F
	(0 – 600)	(601 – 1,200)	(1,201 – 3,100)	(3,101 – 5,400)	(5,401 – 7,100)	(7,101 – 10,000)	>10,001
Water dependent ecosystems and species	✓	✓	✓	✓	✓	✓	✓
Potable water supply - desirable	✓						
Potable water supply – acceptable		✓					
Potable mineral water supply	✓	✓	✓	✓			
Agriculture and irrigation (irrigation)	✓	✓	✓				
Agriculture and irrigation (stock watering)	✓	✓	✓	✓	✓	✓	
Industrial and commercial	✓	✓	✓	✓	✓		
Water-based recreation (primary contact recreation)	✓	✓	✓	✓	✓	✓	✓
Traditional Owner cultural values	✓	✓	✓	✓	✓	✓	✓
Cultural and spiritual values	✓	✓	✓	✓	✓	✓	✓
Buildings and structures	✓	✓	✓	✓	✓		

GROUNDWATER USE	SEGMENTS (MG/L TDS)						
	A1	A2	B	C	D	E	F
	(0 – 600)	(601 – 1,200)	(1,201 – 3,100)	(3,101 – 5,400)	(5,401 – 7,100)	(7,101 – 10,000)	>10,001
Geothermal properties	✓	✓	✓	✓	✓	✓	✓

2.4 Topography and Surface Water

Surface elevation measured in metres Australian Height Datum (mAHD; otherwise referred to as height above sea level) varies across the Precinct, as summarised in **Table 2-6**, which also discusses potential direction of surface water flows that may shed from the land.

Table 2-6 Topography

Precinct Part	Approximate Surface Elevation Range (mAHD)	Expected direction of surface water flow and shedding off-site
1	120 - 142	To the southeast
2	113 - 141	To the southeast, towards Kororoit Creek
3	106 - 132	To the southeast
4	99 - 114	To the east
5	100 - 107	To the east

Contour mapping for the Precinct Parts are presented in **Appendix B**.

2.5 Australian Wetlands Database

A search of the Australian Wetlands database (Ramsar wetlands of Australia; DELWP) was conducted for each of the Precinct Parts. Ramsar wetlands are sites designated to be of international importance that are protected under the internationally ratified Ramsar Convention due to high biodiversity and/or presence of threatened/endangered/vulnerable or geographically uncommon flora and/or fauna.

There were no Ramsar wetlands listed within the Precinct or the investigations buffers around the Precinct Parts.

The complete results of the wetland database searches for the Precinct Parts are presented in **Appendix B**.

2.6 Australian Heritage Database

A search of the Australian Government Department of the Environment and Energy (DoEE) was conducted to identify sites of Commonwealth, national, and regional or state significance located within the Precinct Parts and within the 1 km investigation buffers. The full database search results are presented in **Appendix B** and summarised below:

- There were no sites listed on the Commonwealth Heritage List within the Precinct or the investigation buffers.
- There were no sites listed on the National Heritage List.
- There were no sites listed on the Victorian Heritage List.

2.7 Victorian Aboriginal Cultural Heritage Register

The Victorian Aboriginal Cultural Heritage Register and Information System (ACHRIS) provides information about the location and extent of areas of Aboriginal cultural heritage sensitivity and includes a register of Aboriginal places and objects, as required by the *Aboriginal Heritage Act 2006*. A search of the register through the 'Department of Planning and Community Development' (DPCD) Cultural Heritage Sensitivity register and database was conducted for each Precinct Part and surrounding land within a 1 km investigation buffer; the findings are summarised in **Table 2-7**.

The Kororoit Creek accounts for much of the hits from the database. *Please note: due to overlap of investigation buffers, there is some duplication in counts of off-site hits; the intention is to understand heritage areas in close proximity to the Precinct Parts which may preclude development within the Part or directly adjacent for ancillary development e.g. roads, services etc.*

Table 2-7 Heritage Database Search Results – Victorian Aboriginal Cultural Heritage Areas List

Precinct Part	Victorian Aboriginal Cultural Heritage Areas	
	Within the Precinct Part	Within Investigation Buffer
1	0	7
2	1	4
3	2	3
4	3	16
5	3	14

The full database search results are presented in **Appendix B**.

2.8 Acid Sulphate Soil Risk

A search of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) ‘Atlas of Acid Sulfate Soils’ was conducted to assess the presence of acid sulphate soils within the Precinct or 1 km investigation buffers. Acid sulfate soils may pose a risk to the environment when disturbed and exposed to oxygen, leading to oxidation of the soil and subsequent generation of sulfuric acid, which may be aggressive to concrete foundations and slabs or sub-surface metal pipework.

The searches of the CSIRO Acid Sulfate Soils database are summarised in **Table 2-8**.

Table 2-8 Acid Sulfate Soils

Precinct Parts	Acid Sulfate Soils		
	Probability of Occurrence (%) within Precinct Part	Probability of Occurrence (%) within Investigation Buffer	Distance from Precinct Part (m)
All	Extremely Low 1-5 %	Extremely Low 1-5 %	All land within buffer

Coastal Acid Sulfate Soils (CASS) are those that naturally occur along many parts of Victoria’s coastal zone and may be deposited inland by alluvial or fluvial flows. The potential presence of CASS was not identified within the Precinct Parts or 1 km investigation buffers around the Precinct Parts.

The full database search results are presented in **Appendix B**.

2.9 Planning Overlays

Local government apply planning overlays that specific provisions and restrictions to the allowable activities and uses of a land. SMEC have conducted a review of planning overlays relevant to the potential for contamination or environmental constraints to potential development of the Precinct. The review identified the following planning overlays affecting the Precinct Parts as summarised in **Table 2-9**.

Please note, due to overlap of investigation buffers, to avoid unnecessary duplication:

- any planning overlays outside of the Precinct Part that also exist within the Precinct are not listed again as present within the investigation buffer
- those more than 300 - 350 m away are not listed, as it is assumed that due to distance they will not affect potential for development within that Precinct Part, but may affect access or ancillary development requirements (service installations etc.)
- any overlays within an adjacent Precinct Part and already discussed are not listed again.

Table 2-9 Planning Overlays

Precinct Part	Planning Overlays within Precinct Part	Planning Overlays within Investigation Buffer
1	–	PA01
2	ESO5	HO54
3	–	DCP03, DCP08
4	HO119, ESO2	ESO5, LSI02, DCP04
5	HO205	DCP08, HO122, DCP07, HO115

Notes:

ESO2 – Environmental significance overlay – Schedule 2

ESO5 – Environmental significance overlay – Schedule 5

HO54 – Heritage overlay

HO115 – Heritage overlay

HO119 – Heritage overlay

HO122 – Heritage overlay

HO205 – Heritage overlay

LSI02 – Land subject to inundation overlay – Schedule 2

PA01 – Public acquisition overlay 1

DCP03 – Development contributions plan overlay – Schedule 3

DCP04 – Development contributions plan overlay – Schedule 4

DCP07 – Development contributions plan overlay – Schedule 7

DCP08 – Development contributions plan overlay – Schedule 8

The full database search results are presented in **Appendix B**.

2.10 Natural Hazards

A search of the Department of Transport, Planning and Local Infrastructure (DTPLI) database was conducted to identify any designated bushfire prone areas within or surrounding the site. The designation allows local government to specify minimum construction standards aimed at improving bushfire protection for residential buildings. The findings are summarised in **Table 2-10**.

Table 2-10 Bushfire Prone Areas

Bushfire Prone Areas within Precinct Part	Bushfire Prone Areas within Investigation Buffer
All land within PP1, PP2, PP3, PP4	Majority of land within Investigation Buffer, excepting portions of established residential subdivisions.
Majority of PP5, with the exception of 250 by 10 m section of the Western Highway	

The DTPLI (2019) database search also recorded a bushfire in 1965 which affected all precinct parts.

A search of the Department of Transport, Planning and Local Infrastructure (DTPLI) database was conducted to identify any designated 1 in 100-year modelled flood extent zones within or surrounding the Precinct Parts. The findings are summarised in **Table 2-11**.

Table 2-11 Flood – 1 in 100 Year Modelled Flood Extent

Precinct Part	1 in 100 Year Modelled Flood Extent within Precinct Part	1 in 100 Year Modelled Flood Extent within Investigation Buffer
1	None	Land within the Melton CBD

2	Land in proximity to Kororoit Creek	Land in proximity to Kororoit Creek
3	None	Land in proximity to Kororoit Creek
4	Land in proximity to Kororoit Creek	Land in proximity to Kororoit Creek
5	None	Land in proximity to Kororoit Creek

The full database search results are presented in **Appendix B**.

2.11 Ecological Constraints

As presented in Section 2.10, land within the Precinct is subject to Environmental Significance Overlays (ESO2 and ESO5). Both schedules relate to the protection of the Kororoit Creek corridor and associated ecological values (i.e. remnant vegetation and habitat for threatened flora and fauna). The creek corridor (incorporating the ESO) is contained within a BCS conservation area and is therefore protected from development, upholding the objectives of the ESO.

Vulnerable, threatened or endangered vegetation, or vegetation of national significance as listed in the Native Vegetation (Modelled 2005 Ecological Vegetation Classes) database which are within the Precinct Parts are presented in **Table 2-12**. The presence of these EVCs may act as a constraint on development. *This is covered in more detail in the separate ecological assessment prepared for the Precinct.*

Table 2-12 Native Vegetation

EVC Name	EVC Code	Conservation Status	Precinct Part EVC located within
Plains Grassy Wetland	0125	Endangered	PP1, PP3, PP4, PP5
Plains Grassland	0132	Endangered	PP1, PP3, PP4, PP5
Creepline Grassy Woodland	0068	Endangered	PP2, PP4

The full database search results are presented in **Appendix B**.

Searches of the Bureau of Meteorology (BoM; 2017) Groundwater Dependent Ecosystems (GDE) Atlas and Inflow Dependent Ecosystems (IDE) Likelihood Database were conducted to assess for the potential presence of ecosystems within the Precinct Parts dependent on groundwater (which may be extracted as a result of proposed redevelopment) or inflow (which may be amended by drainage modifications due to development). A summary of the findings is presented in **Table 2-13** (GDE) and **Table 2-14** (IDE).

Please note: the GDE and IDE are related to the presence of rivers, wetlands and EVCs as identified in other sections of this report and will be covered in more detail in the ecological assessment being prepared for the Precinct. As wetlands are potentially sensitive environmental receptors, these are listed if within 300 – 350 m of the Precinct Part.

Table 2-13 Groundwater Dependent Ecosystems

Groundwater dependent ecosystems (GDE) potential	GDE type	Ecosystem type	Aquifer geology	Precinct part GDE located within
Low potential GDE - from national assessment	Terrestrial	Vegetation	Unconsolidated sedimentary	PP2
Moderate potential GDE – from regional studies	Aquatic	Wetland	–	PP1
Moderate potential GDE – from national assessment	Terrestrial	Vegetation	Fractured rock	PP2
Moderate potential GDE – from national assessment	Terrestrial	Vegetation	Fractured rock	PP2

Groundwater dependent ecosystems (GDE) potential	GDE type	Ecosystem type	Aquifer geology	Precinct part GDE located within
Moderate potential GDE – from national assessment	Terrestrial	Vegetation	Unconsolidated sedimentary	PP1
Moderate potential GDE – from regional studies	Aquatic	Wetland	–	PP5
High potential GDE – from national assessment	Aquatic	River	Fractured rock	PP1, PP2
High potential GDE – from national assessment	Terrestrial	Vegetation	Fractured rock	PP1, PP2, PP5
High potential GDE – from national assessment	Terrestrial	Vegetation	Unconsolidated sedimentary	PP1

The full database search results are presented in **Appendix B**.

Table 2-14 Inflow Dependent Ecosystems

Inflow Dependent Ecosystems (IDE) Potential (out of 10)	GDE Type	Ecosystem Type	Aquifer Geology	Precinct Part IDE located within
6	Aquatic	Wetland	–	PP3, PP4, PP5
6	Terrestrial	Vegetation	Fractured rock	PP2, PP3, PP4, PP5
7	Terrestrial	Vegetation	Fractured rock	PP2, PP4
7	Terrestrial	Vegetation	Unconsolidated sedimentary	PP2
8	Terrestrial	Vegetation	Fractured rock	PP2
8	Terrestrial	Vegetation	Unconsolidated sedimentary	PP4
8	Aquatic	Wetland	–	PP4, PP5
9	Terrestrial	Vegetation	Fractured rock	PP2, PP4
9	Terrestrial	Vegetation	Unconsolidated sedimentary	PP2, PP4
10	Aquatic	River	Fractured rock	PP2, PP4

The full database search results are presented in **Appendix B**.

3 Site History

3.1 Historical Aerial Photography

Historical aerial photography for the period between 1961 and 2019 was reviewed as part of this assessment to determine previous site uses and potential for contaminating activities to have occurred. To assess for any significant changes in land use within a gap in photographic coverage of the Site (between 2012 and an aerial photograph for 2018, aerial photography from 2015 was viewed from Google Inc. and Google Earth Pro™).

Please note: to avoid duplication, the summaries in tables below do not include discussion of changes in land within other Precinct Parts already described in other tables.

The aerial photography is presented in full database search results in **Appendix B**.

Table 3-1 to **Table 3-5** each summarise the review of aerial photography for each the Precinct Parts and surrounding land.

Please note: to avoid duplication, the summaries in tables below do not include discussion of changes in land within other Precinct Parts already described in other tables.

Table 3-1: Historical Aerial Photography Review – Precinct Part 1

DATE	OBSERVATIONS
1961	On-Site Land appears to have been subdivided, cleared of vegetation and used for grazing. A road transects through the southern corner of the site (what is now the Western Freeway). An urban residential dwelling is present to the south of PP1.
	Off-Site Surrounding land has also been cleared and subject to agricultural uses, an urban residential dwelling is present to the south of PP1.
1968	On-Site No significant changes since the 1961 imagery are apparent.
	Off-Site A racetrack and two urban residential lots have been constructed to the north of PP1. No other significant changes since the 1961 imagery are apparent.
1974	On-Site and Off-Site No significant changes since the 1968 imagery are apparent.
1985	On-Site No significant changes since the 1974 imagery are apparent.
	Off-Site To the south west of the site, the Western Freeway has undergone construction to the current day layout. Industrial land use (construction of storage sheds) is present to the west of PP1 within the current industry precinct of Melton.
1990	On-Site Three clusters of Dwelling and shed structures are present in the northern section of PP1 and likely for the grazing/agriculture land use. Melton Highway has been constructed along the northern boundary of PP1.
	Off-Site The Western Freeway has been further constructed, within additional lanes. Further development has occurred to the Melton Industry precinct to the southwest of the site. A large excavation is present in what is currently the Melton recycling facility, suggesting quarrying activity.

DATE	OBSERVATIONS
2009	On Site Additional urban residential dwellings and structures have been constructed throughout PP1. A race track has also been constructed in the southern portion of PP1. Agriculture land use in Lot 5LP200559 appears to have intensified.
	Offs Site Residential development of Melton has expanded to the northwest of PP1. The excavation observed within the Melton Recycling Facility appears to have been filled in, potentially indicating landfilling activities.
2019	On-Site No significant changes since the 2009 imagery are apparent.
	Off-Site Further residential and industrial development has occurred within the respective footprints identified in the previous 2009 and 2019 images.

Table 3-2: Historical Aerial Photography Review – Precinct Part 2

DATE	OBSERVATIONS
1974	On-Site Land appears to have been subdivided, cleared of vegetation and used for grazing. Mt Cottrell Road is present along the eastern boundary and Melton Highway is present along the northern boundary. A residential building and storage sheds are present in the norther corner of PP2. Privately owned dams are apparent along the western boundary and a third dam is present along the northern boundary.
	Off-Site Surrounding land has also been cleared and subject to agricultural uses, an urban residential dwelling (with shed structures) are apparent to the norther and south of PP2.
1985	On-Site No significant changes since the 1974 imagery are apparent.
	Off-Site A racetrack has been constructed to the norther of PP2. No other significant changes since the 1974 imagery are apparent.
1990	On-Site No significant changes since the 1974 imagery are apparent.
	Off-Site Further urban residential dwellings and structures are visible to the north and east of PP2. No other significant changes since the 1974 imagery are apparent.
2009	On Site Additional urban residential dwellings and structures have been constructed throughout PP2. Car storage on unsealed grounds appears to be present in Lot 3LP216717 and 4PS304449. More intensive agricultural land use is apparent in Lot 5PS304449.
	Offs Site Additional urban residential dwelling have been constructed to the north of PP2.
2019	On-Site

DATE	OBSERVATIONS
	Intensive agricultural land use appears to have ceased in Lot 5PS304449.
	Off-Site No significant changes since the 2019 imagery are apparent.

Table 3-3: Historical Aerial Photography Review – Precinct Part 3

DATE	OBSERVATIONS
1968	On-Site Land appears to have been subdivided, cleared of vegetation and used for grazing. A road (which is now currently the Western Freeway) Road is present along the southern boundary and Beatty Road is present, transecting PP3 from west to east. Urban residential dwellings with agriculture shed structures are present throughout PP3. A long shed structure is present in 3LP137020. It isn't clear if this was used for cattle dipping purposes.
	Off-Site Surrounding land has also been cleared and subject to agricultural uses.
1974	On Site A large body of water is present within lots 4\LP217378 and 1\PS446475, potentially a privately owned dam. No other significant changes since the 1968 imagery are apparent.
	Off Site No significant changes since the 1968 imagery are apparent.
1985	On-Site Although the shed structure in Lot 3LP137020 is still apparent, paddocks within the lot no longer appear to be divided, suggesting a different site management. An intensification of agricultural land use is apparent in lots 1LP217378, 2LP217378 and 3LP217378. The Western Freeway appears to have been upgraded since the 1974 imagery.
	Off-Site Intensification of agricultural land uses are also apparent in the surrounding properties. No significant changes since the 1968 imagery are apparent.
1991	On-Site No significant changes since the 1985 imagery are apparent.
	Off-Site No significant changes since the 1985 imagery are apparent.
2009	On Site Further intensification of agricultural land use is apparent in lot 1LP217378 and appears to contain an orchid. The body of water previously present over lots 4LP217378 and 1PS446475 appears to have dried out.
	Offs Site No significant changes since the 1991 imagery are apparent.
2018	On-Site The BP service station has been constructed on Lot 1PS537638. No other significant changes since the 1991 imagery are apparent.

DATE	OBSERVATIONS
	<p>Off-Site</p> <p>Residential development of Thornhill Park (to the south of the site) has commenced. No other significant changes since the 1991 imagery are apparent.</p>

Table 3-4: Historical Aerial Photography Review – Precinct Part 4

DATE	OBSERVATIONS
1962	<p>On-Site</p> <p>Land appears to have been subdivided, cleared of vegetation and used for grazing. Regional main roads have been established within PP4, including Leakes Road, Beattys Road and Paynes Road. Residential dwelling and shed structures are present on the agricultural properties.</p>
	<p>Off-Site</p> <p>Surrounding land has also been cleared and subject to agricultural uses.</p>
1968	<p>On Site</p> <p>No significant changes since the 1962 imagery are apparent.</p>
	<p>Off Site</p> <p>No significant changes since the 1962 imagery are apparent.</p>
1974	<p>On Site</p> <p>No significant changes since the 1968 imagery are apparent.</p>
	<p>Off Site</p> <p>No significant changes since the 1968 imagery are apparent.</p>
1985	<p>On-Site</p> <p>No significant changes since the 1974 imagery are apparent.</p>
	<p>Off-Site</p> <p>No significant changes since the 1974 imagery are apparent.</p>
1991	<p>On-Site</p> <p>More intensive agricultural land use is apparent on lots 1LP141752 and 2LP141752 around the homesteads. A racetrack is apparent on lot 1TP613184. The appears to be an excavation in the previous water body footprint in lot 3-7PP2927.</p>
	<p>Off-Site</p> <p>No significant changes since the 1985 imagery are apparent.</p>
2009	<p>On Site</p> <p>Scrape metal stockpiling is apparent on lots 1LP127283 and 1TP118945. A Further intensive agriculture land use is apparent on lot 1TP542527. Potential stockpiling of soils in lot 1TP562688. The excavation previously observed on lot 3-7PP2927 in 1991 appears to have been filled.</p>
	<p>Offs Site</p> <p>No significant changes since the 1991 imagery are apparent.</p>
2018	<p>On-Site</p> <p>The shade structures in Lot 1TP542527 appear to be in disrepair/abandoned. No other significant changes since the 2009 imagery are apparent. The water body in 3-7PP2927 appears to have been further filled.</p>

DATE	OBSERVATIONS
	Off-Site No significant changes since the 2009 imagery are apparent.

Table 3-5: Historical Aerial Photography Review – Precinct Part 5

DATE	OBSERVATIONS
1962	On-Site Land appears to have been subdivided, cleared of vegetation and used for grazing. A road (which is now currently the Western Freeway) Road is present along the southern boundary.
	Off-Site Surrounding land has also been cleared and subject to agricultural uses.
1968	On Site No significant changes since the 1962 imagery are apparent.
	Off Site No significant changes since the 1962 imagery are apparent.
1974	On Site An urban residential dwelling with shed structures is apparent in lot 1TP562688. No other significant changes since the 1968 imagery are apparent.
	Off Site No significant changes since the 1968 imagery are apparent.
1985	On-Site Additional homesteads (with shed structures) are apparent within the allotments in PP5. The western freeway along the southern boundary appears to have been upgraded. No other significant changes since the 1974 imagery are apparent.
	Off-Site No significant changes since the 1974 imagery are apparent.
1991	On-Site No significant changes since the 1985 imagery are apparent.
	Off-Site The residential development of Rockbank is apparent to the south east of PP5.
2009	On Site Scrap metal stockpiling is apparent on lot 5LP137020. No other significant changes since the 1974 imagery are apparent. Significant works and upgrades have occurred the Western Freeway and Leakes Road intersection, including offramps and bypass bridges.
	Offs Site Additional racetracks have been constructed on the agricultural lots to the south of PP5.
2018	On-Site As with PP4, the water body in 3-7PP2927 appears to have been further filled.
	Off-Site

DATE	OBSERVATIONS
	The residential development of Rockbank has continued to expand (located to the south east of the site). No other significant changes since the 2009 imagery are apparent.

3.2 EPA Priority Sites Register

The Victorian EPA Priority Sites Register (PSR) was searched. The PSR records locations where the EPA has issued a Clean-Up Notice (CUN) or Pollution Abatement Notice (PAN) for a site typically known to contain polluted soil and/or groundwater that may pose a risk to human health or to the environment. The Priority Sites Register does not list all sites known to be contaminated in Victoria and as such a site should not be presumed to be free of contamination if it does not appear on the Priority Sites Register.

No current or former Priority Sites listed on the Register were within the Precinct. Current or former Priority sites within the 1 km investigation buffer are presented in **Table 3-6**.

Table 3-6 EPA Priority sites within the investigation buffer area (outside of precinct)

Notice number	Current/former	Address	Suburb	Issue	Distance from site
90008182	Current	43 - 67 FERRIS RD	COBBLEBANK	Industrial waste has been dumped at the site. Requires assessment and/or clean up.	745m (south west)
NO1414	Former	ALLOTMENT 2 CNR TARLETONS RD & LEAKES RD	ROCKBANK	Legacy EPA Database Pollution Notice	226m (north east)

The PSR record for 43 - 67 FERRIS RD coincides with the observed excavation and filling at the (current) Melton Recovery Centre which was observed in the historic aerial images. No observations were noted in the historic aerial photos for the PSR record for the corner of Tarletons Road and Leakes Rd to indicate potential presence of contamination and little information is presented in the PSR.

Due to PANs being revoked and removed from the published lists, this is noted to not be an exhaustive list of all past pollution notices.

The full EPA database search results are presented in **Appendix B**.

3.3 Environmental Audit Reports and Groundwater Quality Restricted Use Zones

The EPA records of environmental audit reports and groundwater quality restricted use zones (GQRUZ) within the 2km investigation buffers around the Precinct Parts were searched and the results are summarised as follows:

- There were no GQRUZ identified within the Precinct.
- An audit site (EPA Audit ID 73278-1) was recorded 155 m to the east of PP5, relating to a former waste dump area completed in 2015. Based on distance from the Precinct it is considered unlikely this site has impacted on land within the Precinct. As such, this audit is not discussed further.

The full EPA database search results are presented in **Appendix B**.

3.4 EPA Licenced Activities

EPA records were searched for listings of any sites containing Licenced Activities and Works Approval within the Precinct or 1 km investigation buffers, identified sites are presented in **Table 3-7**.

Table 3-7 EPA licenced activities

Licence Number	Status	Organisation	Premise Address	Suburb	Activities	Distance (m)	Direction	Precinct Part
10711	Former EPA	COOPER BROS HOLDINGS PTY LTD [MELTON]	3 27-29 NORTON DR	MELTON VIC 3337	A01 Prescribed Industrial Waste Management	891	West	1
1000980	Works Approval	R P PETROLEUM PTY LTD [ROCKBANK]	1267 BEATTYS RD ROCKBANK VIC 3335	ROCKBANK	A03 Sewage Treatment	–	–	Within PP3

The full EPA database search results are presented in **Appendix B**.

3.5 Defence 3 Year Regional Contamination Investigation Program

The Defence 3 Year Regional Contamination Investigation Program database was searched for any sites that have been assessed as part of the program; there were no sites within the Precinct or 1 km investigation buffers.

The full database search results are presented in **Appendix B**.

3.6 Defence PFAS Investigation and Management Program

The Defence PFAS Investigation and Management Program database was searched for any sites that have been assessed as part of the program; there were no sites within the Precinct or 1 km investigation buffers.

The full database search results are presented in **Appendix B**.

3.7 Airservices Australia National PFAS Management Program

The Airservices Australia National PFAS Management Program database was searched for any sites that have been assessed as part of the programme; there were no sites within the Precinct or 1 km investigation buffers. The full database search results are presented in **Appendix B**.

3.8 Waste Management Facilities

A national/state waste management facility was recorded 274 m south west of PP1, being the Melton Recycling Facility (IDs 258/317 respectively), owned by Melton Shire Council, 54 Ferris Road.

Six industrial waste sites were within a 1 km buffer of PP1. The full database search results are presented in **Appendix B**.

3.9 Historical Maps, Historical Melways

Historical maps, including Melways maps were reviewed to assess for any information indicative of potentially contaminating activities to have occurred within the Precinct Parts or in the land immediately surrounding. The results of these searches are summarised in **Table 3-8** below.

Due to overlap in coverage for the Precinct, anything further than 500 m from the edge of each Precinct Part is generally not discussed in detail to avoid duplication; this is also based on the reasonable expectation that any potentially contaminating activity over 500 m away is unlikely to have caused environmental impacts on the land.

Table 3-8: Historical Maps review

Precinct part	Year	Potentially contaminating activities within Precinct Part	Potentially contaminating activities within investigation buffer
1	1916	No indications apart from Western Freeway.	No indications apart from Western Freeway.
	1938	No indications apart from Western Freeway.	No indications apart from Western Freeway.
	1982	No indications apart from Western Freeway.	No indications apart from Western Freeway.
	1986	No indications apart from Western Freeway.	No indications apart from Western Freeway. Melton Municipal Depot within 300 m of the western corner of PP1.
	1998	No indications apart from Western Freeway.	Western Freeway. Melton Municipal Depot within 300 m of the western corner of PP1.
	2009	No indications apart from Western Freeway.	Western Freeway. Melton Industrial precinct.
2	1916	No indications of contaminating activities.	No indications apart from Western Freeway.
	1938	No indications of contaminating activities.	No indications apart from Western Freeway.
	1982	No indications of contaminating activities.	No indications apart from Western Freeway.
	2009	No indications of contaminating activities.	No indications apart from Western Freeway.
3	1916	No indications apart from Western Freeway.	No indications apart from Western Freeway.
	1938	No indications apart from Western Freeway.	No indications apart from Western Freeway.
	1982	No indications apart from Western Freeway.	No indications apart from Western Freeway.
	1986	No indications apart from Western Freeway.	No indications apart from Western Freeway.
	1998	No indications apart from Western Freeway.	Western Freeway. Readymix Quarry within 500m of the southwest of PP3. Chickadee Stud Poultry Farm within 200m to the east of PP3.

Precinct part	Year	Potentially contaminating activities within Precinct Part	Potentially contaminating activities within investigation buffer
	2009	No indications apart from Western Freeway.	Melton Recycling Centre (formally the Readymix Quarry) within 500m to the southwest of PP3.
4	1916	No indications apart from road/track construction.	Western Freeway.
	1938	No indications apart from road/track construction.	Western Freeway.
	1982	No indications apart from road/track construction.	Western Freeway. See PROHIBITED LAND for PP5.
	1998	No indications apart from road/track construction.	Western Freeway. See PROHIBITED LAND for PP5.
	2009	No indications apart from road/track construction.	Western Freeway. See PROHIBITED LAND for PP5.
5	1916	No indications apart from road/track construction and Western Freeway.	Melbourne – Ballarat Railway line within 800 m south of PP5. Record of a quarry within 1000 m south of PP5.
	1938	No indications apart from road/track construction and Western Freeway.	Melbourne – Ballarat Railway line within 800 m south of PP5.
	1982	No indications apart from road/track construction and Western Freeway.	Melbourne – Ballarat Railway line within 800 m south of PP5.
	1998	No indications apart from road/track construction and Western Freeway.	Melbourne – Ballarat Railway line within 800 m south of PP5. Land adjacent to the west of PP5 listed as PROHIBITED AREA Land adjacent to the west of PP5 listed as PROHIBITED AREA. Use by the Army – Royal Australian Signals.
	2009	No indications apart from road/track construction and Western Freeway.	Melbourne – Ballarat Railway line within 800 m south of PP5.

The full database search results are presented in Appendix B.

3.10 Historical Business Directories

Historical UBD and Sands and McDougall’s Business Directories were reviewed to assess for the presence of potentially contaminating land uses, businesses or activities within or surrounding the Site. The years reviewed were 1905, 1925, 1945, 1950, 1960-62, 1970, 1980, and 1991. The search also included listings of dry cleaners, motor garages, service stations premise or road intersection matches for the period 1948 to 1992. Identified listings are presented in **Table 3-9**.

Table 3-9 Historical business directories

Precinct Part	Year	Potentially contaminating activity within precinct part	Potentially contaminating activity within investigation buffer
1	1905 – 1970	Although businesses for “MOTOR GARAGES & SERVICE STATIONS” were recorded, businesses are likely to be outside of investigation area (detected due to limitations in stored data).	
2	1905 – 1991	No records in Precinct Part or investigation buffer.	
3	1905 – 1980	Although businesses for “MOTOR GARAGES & SERVICE STATIONS” were recorded, businesses are likely to be outside of investigation area (detected due to limitations in stored data).	
4	1905 – 1991	No records in Precinct Part or investigation buffer.	
5	1905 – 1991	Although businesses for “MOTOR GARAGES & SERVICE STATIONS” were recorded, businesses are likely to be outside of investigation area (detected due to limitations in stored data).	

3.11 Other

There are no listings of historical mining activities within the Precinct or buffers around the Precinct Parts.

There are no listings of former gasworks sites within the Precinct or buffers around the Precinct Parts.

The full database search results are presented in **Appendix B**.

3.12 Reports on the Site and/or Adjacent Sites

SMEC was unable to locate any reports relating to environmental assessments for land parcels within the Precinct. Assessments relating to other PSP areas in the region were found but did not contain information relevant to this assessment.

4 Preliminary Conceptual Site Model

The objective of the Conceptual Site Model (CSM) is to summarise and encapsulate pertinent information derived from the many studies undertaken at the Precinct and surrounding areas into a document which clearly identifies the following, and how they inter-relate:

- The history of activities and land development at the Precinct and surrounding properties, including potentially contaminating activities and land uses.
- The environmental setting at the Precinct and surrounding properties.
- The inferred sources, nature and extent of contamination, including the various media affected by the contamination.
- The mechanisms for transport and attenuation of the contaminants, and exposure of identified receptors to the contamination.
- The potential health and environmental risks which the identified contamination is inferred to pose.
- The potential contamination threat to the proposed development based on current and previous investigation work.

The main concerns for the proposed development of land within the Precinct relate to historical, recent and current land uses, including:

- Operation of a service station on Lot 1PS537638, which would involve:
 - High volumes of fuel storage.
 - Increased likelihood of fuel spills.
 - Increased likelihood of fuel storage leaks.
 - Storage of chemicals, potentially including firefighting foams.
- Non-intensive and intensive agricultural uses observed throughout the precinct which potentially involved:
 - Pesticide storage and handling.
 - Petrol storage and handling.
- Potential rearing and pasturing of livestock observed throughout the precinct, which may have involved:
 - Petrol storage and handling.
 - Construction of cattle dips. Although no cattle dips were clearly identified in aerial photos, cattle dips (and the use of arsenic treatments) were commonly constructed on cattle raising properties.
 - Burial of livestock – although no burial pits were identified, cattle burial pits were commonly progressed on cattle raising properties.
- Rural residential homesteads throughout the alignment, which potentially involved:
 - demolition of aged structures containing Asbestos Containing Material) (ACM and/or lead-based paints, and rural and high-density residential uses.
 - septic tanks.
- Uncontrolled stockpiling of materials observed in lots 3LP216717 and 4PS304449, 1LP127283, 1TP118945 and 5LP137020.
- Importation of controlled and uncontrolled fill in Lot 3–7\PP2927.
- Use of land adjacent to the east of the precinct by the Defence Force, which contains the potential for exploded or unexploded ordinances. It is noted that the precinct or land used by the defence force are not listed on the UXO register. The Rockbank residential development has also progressed on the land used by the Defence Force. This lowers the likelihood of UXO or EO occurrence within the precinct.
- The filling of the Readymix Quarry with landfill (now the Melton Recycling Centre), proximate to the precinct.
- Use of the Western Freeway and Melton Highway.

These current and former activities have the potential to cause soil contamination, and potentially groundwater contamination.

4.1 Summary of Preliminary CSM

A summary of the CSM is presented in Table 4-1.

Table 4-1: Summary of Conceptual Site Model

Activity	Source	Exposure Pathways	Receptor
Agriculture (Onsite)	Use of Pesticides (organochlorine and organophosphate (OC/OP)), herbicides, nutrients (nitrogen, phosphorus), fertilisers (metals, ammonia), nitrates	Inhalation, dermal contact and ingestion of contaminated soil, water, air.	<p>On-Site:</p> <ul style="list-style-type: none"> • Site occupiers • Future site users, construction site workers, contractors, sub-surface maintenance workers • Livestock • Flora and fauna • Ecosystems – inflow and groundwater dependent ecosystems <p>Off-Site:</p> <ul style="list-style-type: none"> • Downgradient water users • Flora and fauna • Residents of surrounding properties • Workers and visitors to surrounding properties, contractors etc • Ecosystems – inflow and groundwater dependent ecosystems
Livestock (Onsite)	Cattle dips for topical pest control for livestock – OC and OP pesticides and heavy metals, synthetic pyrethroids		
	Livestock carcass and burial pits – Biological Oxygen Demand (BOD), nutrients, oil and grease		
Stockpiling/importation of fill (Onsite)	Importation of fill / uncontrolled fill, illegal dumping – Total Petroleum Hydrocarbons (TRH), benzene, toluene, ethyl-benzene and xylenes (BTEX), metals, pesticides, asbestos	Inhalation, dermal contact and ingestion of contaminated soil, water, air.	
Urban residential structures (onsite)	Septic tanks, grey water drains – enteric bacteria and faecal coliforms	Groundwater diffusion from up-gradient land uses to the Site.	
	Demolitions waste from former buildings and uncontrolled waste disposal - Asbestos, lead		
Service station (onsite)	Storage use and leakages of fuels – heavy metals, TPH, BTEX.	Surface water and run-off overland flows.	
Landfilling (offsite)	Decomposition of wastes to leachate – metals, nutrients.		
Defence Force land use (offsite)	UXO/XO ordnances – UXO, metals.		
Freeway (onsite and offsite)	Road use – asbestos, metal, TPH, BTEXN.		

5 Conclusions and Recommendations

5.1 Conclusions

The review of Precinct history found that the land within the Precinct was previously used primarily for grazing and agricultural purposes. Main road corridors such as the Western Freeway and Melton Highway which are along and within the precinct boundaries have been in use throughout the history of the site. The surrounding land has been and is currently subject to similar uses as land within the Precinct.

Based on the information reviewed, the potential sources of contamination identified as part of this PSI are as follows:

- Onsite:
 - Agriculture – heavy metals, pesticides/herbicides (OC/OPs), Total Petroleum Hydrocarbons (TPH), volatile hydrocarbons benzene, toluene, ethyl-benzene and xylenes (BTEX), Polycyclic Aromatic Hydrocarbons (PAHs), Poly Chlorinated Biphenyls (PCBs)
 - Fuel and oil storage and use – TPH, TRH, BTEX, lead
 - Importation of fill, illegal dumping, stockpiling – TPH, TRH, BTEX, MAH, heavy metals, asbestos
 - Livestock Carcasses and Burial Pits – BOD, nutrients, oil and grease
 - Septic Tanks and Grey Water Tanks – detergents, enteric and faecal bacteria, nutrients
 - Service Station - Storage use and leakages of fuels (heavy metals, TPH, BTEX)
 - Main road corridors - asbestos, metals, TPH, BTEXN.

- Offsite:
 - Melton Recycling Centre, which contained landfilling of the Readymix Quarry (decomposition of wastes to leachate – metals, nutrients).
 - Use of adjacent land by the Defence Force, now the Rockbank residential development (UXO/XO ordnances – UXO, metals).

The DSE Assessment Matrix (Figure 1) has been adopted for determining any requirements further investigation considering the identified areas of potential concern and the proposed sensitivity of the development. Land use has been assumed to be “sensitive” due to proposed dwellings and residential buildings.

Figure 1 - DSE 2005 Table 2 Assessment Matrix

PROPOSED LAND-USE	POTENTIAL FOR CONTAMINATION (as indicated in Table 1)		
	High	Medium	Low
<i>Sensitive Uses</i>			
<i>Child care centre, pre-school or primary school</i>	A	B	C
<i>Dwellings, residential buildings etc.</i>	A	B	C
<i>Other Uses</i>			
<i>Open space</i>	B	C	C
<i>Agriculture</i>	B	C	C
<i>Retail or office</i>	B	C	C
<i>Industry or warehouse</i>	B	C	C

- A. *Require an environmental audit as required by Ministerial Direction No. 1 or the Environmental Audit Overlay when a planning scheme amendment or planning permit application would allow a sensitive use to establish on potentially contaminated land. An environmental audit is also strongly recommended by the SEPP where a planning permit application would allow a sensitive use to be established on land with 'high potential' for contamination.*
- B. *Require a site assessment from a suitably qualified environmental professional if insufficient information is available to determine if an audit is appropriate. If advised that an audit is not required, default to C.*
- C. *General duty under Section 12(2)(b) and Section 60(1)(a)(iii) of the Planning and Environment Act 1987.*

The review of current and previous site uses have identified the following activities associated with the site's use for grazing and agricultural purposes, having a "medium potential for contamination" as defined in Table 1 of the DSE (2005) guideline:

- Possible storage and use of chemicals and fuels; and
- Waste and Building materials.

This triggers assessment level 'B' which has the requirement of "a site assessment from a suitably qualified environmental professional if insufficient information is available to determine if an audit is appropriate. If advised that an audit is not required, default to C". Should these road corridors be retained (i.e. not developed into residential land), the assessment level would default to level 'C'.

A high potential for significant contaminant to be (or become) present has been identified for:

- The service station within Lot 1PS537638 (for the activity of "service stations/fuel storage")

This triggers assessment level 'A' which requires "an environmental audit as required by Ministerial Direction No. 1 or the Environmental Audit Overlay when a planning scheme amendment or planning permit application would allow a sensitive use to establish on potentially contaminated land." However, based on the age of the service station and the likelihood the construction adhered to stringent guidelines, a trigger assessment level 'B' may be more appropriate.

The remainder of the precinct has been indicated to be a low potential for significant contamination, triggering assessment level C requiring "General duty under Section 12(2)(b) and Section 60(1)(a)(iii) of the Planning and Environment Act 1987". It should be noted however that this assessment was a high level review and there is potential for contamination to be present in areas where potential was not identified.

Based on this assessment, the majority of the site is considered generally suitable for proposed redevelopment for urban uses including residential. Application of an Environmental Audit Overlay (EAO) over the Site or environment audit under Section 53v of the Environment Protection Act 1970 (as amended 2018) - Level 'A' assessment as per DSE (2005) is however required for the high potential land use activities. An estimate of the assessment requirements is visually presented in Figure 2 of **Appendix A**.

It is understood that some of the land may be developed for less sensitive purposes, which would then reduce the level of assessment required e.g. where a proposed redevelopment land use includes "Other Uses" e.g. agriculture, or commercial/industrial e.g. retail or office, industry or warehouse.

To comply with duty of care (Level 'C' assessment as per DSE 2005) and further investigation including as a minimum detailed site inspection and walkover of land parcels (Level 'B' assessment as per DSE 2005) is required at the land within the Precinct to further inform on potential for the presence of contamination and/or contaminating activities. This would then highlight whether further investigation e.g. limited intrusive soil and/or groundwater assessment would be warranted. The conclusions of this report are still subject to further assessment to confirm the condition of land within the Precinct observed during this investigation and areas not able to be visually assessed from the ground.

5.2 Recommendations

Based on this review and the conclusions above, SMEC recommends liaison with a suitably qualified and experienced consultant to assess the level of further assessment required at the Precinct (or portion of land within the Precinct) to comply with requirement for a site assessment and duty of care requirements as per DSE (2005) guidance, including detailed site inspections and walkovers and dependant on findings, further assessment may include intrusive soil assessment and/or intrusive groundwater investigation, if considered appropriate. This would serve to assess the potential presence, severity and extent of contamination at specific areas within the Precinct as identified (if any) and

inform on the potential hazards to environmental or human health and requirements for any further assessment or site clean-up to ensure the Site is suitable for the proposed redevelopment.

This should be targeted to ensure detailed assessment of land proposed for more sensitive uses and/or where land has been developed/disturbed or subject to more intensive agricultural uses.

Appendix A, Figure 2 presents the portions of the Precinct where Level 'C' assessment as per DSE (2005) is required; this is based on low risk of the presence of contamination and where assessment is likely to have already been conducted as part of the Planning Permit application process. **Appendix A**, Figure 2 also presents those areas of the Precinct where Level 'B' and 'A' assessment is required.

DSE (2005) indicates that the planning or responsible authority (e.g. Council and/or EPA) may require some or all of the additional site assessment recommended below be completed as a condition of the planning or development permit application; however, it should be noted that this guidance is clearer in regards to sites where an environmental audit overlay is applicable, or where any preliminary investigations determine an environmental audit is warranted based on potential for contamination and proposed land use as per Table 2 of the guidance.

Limited/targeted intrusive soil assessment would be recommended at the following:

- Any locations where waste has been historically dumped / stockpiled, or fill has been imported e.g. for surface levelling or to fill in former dams. This would include lots 3LP216717, 4PS304449, 1LP127283, 1TP118945, 5LP137020 and 3-7\PP2927;
- Any locations where intensive agricultural activities have been identified, including areas where fertilisers have been stockpiled, market gardens/nurseries, farming operations, intensive livestock pasturing operations;
- Any locations where inspection of farm storage sheds/buildings identifies the potential presence of contamination or potentially contaminating activities (mechanical workshops, heavy equipment storage and maintenance);
- Any locations where chemical handling/mixing/storage has been identified, or where there is evidence of spills/losses of fuels/oil/pesticides/herbicides;
- Service station; and
- Former building/structure locations where demolition may have caused impacts from asbestos or other materials associated with vintage structures (PCBs, lead-based paints etc).

Any further assessment should be completed prior to any development permit application process. Intrusive sampling and analysis must be undertaken in accordance with the following standards:

- National Environment Protection (Assessment of Site Contamination) Measure (1999 NEPM as amended 2013)
- Australian Standard (2005) Guide to the investigation and sampling of sites with potentially contaminated soil Part 1: Non-volatile and semi-volatile compounds (AS 4482.1-2005)
- Australian Standard (1999) Guide to the sampling and investigation of potentially contaminated soil Part 2: Volatile substances (AS 4482.2-1999)
- Victoria Environment Protection Authority, Industrial Waste Resource Guidelines (IWRG) Soil Sampling, 2009.

The results of the sampling and analysis would be compared with guideline values for protection of human health and the environment as well as waste disposal criteria (as applicable).

Sections of the precinct mapped as Assessment Level A (as presented in Figure 2 of Appendix A) may require an environmental audit. Alternatively, these sections could be utilised for land uses of lower sensitivities, such as open space, agriculture, retail/office of industry/warehouse. This would negate the requirement for an environmental audit and lower the triggered assessment to Level B, as described above.

In addition, hazardous materials surveys should be carried out for structures identified for demolition or relocation. The surveys should address asbestos, lead-based paint, polychlorinated biphenyls in electrical fixtures, and hazardous materials storage. Should asbestos bearing materials be encountered during future investigations or construction, the testing, inspection and removal of asbestos materials are required by law to be undertaken by a suitably qualified and licensed asbestos specialist/removalist.

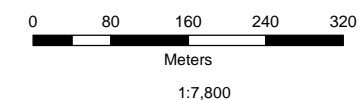
Flood modelling should be undertaken to determine hydrologic effects that any new developments will have on the existing creek system, in particular existing culvert and bridge flow capacities and identified groundwater and inflow-dependent ecosystems within or in close proximity to the Precinct.

Waterways, including Kororoit Creek and un-named tributaries within in or proximity to the Precinct and associated low-lying areas will require feature surveys to provide detail of drainage patterns and inform planning for urban drainage systems. Drainage paths will need to be either maintained or diverted to ensure all areas are well drained during and after any development. Provision should be made in the precinct structure planning for protection of native vegetation along waterways, including Kororoit Creek with appropriate buffering from residential and other urban uses which could be achieved in conjunction with linear parks such as have been established for other developed areas along Kororoit Creek and tributaries.

6 References

- National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013) (NEPM, 2013);
- NEPM Schedule B2 Site Characterisation;
- Ministerial Direction No. 1 – *Potentially Contaminated Land* (Direction No. 1);
- Ministerial Direction No. 19 – *Information requirements for amendments that may result in impacts on the environment, amenity and human health* (Direction No. 19);
- Victorian Department of Sustainability and Environment, *Potentially Contaminated Land*, General Practice Note, 2005 (DSE, 2005); and
- State Environmental Protection Policy (SEPP), *Prevention and Management of Contamination of Land*, 2002 (the Land SEPP).
- Department of Sustainability and Environment (DSE), General Practice Note – *Potentially Contaminated Land*, June 2005 (DSE, 2005)
- LotSearch Pty Ltd, *Environmental Professional Reports (including full dataset listings)*:
 - Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1) – doc. ref.: LS009279 EP, 31 October 2019
 - Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2) – doc. ref.: LS009280 EP, 31 October 2019
 - Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 3) – doc. ref.: LS009281 EP, 31 October 2019
 - Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 4) – doc. ref.: LS009282 EP, 31 October 2019
 - Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 5) – doc. ref.: LS009283 EP, 31 October 2019
 -
- Ministerial Direction No. 1, *Potentially Contaminated Land*, 2001

Appendix A Figures



Legend

Study Area

Road Network

Major Road

Minor Road

Watercourse

Lakes and dams

Section Boundary

Resumed Lots by Section

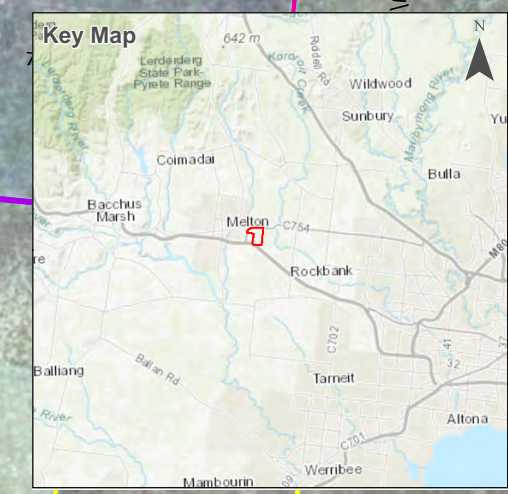
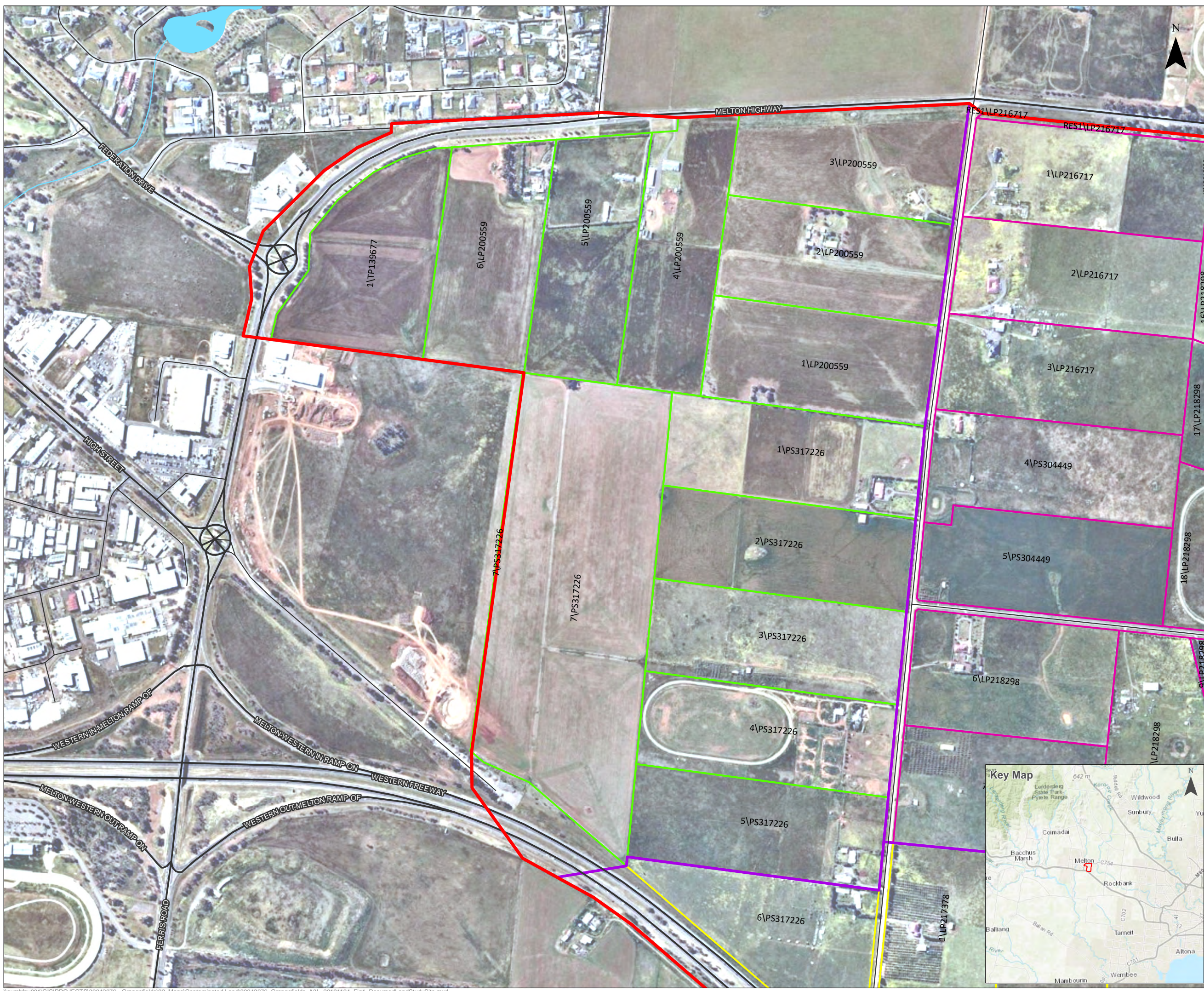
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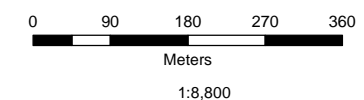

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PROJECT NO: 30042076
FIGURE NO: 1
FIGURE TITLE: Study Area
CREATED BY: JR14941
DATE: 6/11/2019
VERSION: DRAFT 1
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Legend
 Study Area

Road Network
 Major Road

 Minor Road

 Watercourse

 Lakes and dams

 Section Boundary

Resumed Lots by Section
 1

 2

 3

 4

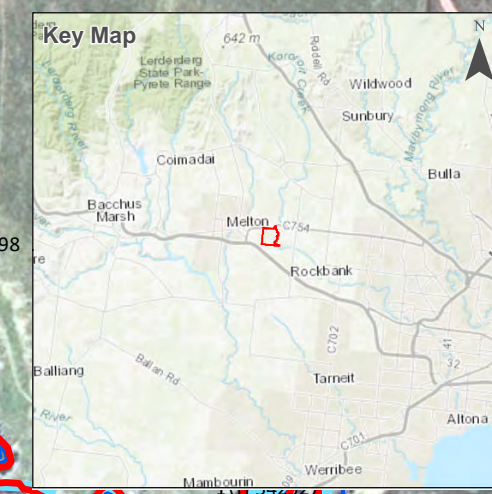
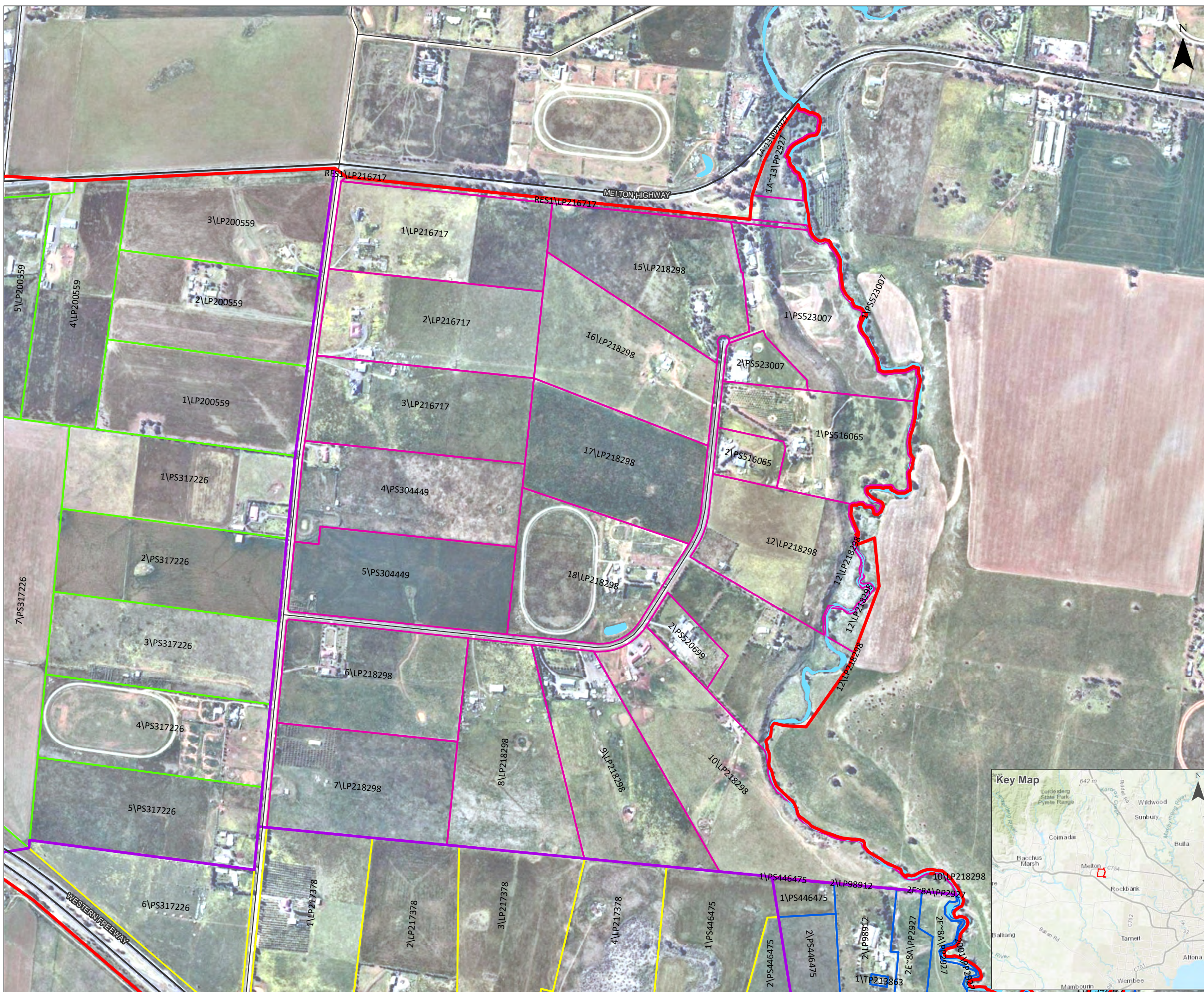
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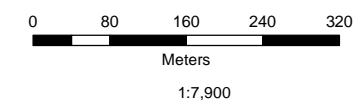

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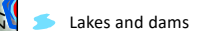

Legend
 Study Area

 Road Network

 Major Road

 Minor Road

 Watercourse

 Lakes and dams

 Section Boundary

Resumed Lots by Section
 1

 2

 3

 4

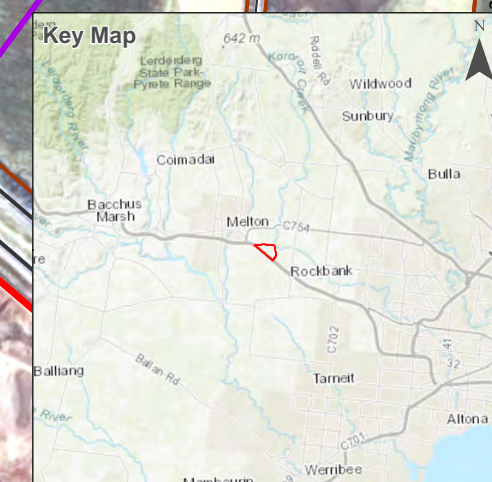
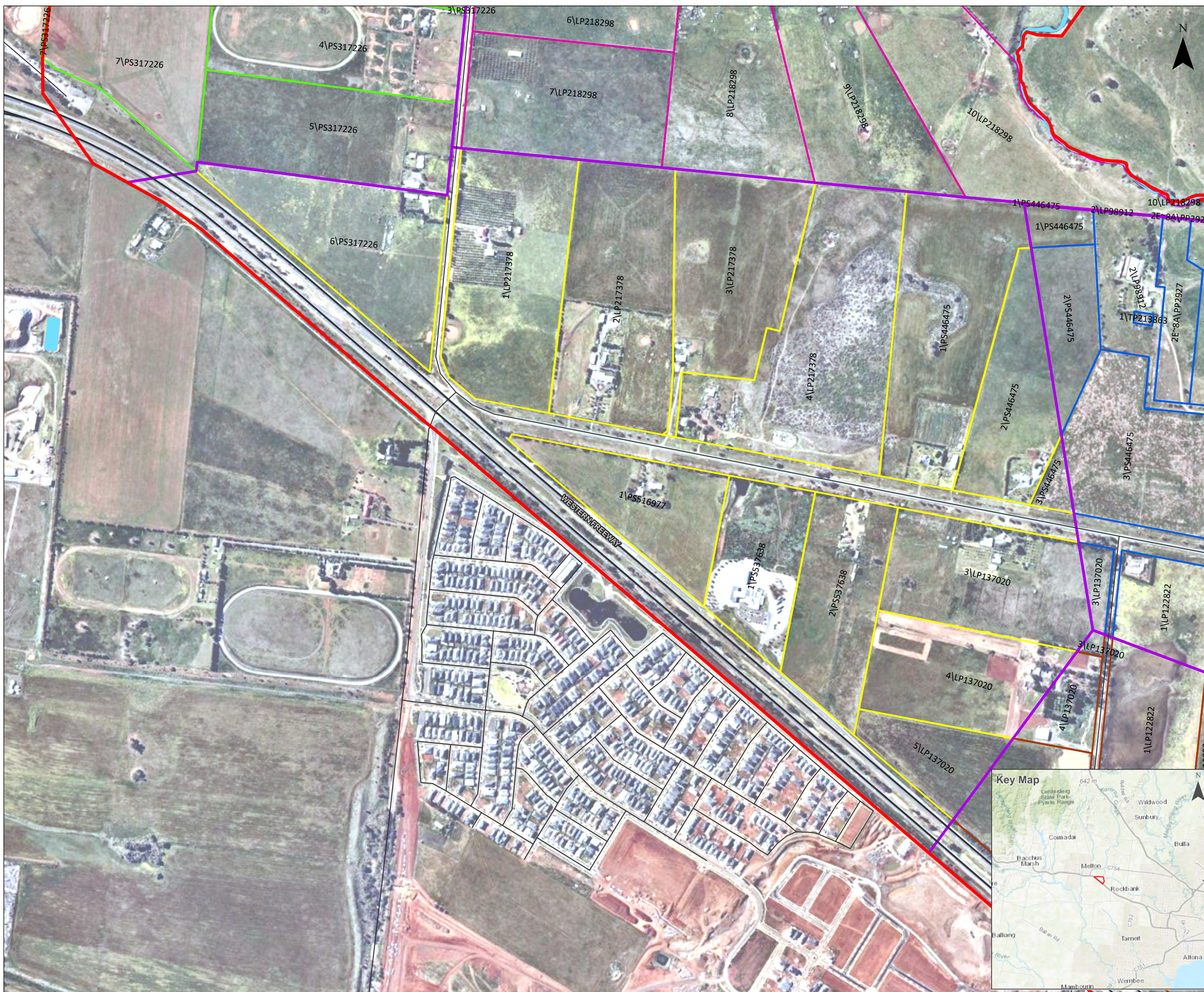
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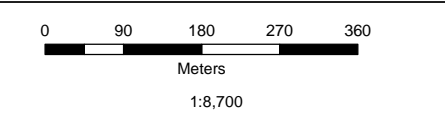
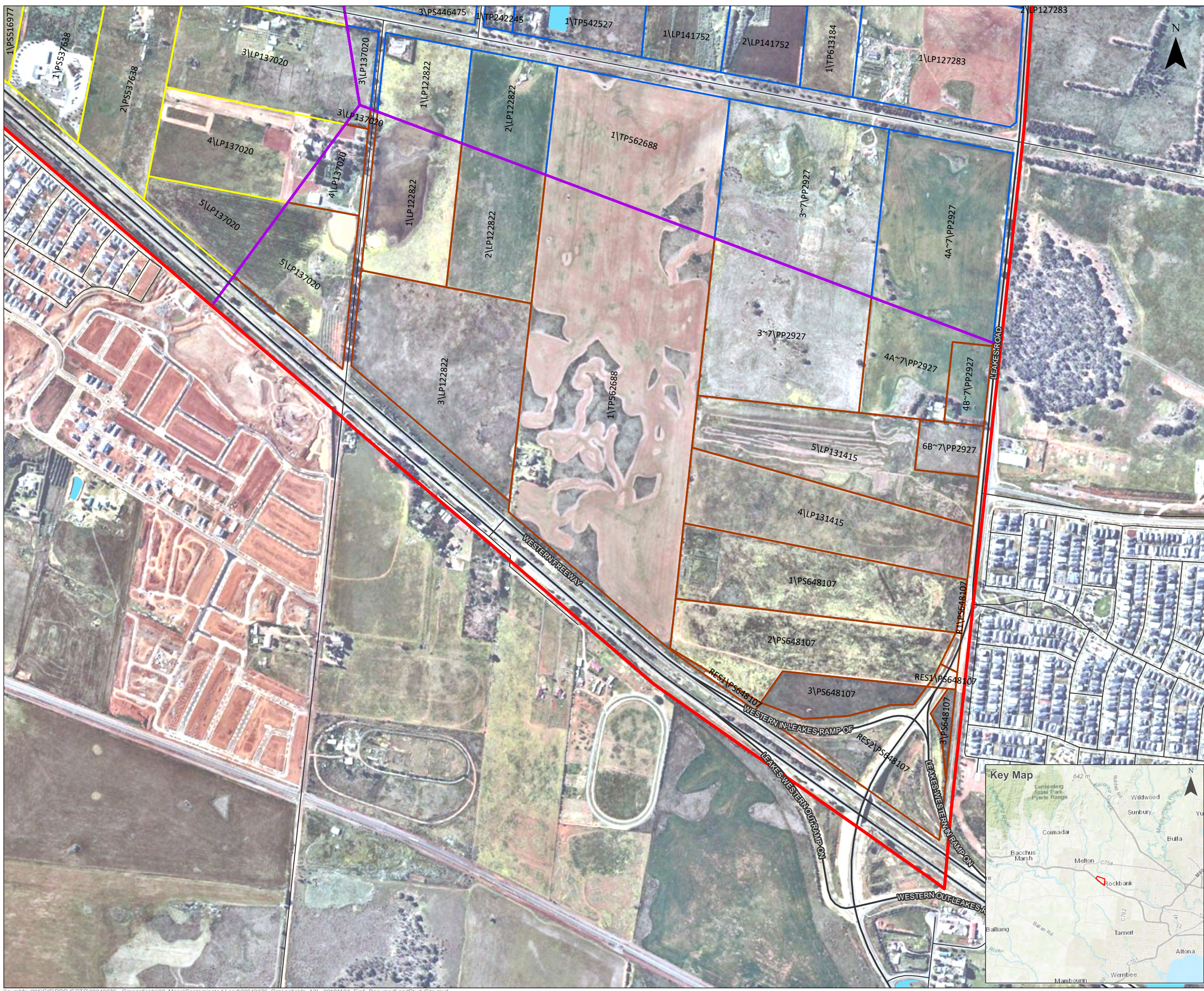
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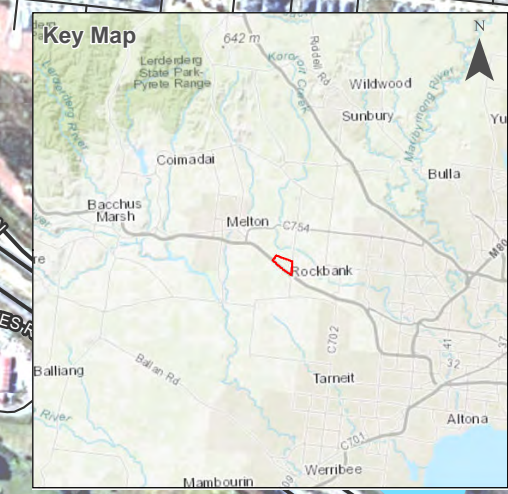
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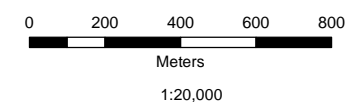
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FIGURE NO: 5
FIGURE TITLE: Study Area
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Legend
 Lot Search Perimeter

Level Of Assessment Boundaries
 Level A Assessment Area

 Level B Assessment Area

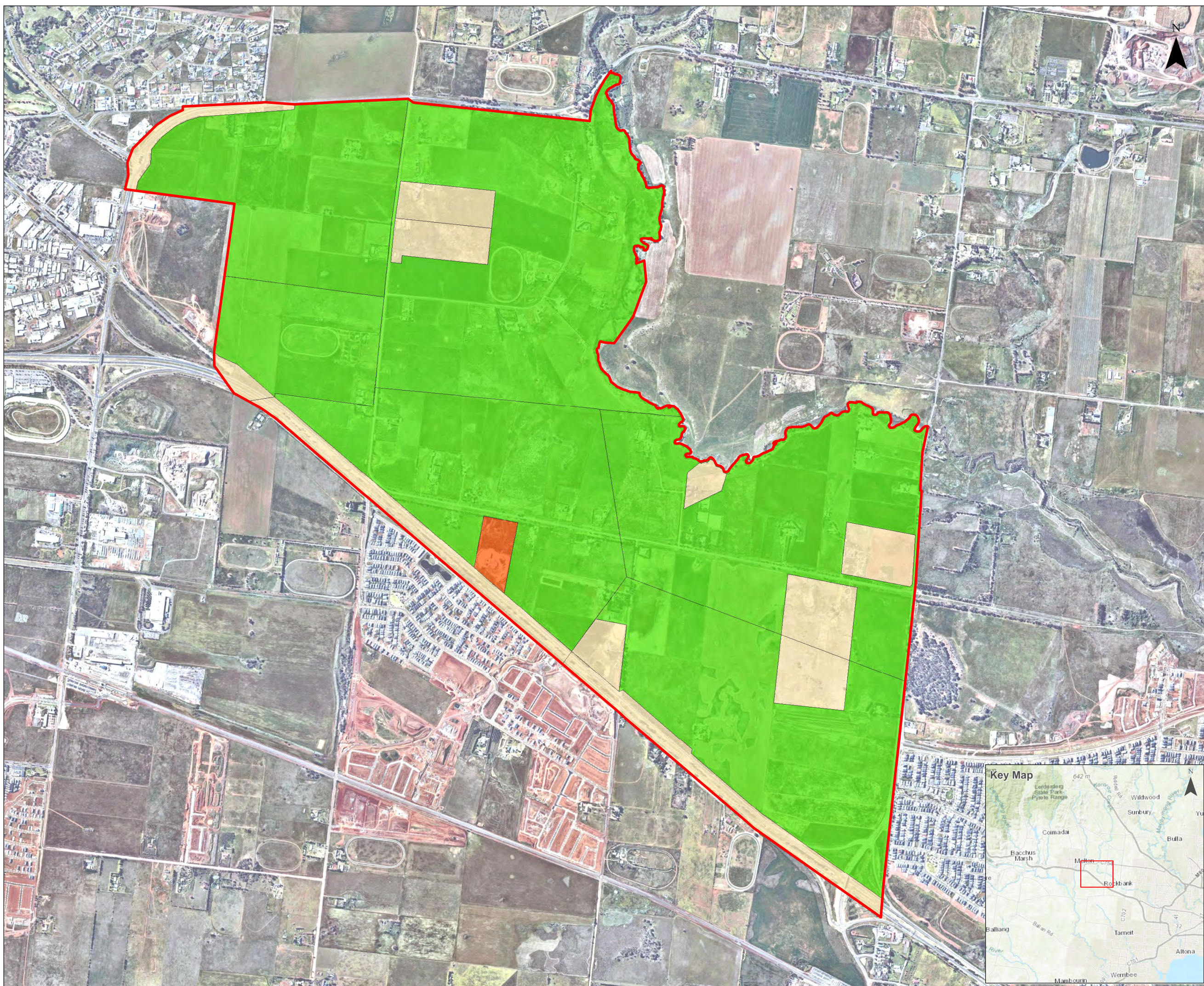
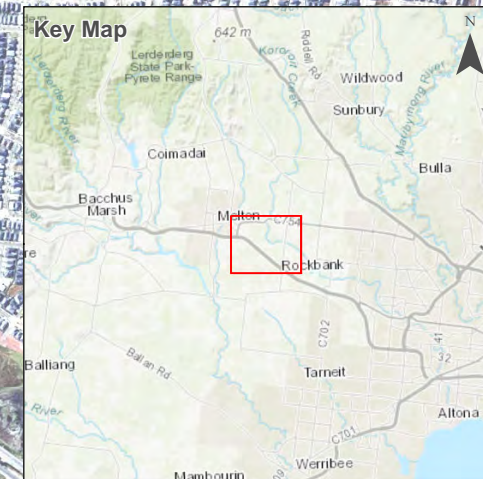
 Level C Assessment Area

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Appendix B Database Search Reports



LOTSEARCH
LOTSEARCH ENVIRO PROFESSIONAL

Address: Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Date: 31 Oct 2019 11:41:50

Reference: LS009279 EP

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.

You should obtain independent advice before you make any decision based on the information within the report.

The detailed terms applicable to use of this report are set out at the end of this report.

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Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a confidence is given under the field heading “LocConf” or “Location Confidence”.

Location Confidence	Description
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced with the confidence of the general/approximate area
Road Match	Georeferenced to the road or rail
Road Intersection	Georeferenced to the road intersection
Buffered Point	Feature is a buffered point
Network of Features	Georeferenced to a network of features

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

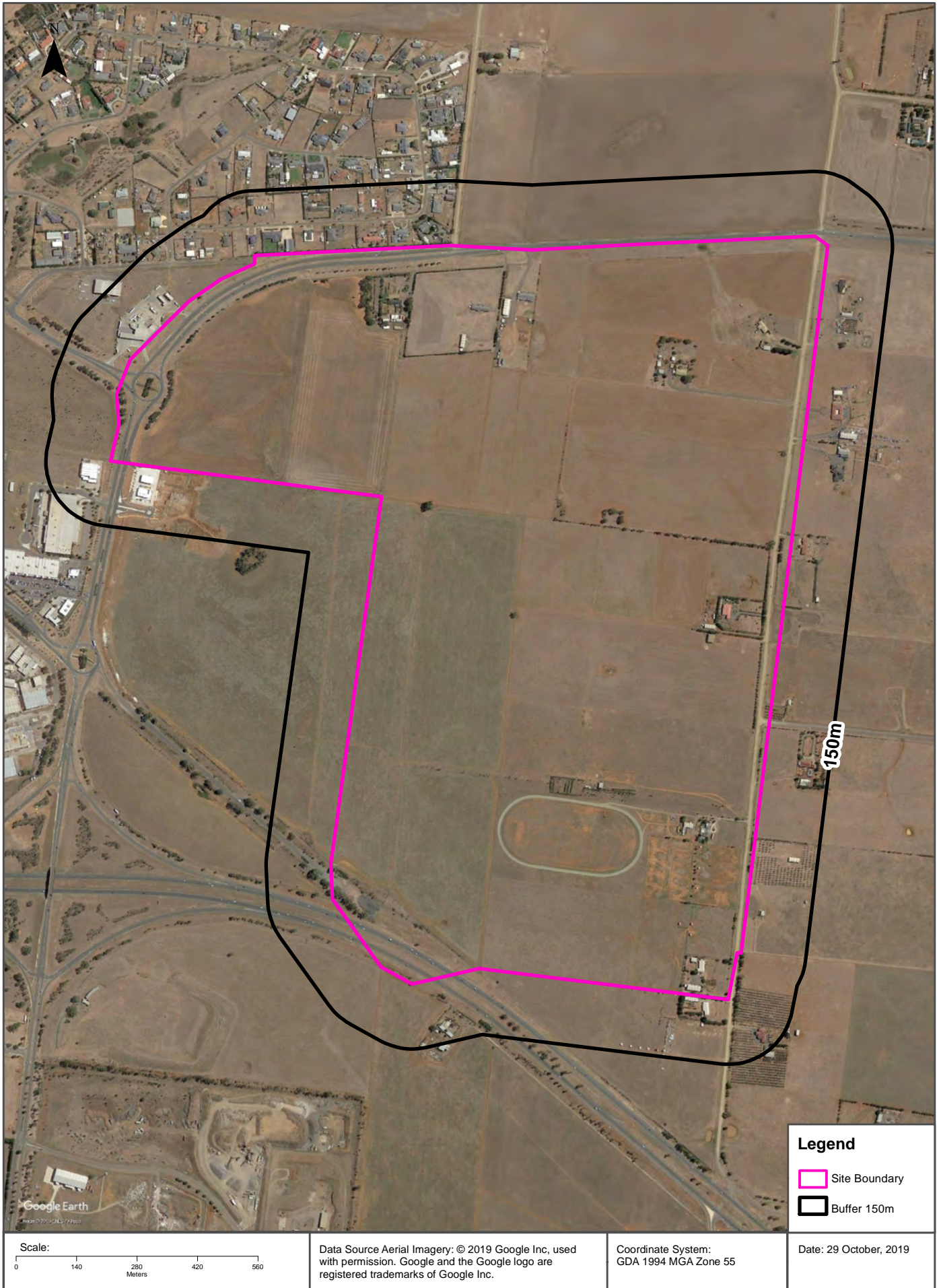
Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Topographic and Cadastre data	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	14/10/2019	Monthly	-	-	-	-
Current EPA Priority Sites	Environment Protection Authority (Vic)	09/10/2019	31/08/2019	Monthly	1000	0	0	1
Former EPA Priority Sites & other Remedial Notices	Environment Protection Authority (Vic)	06/08/2019	05/07/2019	Monthly	1000	0	0	1
EPA PFAS Site Investigations	Environment Protection Authority (Vic)	15/10/2019	13/12/2018	Monthly	2000	0	0	0
Defence PFAS Investigation & Management Program	Department of Defence	02/10/2019	02/10/2019	Monthly	2000	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	02/10/2019	02/10/2019	Monthly	2000	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	02/10/2019	02/10/2019	Monthly	2000	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	14/10/2019	14/10/2019	Monthly	1000	0	0	0
EPA Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	14/10/2019	14/10/2019	Monthly	1000	0	0	0
Current EPA Licensed Activities	Environment Protection Authority (Vic)	16/10/2019	16/10/2019	Monthly	1000	0	0	0
Former EPA Licensed Activities	Environment Protection Authority (Vic)	16/10/2019	16/10/2019	Monthly	1000	0	0	1
EPA Works Approvals	Environment Protection Authority (Vic)	16/10/2019	16/10/2019	Monthly	1000	0	0	0
National Waste Management Facilities Database	Geoscience Australia	06/08/2019	07/03/2017	Quarterly	1000	0	0	1
Statewide Waste and Resource Recovery Infrastructure Plan Facilities	State Government Victoria - Department of Sustainability	27/11/2014	31/12/2012	None planned	1000	0	0	1
EPA Prescribed Industrial Waste	Environment Protection Authority (Vic)	31/07/2019	31/07/2019	Quarterly	1000	0	0	6
EPA Victorian Landfill Register	Environment Protection Authority (Vic)	01/10/2019	01/10/2019	Quarterly	1000	0	0	0
Former Gasworks	Various historical sources collated by Lotsearch	15/08/2017	15/08/2017	Not required	1000	0	0	0
UBD Business Directory 1970 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1970 (Road & Area Matches)	Hardie Grant			Not required	150	-	20	20
UBD Business Directory 1960-62 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1960-62 (Road & Area Matches)	Hardie Grant			Not required	150	-	15	15
UBD Business Directory 1950 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1950 (Road & Area Matches)	Hardie Grant			Not required	150	-	11	11
Sands & McDougall's Directory 1945 (Premise & Intersection Matches)	Sands & McDougall, State Library Victoria			Not required	150	0	0	0
Sands & McDougall's Directory 1945 (Road & Area Matches)	Sands & McDougall, State Library Victoria			Not required	150	-	0	0
Sands & McDougall's Directory 1925 (Premise & Intersection Matches)	Sands & McDougall, State Library Victoria			Not required	150	0	0	0
Sands & McDougall's Directory 1925 (Road & Area Matches)	Sands & McDougall, State Library Victoria			Not required	150	-	1	1

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Sands & McDougall's Directory 1905 (Premise & Intersection Matches)	Sands & McDougall, State Library Victoria			Not required	150	0	0	0
Sands & McDougall's Directory 1905 (Road & Area Matches)	Sands & McDougall, State Library Victoria			Not required	150	-	18	18
Historical Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	500	0	0	0
Historical Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	500	-	7	7
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	14/10/2019	Quarterly	1000	4	5	28
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1
Groundwater Salinity	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	0	1	-	-
Depth to Watertable	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	0	2	-	-
Surface Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	0	1	-	-
Basement Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	0	1	-	-
Groundwater Boreholes WMIS	State Government Victoria - Department of Environment, Land, Water & Planning	28/08/2019	01/08/2019	Quarterly	2000	9	16	154
Groundwater Boreholes Earth Resources Database	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	27/07/2018	17/02/2010	As required	2000	9	12	80
Groundwater Boreholes Fed Uni	Federation University Australia	21/12/2017	07/01/2014	As required	2000	0	0	1
Historical Mining Activity - Shafts	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	18/10/2018	20/07/2018	As required	1000	0	0	0
Geological Units 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	1	-	4
Geological Structures 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	0	-	0
Dykes and Marker Beds 50k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	0	-	0
Shear zones 250k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	0	-	0
Atlas of Australian Soils	ABARES	19/05/2017	17/02/2011	As required	1000	1	1	1
Victorian Soil Type Mapping	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	24/08/2017	21/03/2016	Unknown	1000	2	3	4
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	1	1	1
Coastal Acid Sulfate Soils	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	28/03/2017	30/03/2011	None planned	1000	0	0	0
Planning Scheme Zones	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	09/10/2019	Monthly	1000	2	6	18
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	09/10/2019	Monthly	1000	1	2	8
Commonwealth Heritage List	Australian Government Department of the Environment and Energy - Heritage Branch	16/01/2019	31/07/2018	Unknown	1000	0	0	0
National Heritage List	Australian Government Department of the Environment and Energy - Heritage Branch	16/01/2019	28/09/2018	Unknown	1000	0	0	0
Victorian Heritage Register	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	14/10/2019	Quarterly	1000	0	0	0

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Cultural Heritage Sensitivity	State Government Victoria - Department of Premier and Cabinet	14/10/2019	13/10/2019	Quarterly	1000	0	1	6
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	19/09/2019	10/09/2019	Quarterly	1000	1	1	1
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	13/10/2019	Quarterly	1000	1	1	1
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	31/12/2014	Quarterly	1000	0	0	2
Victorian Coastal Inundation Sea Level Rise	State Government Victoria - Department of Environment, Land, Water & Planning	10/04/2018	24/10/2017	Unknown	1000	0	0	0
Native Vegetation (Modelled 2005 Ecological Vegetation Classes)	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	31/12/2005	None planned	1000	1	1	4
Ramsar Wetland Areas in Victoria	State Government Victoria - Department of Environment, Land, Water & Planning	28/03/2017	24/06/2013	None planned	1000	0	0	0
Groundwater Dependent Ecosystems Atlas	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	4
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	0	0	7

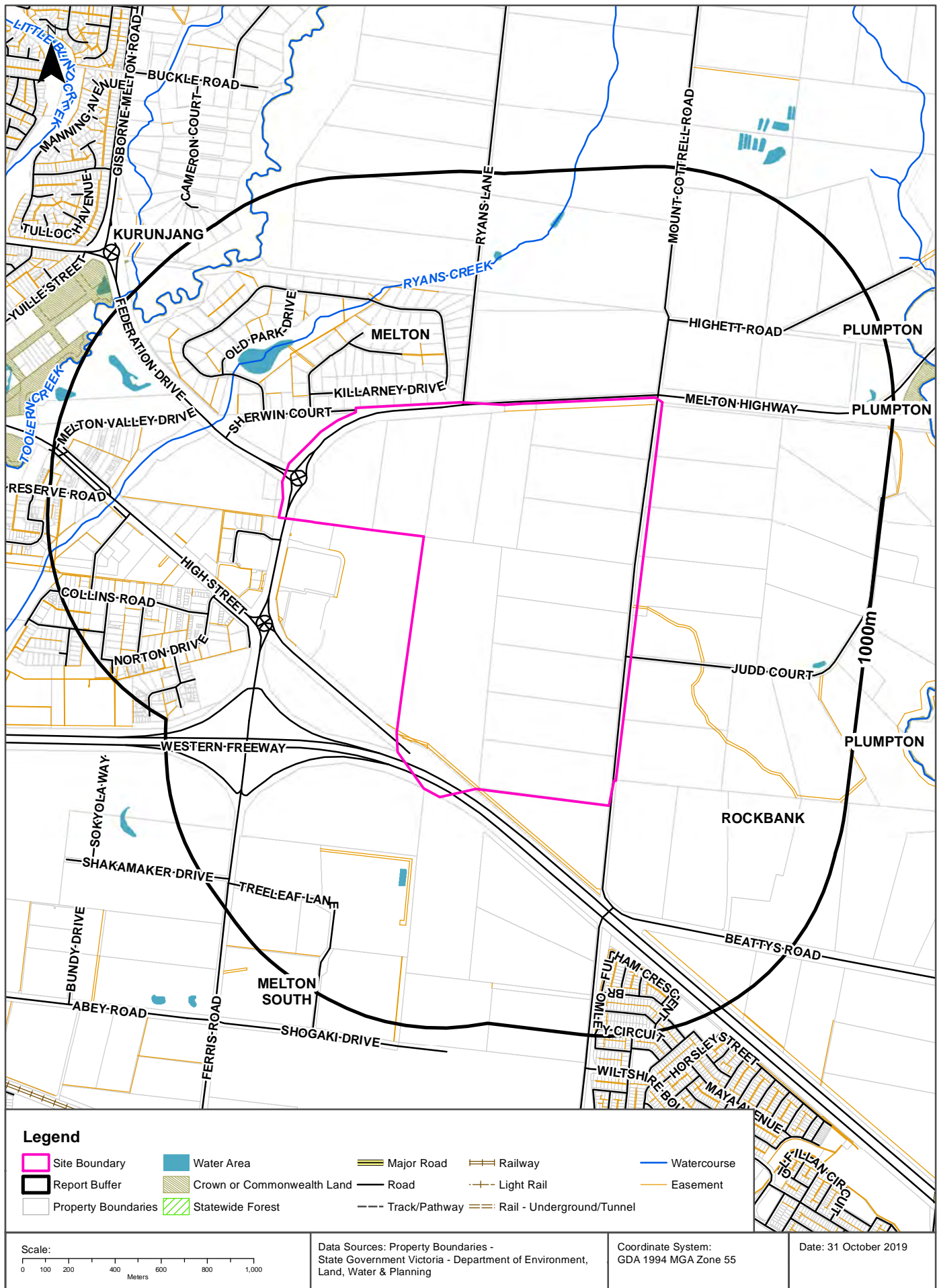
Aerial Imagery 2019

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



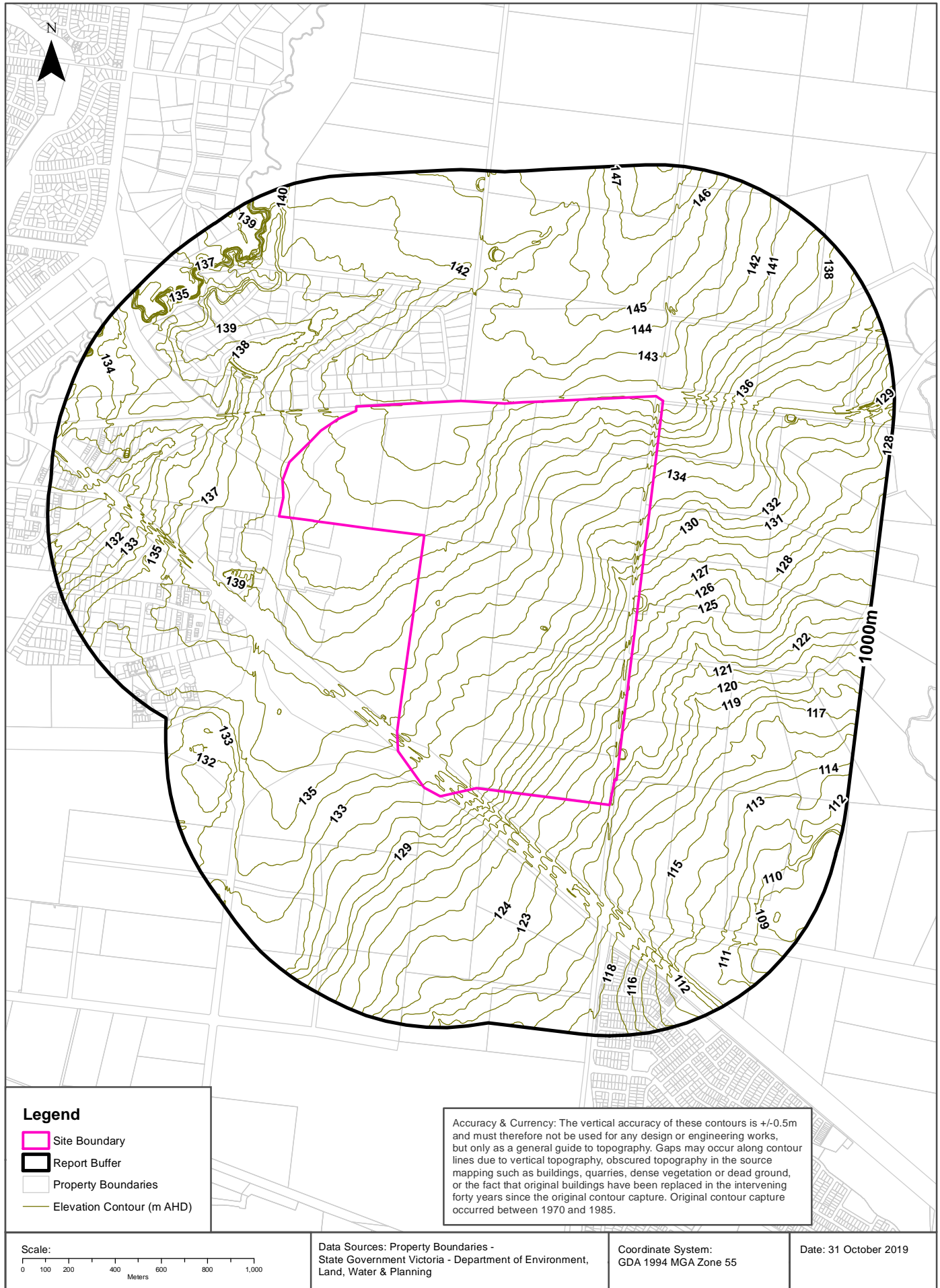
Topographic Data

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



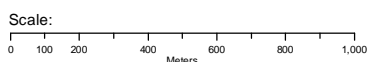
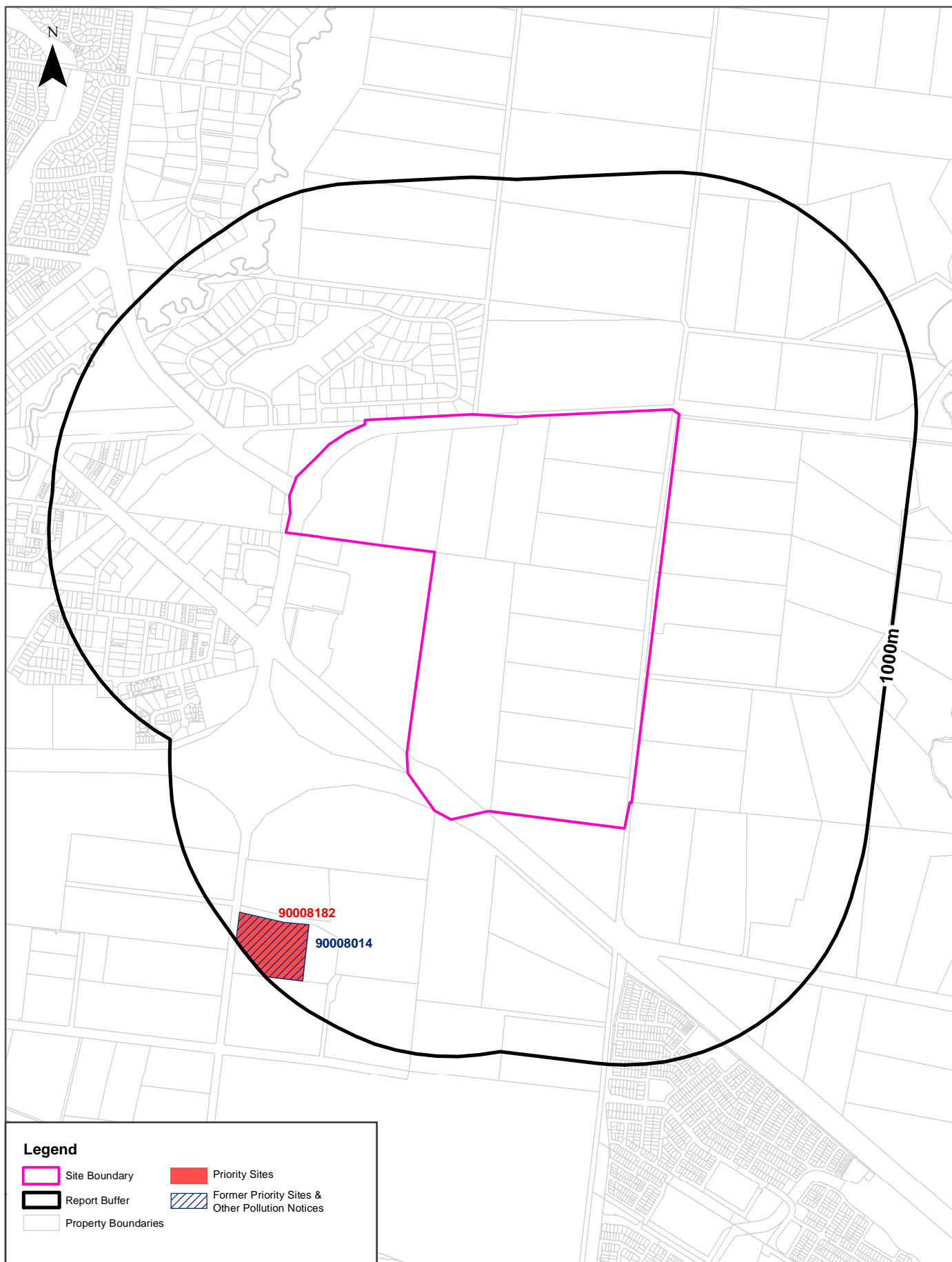
Elevation Contours (m AHD)

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



EPA Records - Priority Sites & Pollution Notices

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Current EPA Priority Sites Register

Sites on the current EPA priority sites register that exist within the dataset buffer:

Notice No	Address	Suburb	Issue	Loc Conf	Dist (m)	Direction
90008182	43 - 67 FERRIS RD	COBBLEBANK	Industrial waste has been dumped at the site. Requires assessment and/or clean up.	Premise Match	715m	South West

Priority Sites Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

Former EPA Priority Sites & Other Pollution Notices

Sites within the dataset buffer that have been issued a Pollution Notice:

Note. Due to pollution notices being revoked and removed from published lists this is not an exhaustive list of all past pollution notices.

Notice No	Notice Type	Company	Address	Suburb	Status	Issue	Date Issued	Loc Conf	Dist	Dir
90008014	Previous Priority Notice		43 FERRIS ROAD	COBBLEBANK	Previous Priority Notice	Industrial waste has been dumped at the site. Requires assessment and/or clean up.		Premise Match	715m	South West

Pollution Notice Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

PFAS Investigation Sites

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

EPA PFAS Site Investigations

Sites being investigated by the EPA for PFAS contamination within the dataset buffer:

Map ID	Site Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Site Investigations Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

Defence PFAS Investigation & Management Program

Sites being investigated or managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation & Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Defence 3 Year Regional Contamination Investigation Program

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

EPA Environmental Audits

EPA environmental audit records that exist within the dataset buffer:

Note. Please click on CARMS No. to activate a hyperlink to online documentation. If link does not work, documentation may still be accessible via the EPA Interaction Portal.

CARMS No	Transaction No	Site	Address	Suburb	Date Complete	Audit Category	Loc Conf	Distance	Direction
N/A	No records in buffer								

Environmental Audit Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

EPA Groundwater Zones with Restricted Uses

EPA GQRUZ records that exist within the dataset buffer:

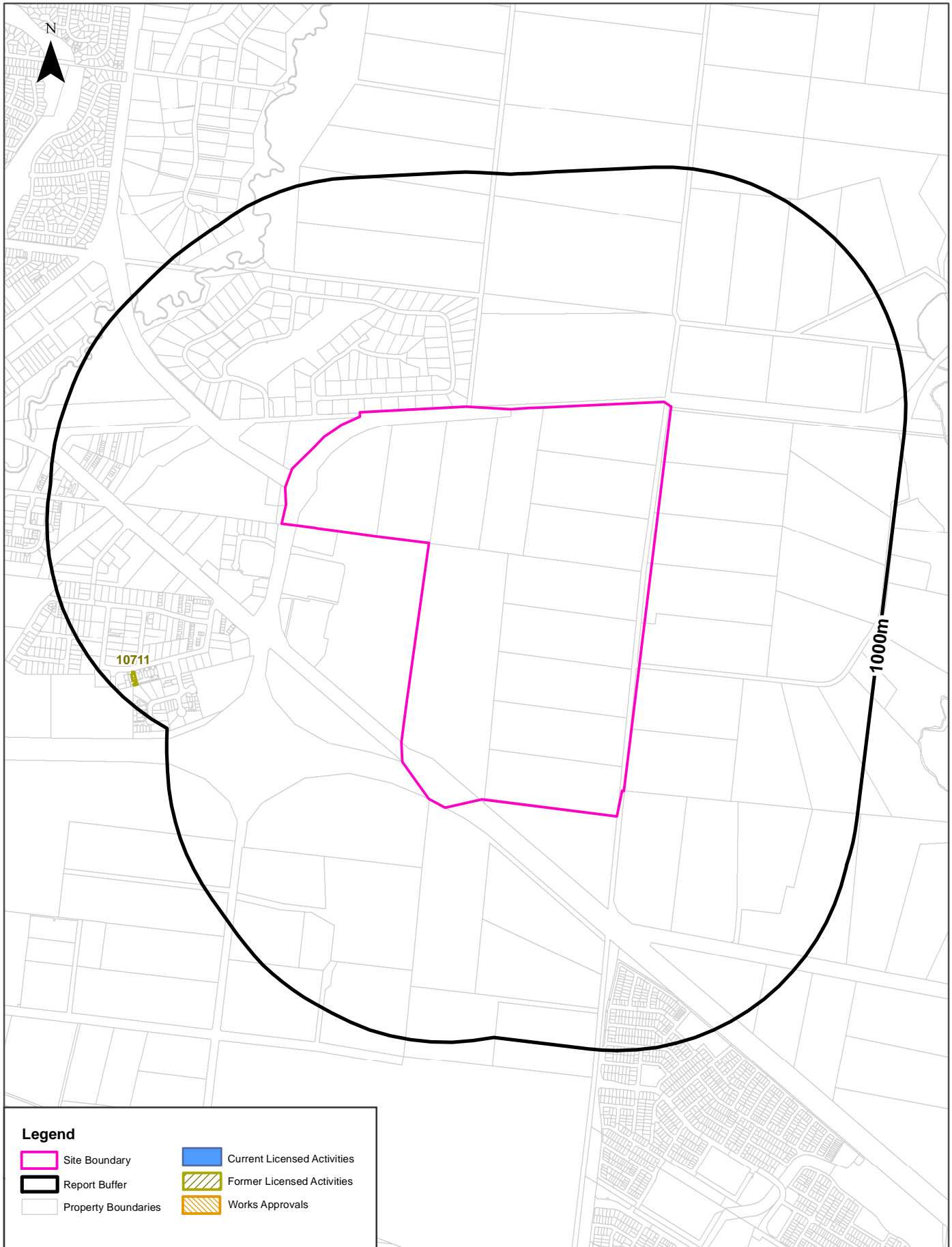
Note. Please click on CARMS No. to activate a hyperlink to online documentation.

CARMS No	EPA Id	Site History	Site Address	Restricted Uses	Status	Loc Conf	Distance	Direction
N/A	No records in buffer							







Environmental GQRUZ Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

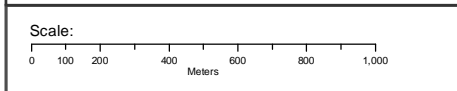
EPA Records - Licensed Activities & Works Approvals

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend

 Site Boundary	 Current Licensed Activities
 Report Buffer	 Former Licensed Activities
 Property Boundaries	 Works Approvals



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

EPA Licensed Activities

EPA licensed activities that exist within the dataset buffer:

Trans No	Licence No	Licence Type	Organisation	Premise Ref	Premise Address 1	Premise Address 2	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer									

Licensed Activity Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

Former EPA Licensed Activities

Former EPA licensed activities that exist within the dataset buffer:

Licence No	Organisation	Premise Address	Suburb	Activities	Loc Conf	Dist (m)	Direction
10711	COOPER BROS HOLDINGS PTY LTD [MELTON]	3 27-29 NORTON DR	MELTON VIC 3337	A01 Prescribed Industrial Waste Management	Premise Match	891m	West

Former Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

EPA Works Approvals

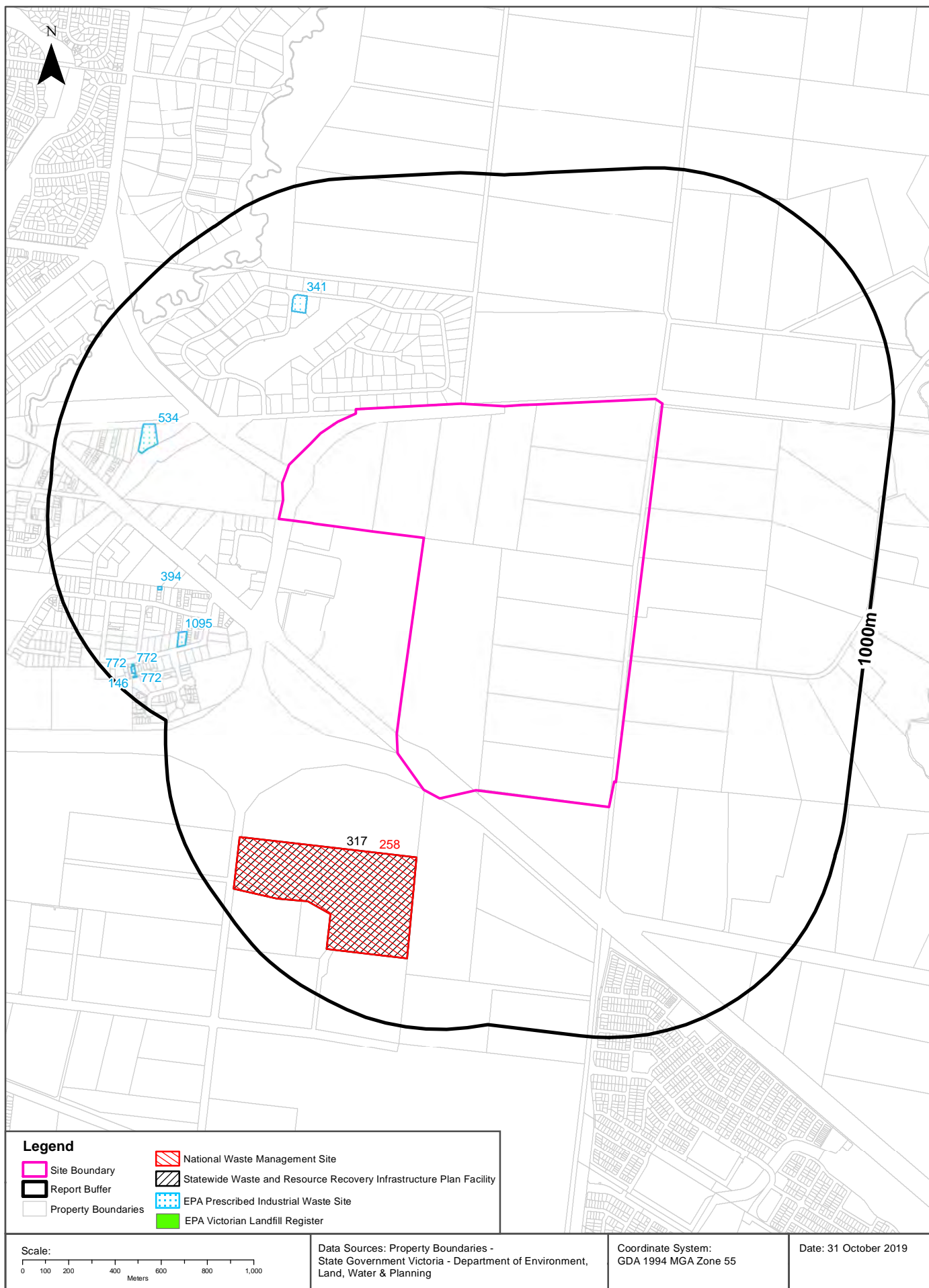
EPA works approvals that exist within the dataset buffer:

Transaction No	Status	Approval No	Organisation	Premise Address	Suburb	Scheduled Categories	Loc Conf	Dist (m)	Direction
N/A	No records in buffer								

Works Approvals Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

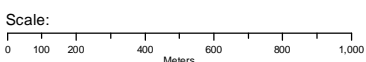
Waste Management Facilities & Landfills

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend

- Site Boundary
- Report Buffer
- Property Boundaries
- National Waste Management Site
- Statewide Waste and Resource Recovery Infrastructure Plan Facility
- EPA Prescribed Industrial Waste Site
- EPA Victorian Landfill Register



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

Waste Management Facilities & Landfills

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
258	Melton Shire Council	Melton Recycling Centre	54 Ferris Road	Melton	Multi-Purpose	Operational	Operational		Original information on waste management site collected by DEWHA in 2009	Premise Match	274m	South West

Waste Management Facilities Data Source: Australian Government Geoscience Australia

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Statewide Waste and Resource Recovery Infrastructure Plan Facilities

Statewide Waste and Resource Recovery Infrastructure Plan Facilities within the dataset buffer:

Map Id	Owner	Site Name	Address	Suburb	Category	Sub Category	Loc Conf	Distance	Direction
317	Melton City Council	Melton Recycling Centre	Ferris Rd	Melton	Municipal Waste	MSW Transfer station	Premise Match	274m	South West

SWRRIPF Data Source: State Government Victoria - Department of Sustainability

EPA Prescribed Industrial Waste

EPA Prescribed Industrial Waste treaters, disposers and permitted transporters within the dataset buffer:

Map Id	Company Name	Address	Suburb	Treatment/Disposal	Transport	Accredited Agent	EPA List Status	Loc Conf	Dist' (m)	Direct
341	KECA, DUSKO	4 OLD PARK DR	MELTON VIC 3337	No	Yes	No	Previous EPA List	Premise Match	473m	North West
534	SHARP, STEVEN JOHN	13 MELTON VALLEY DR	MELTON VIC 3337	No	Yes	No	Previous EPA List	Premise Match	565m	West
394	MARCUS RIDGE HOLDINGS PTY LTD [MELTON]	UNIT 4 10 COLLINS RD	MELTON VIC 3337	No	Yes	No	Current EPA List	Premise Match	585m	West
1095	NOTMAN, BRUCE	Unit 1, 12 NORTON DRIVE	MELTON	No	Yes	No	Previous EPA List	Premise Match	630m	West
772	TRIPLE R TRANSPORT PTY LTD [MELTON]	3, 27-29 NORTON DR	MELTON VIC 3337	No	Yes	Yes	Previous EPA List	Premise Match	891m	West
146	COOPER BROS HOLDINGS PTY LTD [MELTON]	3, 27-29 NORTON DR	MELTON VIC 3337	Yes	No	No	Previous EPA List	Premise Match	891m	West

Prescribed Industrial Waste Data Source: State Government Victoria - Environment Protection Authority (EPA)

EPA Victorian Landfill Register

EPA Victorian Landfill Register sites within the dataset buffer:

Landfill Register No.	Site	Address	Operating Status	Est. Year Of Closure	Waste type	Loc Conf	Dist' (m)	Direction
No records in buffer								

EPA Victorian Landfill Register Data Source: State Government Victoria - Environment Protection Authority (EPA)

Former Gasworks

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Former Gasworks

Former Gasworks identified from various historical sources within the dataset buffer:

Note - As this is a dataset collated from various historical sources, it is not an exhaustive list of all former Gasworks

Map Id	Site Name	Date Opened	Year Closed	Location Confidence	Distance	Direction
N/A	No records in buffer					

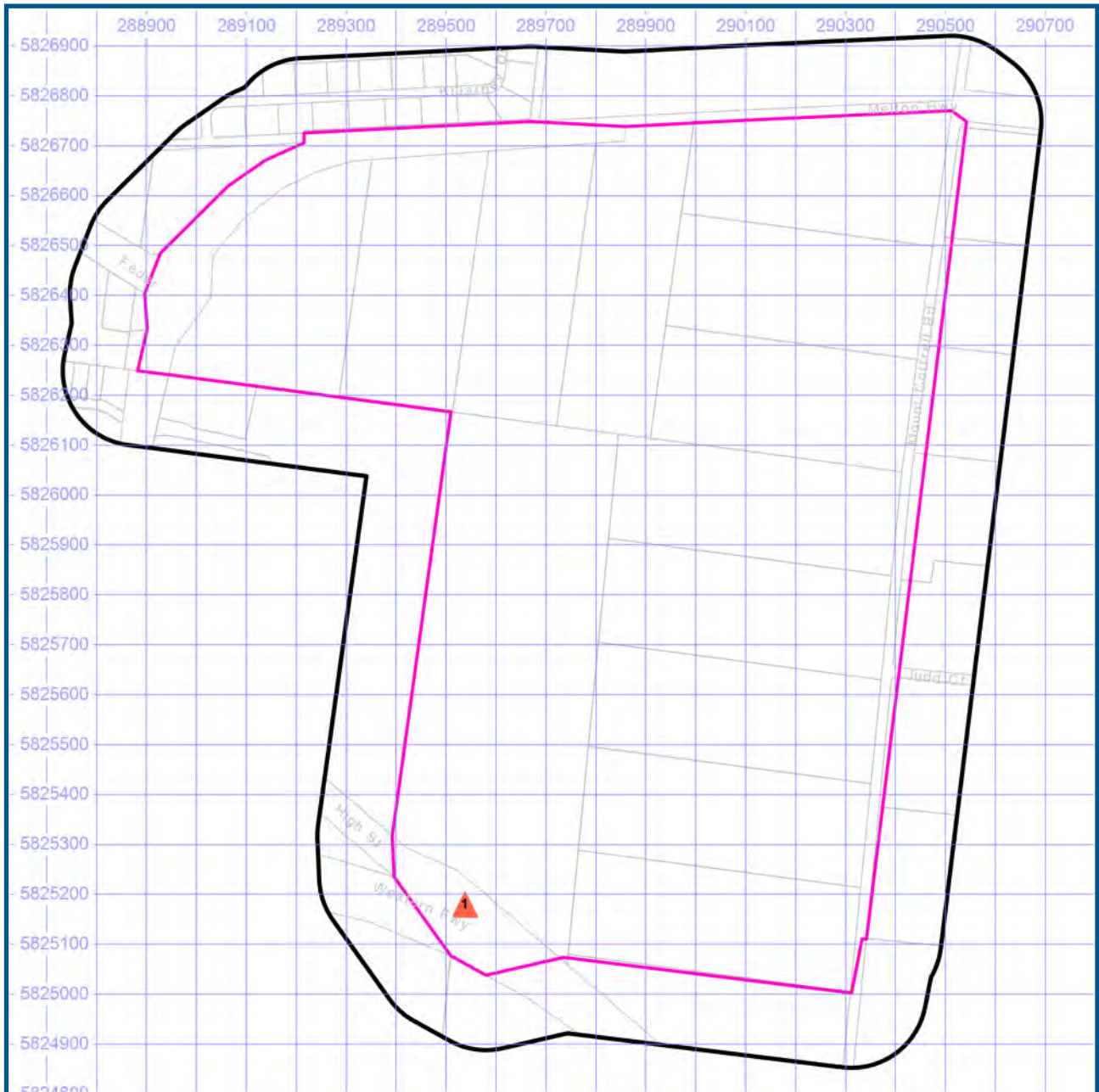
Former Gasworks Data Source: Collated from various historical sources




Historical Business Directories





Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



1970 Business Directory Records



-  Site Boundary
-  Buffer 150m
-  Property Boundaries

-  Business directory records mapped to a specific premise
-  Business directory records mapped to a road intersection
-  Business directory records mapped to a road corridor
-  Business directory records mapped to a general area



Projected Coordinate System:
GDA94 MGA Zone 55

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Property Boundaries © State Government Victoria - Dept. of Environment, Land, Water & Planning 2019

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

1970 Business Directory Records Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1970 Business Directory Records Road or Area Matches

Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
1	REAL ESTATE AGENTS	Andrews. L & Co., High St Melton & Melton South	12392	Road Match	0m
	NEWSAGENTS	Arnold. G. E & J. M.,23 High St Melton & Melton South	12390	Road Match	0m
	JUSTICES OF THE PEACE	Arnold. G. E., High St Melton & Melton South	12380	Road Match	0m
	BUTCHERS	Backhouse Bros., High St Melton & Melton South	12351	Road Match	0m
	REAL ESTATE AGENTS	Delphic Realty Pty. Ltd. (R.E.A.A.),High St Melton & Melton South	12393	Road Match	0m
	CHILDREN'S WEAR	Joanelle Wear., High St Melton & Melton South	12358	Road Match	0m
	DRAPERS	Joanelle Wear., High St Melton & Melton South	12365	Road Match	0m
	FROCK & COAT SALONS	Joanelle Wear., High St Melton & Melton South	12366	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS .	Jongebloed. E. R., High St Melton & Melton South	12371	Road Match	0m
	REAL ESTATE AGENTS	Kontex John & Son.,42 High St Melton & Melton South	12394	Road Match	0m
	HAIRDRESSERS (LADIES') AND BEAUTY SALONS	Mandy Lee., High St Melton & Melton South	12373	Road Match	0m
	REAL ESTATE AGENTS	Mcdonald. W.(R.E.A.A.),High St Melton & Melton South	12395	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Melton Auto Port., Ballarat Rd Melton & Melton South	12387	Road Match	0m
	HARDWARE MERCHANTS	Melton Hardware Supplies., High St Melton & Melton South	12377	Road Match	0m
	CHAFF & GRAIN MILLS	Melton Pharmacy.,88 High St Melton & Melton South	12357	Road Match	0m
	REAL ESTATE AGENTS	Melton Real Estate Pty. Ltd., High St Melton & Melton South	12396	Road Match	0m

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
1	CAFES	Miller. T. J., High St Melton & Melton South	12352	Road Match	0m
	JUSTICES OF THE PEACE	Pearcey. J. E., High St Melton & Melton South	12382	Road Match	0m
	CONFECTIONERS & FRUITERERS	Radford. E. & V. G., High St Melton & Melton South	12363	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Young's Motors (Melton),High St Melton & Melton South	12388	Road Match	0m

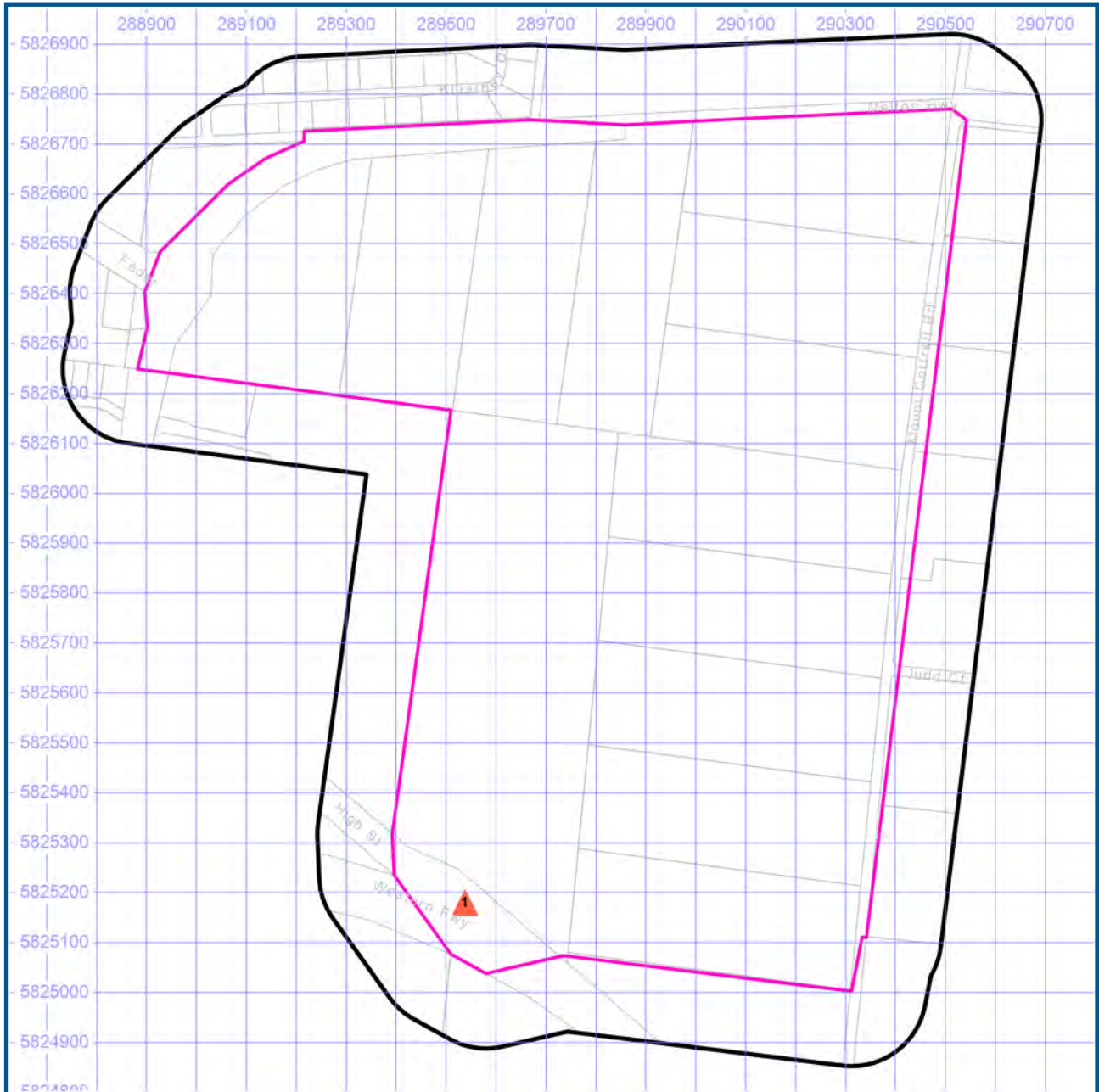
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Historical Business Directories





Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



1960-62 Business Directory Records



-  Site Boundary
-  Buffer 150m
-  Property Boundaries

-  Business directory records mapped to a specific premise
-  Business directory records mapped to a road intersection
-  Business directory records mapped to a road corridor
-  Business directory records mapped to a general area



Projected Coordinate System:
GDA94 MGA Zone 55

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Property Boundaries © State Government Victoria - Dept. of Environment, Land, Water & Planning 2019

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

1960-62 Business Directory Records Premise or Road Intersection Matches

Records from the 1960-62 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1960-62 Business Directory Records Road or Area Matches

Records from the 1960-62 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
1	BUTCHERS	Abraham, R. G., High St., Melton & Melton South.	157437	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS	Bardsley, R., High St., Melton & Melton South.	157460	Road Match	0m
	NEWSAGENTS	Bardsley, R., High St., Melton & Melton South.	157479	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Dalgleish Motors, High St., Melton & Melton South.	157475	Road Match	0m
	CAFES & TEA ROOMS	Frawley, Mrs. S. E., High St., Melton & Melton South.	157439	Road Match	0m
	CONFECTIONERS & FRUITERERS	Fuller, W. & A., High St., Melton & Melton South.	157451	Road Match	0m
	BAKERS	Jongebloed, E. R., High St., Melton & Melton South.	157432	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS	Jongebloed, E. R., High St., Melton & Melton South.	157461	Road Match	0m
	CAFES & TEA ROOMS	Masterson, A. I., High St., Melton & Melton South.	157440	Road Match	0m
	CONFECTIONERS & FRUITERERS	Masterson, High St., Melton & Melton South.	157452	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Melton Auto Port, Ballarat Rd., Melton & Melton South.	157476	Road Match	0m
	FROCK MANUFACTURERS	Melva Gowns, High St., Melton & Melton South.	157456	Road Match	0m
	JUSTICES OF THE PEACE	Pearcey, J. E., High St., Melton & Melton South.	157471	Road Match	0m
	CONFECTIONERS & FRUITERERS	Radford, E. & V. G., High St., Melton & Melton South.	157453	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Young's Motors, High St., Melton & Melton South.	157477	Road Match	0m

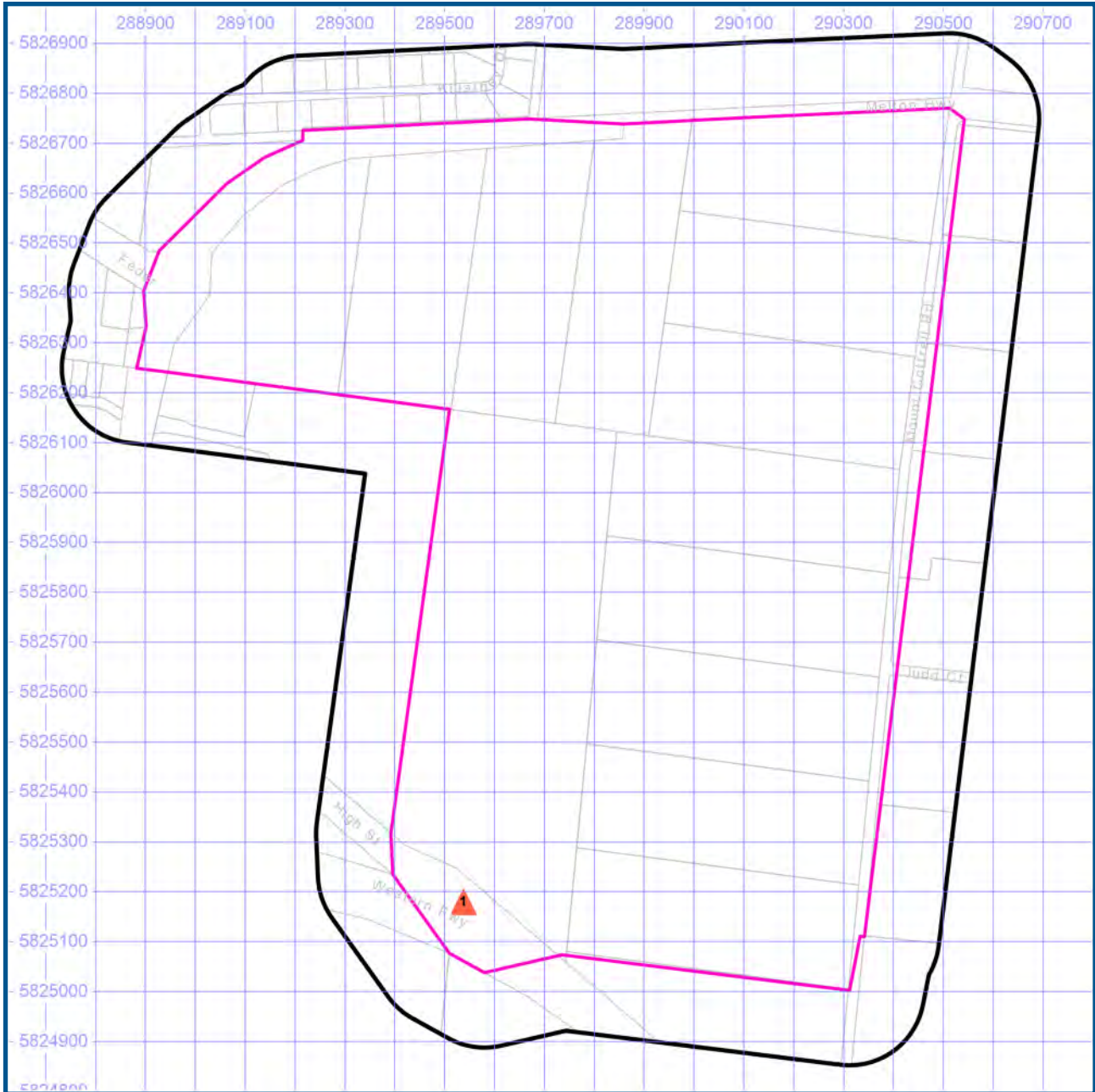
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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



1950 Business Directory Records



- | | | |
|---|--|---|
|  Site Boundary |  Business directory records mapped to a specific premise |  N |
|  Buffer 150m |  Business directory records mapped to a road intersection | |
|  Property Boundaries |  Business directory records mapped to a road corridor | |
| |  Business directory records mapped to a general area | |

Projected Coordinate System:
GDA94 MGA Zone 55

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Property Boundaries © State Government Victoria - Dept. of Environment, Land, Water & Planning 2019

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

1950 Business Directory Records Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1950 Business Directory Records Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
1	BUTCHERS	Abraham. H. G., High St. Melton & Melton South	116575	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS	Bardsley, R., High St. Melton & Melton South	116601	Road Match	0m
	NEWSAGENTS	Bardsley. R., High St. Melton & Melton South	116616	Road Match	0m
	BAKERS	Jongebloed. E. R., High St. Melton & Melton South	116570	Road Match	0m
	GROCERS & GENERAL STOREKEEPERS	Jongebloed. E. R., High St. Melton & Melton South	116602	Road Match	0m
	CONFECTIONERS & FRUITERERS	Masterson (Confectioner only)., High St. Melton & Melton South	116592	Road Match	0m
	CAFES & TEAROOMS	Masterson. A. I, (also Boarding House)., High St. Melton & Melton South	116577	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Melton Motors., Ballarat Rd. Melton & Melton South	116612	Road Match	0m
	DRESS, FROCK & GOWN MANUFACTURERS	Melval Gowns (W. G. Swingler, Propr.), High St. Melton & Melton South	116594	Road Match	0m
	CONFECTIONERS & FRUITERERS	Radford., High St. Melton & Melton South	116593	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Woodgate Motors., High St. Melton & Melton South	116613	Road Match	0m

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

1945 Business Directory Records Premise or Road Intersection Matches

Records from the 1945 Sands & McDougall's Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

Business Directory Content derived from Sands & McDougall's Directory of Victoria and Canberra ACT - Digitised by State Library Victoria

1945 Business Directory Records Road or Area Matches

Records from the 1945 Sands & McDougall's Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

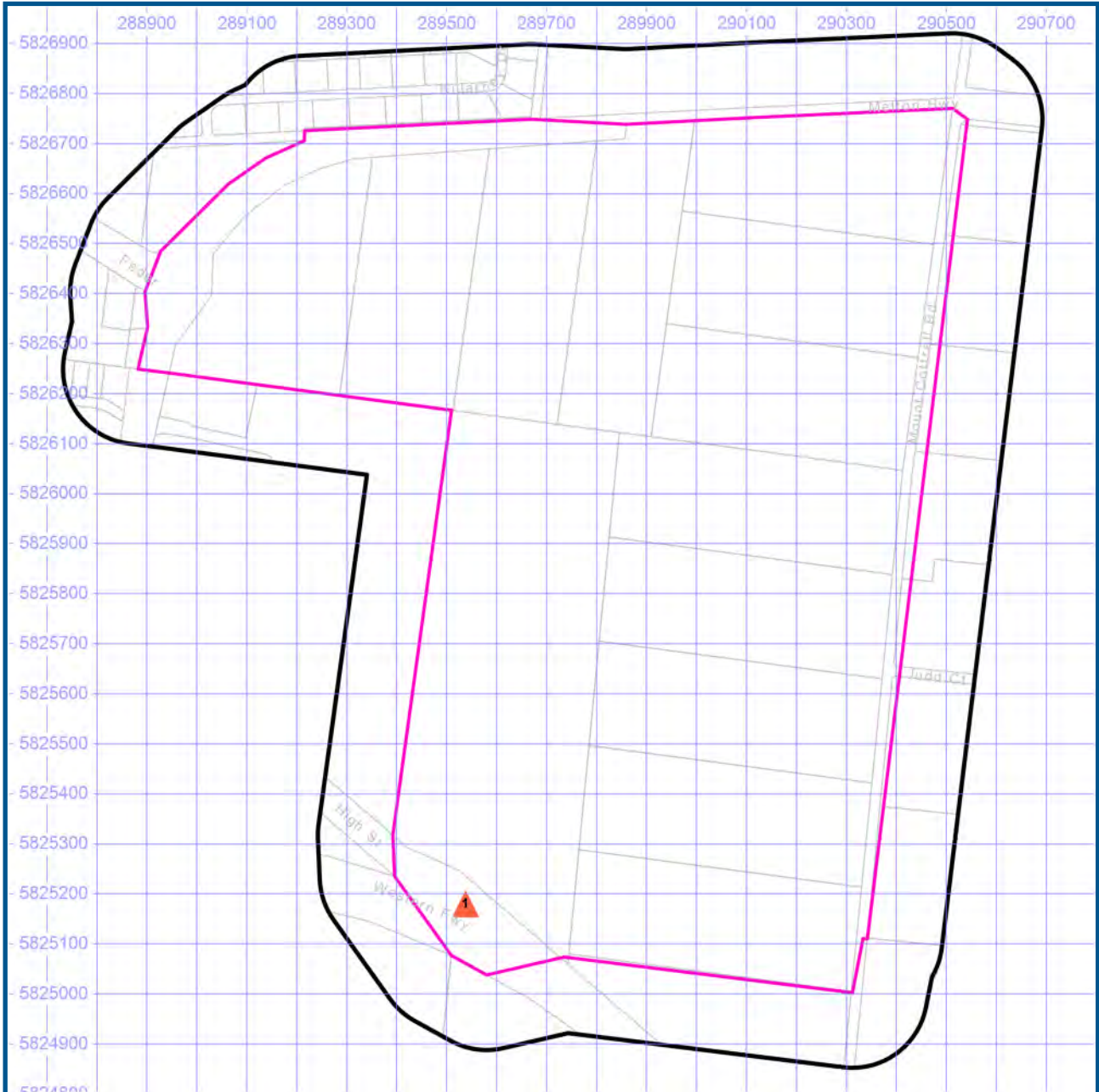
Business Directory Content derived from Sands & McDougall's Directory of Victoria and Canberra ACT - Digitised by State Library Victoria




Historical Business Directories





Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



1925 Business Directory Records



-  Site Boundary
-  Buffer 150m
-  Property Boundaries

-  Business directory records mapped to a specific premise
-  Business directory records mapped to a road intersection
-  Business directory records mapped to a road corridor
-  Business directory records mapped to a general area



Projected Coordinate System:
GDA94 MGA Zone 55

Data Sources: Data derived from Sands & McDougall's Directory - Digitised by State Library Victoria
Property Boundaries © State Government Victoria - Dept. of Environment, Land, Water & Planning 2019

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

1925 Business Directory Records Premise or Road Intersection Matches

Records from the 1925 Sands & McDougall's Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

Business Directory Content derived from Sands & McDougall's Directory of Victoria - Digitised by State Library Victoria

1925 Business Directory Records Road or Area Matches

Records from the 1925 Sands & McDougall's Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
1	SADDLERS & HARNESS MAKERS	Shelley, Frank, High-st, Melton	358209	Road Match	0m

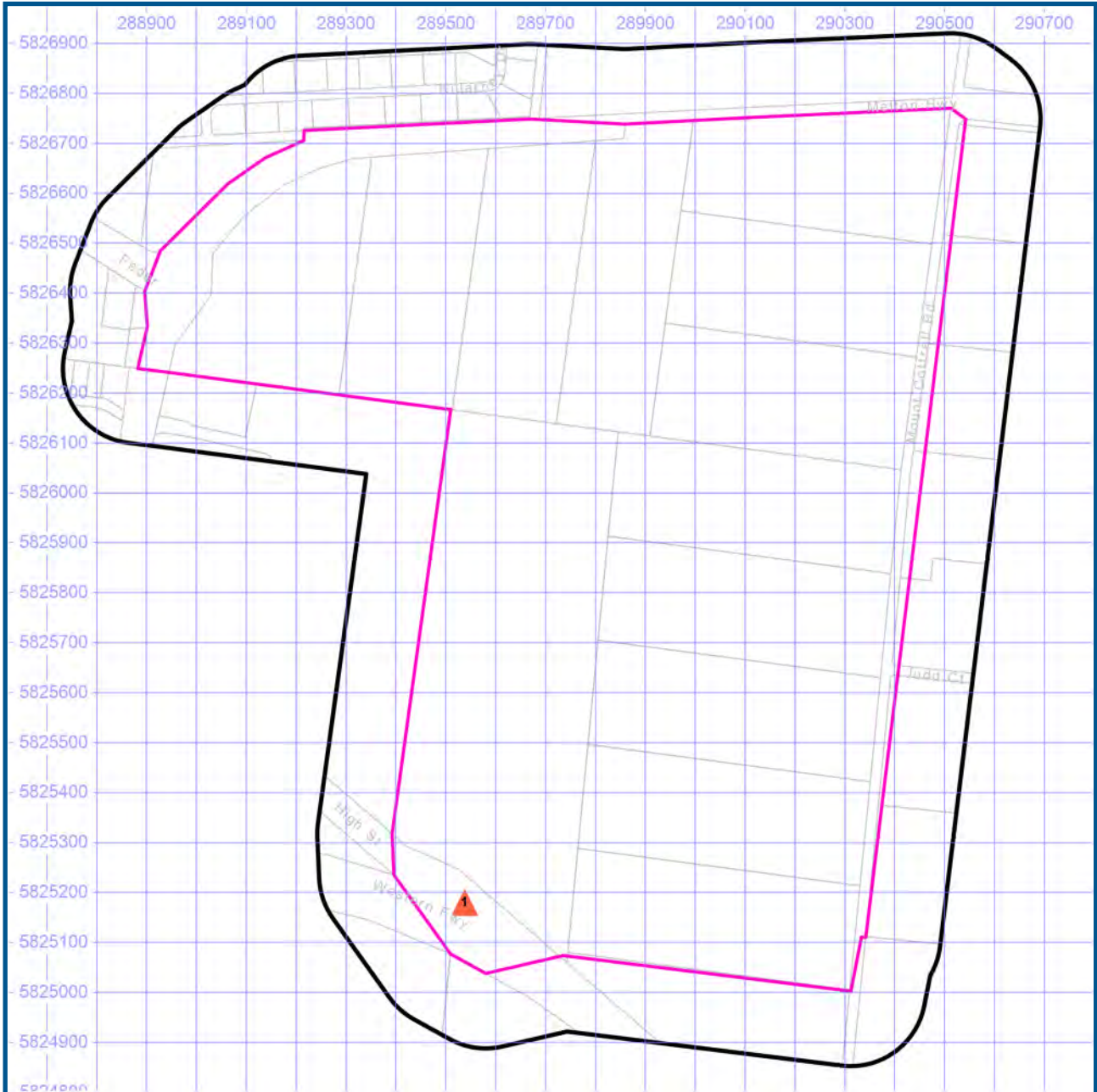
Business Directory Content derived from Sands & McDougall's Directory of Victoria - Digitised by State Library Victoria


Historical Business Directories





Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



1905 Business Directory Records



-  Site Boundary
-  Buffer 150m
-  Property Boundaries

-  Business directory records mapped to a specific premise
-  Business directory records mapped to a road intersection
-  Business directory records mapped to a road corridor
-  Business directory records mapped to a general area



Projected Coordinate System:
GDA94 MGA Zone 55

Data Sources: Data derived from Sands & McDougall's Directory - Digitised by State Library Victoria
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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

1905 Business Directory Records Premise or Road Intersection Matches

Records from the 1905 Sands & McDougall's Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

Business Directory Content derived from Sands & McDougall's Melbourne, Suburban, and Country Directory - Digitised by State Library Victoria

1905 Business Directory Records Road or Area Matches

Records from the 1905 Sands & McDougall's Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
1	GROCERS	Atley Bros, High St Melton	172659	Road Match	0m
	BOOTMAKERS AND DEALERS	Baudoin, Fred., High St Melton	167566	Road Match	0m
	BLACKSMITHS , FARRIERS , AND WHEEL- WRIGHTS	Byrnes, Jas., High St Melton	163174	Road Match	0m
	BLACKSMITHS , FARRIERS , AND WHEEL- WRIGHTS	Cameron, Alex., High St Melton	163176	Road Match	0m
	GROCERS	Chalmers Ernest ., High St Melton	172660	Road Match	0m
	BOOTMAKERS AND DEALERS	Cutter. Percival H., High St Melton	167608	Road Match	0m
	DRAPERS AND CLOTHIERS	Geddes. Alexr ., High St Melton	167436	Road Match	0m
	TOBACCONISTS	Hay, Archibald, High St Melton	173223	Road Match	0m
	BAKERS	Jongleblood. G., High St Melton	172268	Road Match	0m
	SADDLERS AND HARNESS MAKERS	Lewis, Joseph, High St Melton	166858	Road Match	0m
	GROCERS	Mcnicoll, Wm., High St Melton	172676	Road Match	0m
	SHIRE HALLS	Melton-Nicklson. J. M, Sec., High St	172746	Road Match	0m
	HOTELS	Minn - Hay, Mr J., High St Melton	172837	Road Match	0m
	HOTELS	Raglan.-Manning W T ., High St Melton	172851	Road Match	0m
	HOTELS	Royal-Graham Mrs R A ., High St Meiton	172859	Road Match	0m

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
1	EDUCATIONAL-TEACHERS OF MUSIC AND SINGING	Scotson, Miss Sarah, High St Melton	172579	Road Match	0m
	BUTCHERS	Simpson Bros, High St Melton	172422	Road Match	0m
	BLACKSMITHS , FARRIERS , AND WHEEL- WRIGHTS	Whittington, Wm., High St Melton	163182	Road Match	0m

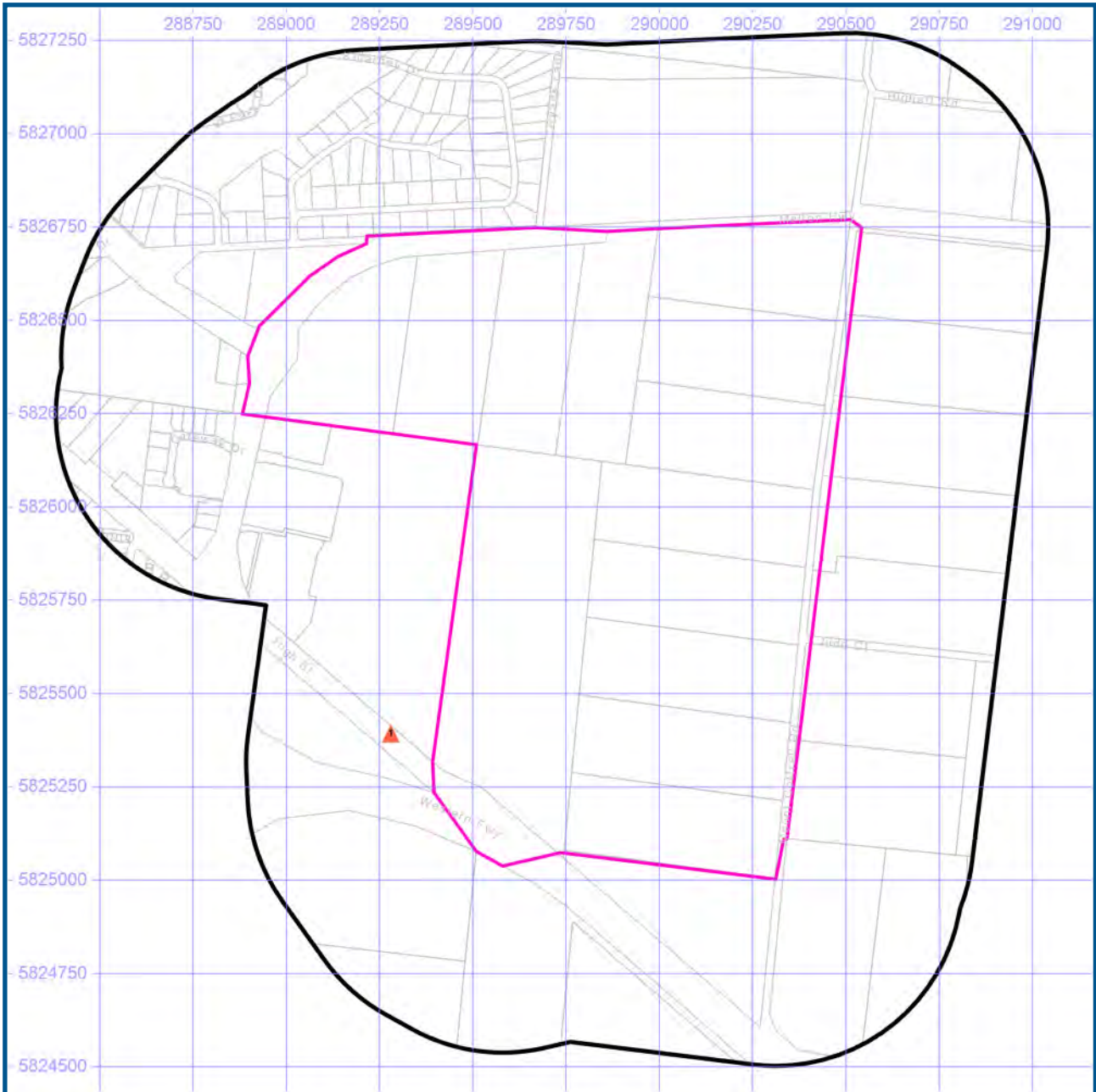
Business Directory Content derived from Sands & McDougall's Melbourne, Suburban, and Country Directory - Digitised by State Library Victoria









Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Dry Cleaners, Motor Garages & Service Stations



	Site Boundary		Business directory records mapped to a specific premise	 N
	Buffer 500m		Business directory records mapped to a road intersection	
	Property Boundaries		Business directory records mapped to a road corridor	
			Business directory records mapped to a general area	

Projected Coordinate System: GDA94 MGA Zone 55

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from Sands & McDougall's Directories and UBD Business Directories, mapped to a premise or road intersection within the dataset buffer.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer						

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

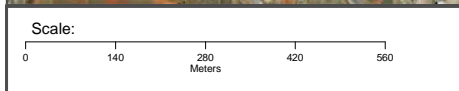
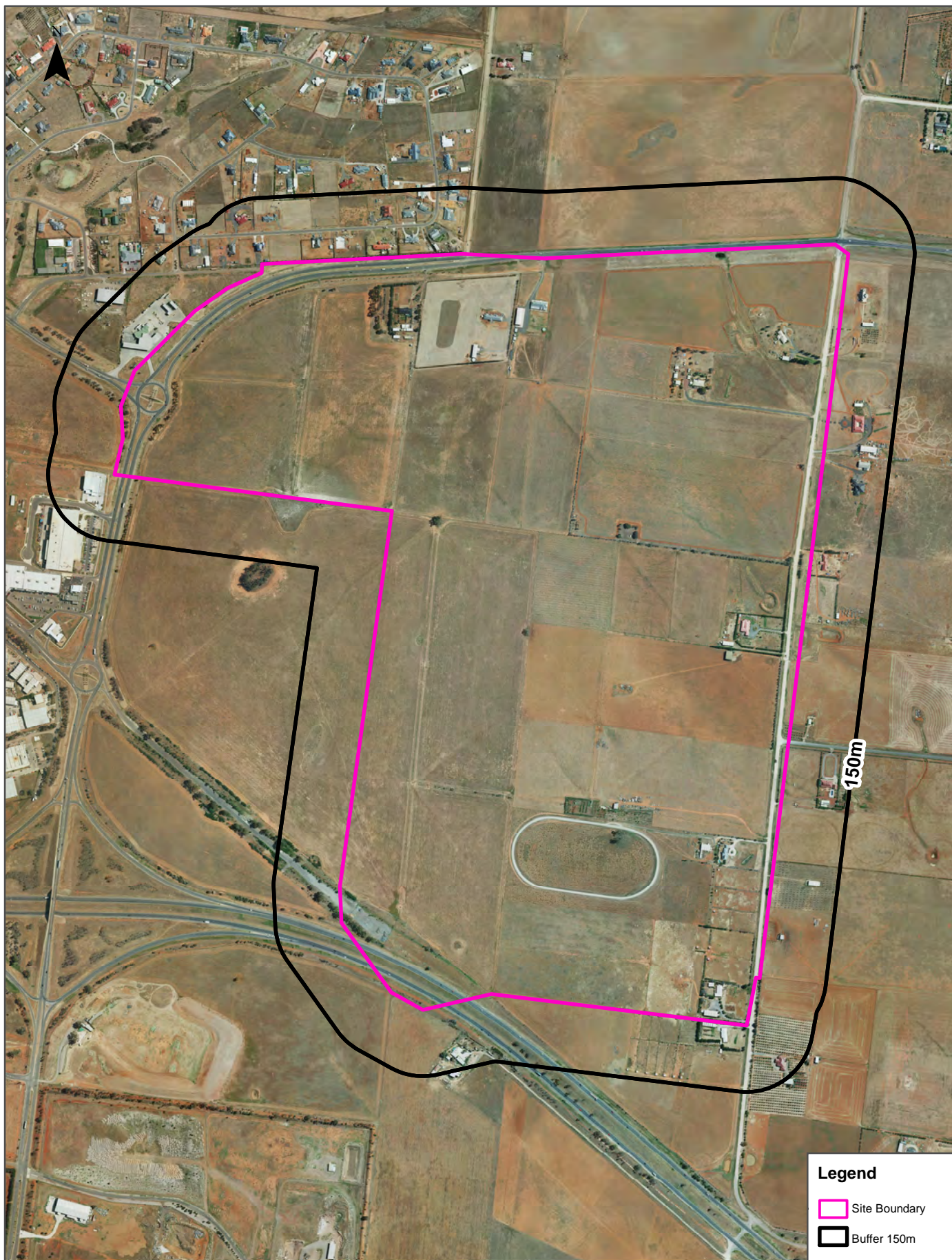
Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories and Sands & McDougall's Directories, mapped to a road or an area within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	MOTOR GARAGES & SERVICE STATIONS	Melton Auto Port., Ballarat Rd Melton & Melton South	12387	1970	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Young's Motors (Melton), High St Melton & Melton South	12388	1970	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Dagleish Motors, High St., Melton & Melton South.	157475	1960	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Melton Auto Port, Ballarat Rd., Melton & Melton South.	157476	1960	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Young's Motors, High St., Melton & Melton South.	157477	1960	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Melton Motors., Ballarat Rd. Melton & Melton South	116612	1950	Road Match	0m
	MOTOR GARAGES & SERVICE STATIONS	Woodgate Motors., High St. Melton & Melton South	116613	1950	Road Match	0m

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Aerial Imagery 2009

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



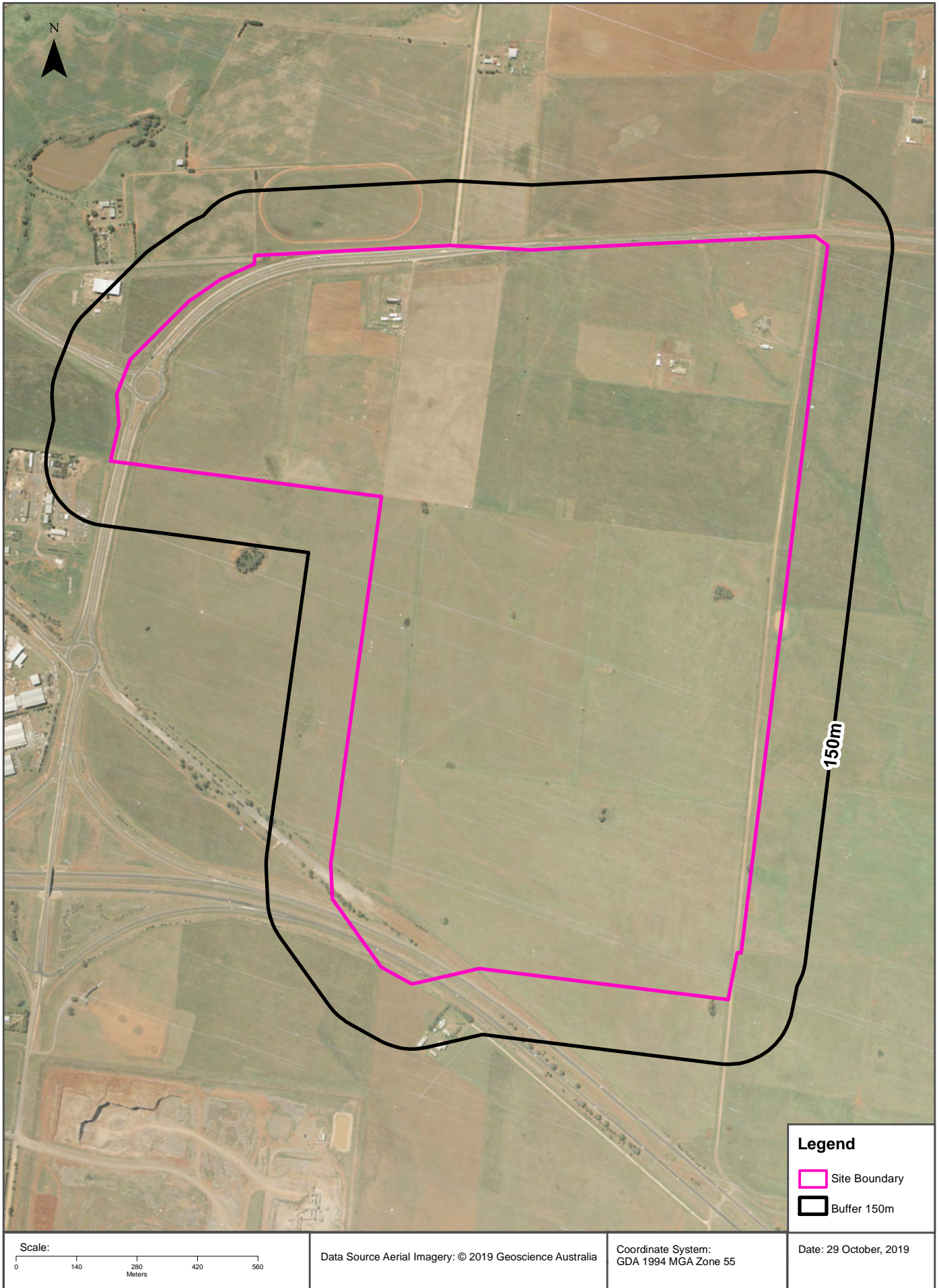
Data Sources Aerial Imagery: © Aerometrex Pty Ltd

Coordinate System:
GDA 1994 MGA Zone 55

Date: 29 October 2019

Aerial Imagery 1990

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

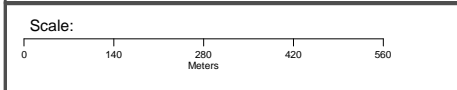


Aerial Imagery 1985

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend	
	Site Boundary
	Buffer 150m



Data Source Aerial Imagery: © 2019 Geoscience Australia

Coordinate System:
GDA 1994 MGA Zone 55

Date: 29 October, 2019

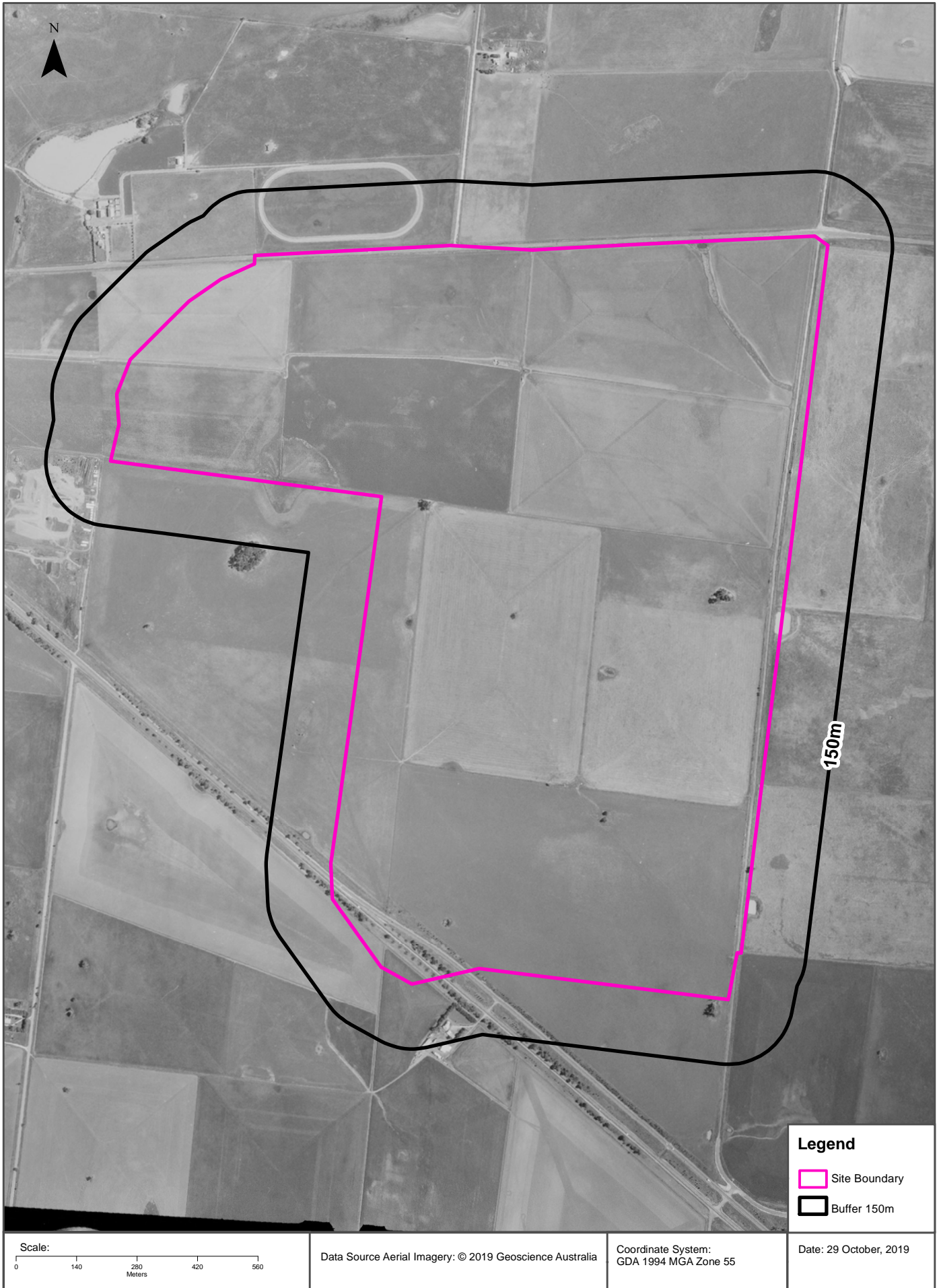
Aerial Imagery 1985

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



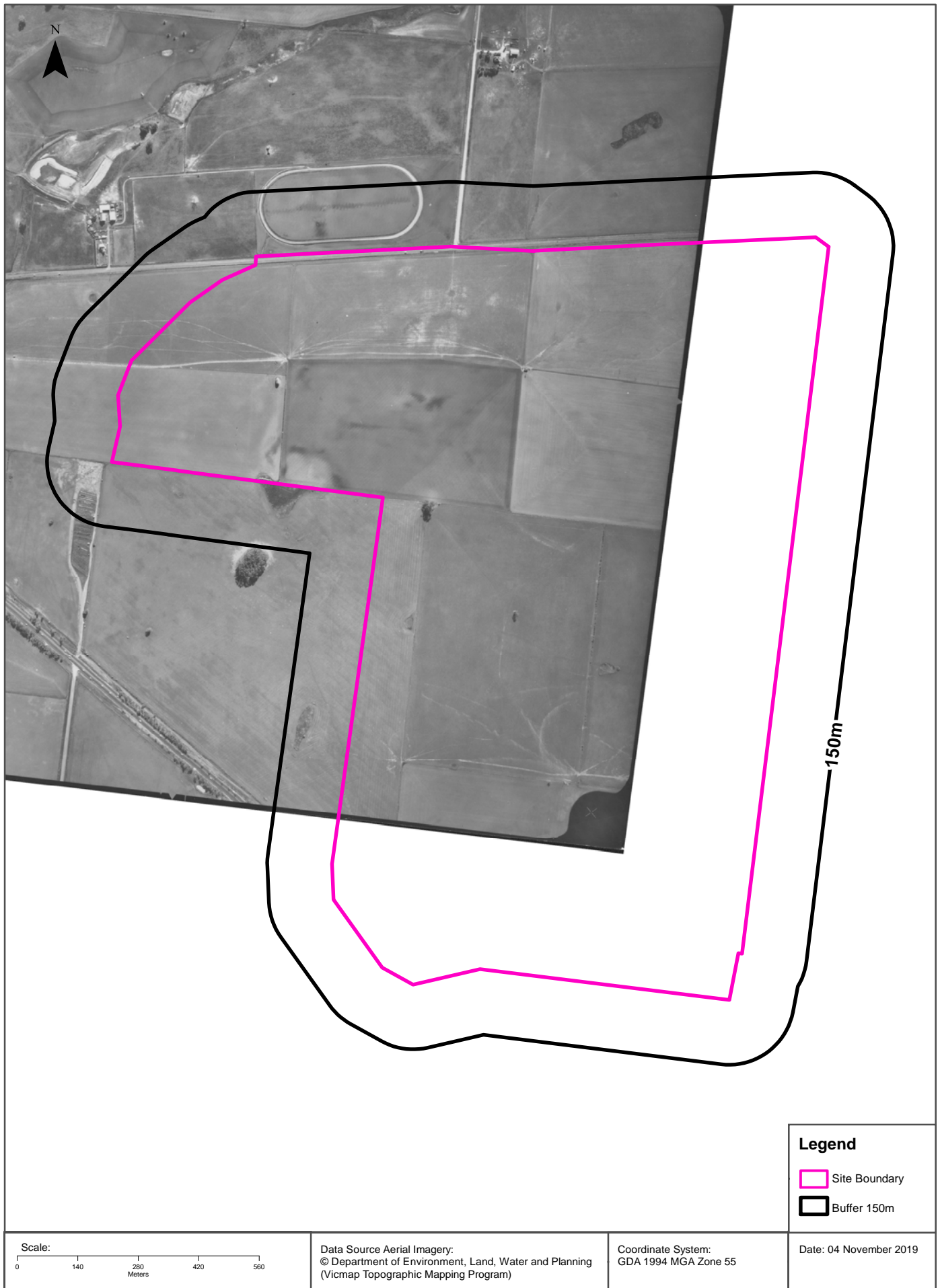
Aerial Imagery 1974

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Aerial Imagery 1968

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

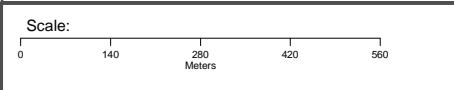


Aerial Imagery 1968

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend	
	Site Boundary
	Buffer 150m



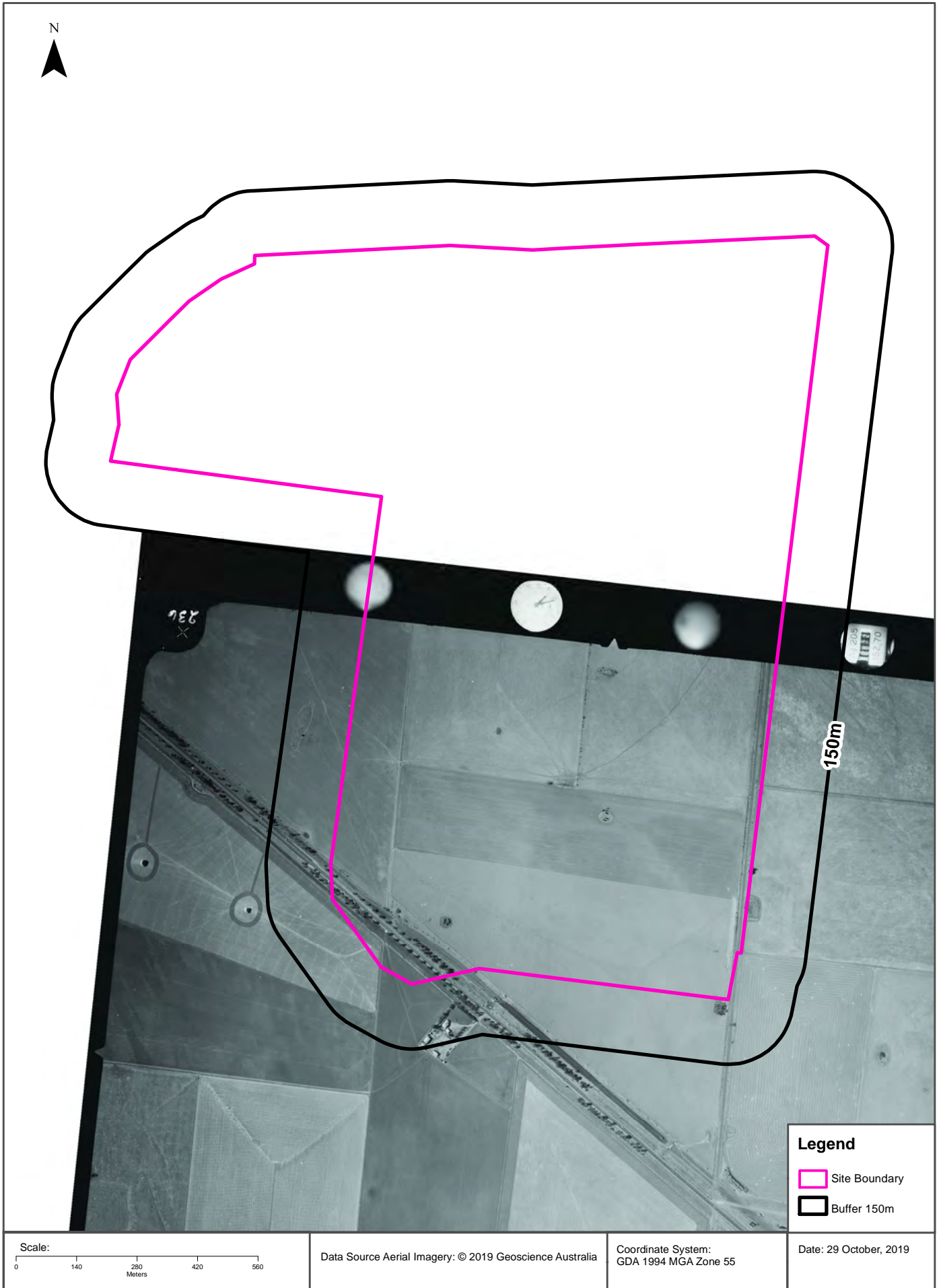
Data Source Aerial Imagery:
© Department of Environment, Land, Water and Planning
(Vicmap Topographic Mapping Program)

Coordinate System:
GDA 1994 MGA Zone 55

Date: 04 November 2019

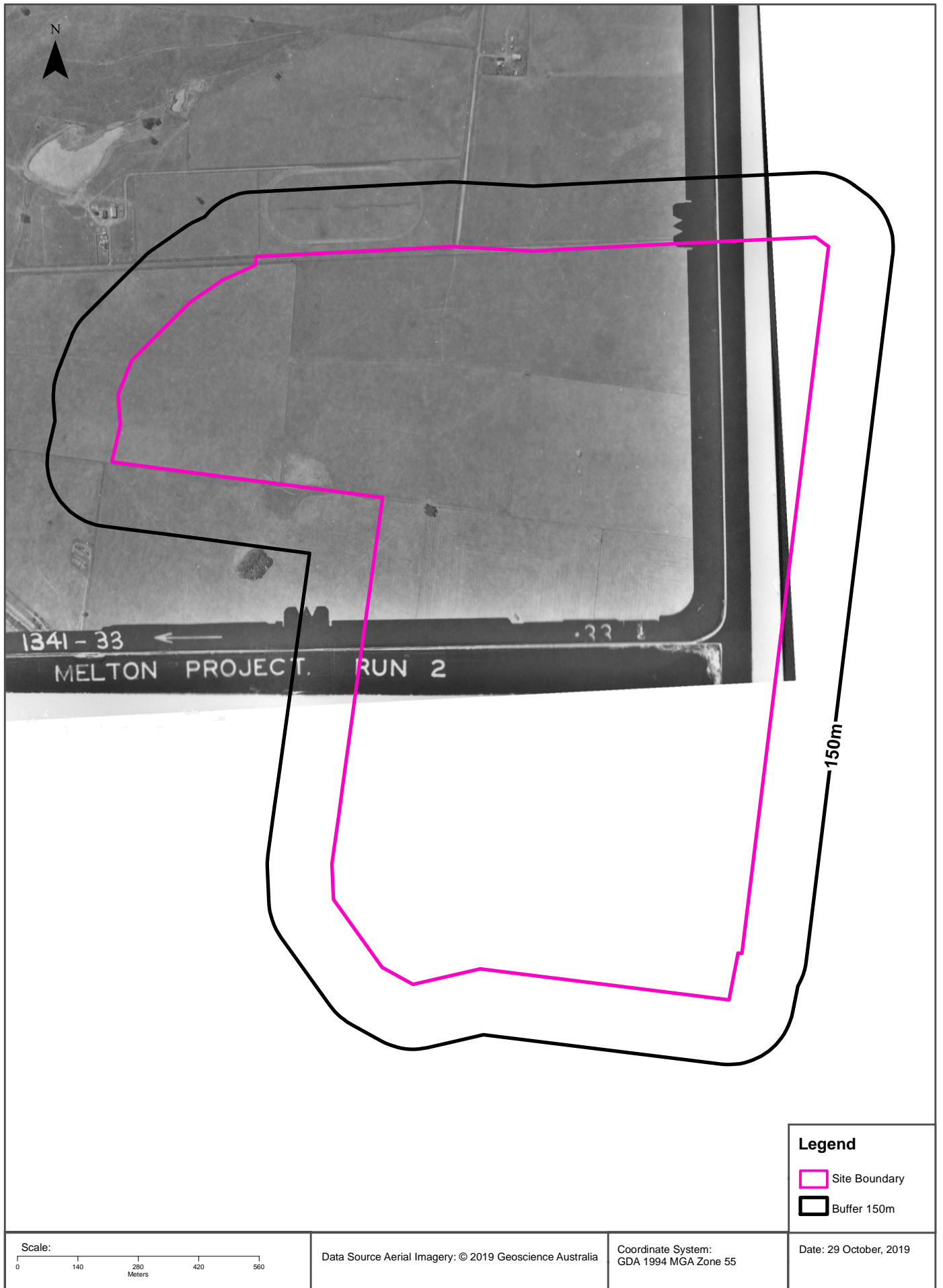
Aerial Imagery 1968

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



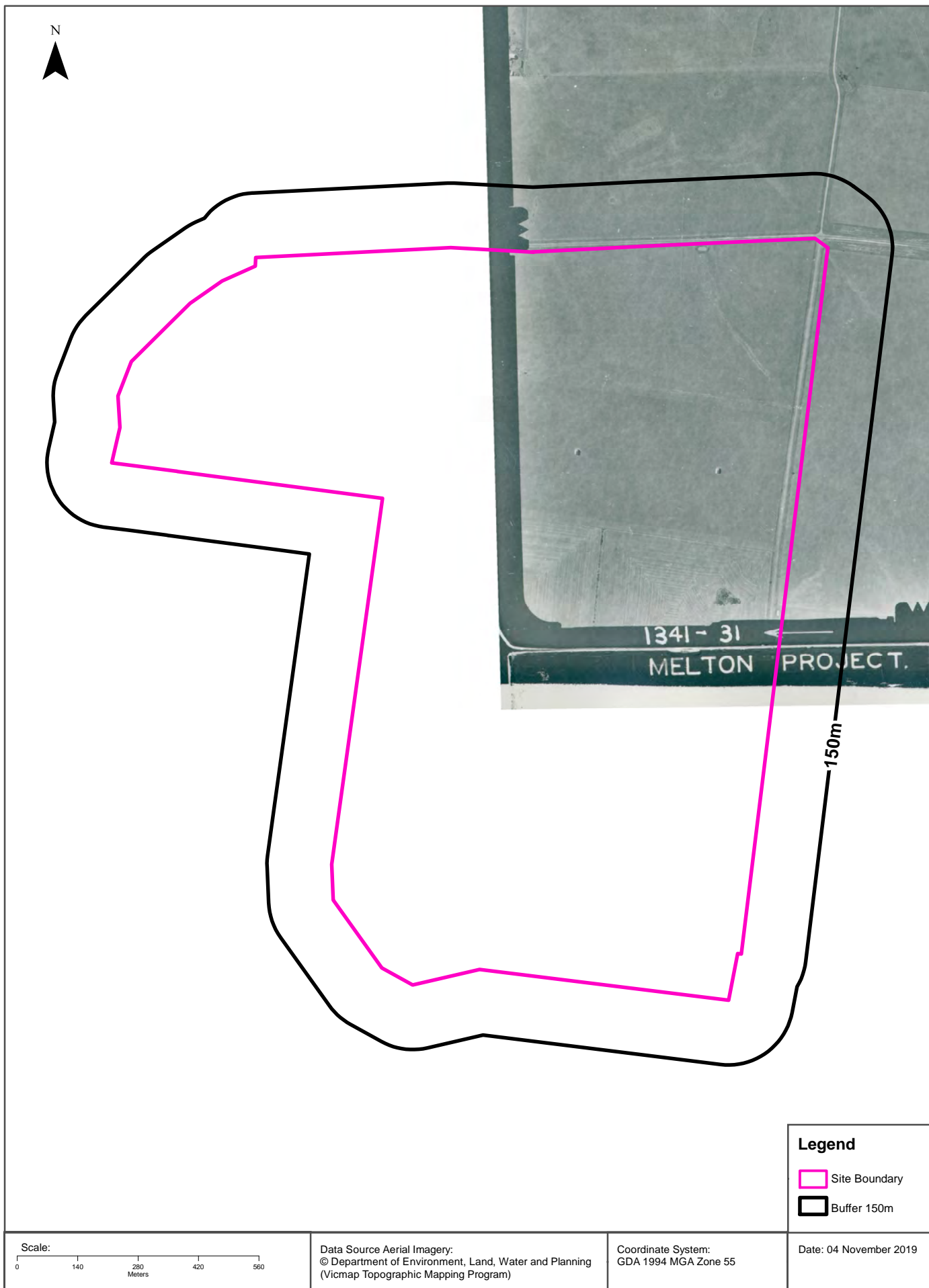
Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



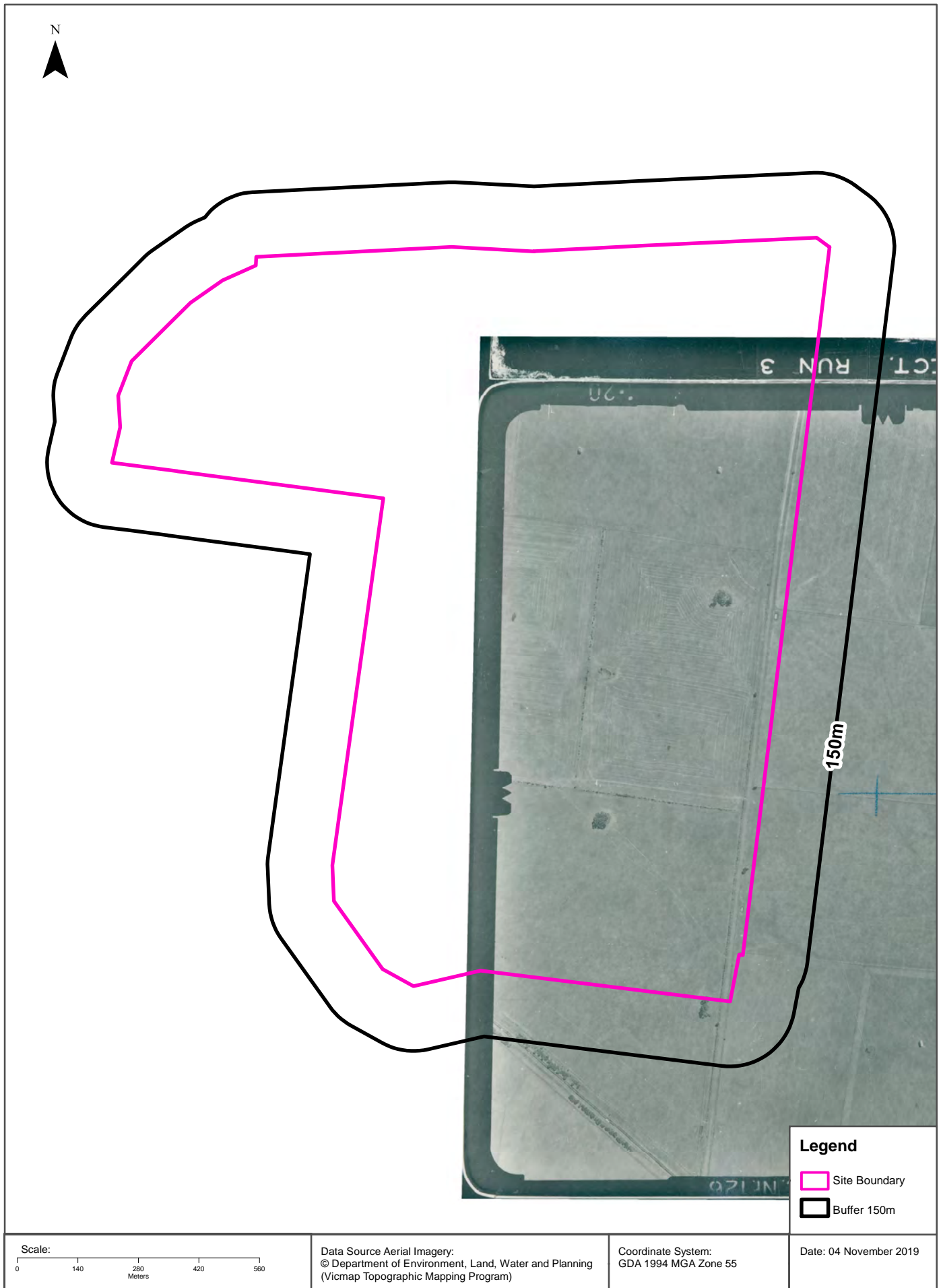
Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Scale:
0 140 280 420 560
Meters

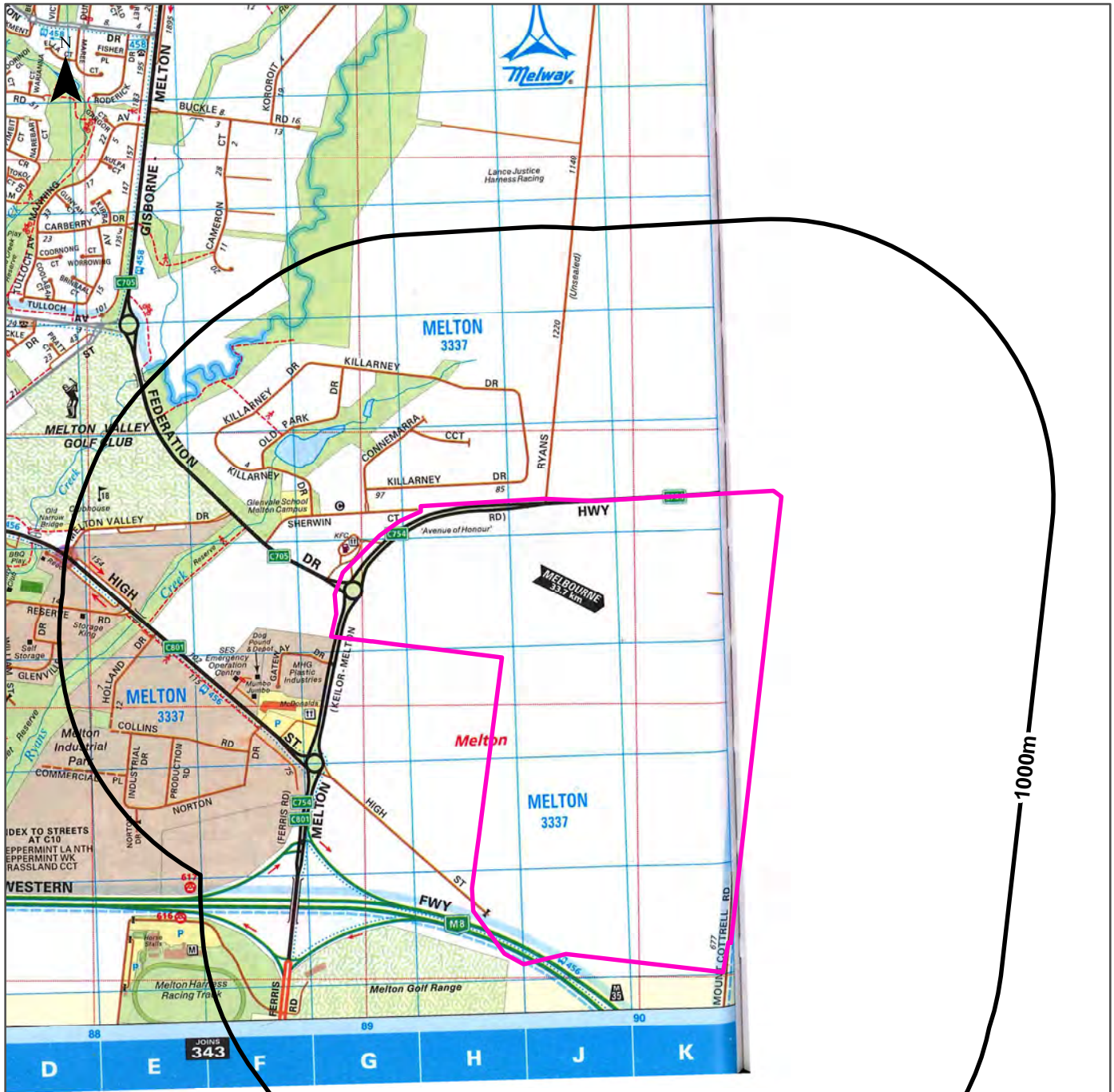
Data Source Aerial Imagery:
© Department of Environment, Land, Water and Planning
(Vicmap Topographic Mapping Program)

Coordinate System:
GDA 1994 MGA Zone 55

Date: 04 November 2019

Historical Map 2009

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend

- Site Boundary
- Buffer 1000m

<p>Scale:</p>

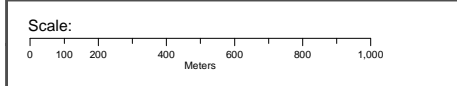
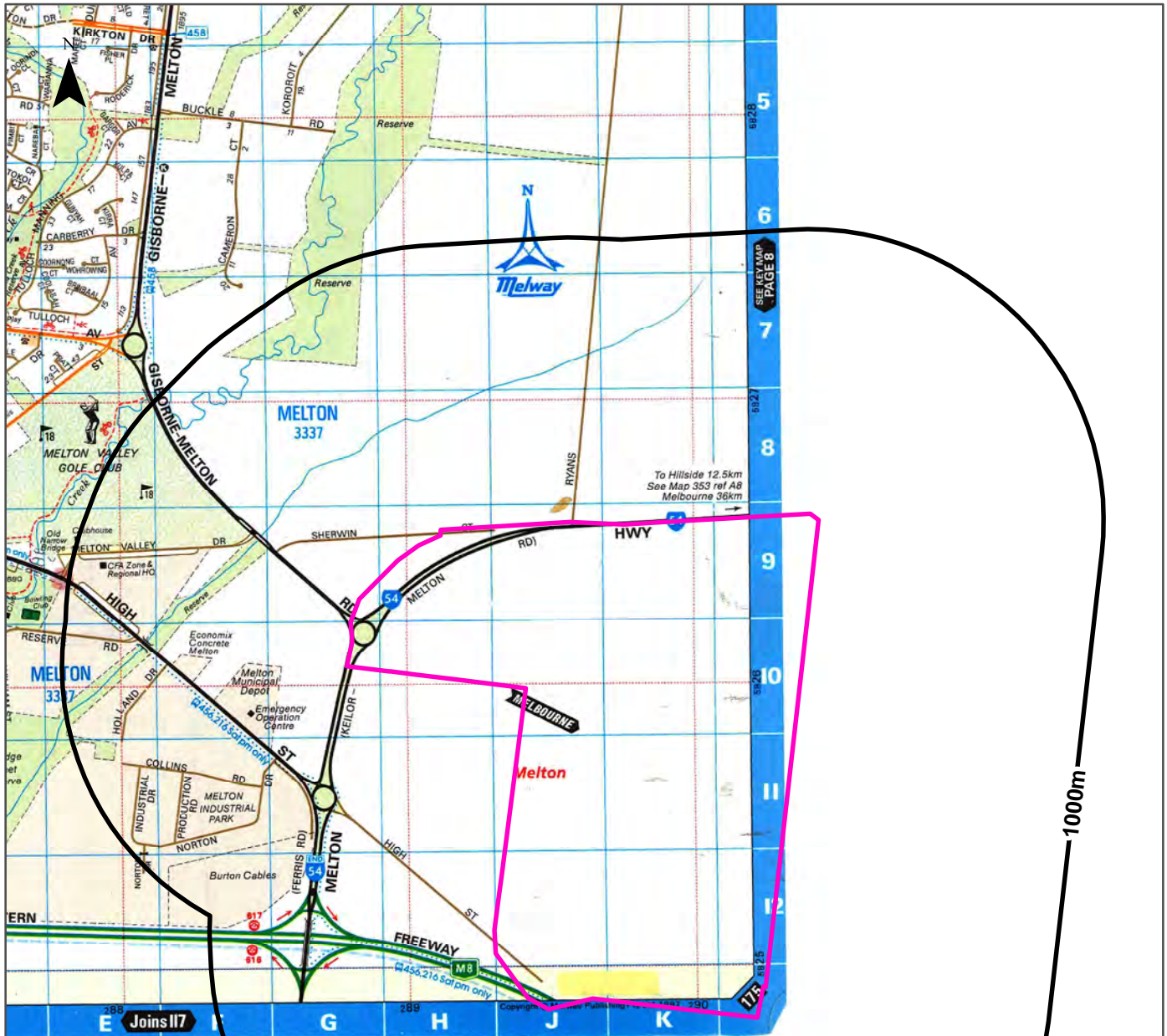
<p>Data Sources: Maps reproduced from 2009, Edition 36 of the Melway Street Directory</p>

<p>Coordinate System: GDA 1994 MGA Zone 55</p>
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<p>Date: 31 October 2019</p>

Historical Map 1998

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



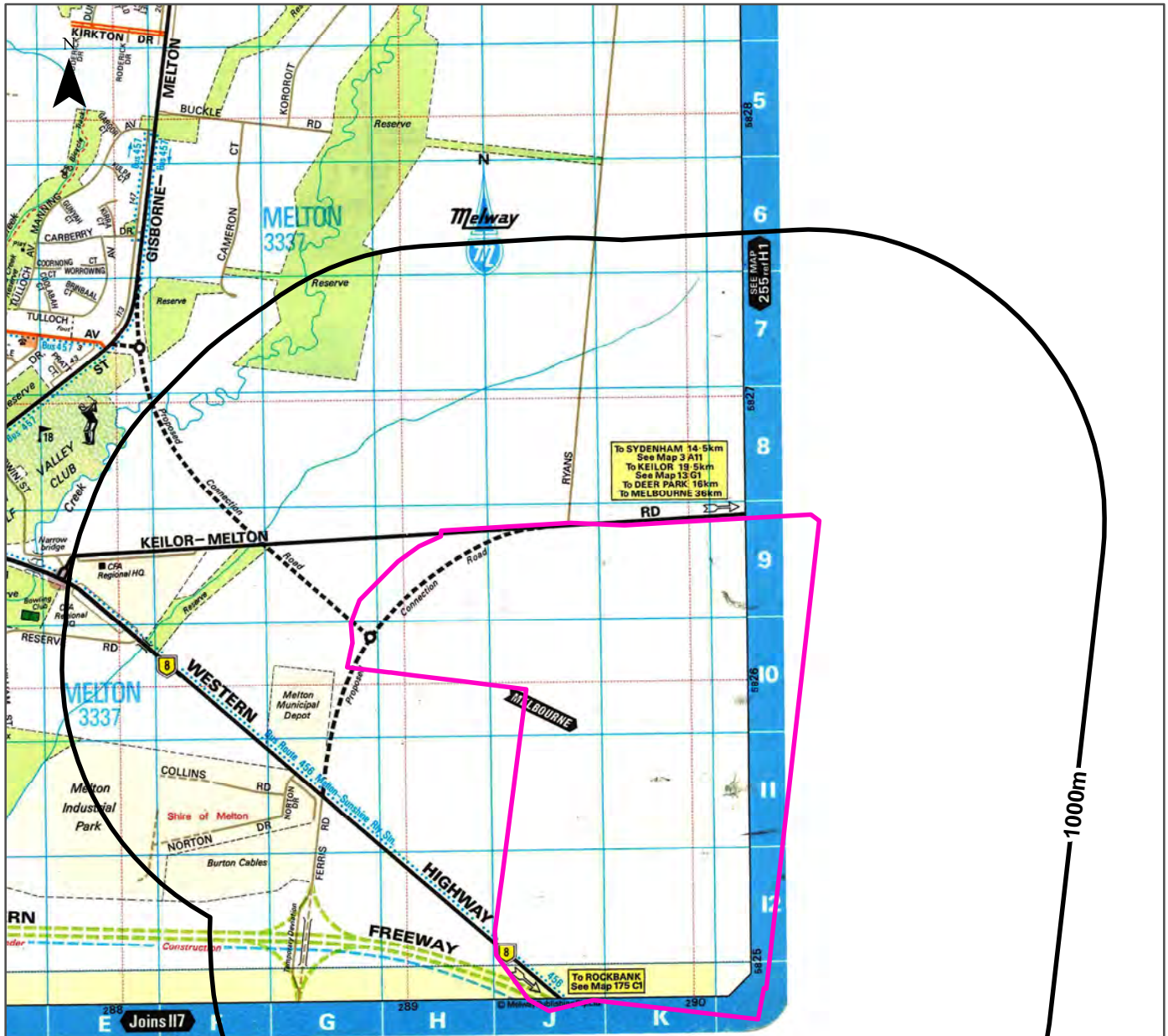
Data Sources: Maps reproduced from 1998, Edition 26 of the Melway Street Directory

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

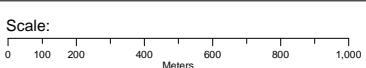
Historical Map 1986

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



1000m

- Legend**
- Site Boundary
 - Buffer 1000m



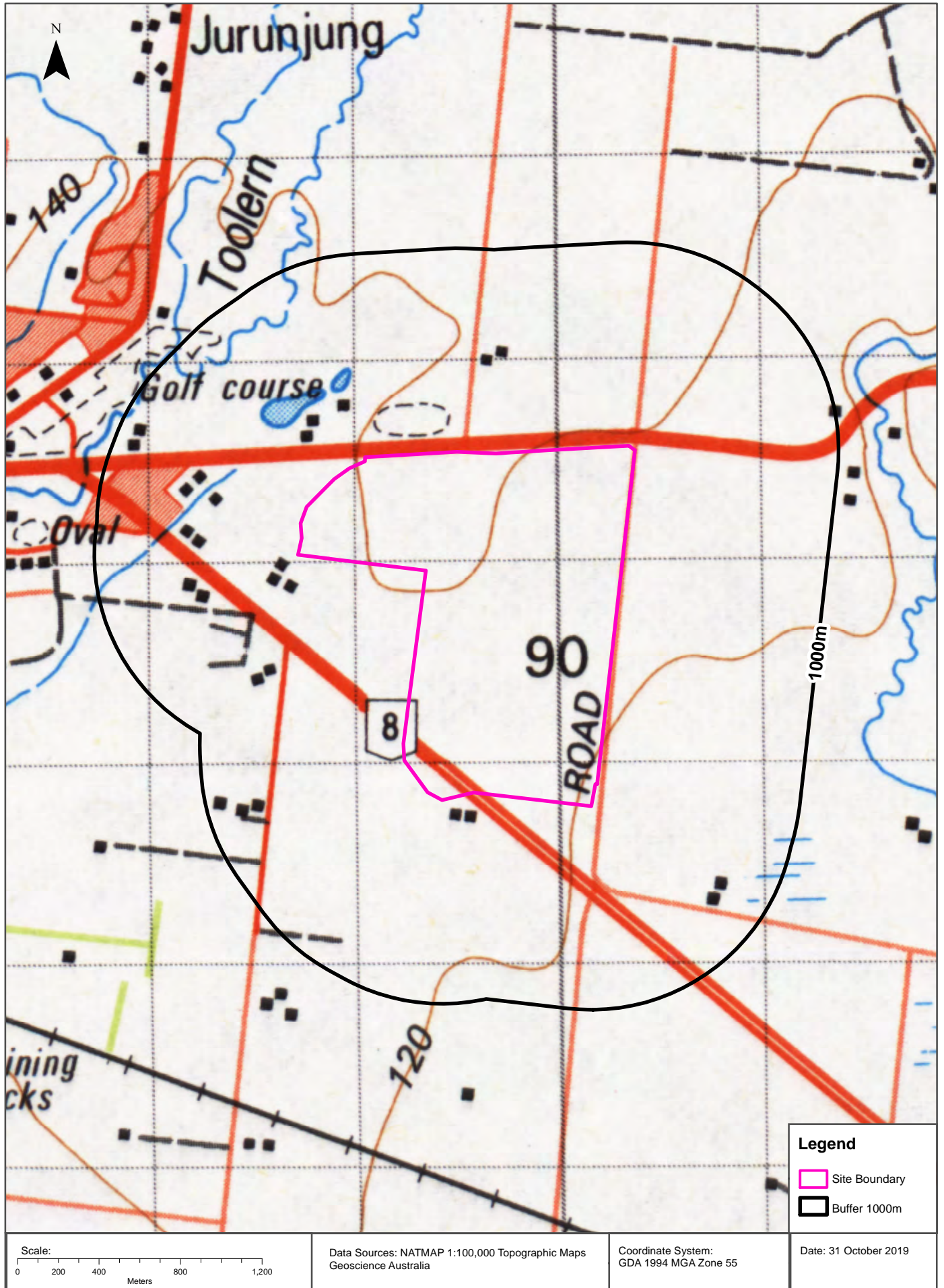
Data Sources: Maps reproduced from 1986, Edition 16 of the Melway Street Directory

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

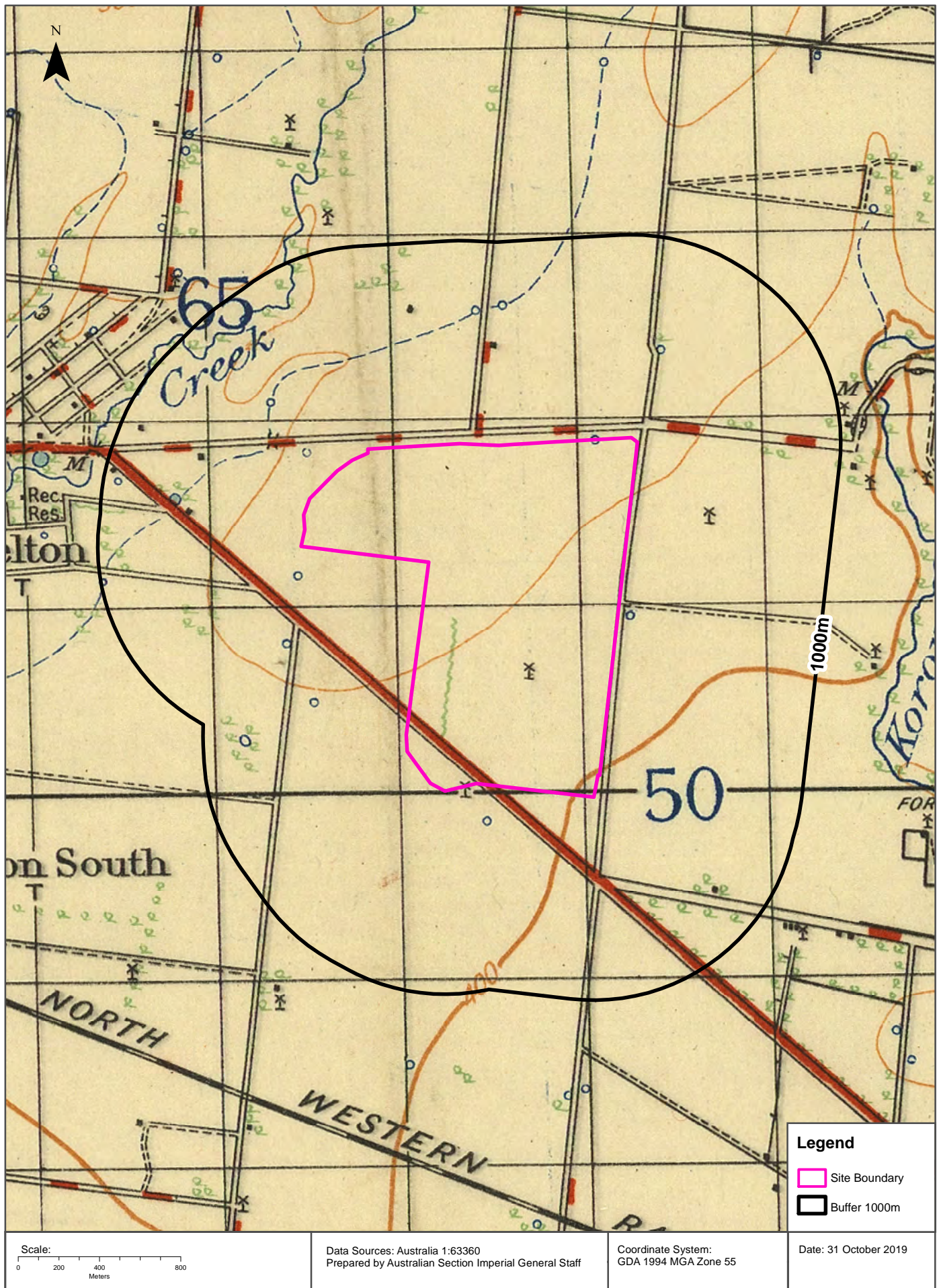
Historical Map 1982

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



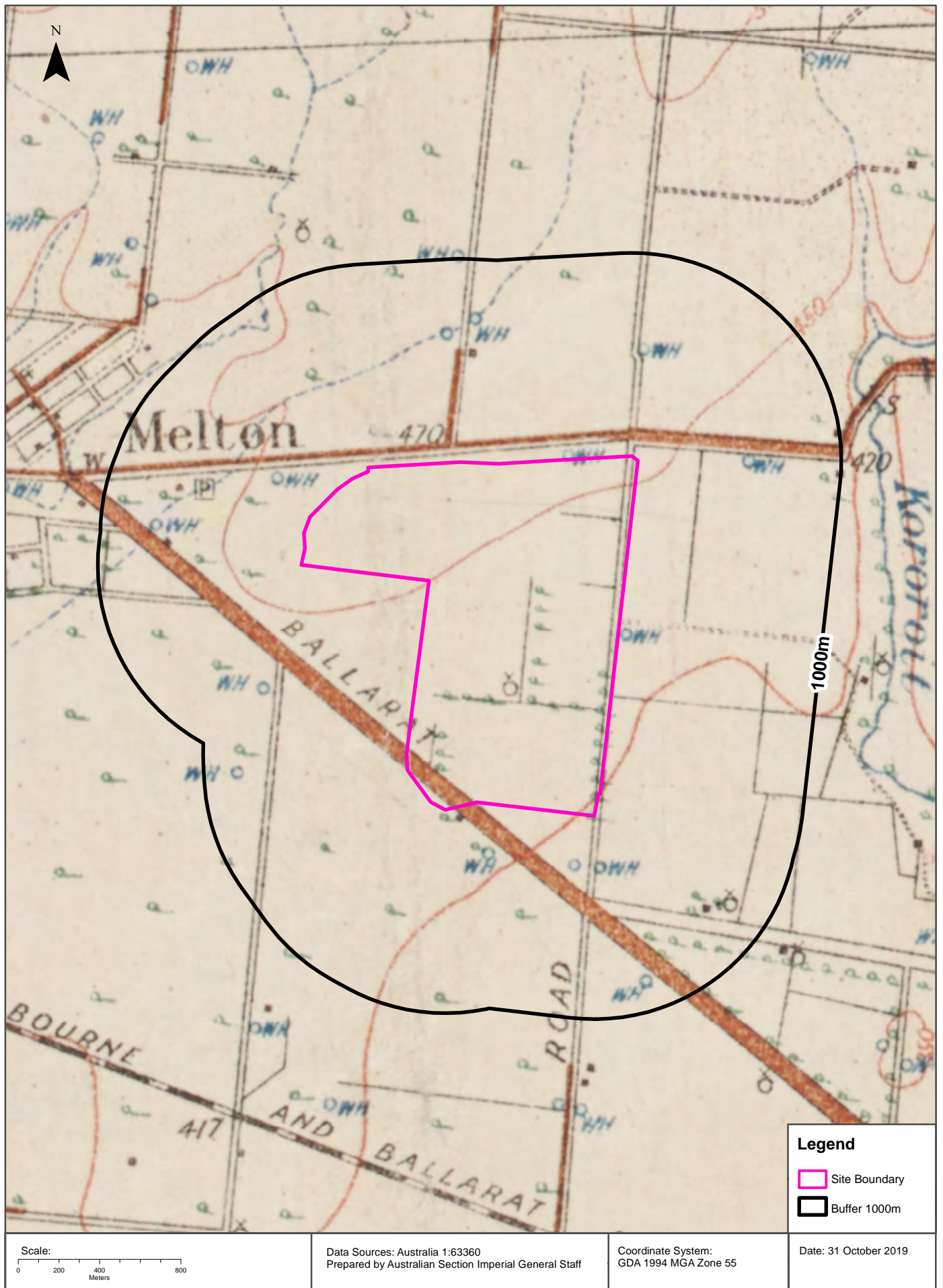
Historical Map c.1938

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



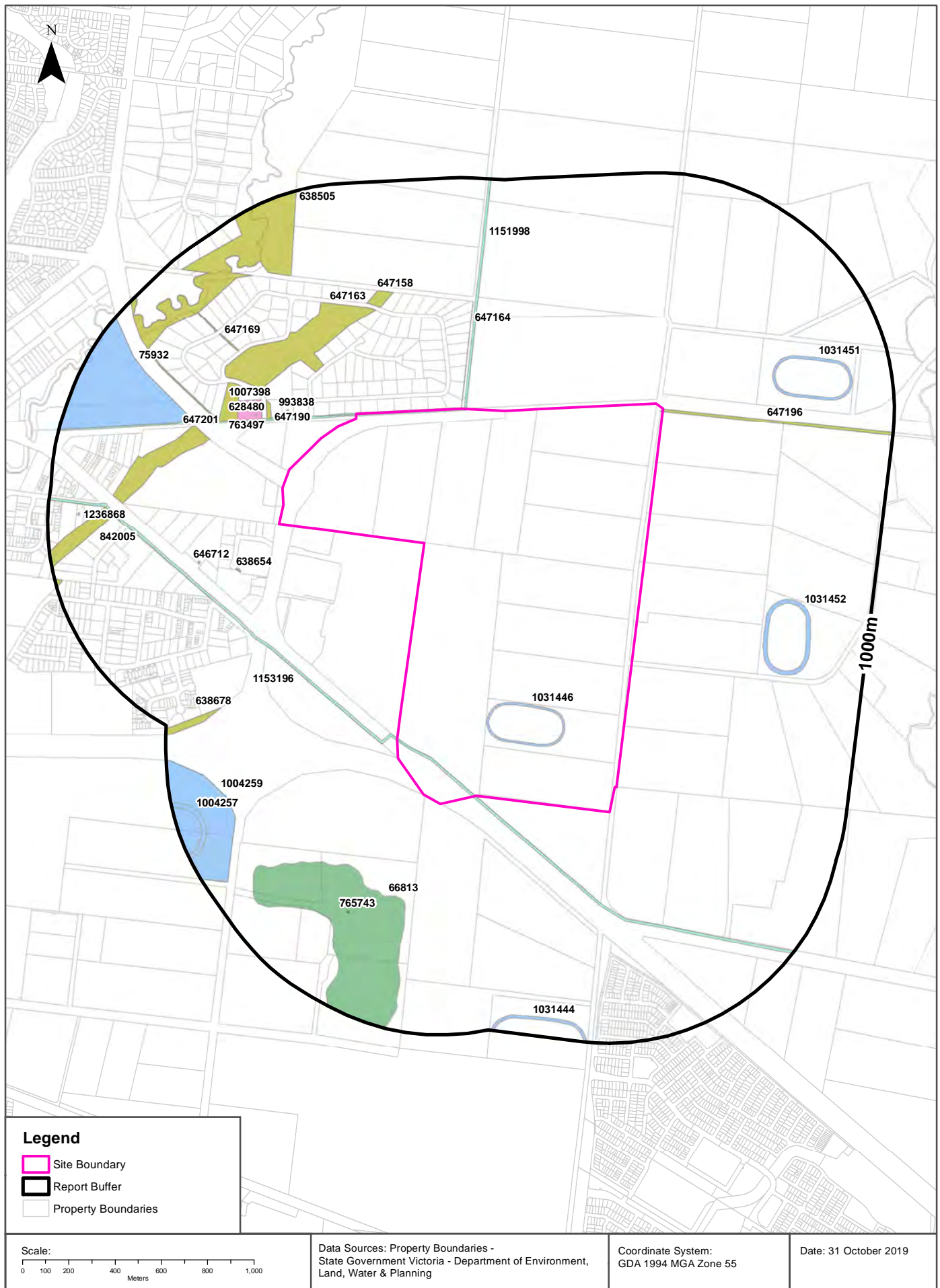
Historical Map c.1916

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Features of Interest

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Features of Interest

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Features of Interest

Features of Interest within the dataset buffer:

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
647196	reserve	park		0m	Onsite
1031446	sport facility	training track		0m	Onsite
1151998	power line	power sub transmission		0m	Onsite
1153196	power line	power sub transmission		0m	Onsite
647164	reserve	park		0m	North West
993838	care facility	child care	Paisley Park Early Learning Centre Melton	183m	North West
647190	reserve	park		214m	North West
1007398	education centre	education complex		241m	North West
647163	reserve	park		253m	North West
638654	reserve	park		260m	West
628480	education centre	primary/secondary school	Glenvale School - Melton Centre	264m	North West
763497	education centre	primary/secondary school	Glenvale School	264m	North
638505	reserve	park		311m	North West
647201	reserve	park		370m	West
646712	emergency facility	ses unit	Vicses Melton	379m	West
66813	excavation site	quarry		438m	South West
647158	reserve	park		456m	North West
1031451	sport facility	training track		489m	North East
75932	sport facility	golf course	Melton Valley Golf Club	492m	North West
647169	reserve	park		520m	North West
1031452	sport facility	training track		548m	East
765743	dumping ground	transfer station	Melton Recycling Centre	598m	South West
842005	reserve	gardens	Melton Botanic Garden	711m	West
1004259	sport facility	racecourse	Melton Harness Racing And Entertainment Complex	747m	South West
638678	reserve	park		773m	South West
1236868	care facility	child care	Nino Early Learning Adventures - Melton	863m	West
1004257	sport facility	harness racetrack		880m	South West
1031444	sport facility	training track		916m	South

Features of Interest Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Depth to Watertable

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Hydrogeology & Groundwater

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Fractured or fissured, extensive aquifers of low to moderate productivity	0m	Onsite

Hydrogeology Map of Australia: Commonwealth of Australia (Geoscience Australia)
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Groundwater Salinity

On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
1,000 - 3,500 mg/l	100

Depth to Watertable

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
5 to 10 metres	91
10 to 20 metres	8

Surface Elevation

Approximate on-site Surface Elevation:

Surface Elevation
122 AHDm to 143 AHDm

Basement Elevation

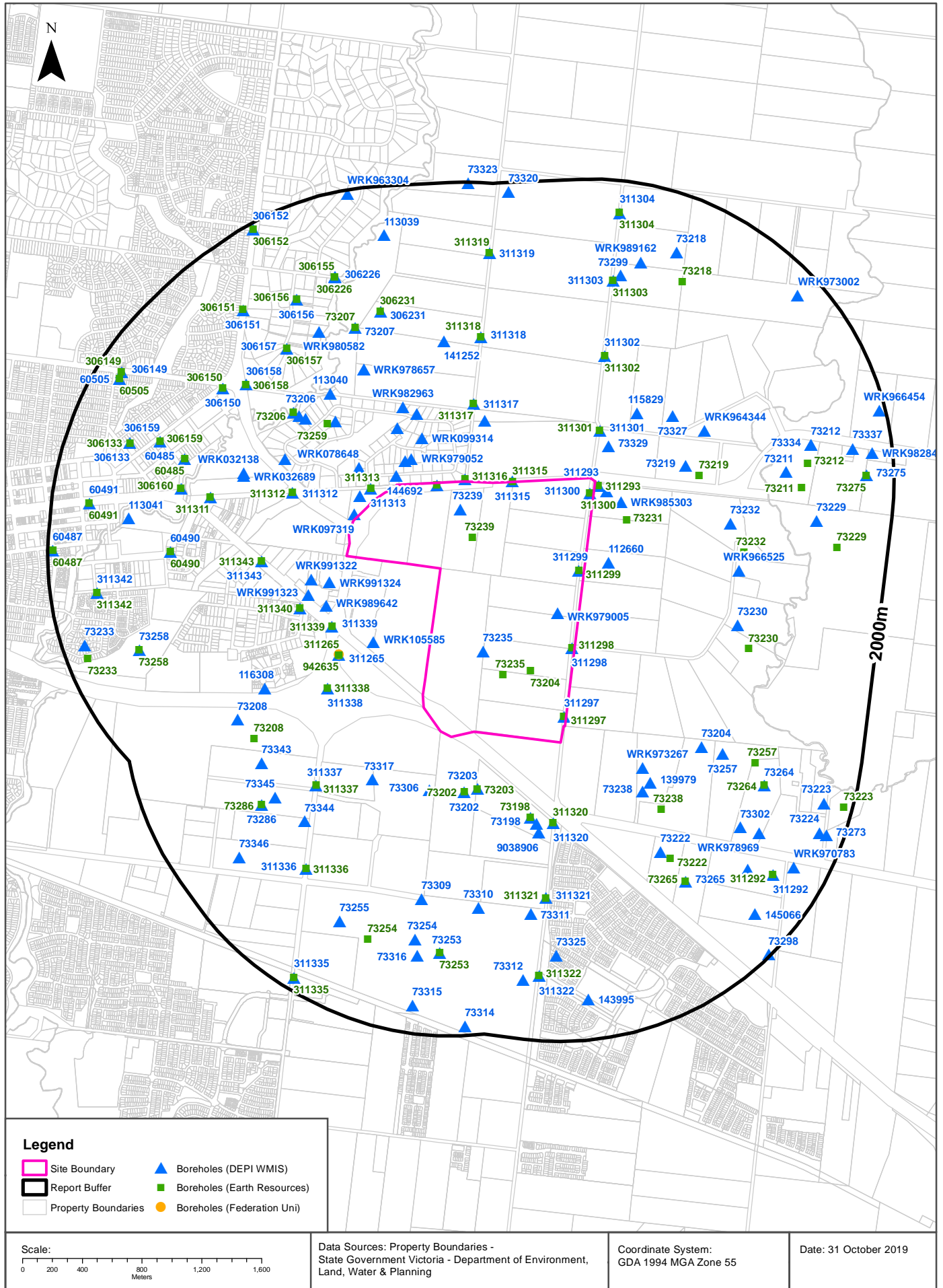
Approximate on-site Basement Elevation:

Basement Elevation - Basement Rocks comprise Lower Palaeozoic basement rocks that form the highlands and the crystalline basement; and Mesozoic rocks of the Otway and Gippsland basins both outcropping and subsurface
43 AHDm to 63 AHDm

Groundwater Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Groundwater Boreholes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Groundwater Boreholes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Boreholes (DEPI WMIS)

Boreholes from the Department of Environment and Primary Industries' Water Measurement Information System, within the dataset buffer:

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK979005	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-02-28	0	Onsite
311297	Non Groundwater					1983-03-03	0	Onsite
311315	Non Groundwater					1983-04-06	0	Onsite
311299	Non Groundwater					1983-03-03	0	Onsite
311298	Non Groundwater					1983-03-03	0	Onsite
311300	Non Groundwater					1983-03-04	0	Onsite
311314	Non Groundwater					1983-04-06	0	Onsite
73235	Stock					1970-12-31	0	Onsite
73239	Stock					1970-12-31	0	Onsite
311316	Non Groundwater					1983-04-06	16	North
311293	Non Groundwater					1972-08-28	25	North East
WRK097319	Investigation	0.00m-0.20m CONcrete 0.20m-4.00m CLAY 4.00m-20.50m BASALT	0.00m-16.50m INNER LINING - CASING = Pvc 16.50m-20.50m INNER LINING - SCREEN = Pvc 0.00m-15.00m OUTER LINING - GRAVEL = Cement 15.00m-16.00m OUTER LINING - GRAVEL = Bentonite 16.00m-20.50m OUTER LINING - GRAVEL = Gravel			2016-12-08	27	North West
144692	Domestic & Stock	0.00m-1.00m OVERBURDEN 1.00m-4.50m GREY CLAY 4.50m-22.00m BASALT 22.00m-24.00m SCORIA 24.00m-30.00m BASALT 30.00m-49.00m BLUESTONE 49.00m-52.50m BROWN CLAY 52.50m-55.00m SAND 55.00m-66.00m GRAVEL AND PEBBLES				2001-05-05	57	North West
311313	Non Groundwater					1983-03-31	77	North West
WRK097316	Investigation	0.00m-0.20m CONcrete 0.20m-4.00m CLAY 4.00m-20.00m BASALT	0.00m-16.00m INNER LINING - CASING = Pvc 16.00m-20.00m INNER LINING - SCREEN = Pvc 0.00m-14.00m OUTER LINING - GRAVEL = Cement 14.00m-15.50m OUTER LINING - GRAVEL = Bentonite 15.50m-16.00m OUTER LINING - GRAVEL = Gravel			2016-12-08	86	North West
73231	Stock					1970-12-31	87	North East
WRK980894	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-04-30	153	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
112660	Stock	0.00m-5.00m OVERBURDEN 5.00m-10.10m CLAY 10.10m-12.30m BASALT (SOFT) 12.30m-15.20m BASALT (HARD) 15.20m-18.20m BASALT (SOFT) 18.20m-21.30m BLUESTONE	3.00m-15.20m INNER LINING - CASING = Pvc Class 9 15.20m-18.20m INNER LINING - SCREEN = Pvc Class 9 18.20m-21.30m INNER LINING - CASING = Pvc Class 9		15.20m-18.20m Basalt	1991-12-14	155	East
WRK979052	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-02-27	169	North West
WRK985303							188	North East
WRK991324							210	West
WRK078648	Domestic & Stock	0.00m-0.50m SOIL 0.50m-3.50m CLAY 3.50m-19.00m BASALT 19.00m-22.00m CLAY 22.00m-38.00m BASALT	0.50m-26.00m INNER LINING - CASING = Pvc 26.00m-38.00m INNER LINING - SLOT = Pvc 0.00m-5.00m OUTER LINING - GRAVEL = Cement			2014-03-02	236	North West
73329	Domestic	0.00m-1.00m TOPSOIL 1.00m-4.00m CLAY 4.00m-17.00m BASALT 17.00m-29.00m CLAY 29.00m-63.00m DECOMPOSED BASALT 63.00m-64.00m CLAY	-0.30m-30.00m INNER LINING - CASING = Pvc 30.00m-63.00m INNER LINING - SCREEN = Pvc 63.00m-64.00m INNER LINING - CASING = Pvc		30.00m-63.00m Basalt	1990-03-01	245	North East
WRK991322	Groundwater Investigation	0.00m-0.50m orange brown stiff clay 0.50m-2.10m weathered basalt 2.10m-17.50m fresh basalt 17.50m-19.00m orange/brown weathered basalt 19.00m-32.00m weathered basalt	0.50m-20.00m INNER LINING - CASING = Pvc 20.00m-32.00m INNER LINING - SCREEN = Pvc 0.00m-18.00m OUTER LINING - GRAVEL = Cement 18.00m-19.00m OUTER LINING - GRAVEL = Bentonite 19.00m-32.00m OUTER LINING - GRAVEL = Gravel			2009-05-22	282	West
WRK099314	Domestic & Stock	0.00m-0.50m FIRM RED CLAY 0.50m-1.40m BROWN 1.50m-6.00m BASALT 6.00m-7.50m WEATHERED BASALT 7.50m-18.30m BASALT 18.30m-18.60m RED CLAY 18.60m-20.00m BROWN CLAY 20.00m-34.00m BASALT 34.00m-34.50m FRACTURED BASALT AND BAKED CLAY 34.50m-37.00m RED WEATHERED BASALT 37.00m-45.50m BASALT	0.00m-33.50m INNER LINING - CASING = Pvc 33.50m-45.50m INNER LINING - SLOT = Pvc 0.00m-6.00m OUTER LINING - GRAVEL = Cement 6.00m-8.00m OUTER LINING - GRAVEL = Bentonite 8.00m-45.50m OUTER LINING - GRAVEL = Gravel			2018-03-08	304	North West
311301	Non Groundwater					1983-03-04	323	North East
WRK989642							358	West
WRK991323							366	West
WRK105585	Investigation	0.00m-1.30m BASALTclay 1.30m-23.30m BASALT	0.00m-14.30m INNER LINING - CASING = Pvc 14.30m-23.30m INNER LINING - SCREEN = Pvc 0.00m-12.30m OUTER LINING - GRAVEL = Cement 12.30m-13.80m OUTER LINING - GRAVEL = Bentonite 13.80m-23.30m OUTER LINING - GRAVEL = Gravel			2018-04-04	376	West
73202	Not Known					1947-10-12	377	South
73203	Not Known					1947-10-12	378	South
WRK980623	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-05-01	379	North West
73306	Not Known		0.00m-28.00m INNER LINING - CASING = Mild Steel 28.00m-58.00m INNER LINING - SCREEN = Mild Steel 58.00m-60.00m INNER LINING - CASING = Mild Steel		28.00m-58.00m Basalt	1988-01-11	382	South
WRK983061							412	North
311312	Non Groundwater					1983-03-31	448	North West
WRK984717							466	North West
311340	Non Groundwater					1983-04-28	469	West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
311339	Non Groundwater					1983-04-28	481	West
WRK982963							515	North West
311317	Non Groundwater					1983-04-06	521	North
73198	Domestic, Stock					1919-12-31	522	South
115829	Domestic	0.00m-2.00m SOIL & CLAY 2.00m-18.00m BASALT 18.00m-20.00m BASALTIC CLAY 20.00m-25.00m WEATHERED BASALT 25.00m-28.00m SCORIA 28.00m-50.00m BASALT 50.00m-55.00m SCORIA & WEATHERED BASALT 55.00m-64.50m BASALT	-0.30m-52.00m INNER LINING - CASING = Pvc Class 9 52.00m-64.50m INNER LINING - SCREEN = Pvc Class 9 0.00m-0.40m OUTER LINING - GRAVEL = Cement 34.00m-0.00m OUTER LINING - GRAVEL = Seal		52.00m-64.50m Basalt	1993-06-19	533	North East
311320	Non Groundwater					1983-04-08	539	South
73317	Not Known	0.00m-1.40m RED BASALT CLAY 1.40m-25.10m GREY BASALT	0.00m-8.10m INNER LINING - CASING = Pvc 8.10m-25.10m INNER LINING - SCREEN = Pvc		8.10m-25.10m Basalt	1983-06-30	558	South West
WRK992493							559	South
311343	Non Groundwater					1983-06-21	569	West
WRK973267	Domestic & Stock	0.00m-0.30m TOP SOIL 0.30m-3.50m WEATHERED BASALT 3.50m-15.00m BASALT 15.00m-18.00m BROWN CLAY 18.00m-28.00m FRACTURED BASALT	0.50m-18.00m INNER LINING - CASING = Pvc 18.00m-28.00m INNER LINING - SLOT = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement		0.50m-18.00m Basalt 18.00m-28.00m Basalt	2006-04-07	573	South East
WRK980406	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-04-30	580	North West
311265	Non Groundwater					1981-10-29	593	West
73219	Domestic, Stock					1970-12-31	614	North East
9038906	Domestic & Stock	0.00m-0.60m Red Clay 0.60m-2.70m Weathered Basalt 2.70m-11.40m Basalt 11.40m-16.00m Scoria & Red Clay 16.00m-26.40m Basalt 26.40m-30.10m Scoria & Red Clay 30.10m-50.50m Basalt	-0.30m-31.00m INNER LINING - CASING = Pvc Class 9 31.00m-33.00m INNER LINING - SLOT = Pvc Class 9 33.00m-46.00m INNER LINING - CASING = Pvc Class 9 46.00m-50.50m INNER LINING - SLOT = Pvc Class 9 25.00m-25.10m OUTER LINING - GRAVEL = Seal			2009-09-25	616	South
WRK980483	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-04-29	617	North West
73238	Domestic, Stock					1970-12-31	638	South East
311338	Non Groundwater					1983-04-28	640	South West
139979	Domestic, Stock	0.00m-1.00m VOLCANIC TOP SOIL 1.00m-3.00m BROWN CLAY 3.00m-30.00m FRESH BLUESTONE 30.00m-33.00m RED CLAY MOCK 33.00m-45.00m BLUESTONE 45.00m-55.00m BROWN BASALT	-0.30m-43.00m INNER LINING - CASING = Pvc 43.00m-55.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			1998-03-31	657	South East
73327	Domestic, Stock	0.00m-1.00m SOIL AND CLAY 1.00m-55.00m BASALT	0.00m-49.00m INNER LINING - CASING = Pvc 49.00m-55.00m INNER LINING - SCREEN = Pvc 10.00m-55.00m OUTER LINING - GRAVEL = Gravel		49.00m-55.00m Basalt	1988-08-22	678	North East
73259	Stock					1970-12-31	713	North West
113040	Groundwater Investigation	0.00m-1.00m SAN Z C DK BR 1.00m-2.00m S Z C DK BR 2.00m-4.00m S C L BR YELL 4.00m-5.00m S Z L BR 5.00m-7.00m Z C LI BR YELL BR 7.00m-8.50m Z C L YELL BR	0.00m-6.00m INNER LINING - CASING = Pvc Class 9 6.00m-8.00m INNER LINING - SCREEN = Pvc Class 9 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-8.50m OUTER LINING - GRAVEL = Gravel			1992-11-18	752	North West
WRK982929							753	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK032689	Irrigation	0.00m-12.00m CLAY 12.00m-21.00m SCORIA 21.00m-52.00m BASALT	-0.30m-12.00m INNER LINING - CASING = Steel -0.30m-52.00m INNER LINING - CASING = Pvc Class 12 34.00m-52.00m INNER LINING - SCREEN = Steel 0.00m-20.00m OUTER LINING - GRAVEL = Bentonite 20.00m-52.00m OUTER LINING - GRAVEL = Gravel		34.00m-52.00m Basalt	1998-11-10	792	North West
73206	Not Known					1958-12-31	797	North West
WRK032138	Irrigation	0.00m-8.00m EARTH & STIFF & GREY CLAY 8.00m-12.00m HARD BASALT 12.00m-31.00m FRACTURED BLUE BASALT 31.00m-48.00m HARD BLUE BASALT 48.00m-52.00m FRACTURED BROWN BASALT 52.00m-60.00m HARD BLUE BASALT	-0.30m-60.00m INNER LINING - CASING = Pvc 48.00m-54.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 9.00m-0.00m OUTER LINING - GRAVEL = Packer		48.00m-54.00m Basalt	1994-02-01	800	North West
WRK978657	Domestic & Stock					2007-01-24	800	North West
WRK978648							800	North West
WRK964344	Domestic & Stock	0.00m-0.90m OVERBURDEN 0.90m-2.00m BROWN CLAY 2.00m-19.50m WEATHERED BASALT 19.50m-24.00m BLUESTONE 24.00m-27.00m BROWN CLAY 27.00m-45.00m BLUESTONE 45.00m-52.00m FRACTURED BASALT 52.00m-53.00m BROWN CLAY	-0.50m-45.00m INNER LINING - CASING = Pvc 45.00m-53.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2004-01-28	808	North East
311302	Non Groundwater					1983-03-07	821	North East
311337	Non Groundwater					1983-04-27	888	South West
73204	Stock					1957-01-11	922	South East
73232	Domestic					1970-12-31	933	East
141252	Stock	0.00m-1.00m OVERBURDEN 1.00m-2.50m BROWN CLAY 2.50m-7.50m GREY CLAY 7.50m-9.20m GRAVEL 9.20m-12.00m GREY CLAY 12.00m-21.00m BROWN CLAY 21.00m-27.00m BASALT 27.00m-30.00m FRACTURED BASALT	-0.50m-27.00m INNER LINING - CASING = Pvc 27.00m-30.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2000-08-26	940	North
311311	Non Groundwater					1983-03-31	956	West
311318	Non Groundwater					1983-04-07	966	North
73222	Domestic, Stock					1970-12-31	992	South East
WRK966525	Domestic & Stock	0.00m-1.00m RED SOIL 1.00m-2.00m BROWN SANDY CLAY 2.00m-3.00m GREY CLAY 3.00m-13.50m BASALT 13.50m-15.50m BROWN CLAY 15.50m-25.00m WEATHERED BASALT 25.00m-35.00m FRACTURED BASALT	-0.50m-25.00m INNER LINING - CASING = Pvc 25.00m-35.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2004-08-24	1027	East
116308	Industrial	0.00m-5.50m CLAY 5.50m-13.00m BASALT 13.00m-14.00m RED CLAY 14.00m-15.00m BROWN CLAY 15.00m-49.00m BASALT 49.00m-50.00m BROWN CLAY 50.00m-58.00m BASALT 58.00m-59.00m RED CLAY 59.00m-70.00m FINE & MEDIUM SAND 70.00m-78.00m WHITE CLAY 78.00m-200.00m GREY SANDSTONE	-0.50m-59.50m INNER LINING - CASING = Pvc -0.30m-4.50m INNER LINING - CASING = Steel 59.50m-71.50m INNER LINING - SCREEN = Steel 71.50m-78.00m INNER LINING - CASING = Pvc 78.00m-200.00m INNER LINING - SCREEN = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement 58.00m-0.00m OUTER LINING - GRAVEL = Seal 77.00m-0.00m OUTER LINING - GRAVEL = Seal		59.50m-71.50m Sand 78.00m-200.00m Sandstone	1993-07-26	1041	West
311321	Non Groundwater					1983-04-08	1046	South
73230	Stock					1970-12-31	1062	East
73257	Stock					1970-12-31	1070	South East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
73207	Not Known					1958-12-31	1085	North West
73344	Groundwater Investigation	0.00m-6.20m TIP FILL 6.20m-8.70m BASALTIC CLAY 8.70m-34.74m BASALT	0.00m-28.50m INNER LINING - CASING = Pvc 28.50m-34.50m INNER LINING - SCREEN = Pvc		28.50m-34.50m Basalt	1991-01-09	1086	South West
73309	Not Known	0.00m-1.00m RED CLAY 1.00m-26.00m GREY BASALT 26.00m-28.00m RED BROWN CLAY 28.00m-45.10m GREY BASALT	0.00m-28.40m INNER LINING - CASING = Pvc Class 18 28.40m-45.10m INNER LINING - SCREEN = Pvc Class 18 27.40m-28.40m OUTER LINING - GRAVEL = Bentonite		28.40m-45.10m Basalt	1983-06-30	1101	South
73343	Groundwater Investigation	0.00m-5.00m BASALTIC CLAY 5.00m-27.62m VERSICULAR BASALT	0.00m-21.00m INNER LINING - CASING = Pvc 21.00m-27.00m INNER LINING - SCREEN = Pvc 5.50m-27.62m OUTER LINING - GRAVEL = Gravel		21.00m-27.00m Basalt	1991-01-08	1144	South West
WRK980582	Domestic & Stock		0.30m-9.00m INNER LINING - CASING = Pvc 23.00m-38.00m INNER LINING - SLOT = Pvc 0.00m-1.00m OUTER LINING - GRAVEL = Cement			2007-05-02	1146	North West
306158	Non Groundwater					1983-03-30	1151	North West
73310	Not Known	0.00m-2.10m RED BASALTIC CLAY 2.10m-25.20m GREY VESICULAR BASALT	0.00m-8.20m INNER LINING - CASING = Pvc Class 18 8.20m-25.20m INNER LINING - SCREEN = Pvc Class 18			1983-06-30	1157	South
306160	Non Groundwater					1983-03-31	1160	West
73345	Groundwater Investigation	0.00m-1.00m BASALTIC CLAY 1.00m-27.68m BASALT	-0.30m-21.50m INNER LINING - CASING = Pvc 21.50m-27.50m INNER LINING - SCREEN = Pvc 15.00m-27.28m OUTER LINING - GRAVEL = Gravel		21.50m-27.50m Basalt	1991-01-10	1160	South West
306231	Non Groundwater					1983-11-23	1161	North
73311	Not Known	0.00m-2.70m RED & GREY BASALTIC CLAY 2.70m-26.50m GREY BASALT 26.50m-29.60m BROWN HIGHLY WEATHERED BASALT 29.60m-45.00m GREY BASALT	0.00m-32.15m INNER LINING - CASING = Pvc Class 18 32.15m-45.00m INNER LINING - SCREEN = Pvc Class 18		32.15m-45.00m Basalt	1983-06-30	1163	South
306157	Non Groundwater					1983-03-30	1165	North West
60490	Not Known					1958-12-31	1178	West
60485	Not Known					1958-12-31	1201	North West
306150	Non Groundwater					1983-03-24	1243	North West
73208	Domestic, Stock					1958-12-31	1245	South West
73265	Not Known					1970-12-31	1251	South East
73286	Domestic, Stock	0.00m-0.40m TOP SOIL 0.40m-1.10m BROWN CLAY AND BOULDERS 1.10m-15.40m HARD GREY BASALT 15.40m-21.30m SCORIA 21.30m-24.20m HARD BROWN BASALT 24.20m-32.80m HARD GREY BASALT 32.80m-36.10m HARD BROWN BASALT 36.10m-43.90m HARD BLACK BASALT	-0.30m-1.50m INNER LINING - CASING = Pvc 1.50m-43.90m INNER LINING - SCREEN = Pvc 1.40m-0.00m OUTER LINING - GRAVEL = Seal		1.50m-43.90m Basalt	1984-04-02	1262	South West
73211	Domestic					1970-12-31	1279	North East
311336	Non Groundwater					1983-04-27	1285	South West
73302	Domestic, Stock		0.00m-15.00m INNER LINING - CASING = Pvc 15.00m-27.00m INNER LINING - SCREEN = Pvc		15.00m-27.00m Basalt	1987-05-15	1328	South East
311303	Non Groundwater					1983-03-07	1331	North

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
73299	Domestic	0.00m-0.30m TOPSOIL 0.30m-1.00m RED CLAY 1.00m-12.10m PINK BASALT 12.10m-26.80m BLUE BASALT 26.80m-30.00m BAKED RED CLAY 30.00m-60.00m HARD BLUE BASALT WITH SOME FRACTURES	0.00m-5.40m INNER LINING - CASING = Steel 0.00m-54.00m INNER LINING - CASING = Pvc 54.00m-60.00m INNER LINING - SCREEN = Steel		54.00m-60.00m Basalt	1987-01-27	1368	North
73254	Not Known					1970-12-31	1373	South
73264	Not Known					1970-12-31	1390	South East
306159	Non Groundwater					1983-03-30	1397	North West
306156	Non Groundwater					1983-03-29	1404	North West
73325	Domestic, Stock	0.00m-3.00m SOIL AND CLAY 3.00m-50.00m BASALT	0.00m-29.00m INNER LINING - CASING = Pvc 29.00m-50.00m INNER LINING - SCREEN = Pvc		29.00m-50.00m Basalt	1988-05-12	1428	South
73255	Not Known					1970-12-31	1437	South West
73253	Not Known					1970-12-31	1446	South
306226	Non Groundwater					1983-11-15	1448	North West
306155	Non Groundwater					1983-03-29	1449	North West
WRK978969	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-02-28	1458	South East
73212	Not Known					1967-12-31	1465	North East
73334	Not Known					1988-01-01	1465	North East
113041	Groundwater Investigation	0.00m-1.00m FINE SAND OR 1.00m-3.00m FIN SAND CL LI BR 3.00m-4.00m FIN SAND LI BR GRY 4.00m-6.00m Z C BASALT DK GRY	0.00m-3.76m INNER LINING - CASING = Pvc Class 9 3.76m-5.76m INNER LINING - SCREEN = Pvc Class 9 0.00m-3.00m OUTER LINING - GRAVEL = Cement 3.00m-6.26m OUTER LINING - GRAVEL = Gravel			1992-11-18	1476	West
73316	Not Known	0.00m-1.55m RED BASALT CLAY 1.55m-25.04m GREY BASALT	0.00m-8.04m INNER LINING - CASING = Pvc Class 18 8.04m-25.04m INNER LINING - SCREEN = Pvc Class 18		8.04m-25.04m Basalt	1983-06-30	1480	South
WRK989162							1483	North East
73229	Domestic					1970-12-31	1502	East
73324	Domestic	0.00m-6.00m HARD BLUE BASALT 6.00m-11.00m SOFT RED SCORIA 11.00m-16.00m STIFF RED CLAY 16.00m-24.00m HARD BLUE BASALT 24.00m-26.00m FRACTURED - DECAYED BROWN BASALT 26.00m-30.00m HARD BLUE BASALT	0.00m-24.00m INNER LINING - CASING = Pvc 24.00m-27.00m INNER LINING - SCREEN = Pvc 27.00m-30.00m INNER LINING - CASING = Pvc		24.00m-27.00m Basalt	1988-10-17	1511	South East
73258	Not Known					1970-12-31	1523	West
311319	Non Groundwater					1983-04-07	1533	North
306151	Non Groundwater					1983-03-25	1545	North West
311322	Non Groundwater					1983-04-08	1569	South
306133	Non Groundwater					1894-12-31	1581	North West
73346	Groundwater Investigation	0.00m-1.00m CLAY 1.00m-12.00m BASALT 12.00m-14.00m RED CLAY 14.00m-29.72m BASALT	-0.30m-23.50m INNER LINING - CASING = Pvc 23.50m-29.50m INNER LINING - SCREEN = Pvc 15.00m-29.72m OUTER LINING - GRAVEL = Gravel		23.50m-29.50m Basalt	1991-01-11	1584	South West
73312	Not Known	0.00m-0.80m RED BASALT CLAY 0.80m-25.16m GREY BASALT	0.00m-8.16m INNER LINING - CASING = Pvc Class 18 8.16m-25.16m INNER LINING - SCREEN = Pvc Class 18		8.16m-25.16m Basalt	1983-06-30	1606	South
73218	Stock					1970-12-31	1614	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
113039	Groundwater Investigation	0.00m-1.00m FIN SAN CL BL 1.00m-3.00m FIN SAN CL LI BR 3.00m-4.00m FIN SAN CL BR GRY 4.00m-5.00m FIN SAN CL GRY BR 5.00m-7.00m FIN SAN CL BR OR GRY 7.00m-9.50m CL LI BR DR GRY	0.00m-7.00m INNER LINING - CASING = Pvc Class 9 7.00m-9.00m INNER LINING - SCREEN = Pvc Class 9 0.00m-6.00m OUTER LINING - GRAVEL = Cement 6.00m-9.50m OUTER LINING - GRAVEL = Gravel			1992-11-18	1670	North
311292	Non Groundwater					1972-07-12	1674	South East
311342	Non Groundwater					1983-06-17	1686	West
143995	Domestic, Stock	0.00m-1.00m VOLCANIC TOPSOIL 1.00m-7.00m CLAY 7.00m-11.00m BLUE STONE 11.00m-15.00m BROWN BASALT 15.00m-21.00m FRESH BLUESTONE 21.00m-53.00m BROWN BASALT 53.00m-54.00m CLAY	-0.30m-42.00m INNER LINING - CASING = Pvc 42.00m-54.00m INNER LINING - SCREEN = Pvc			2000-01-08	1727	South
145066	Domestic, Stock	0.00m-0.50m OVERBURDEN 0.50m-3.00m RED CLAYEY SOIL 3.00m-4.20m GREY CLAY 4.20m-7.00m BASALT 7.00m-13.00m WEATHERED BASALT 13.00m-14.50m BLUESTONE 14.50m-16.50m BROWN CLAY 16.50m-21.50m BASALT 21.50m-30.00m FRACTURED BASALT 30.00m-31.00m BASALT	-0.50m-20.00m INNER LINING - CASING = Pvc 20.00m-31.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2001-11-17	1734	South East
73337	Domestic, Stock					1988-01-01	1736	East
60491	Not Known					1958-12-31	1746	West
WRK970783	Domestic & Stock		0.50m-16.50m INNER LINING - CASING = Pvc 16.50m-24.00m INNER LINING - SCREEN = Pvc 24.00m-30.00m INNER LINING - CASING = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2005-07-29	1770	South East
311304	Non Groundwater					1983-03-07	1782	North
73223	Domestic					1970-12-31	1805	South East
73315	Not Known	0.00m-1.60m RED BASALT CLAY 1.60m-32.00m GREY BASALT 32.00m-36.60m RED BASALT CLAY 36.60m-45.10m GREY BASALT	0.00m-33.10m INNER LINING - CASING = Pvc Class 18 33.10m-45.10m INNER LINING - SCREEN = Pvc Class 18		33.10m-45.10m Basalt	1983-06-30	1811	South
73275	Domestic, Stock	0.00m-50.50m WEATHERED BASALT	0.00m-50.50m INNER LINING - CASING = Pvc 33.00m-48.00m INNER LINING - SCREEN = Pvc			1977-05-12	1814	East
60505	Not Known	0.00m-0.50m SOIL 0.50m-2.50m CLAY 2.50m-17.00m BASALT 17.00m-20.00m BASALTIC CLAY 20.00m-34.00m BASALT 34.00m-37.00m RED CLAY 37.00m-51.00m FINE SILTY SNAD 51.00m-55.00m GREY SILTSTONE				1983-11-07	1829	North West
73224	Domestic					1970-12-31	1833	South East
WRK973002	Domestic & Stock		0.30m-45.00m INNER LINING - CASING = Pvc 45.00m-50.00m INNER LINING - CASING = Not Known 0.00m-0.50m OUTER LINING - GRAVEL = Cement 1.00m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-1.80m OUTER LINING - GRAVEL = Seal			2006-03-21	1839	North East
306149	Non Groundwater					1983-03-24	1842	North West
73233	Stock					1958-12-31	1850	West
WRK982840							1862	East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
73273	Domestic, Stock	0.00m-0.30m TOP SOIL 0.30m-1.83m MOTTLED CLAY 1.83m-2.44m BASALT 2.44m-2.74m MOTTLED CLAY 2.74m-3.05m BASALT 3.05m-3.66m MOTTLED CLAY 3.66m-6.40m BASALT 6.40m-6.70m MOTTLED CLAY 6.70m-12.19m BASALT	0.00m-12.19m INNER LINING - CASING = Not Known 7.62m-12.19m INNER LINING - SCREEN = Not Known			1974-11-07	1882	South East
311335	Non Groundwater					1983-04-27	1916	South West
73314	Not Known	0.00m-2.30m RED BASALT CLAY 2.30m-25.10m GREY BASALT	0.00m-8.10m INNER LINING - CASING = Pvc Class 18 8.10m-25.10m INNER LINING - SCREEN = Pvc Class 18		8.10m-25.10m Basalt	1983-06-30	1935	South
73320	Domestic	0.00m-0.30m SOIL 0.30m-7.00m STIFF GREY CLAY 7.00m-15.00m BASALT 15.00m-18.00m RED CLAY 18.00m-78.00m BASALT 78.00m-80.70m QUARTZ AND SANDSTONE GRAVEL	0.00m-68.00m INNER LINING - CASING = Pvc 68.00m-80.70m INNER LINING - SCREEN = Pvc		68.00m-80.70m Basalt	1988-08-16	1937	North
306152	Non Groundwater					1983-03-28	1957	North West
WRK966454	Domestic & Stock	0.00m-2.00m BROWN CLAY 2.00m-5.00m GREY CLAY 5.00m-30.00m BASALT 30.00m-39.00m FRACTURED BASALT 39.00m-40.50m BASALT	-0.50m-30.00m INNER LINING - CASING = Pvc 30.00m-40.50m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2004-08-04	1960	North East
60487	Not Known					1958-12-31	1965	West
WRK963304	Domestic & Stock	0.00m-1.00m OVERBURDEN 1.00m-6.00m BROWN SANDY CLAY 6.00m-14.50m BROWN CLAY 14.50m-21.00m BASALT 21.00m-30.00m WEATHERED BASALT 30.00m-39.00m FRACTURED BASALT 39.00m-40.50m BASALT	-0.50m-30.00m INNER LINING - CASING = Pvc 30.00m-40.50m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2003-11-15	1974	North
73298	Domestic, Stock	0.00m-2.13m RED TOP SOIL 2.13m-13.10m SOFT BASALT 13.10m-13.71m CLAY	0.00m-7.62m INNER LINING - CASING = Pvc 7.62m-13.71m INNER LINING - SCREEN = Pvc		7.62m-13.71m Basalt	1983-04-07	1986	South East
73323	Domestic, Stock	0.00m-0.50m SOIL 0.50m-7.00m STIFF BROWN CLAY 7.00m-77.00m BASALT	0.00m-71.00m INNER LINING - CASING = Pvc 71.00m-77.00m INNER LINING - SCREEN = Pvc		71.00m-77.00m Basalt	1988-11-01	1995	North

Boreholes WMIS Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Groundwater Boreholes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Boreholes (Earth Resources Database)

Boreholes from the Earth Resources dataset, within the dataset buffer:

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
311297		Department of Manufacturing & Industry Development		Mechanical Auger		03/03/1983	1.20	121.70	100	0	Onsite
311298		Department of Manufacturing & Industry Development		Mechanical Auger		03/03/1983	0.85	127.00	100	0	Onsite
311299		Department of Manufacturing & Industry Development		Mechanical Auger		03/03/1983	0.70	131.80	100	0	Onsite
311300		Department of Manufacturing & Industry Development		Mechanical Auger		04/03/1983	0.65	139.40	100	0	Onsite
311314		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	1.96	142.80	100	0	Onsite
311315		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	0.70	142.00	100	0	Onsite
73204		Private Individual/Corporation				11/01/1957	31.70	122.00	100	0	Onsite
73235		Private Individual/Corporation				31/12/1970	30.48		300	0	Onsite
73239		Private Individual/Corporation				31/12/1970	41.15		300	0	Onsite
311316		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	1.08	143.10	100	16	North
311293		Department of Manufacturing & Industry Development		Rotary (diamond/drag bit)		28/08/1972	79.25	140.00	100	24	North East
311313		Department of Manufacturing & Industry Development		Mechanical Auger		31/03/1983	1.82	140.80	100	78	North West
73231		Private Individual/Corporation				31/12/1970	33.53		300	240	North East
311301		Department of Manufacturing & Industry Development		Mechanical Auger		04/03/1983	0.80	143.50	100	322	North East
73202		Private Individual/Corporation				12/10/1947	73.15	125.00	300	376	South
73203		Private Individual/Corporation				12/10/1947	49.38	125.00	100	378	South

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
311312		Department of Manufacturing & Industry Development		Mechanical Auger		31/03/1983	2.04	133.90	100	449	North West
311340		Department of Manufacturing & Industry Development		Mechanical Auger		28/04/1983	0.45	136.80	100	470	West
311339		Department of Manufacturing & Industry Development		Mechanical Auger		28/04/1983	1.30	137.10	100	481	West
73198		Department of Manufacturing & Industry Development				31/12/1919	52.43	120.00	100	522	South
311317		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	3.48	142.20	100	522	North
311320		Department of Manufacturing & Industry Development		Mechanical Auger		08/04/1983	0.70	119.40	100	540	South
311343		Department of Manufacturing & Industry Development		Mechanical Auger		21/06/1983	10.40	138.00	100	571	West
311265		Private Individual/Corporation		Rotary (diamond/drag bit)		29/10/1981	146.00	140.00	100	594	West
942635		CRA Exploration Pty Ltd		Rotary mud drilling	Completed	29/10/1981	146.00	136.54	25	594	West
73259		Private Individual/Corporation				31/12/1970	36.58		300	596	North West
311338		Department of Manufacturing & Industry Development		Mechanical Auger		28/04/1983	2.05	135.00	100	641	South West
73219		Private Individual/Corporation				31/12/1970	30.48		300	695	North East
73206		Private Individual/Corporation				31/12/1958			300	798	North West
73238		Private Individual/Corporation				31/12/1970	19.51		300	807	South East
311302		Department of Manufacturing & Industry Development		Mechanical Auger		07/03/1983	0.80	147.60	100	822	North East
311337		Department of Manufacturing & Industry Development		Mechanical Auger		27/04/1983	1.96	133.70	100	889	South West
311311		Department of Manufacturing & Industry Development		Mechanical Auger		31/03/1983	4.25	133.10	100	957	West
311318		Department of Manufacturing & Industry Development		Mechanical Auger		07/04/1983	4.25	143.70	100	967	North
73232		Private Individual/Corporation				31/12/1970	12.19		300	1044	East
311321		Department of Manufacturing & Industry Development		Mechanical Auger		08/04/1983	0.76	117.20	100	1045	South
73222		Private Individual/Corporation				31/12/1970	36.58		300	1069	South East

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
73207		Private Individual/Corporation				31/12/1958			300	1085	North West
73208		Private Individual/Corporation				31/12/1958	34.14		300	1153	South West
306158		Department of Manufacturing & Industry Development		Mechanical Auger		30/03/1983	3.90	137.20	100	1153	North West
73230		Private Individual/Corporation				31/12/1970	30.48		300	1154	East
306231		Department of Manufacturing & Industry Development		Mechanical Auger		23/11/1983	3.40	149.00	100	1161	North
306160		Department of Manufacturing & Industry Development		Mechanical Auger		31/03/1983	4.25	131.40	100	1162	West
306157		Department of Manufacturing & Industry Development		Mechanical Auger		30/03/1983	4.25	139.70	100	1166	North West
60490		Local Government Authority				31/12/1958			300	1179	West
60485		Private Individual/Corporation				31/12/1958			300	1203	North West
306150		Department of Manufacturing & Industry Development		Mechanical Auger		24/03/1983	4.25	137.00	100	1244	North West
73265		Private Individual/Corporation			Abandoned	31/12/1970			300	1250	South East
73286		Private Individual/Corporation	Domestic & Stock water supply	Air Percussion/Air Rotary		02/04/1984	43.90		100	1264	South West
311336		Department of Manufacturing & Industry Development		Mechanical Auger		27/04/1983	0.80	129.60	100	1286	South West
73257		Private Individual/Corporation				31/12/1970	21.34		300	1292	South East
311303		Department of Manufacturing & Industry Development		Mechanical Auger		07/03/1983	0.80	150.20	100	1331	North
73211		Private Individual/Corporation				31/12/1970	21.95		300	1380	East
73264		Private Individual/Corporation			Abandoned	31/12/1970			300	1389	South East
306159		Department of Manufacturing & Industry Development		Mechanical Auger		30/03/1983	4.25	137.80	100	1398	North West
306156		Department of Manufacturing & Industry Development		Mechanical Auger		29/03/1983	4.25	141.80	100	1405	North West
73212		Private Individual/Corporation	Irrigation	Percussion (cable)		31/12/1967	12.80		300	1425	North East
73253		Private Individual/Corporation				31/12/1970			300	1446	South
73218		Private Individual/Corporation				31/12/1970	36.58		300	1448	North East

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
306226		Department of Manufacturing & Industry Development		Mechanical Auger		15/11/1983	12.95	144.00	100	1448	North West
306155		Department of Manufacturing & Industry Development		Mechanical Auger		29/03/1983	4.10	143.90	100	1450	North West
73254		Private Individual/Corporation				31/12/1970	27.43		300	1462	South
73258		Private Individual/Corporation				31/12/1970			300	1525	West
311319		Department of Manufacturing & Industry Development		Mechanical Auger		07/04/1983	4.25	147.00	100	1533	North
306151		Department of Manufacturing & Industry Development		Mechanical Auger		25/03/1983	3.35	139.90	100	1546	North West
311322		Department of Manufacturing & Industry Development		Mechanical Auger		08/04/1983	1.76	113.70	100	1569	South
306133		Department of Manufacturing & Industry Development		Rotary (diamond/drag bit)		31/12/1894	50.29	135.00	100	1582	North West
73229		Private Individual/Corporation				31/12/1970			300	1658	East
311292		Department of Manufacturing & Industry Development		Rotary (diamond/drag bit)		12/07/1972	60.96	110.00	300	1672	South East
311342		Department of Manufacturing & Industry Development		Mechanical Auger		17/06/1983	4.00	132.00	100	1688	West
60491		Private Individual/Corporation				31/12/1958			300	1747	West
311304		Department of Manufacturing & Industry Development		Mechanical Auger		07/03/1983	1.40	153.50	100	1784	North
73275		Private Individual/Corporation	Domestic & Stock water supply	Air Percussion/Air Rotary		12/05/1977	50.50		300	1813	East
60505		Private Individual/Corporation		Air Percussion/Air Rotary	Abandoned	07/11/1983	55.00		100	1831	North West
306149		Department of Manufacturing & Industry Development		Mechanical Auger		24/03/1983	1.00	140.00	100	1843	North West
73233		Private Individual/Corporation				31/12/1958	30.48		300	1865	West
311335		Department of Manufacturing & Industry Development		Mechanical Auger		27/04/1983	0.50	128.00	100	1917	South West
73223		Private Individual/Corporation				31/12/1970	21.34		300	1940	South East
306152		Department of Manufacturing & Industry Development		Mechanical Auger		28/03/1983	4.25	147.00	100	1958	North West
60487		Private Individual/Corporation				31/12/1958	30.48		300	1966	West

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Boreholes (Federation University)

Boreholes from the Federation University Australia dataset, within the dataset buffer:

Bore Id	Authority	Type	Uses	Initial TD	Log	Dist (m)	Direct
311265	Department of Minerals and Energy (1977 - 1985)	Coal	Non Groundwater			593	West

Boreholes FedUni Data Source: © Federation University Australia

Historical Mining Activity - Shafts

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Historical Mining Activity - Shafts

Mine Shaft Locations were collected by a variety of methods from 1869 in some areas of the state, mainly concentrating in Ballarat and Bendigo. In places a shaft may be recorded multiple times with a different source. In cases where several shaft locations are shown close together (generally with separations less than stated position errors) and they have different sources, it is possible that one shaft has been mapped several times. In cases where several shaft locations are shown close together but they have the same information source, it is possible that each shaft location represents a different shaft on the ground.

Historical Mine Shafts within the dataset buffer:

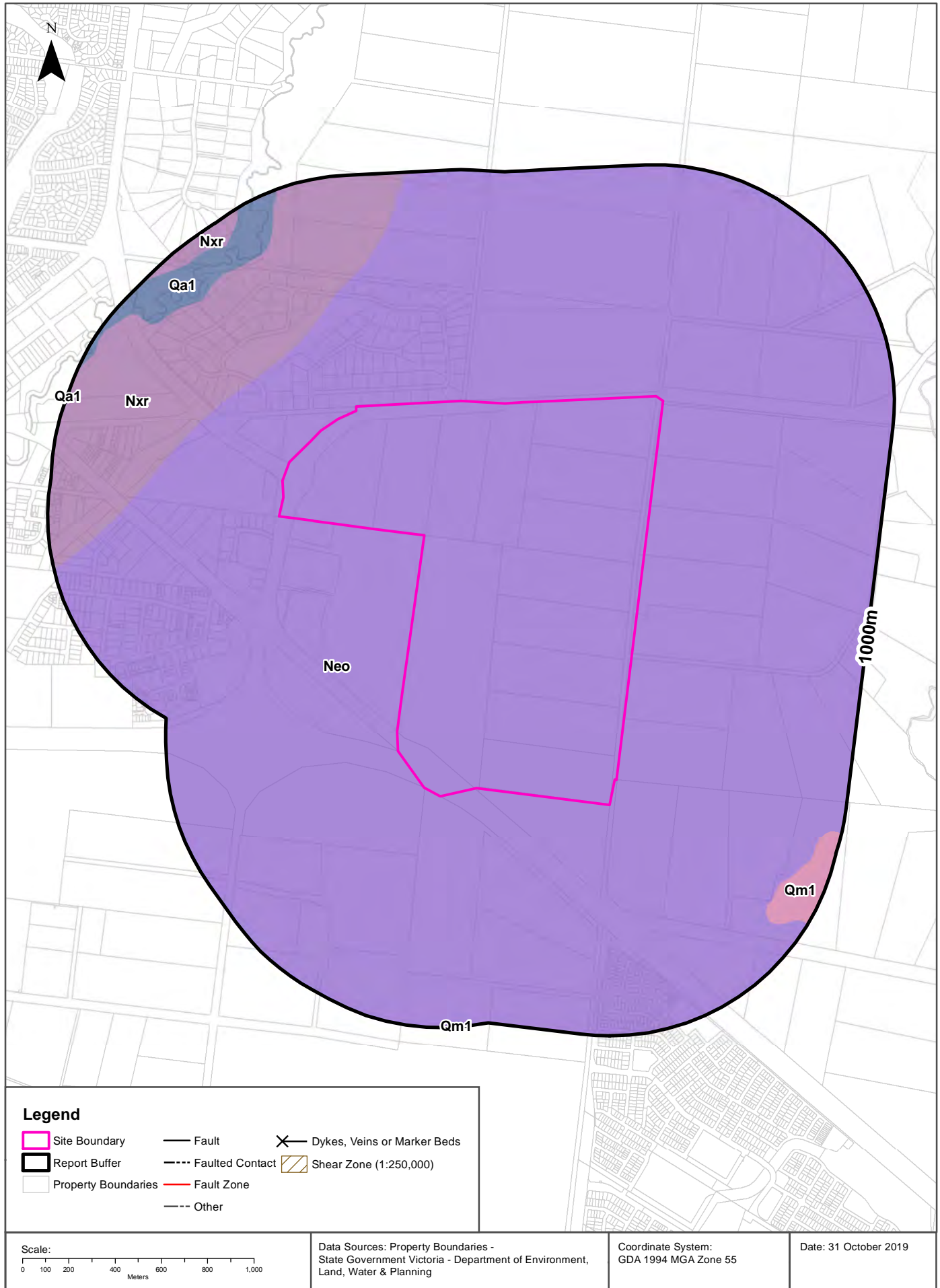
Map Id	Name	Source	Depth (m)	Collar (ft)	Fill/Cap Method	Location Desc	Location Accuracy	Distance	Direction
N/A	No records in buffer								

Historical Mining Activity Data Custodian: State Government Victoria - Dept of Economic Development, Jobs, Transport & Resources

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Geology 1:50,000

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Geology

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Geological Units

What are the Geological Units onsite?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Neo	Newer Volcanic Group - basalt flows (Neo): generic	Olivine tholeiite, quartz tholeiite, basanite, basaltic icelandite, hawaiiite, mugearite, minor scoria and ash, fluvial sediments: tholeiitic to alkaline; includes sheet flows and valley flows and intercalated gravel, sand, clay	Miocene to Holocene	alkali basalt (major proportion); tholeiitic basalt (major proportion); alluvium (minor proportion); tuff (minor proportion)	1:50,000

What are the Geological Units within the dataset buffer?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Neo	Newer Volcanic Group - basalt flows (Neo): generic	Olivine tholeiite, quartz tholeiite, basanite, basaltic icelandite, hawaiiite, mugearite, minor scoria and ash, fluvial sediments: tholeiitic to alkaline; includes sheet flows and valley flows and intercalated gravel, sand, clay	Miocene to Holocene	alkali basalt (major proportion); tholeiitic basalt (major proportion); alluvium (minor proportion); tuff (minor proportion)	1:50,000
Nxr	Darley Gravel (Nxr): generic	Gravel, sand, silt: gravel red to pale colours; rounding and sorting moderate to good; moderately consolidated; massive to trough cross-bedded; gravel clasts of vein quartz, sandstone, basalt, ironstone in proportions that reflect the local source	Neogene to Pleistocene	gravel material (significant); sand (significant); silt material (significant)	1:50,000
Qa1	alluvium(Qa1): generic	Gravel, sand, silt: variably sorted and rounded; generally unconsolidated; includes deposits of low terraces; alluvial floodplain deposits	Pleistocene to Holocene	gravel material (significant); sand (significant); silt material (significant)	1:50,000
Qm1	swamp and lake deposits (Qm1): generic	Grey to black carbonaceous mud, silt, clay, minor peat: generally unconsolidated; rare dolomite	Pleistocene to Holocene	mud (major proportion); silt material (significant); clay lithology (significant); peat (minor proportion)	1:50,000

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Geology

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Geological Structures

What are the Geological Faults or Faulted Contacts onsite?

Map Id	Type	Name	Contact	Positional Accuracy	Dataset
No features					1:50,000

What are the Dykes, Marker Beds and Veins onsite?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:50,000

What are the Shear Zones onsite (1:250,000 scale)?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

What are the Geological Faults or Faulted Contacts within the dataset buffer?

Map Id	Type	Name	Contact	Positional Accuracy	Dataset
No features					1:50,000

What are the Dykes, Marker Beds and Veins within the dataset buffer?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:50,000

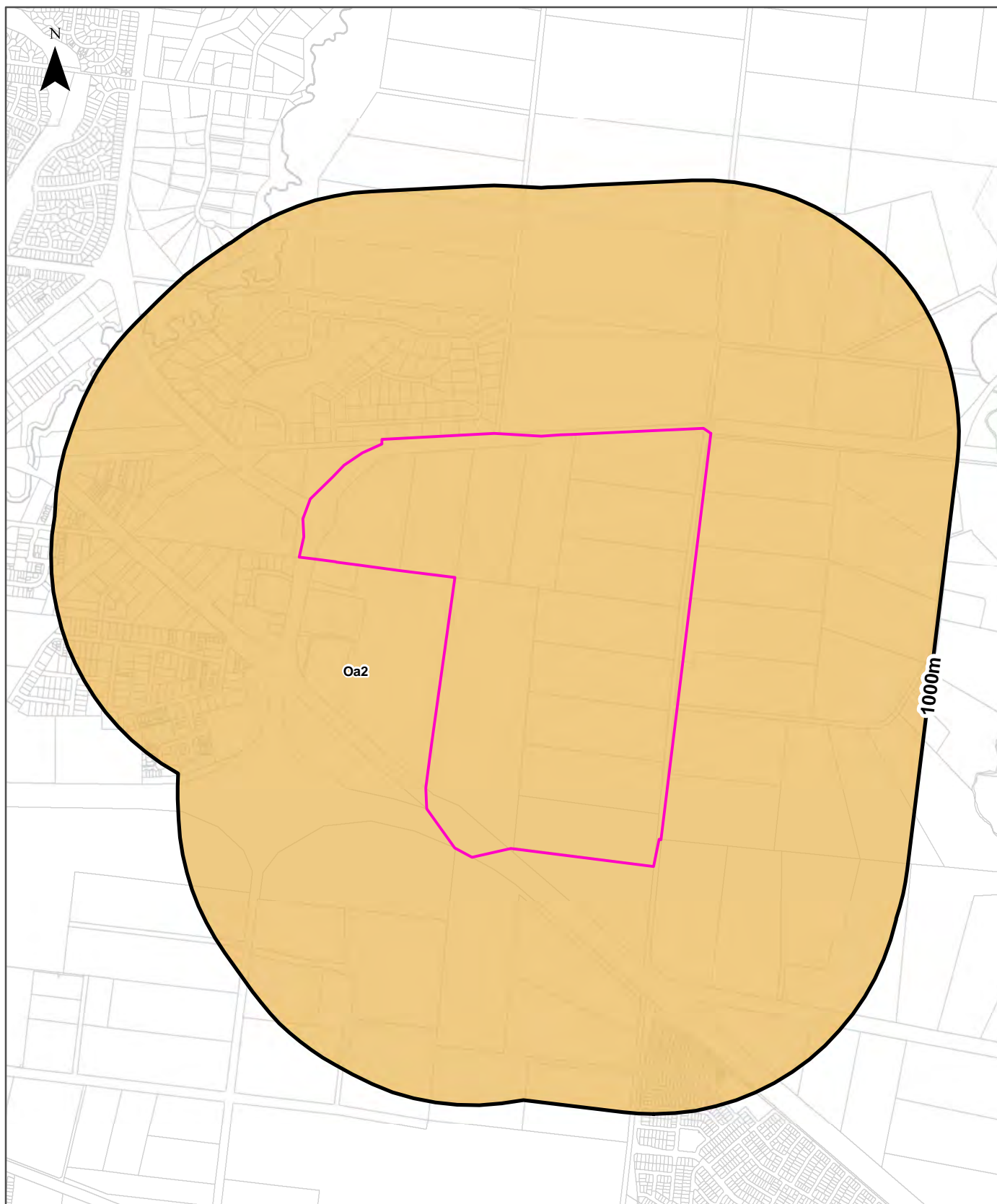
What are the Shear Zones within the dataset buffer (1:250,000 scale)?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

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Atlas of Australian Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend		Australian Soil Classification Orders					
Site Boundary	Anthroposol	Dermosol	Kandosol	Podosol	Tenosol	No Data	
Report Buffer	Calcarosol	Ferrosol	Kurosol	Rudosol	Vertosol		
Property Boundary	Chromosol	Hydrosol	Organosol	Sodosol	Lake		

<p>Scale:</p>	<p>Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning</p>	<p>Coordinate System: GDA 1994 MGA Zone 55</p>	<p>Date: 31 October 2019</p>
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Soil Landscapes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Atlas of Australian Soils

Australian soil types within the dataset buffer:

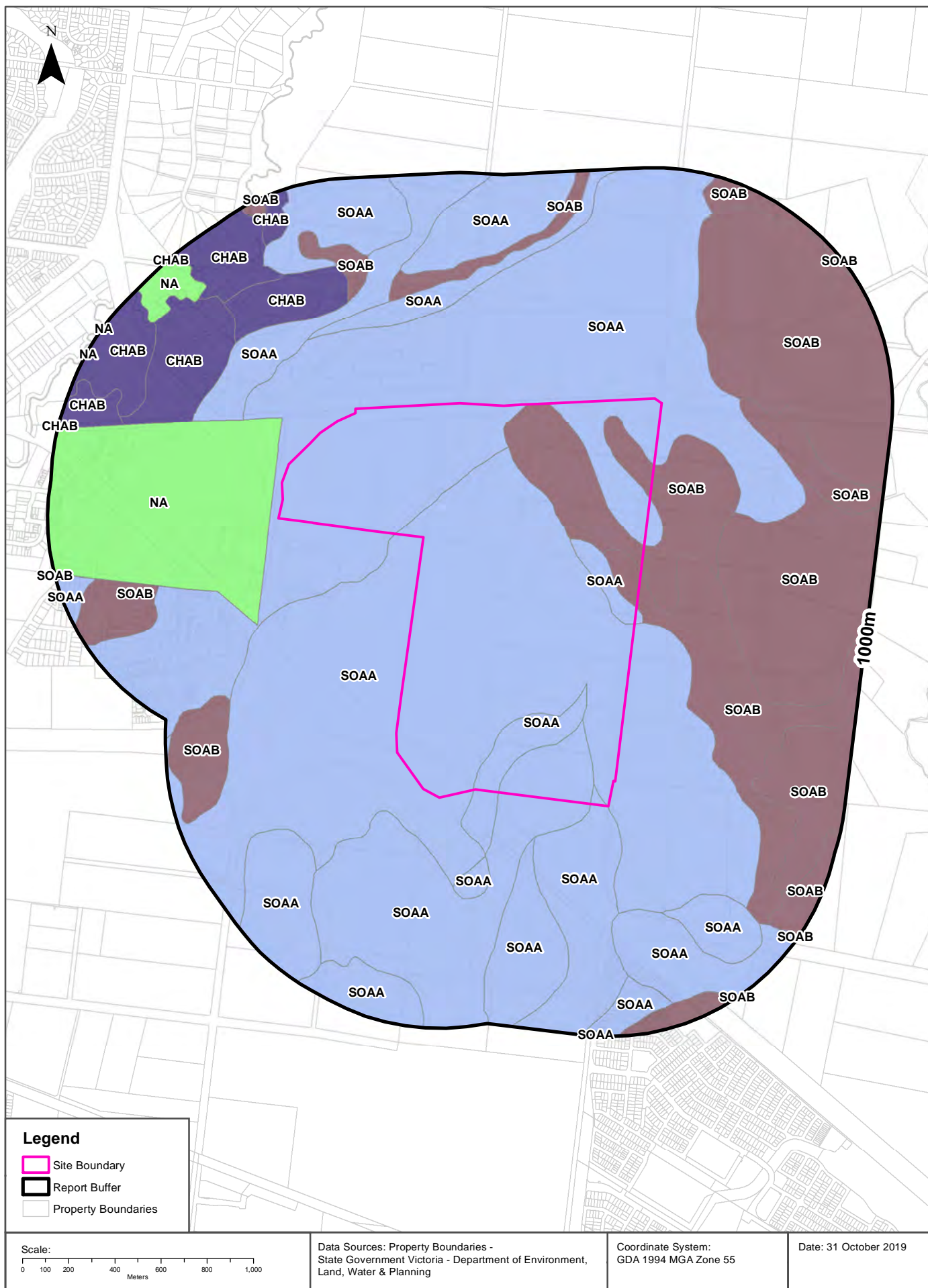
Symbol	Soil Order	Map Unit Description	Distance
Oa2	Chromosol	Dissected plateaux at low elevation: plains of hard alkaline red soils (Dr2.13) often in gilgai micro- association with dark cracking clays (Ug5.1), and grey and brown cracking clays (Ug5.2 and Ug5.3), small areas of other soils such as (Dr2.33), (Dy3.43), and (Dd1.1); also with (1) low, broad, sprawling stony rises of (Dr2.13), (2) low rounded hills of various (D) soils such as (Db1.23) with boulder strewn slopes, and (3) incised, often gorge-like, stream valleys of undescribed soils.	0m

Atlas of Australian Soils: CSIRO

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Victorian Soil Type Mapping

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Soil Landscapes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Victorian Soil Type Mapping

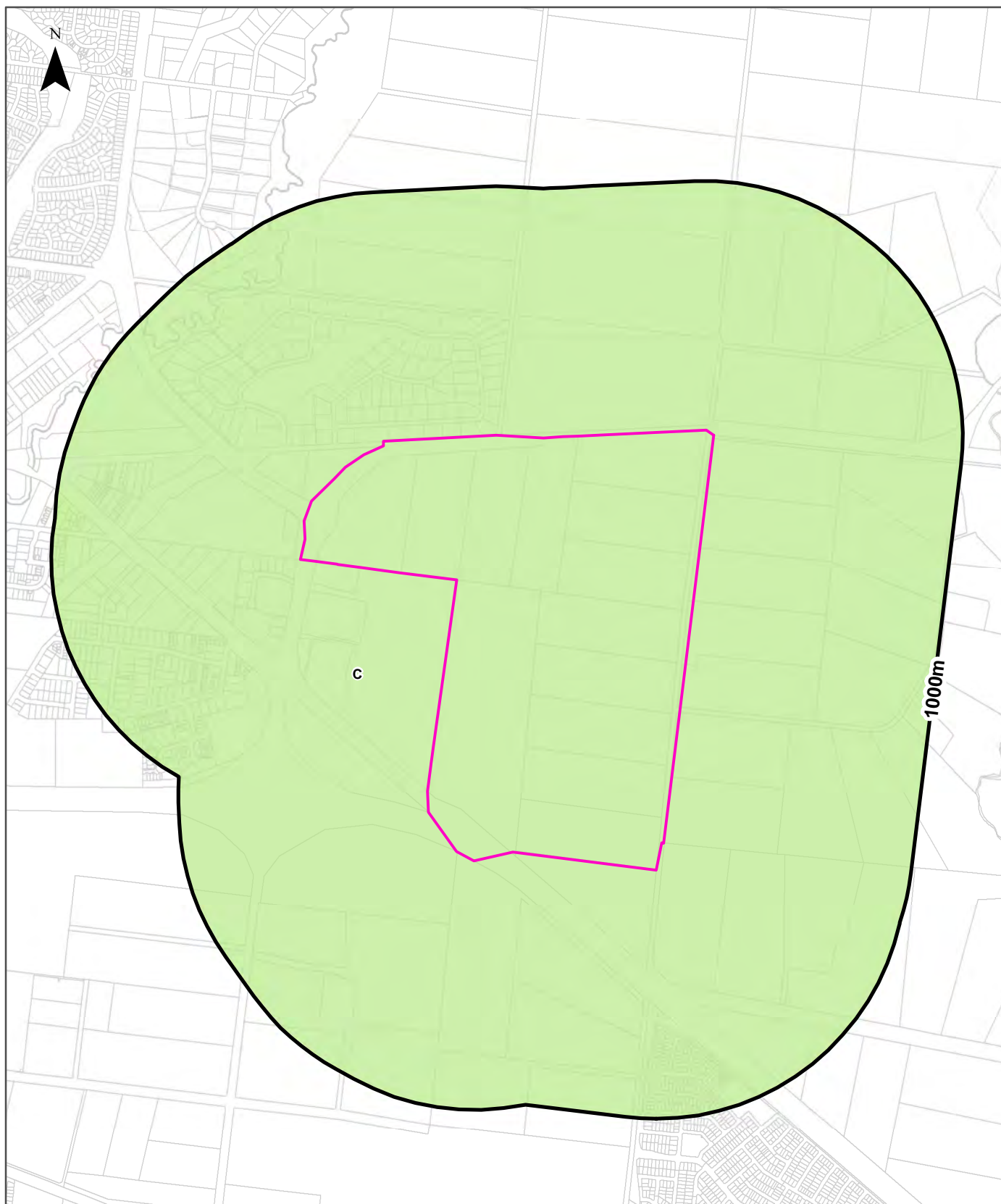
Victorian Soil Types within the dataset buffer:

Symbol	Description	Distance
SOAA	Red Sodosols	0m
SOAB	Brown Sodosols	0m
NA	Unassigned	33m
CHAB	Brown Chromosols	428m

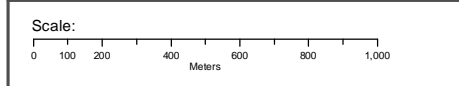
Victorian Soil Type Mapping Data Source: Department of Economic Development, Jobs, Transport and Resources
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Atlas of Australian Acid Sulfate Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend			
Site Boundary	Probability of occurrence of Acid Sulfate Soils		
Report Buffer	A. High (>70%)	C. Extremely Low (1-5%)	No Data
Property Boundary	B. Low (6-70%)	D. No Chance (0%)	



Data Sources: Property Boundaries & Topographic Data:
State of Victoria - Department of Environment and Primary Industries

Coordinate System:
GDA 1994 MGA Zone 55

Date: 31 October 2019

Acid Sulfate Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Atlas of Australian Acid Sulfate Soils

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

PROBCLASS	Description	Distance
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO

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Coastal Acid Sulfate Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Coastal Acid Sulfate Soils

What are the on-site Coastal Acid Sulfate Soil types?

Coastal Acid Sulfate Soil Types
There are no Acid Sulfate areas onsite

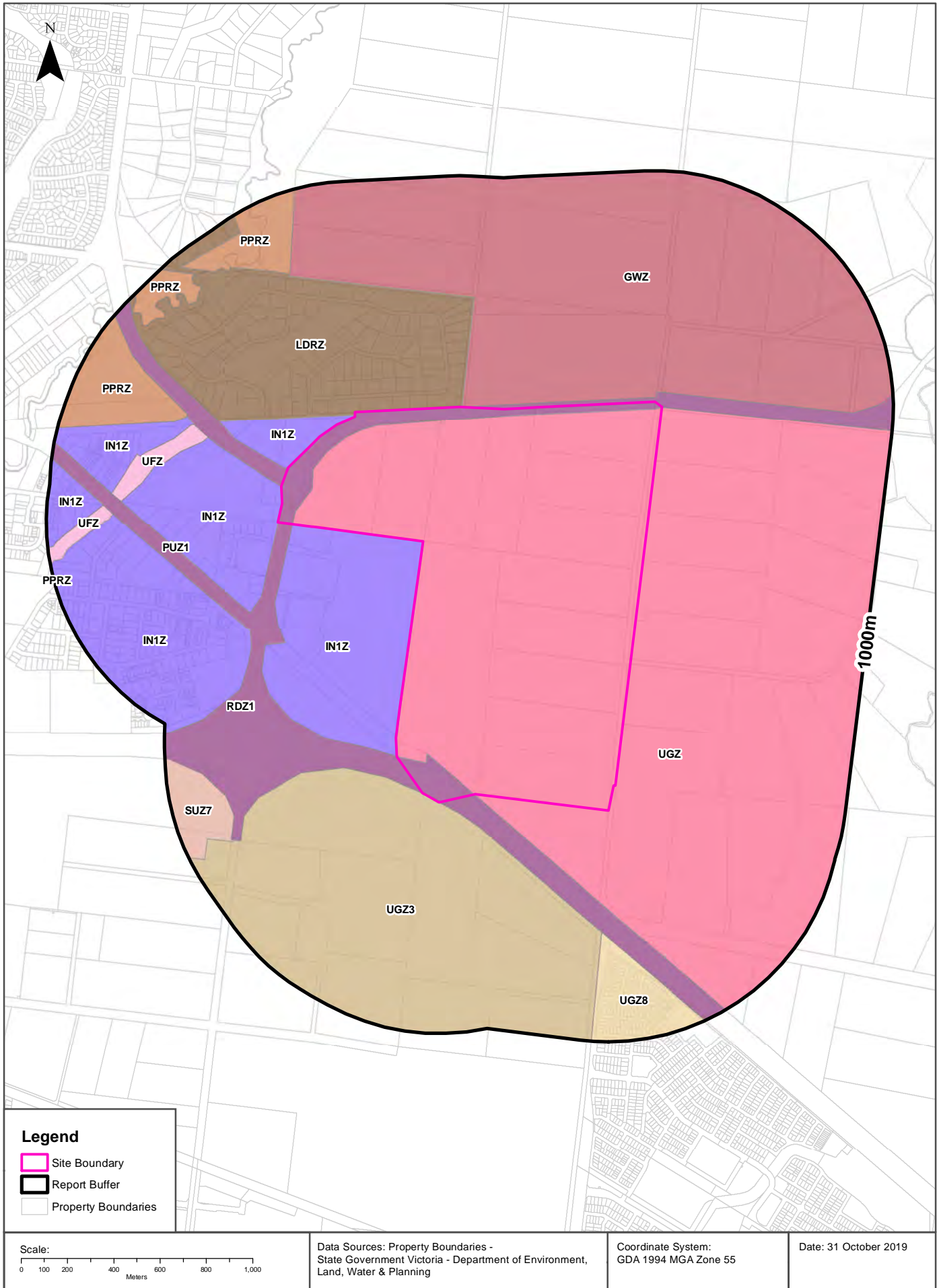
What are the Coastal Acid Sulfate Soil types within the dataset buffer?

Coastal Acid Sulfate Soil Types	Distance	Direction
There are no Acid Sulfate areas within the report buffer		

Coastal Acid Sulfate Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Planning Zones

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Planning Zones

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Planning Zones

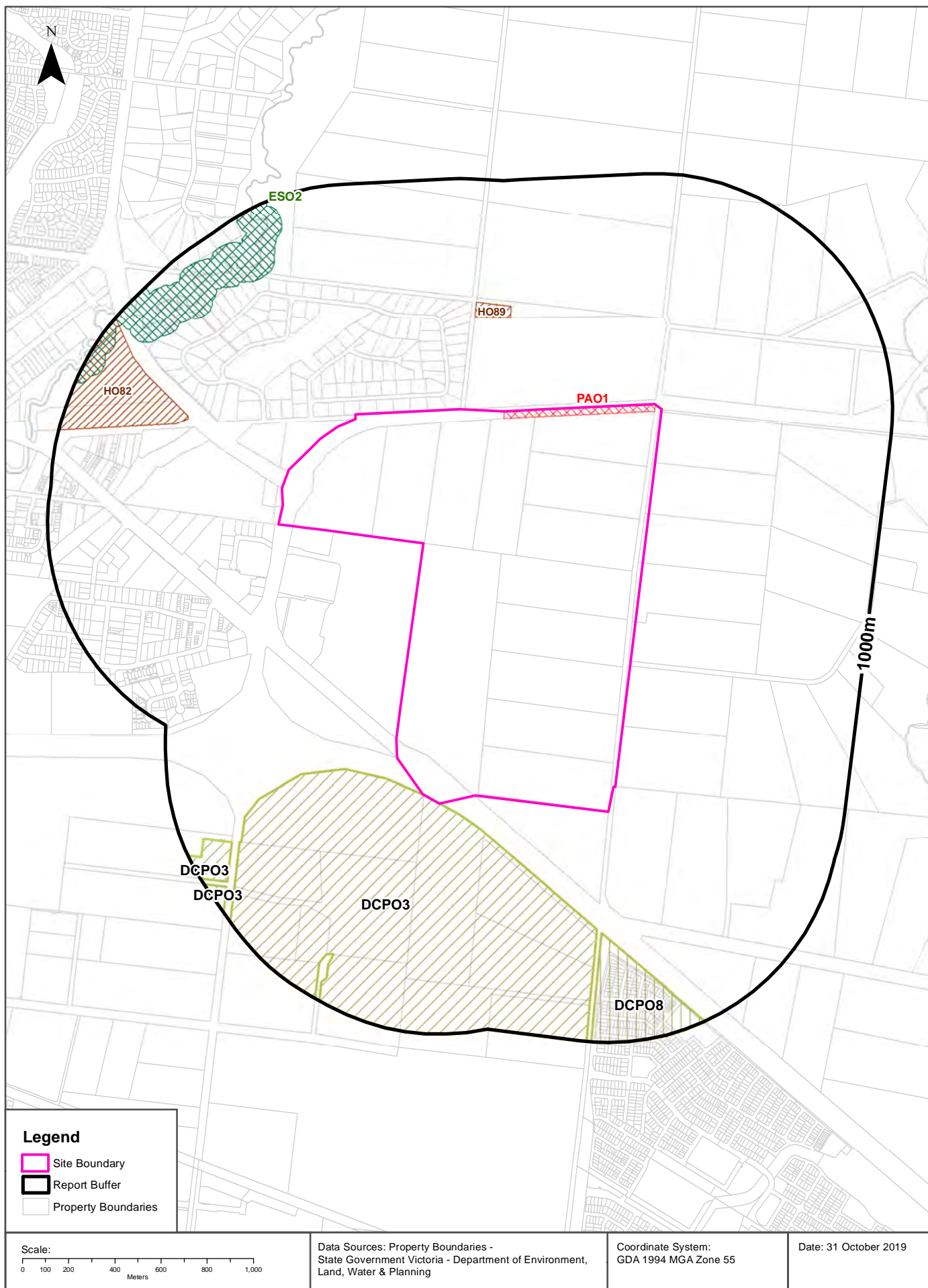
Planning zones within the dataset buffer:

Zone Code	Description	Distance	Direction
UGZ	URBAN GROWTH ZONE	0m	Onsite
RDZ1	ROAD ZONE - CATEGORY 1	0m	Onsite
IN1Z	INDUSTRIAL 1 ZONE	0m	North West
LDRZ	LOW DENSITY RESIDENTIAL ZONE	0m	North West
UGZ3	URBAN GROWTH ZONE - SCHEDULE 3	0m	South West
GWZ	GREEN WEDGE ZONE	1m	North East
UFZ	URBAN FLOODWAY ZONE	370m	West
PUZ1	PUBLIC USE ZONE - SERVICE AND UTILITY	428m	West
IN1Z	INDUSTRIAL 1 ZONE	435m	West
IN1Z	INDUSTRIAL 1 ZONE	446m	West
PPRZ	PUBLIC PARK AND RECREATION ZONE	492m	North West
UGZ8	URBAN GROWTH ZONE - SCHEDULE 8	526m	South
PPRZ	PUBLIC PARK AND RECREATION ZONE	662m	North
UFZ	URBAN FLOODWAY ZONE	712m	West
SUZ7	SPECIAL USE ZONE - SCHEDULE 7	747m	South West
IN1Z	INDUSTRIAL 1 ZONE	759m	West
PPRZ	PUBLIC PARK AND RECREATION ZONE	795m	North West
PPRZ	PUBLIC PARK AND RECREATION ZONE	968m	West

Planning Zone Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Planning Overlays

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Planning Overlays

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Planning Overlays

Planning overlays within the dataset buffer:

Zone Code	Description	Distance	Direction
PAO1	PUBLIC ACQUISITION OVERLAY 1	0m	Onsite
DCPO3	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 3	0m	South
HO89	HERITAGE OVERLAY (HO89)	405m	North
HO82	HERITAGE OVERLAY (HO82)	492m	North West
DCPO8	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 8	526m	South
ESO2	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2	720m	North
DCPO3	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 3	804m	South West
DCPO3	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 3	927m	South West

Planning Overlay Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Heritage

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?

Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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Victorian Heritage Register

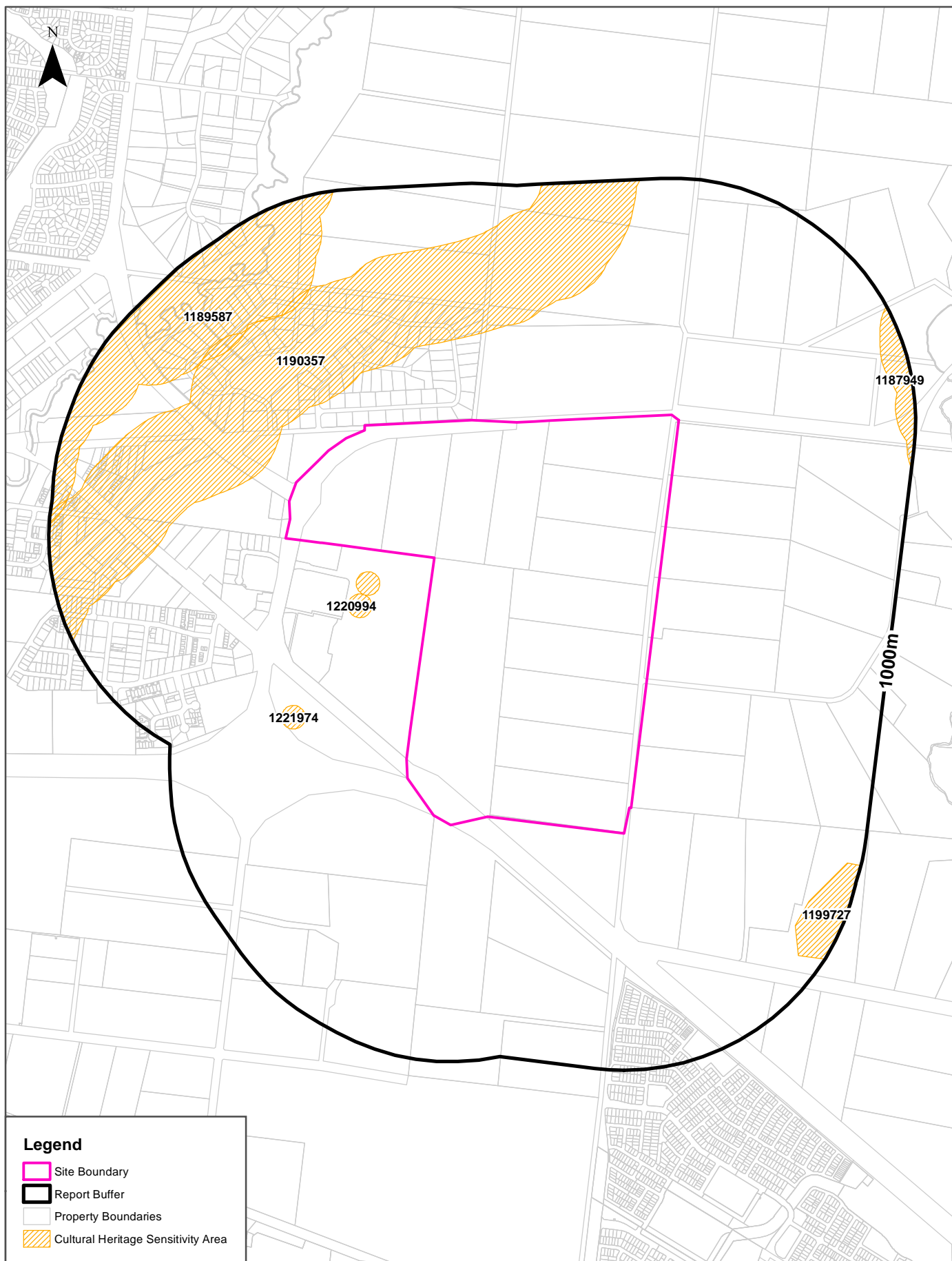
What are the Victorian Heritage Register items located within the dataset buffer?:

VHR Number	Description	Distance	Direction
N/A	No records within buffer		

Victorian Heritage Register Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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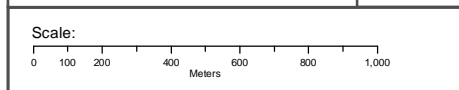
Cultural Heritage Sensitivity

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend

- Site Boundary
- Report Buffer
- Property Boundaries
- Cultural Heritage Sensitivity Area



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

Heritage

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Cultural Heritage Sensitivity

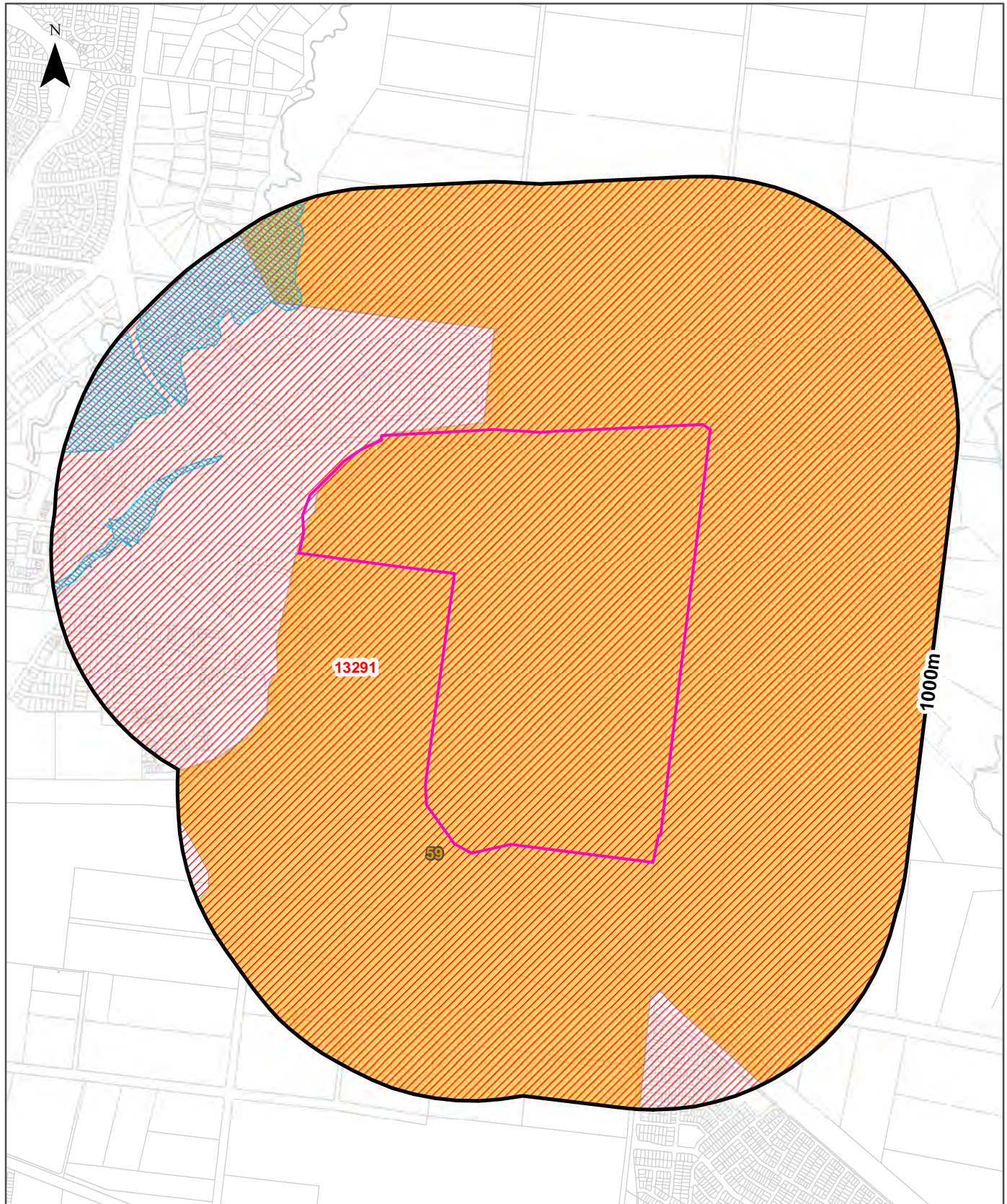
Areas of Cultural Heritage Sensitivity as specified in Division 3 of Part 2 in the Victorian Aboriginal Heritage Regulations 2018, within the dataset buffer:

Map Id	Distance	Direction
1220994	95m	West
1190357	146m	North West
1221974	447m	South West
1189587	575m	North West
1199727	821m	South East
1187949	893m	South East

Cultural Heritage Sensitivity Data Custodian: State Government Victoria - Department of Premier and Cabinet
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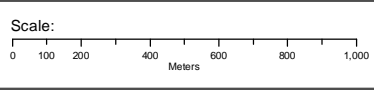
Natural Hazards

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend

- | | | | |
|---------------------|--------------------------------|---------------------------------|---------------------------------|
| Site Boundary | Flood 1 in 100 Year Extent | Sea Level 0cm (2009) | Sea Level 47cm (2070) |
| Report Buffer | Fire History Records | 1 in 100 Year Storm Tide (2009) | 1 in 100 Year Storm Tide (2070) |
| Property Boundaries | Designated Bushfire Prone Area | Sea Level 20cm (2040) | Sea Level 82cm (2100) |
| | | 1 in 100 Year Storm Tide (2040) | 1 in 100 Year Storm Tide (2100) |



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

Natural Hazards

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Bushfire Prone Areas

What are the designated bushfire prone areas within the dataset buffer?

Map ID	Feature	Plan No	LGA	Gazetted Date	Distance	Direction
59	Designated Bushfire Prone Area	LEGL./19-220	MELTON	10/09/2019	0m	Onsite

Bushfire Prone Area Data Custodian: State Government Victoria - Dept of Transport, Planning & Local Infrastructure
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Fire History

What are the fire history records of fires primarily on public land, within the dataset buffer?

Map Id	Fire Type	Fire Key	Season	Fire No	Fire Name	Treatment	Fire Cover	Start Date	Dist (m)	Direction
13291	BUSHFIRE	W196599999	1965	999		FIRE			0m	Onsite

Fire History Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Flood - 1 in 100 year modelled flood extent

What 1 in 100 year flood extent features exist within the dataset buffer?

Feature	Source	Method	Scale	Modified Date	Distance	Direction
100 Year Flood Outline	Consultants	Detailed contour and flood info	2500	01/01/2000	387m	West
100 Year Flood Outline	Consultants	Little info available	2500	01/01/2000	618m	North West

Flood Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Natural Hazards

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Victorian Coastal Inundation Sea Level Rise

What coastal inundation sea level rise features exist within the dataset buffer?

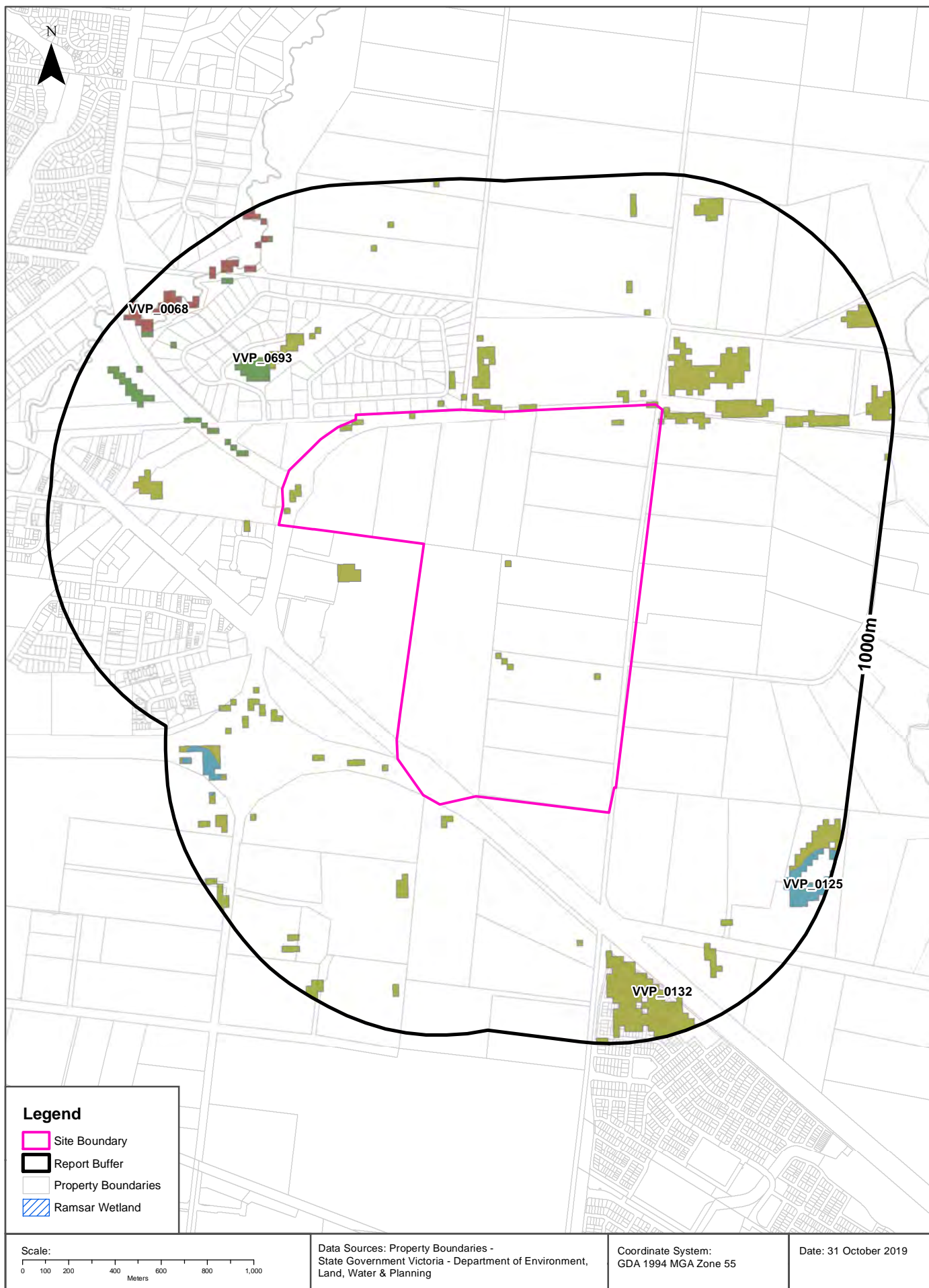
Description	Distance	Direction
No records within buffer		

Victorian Coastal Inundation Sea Level Rise Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning

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Ecological Constraints - Native Vegetation 2005 & Ramsar Wetlands

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Ecological Constraints

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Native Vegetation (Modelled 2005 Ecological Vegetation Classes)

What native vegetation exists within the dataset buffer?

Veg Code	EVC Name	EVCCode	Group	Subgroup	Bioregion	Conservation Status	Geographic Occurance	Distance
VVP_0132	Plains Grassland	0132	Plains Grasslands and Chenopod Shrublands	Clay soils	Victorian Volcanic Plain	Endangered	Common	0m
VVP_0693	Plains Woodland/Plains Grassland Mosaic	0693	Plains Woodlands or Forests	Poorly-draining	Victorian Volcanic Plain	Endangered	not applicable	187m
VVP_0068	Creepline Grassy Woodland	0068	Riverine Grassy Woodlands or Forests	Creepline and/or swampy	Victorian Volcanic Plain	Endangered	Common	756m
VVP_0125	Plains Grassy Wetland	0125	Wetlands	Freshwater	Victorian Volcanic Plain	Endangered	Common	756m

Native Vegetation Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Ramsar Wetlands

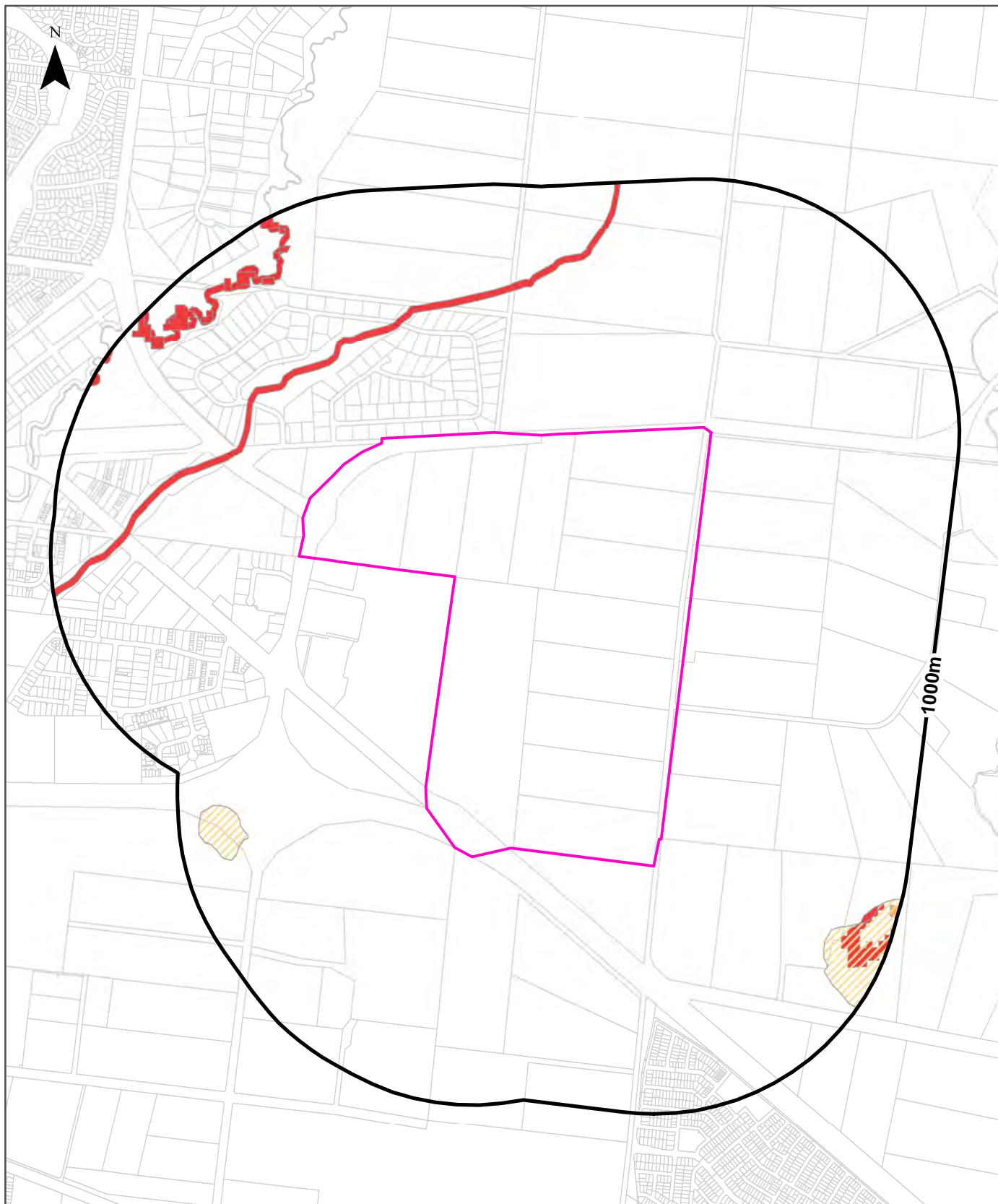
What Ramsar wetland areas exist within the dataset buffer?

Map ID	Site Name	Lake Name	Distance	Direction
N/A	No records within buffer			

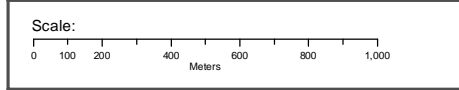
Ramsar Wetland Area Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Legend			
	High potential GDE - from national assessment		Low potential GDE - from national assessment
	Site Boundary		High potential GDE - from regional studies
	Report Buffer		Moderate potential GDE - from national assessment
	Property Boundaries		Moderate potential GDE - from regional studies
			Low potential GDE - from regional studies
			Known GDE - from regional studies
			Unclassified potential GDE - from regional studies



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

Ecological Constraints

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Groundwater Dependent Ecosystems Atlas

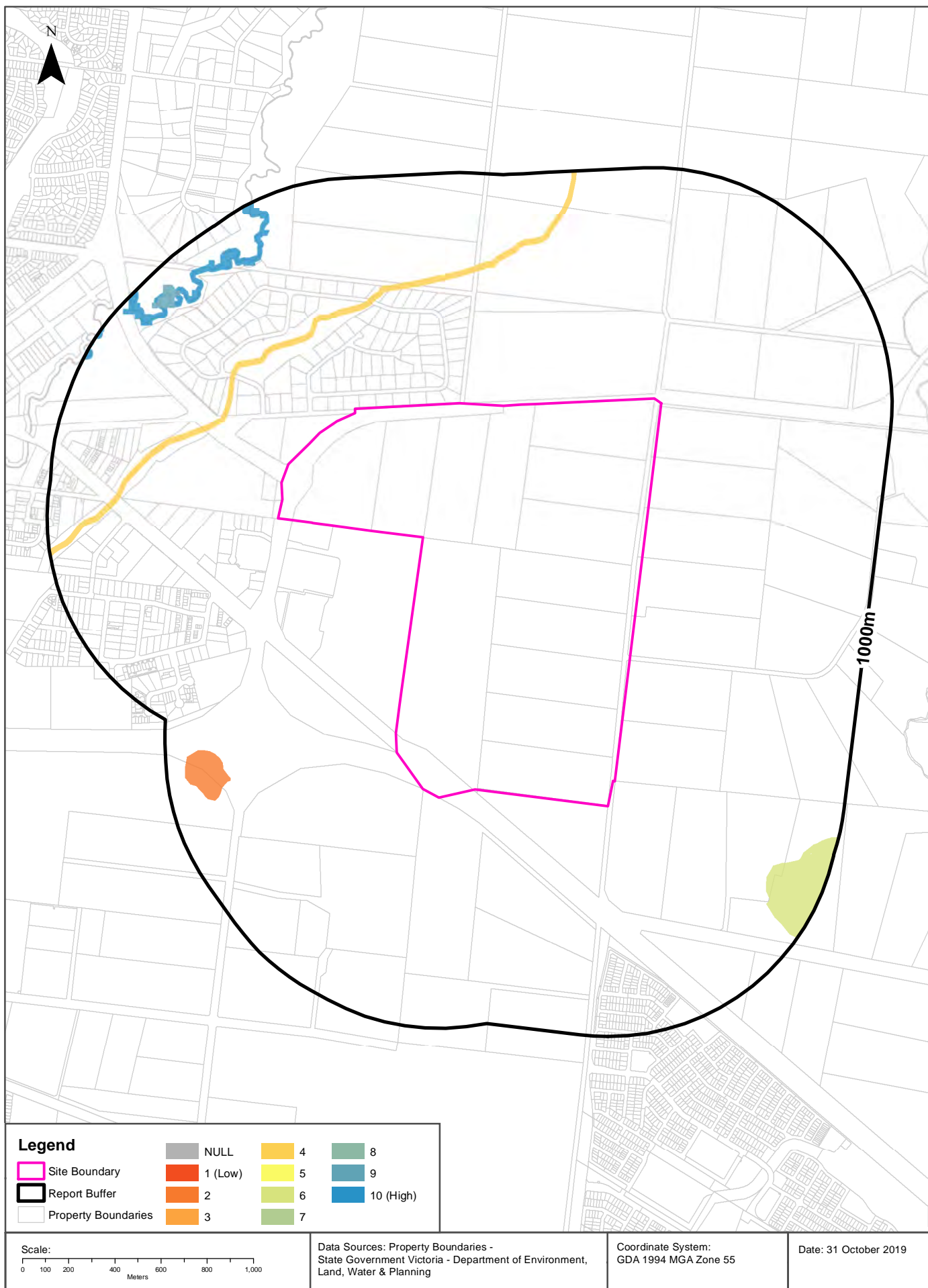
What GDEs exist within the dataset buffer?

GDE Type	Name	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Aquatic	RYANS CREEK	High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	333m
Aquatic		Moderate potential GDE - from regional studies	Moderately high plateaus and strike ridges.	Wetland		726m
Terrestrial		High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	756m
Terrestrial		Moderate potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	958m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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Inflow Dependent Ecosystems Likelihood

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)



Ecological Constraints

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 1)

Inflow Dependent Ecosystems Likelihood

What IDEs exist within the dataset buffer?

GDE Type	Name	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Aquatic	RYANS CREEK	4	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	333m
Aquatic		2	Moderately high plateaus and strike ridges.	Wetland		726m
Aquatic		6	Moderately high plateaus and strike ridges.	Wetland		750m
Terrestrial		10	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	756m
Aquatic	TOOLERN CREEK	10	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	761m
Terrestrial		6	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	804m
Terrestrial		9	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	827m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
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Address: Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Date: 31 Oct 2019 12:12:10

Reference: LS009280 EP

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.

You should obtain independent advice before you make any decision based on the information within the report.

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Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a confidence is given under the field heading “LocConf” or “Location Confidence”.

Location Confidence	Description
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced with the confidence of the general/approximate area
Road Match	Georeferenced to the road or rail
Road Intersection	Georeferenced to the road intersection
Buffered Point	Feature is a buffered point
Network of Features	Georeferenced to a network of features

Dataset Listing

Datasets contained within this report, detailing their source and data currency:

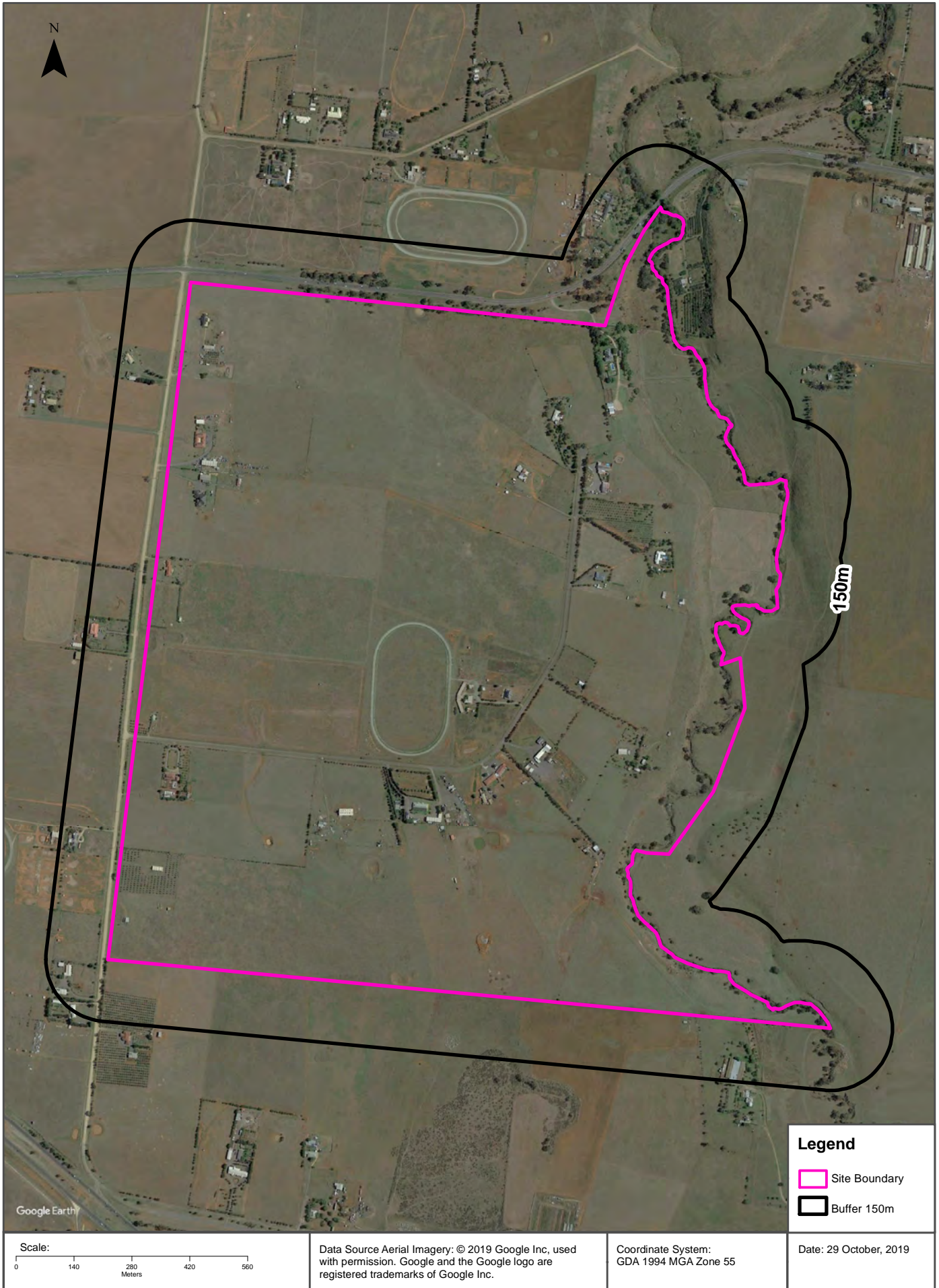
Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Topographic and Cadastre data	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	14/10/2019	Monthly	-	-	-	-
Current EPA Priority Sites	Environment Protection Authority (Vic)	09/10/2019	31/08/2019	Monthly	1000	0	0	0
Former EPA Priority Sites & other Remedial Notices	Environment Protection Authority (Vic)	06/08/2019	05/07/2019	Monthly	1000	0	0	0
EPA PFAS Site Investigations	Environment Protection Authority (Vic)	15/10/2019	13/12/2018	Monthly	2000	0	0	0
Defence PFAS Investigation & Management Program	Department of Defence	02/10/2019	02/10/2019	Monthly	2000	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	02/10/2019	02/10/2019	Monthly	2000	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	02/10/2019	02/10/2019	Monthly	2000	0	0	0
EPA Environmental Audit Reports	Environment Protection Authority (Vic)	14/10/2019	14/10/2019	Monthly	1000	0	0	0
EPA Groundwater Zones with Restricted Uses	Environment Protection Authority (Vic)	14/10/2019	14/10/2019	Monthly	1000	0	0	0
Current EPA Licensed Activities	Environment Protection Authority (Vic)	16/10/2019	16/10/2019	Monthly	1000	0	0	0
Former EPA Licensed Activities	Environment Protection Authority (Vic)	16/10/2019	16/10/2019	Monthly	1000	0	0	0
EPA Works Approvals	Environment Protection Authority (Vic)	16/10/2019	16/10/2019	Monthly	1000	0	0	1
National Waste Management Facilities Database	Geoscience Australia	06/08/2019	07/03/2017	Quarterly	1000	0	0	1
Statewide Waste and Resource Recovery Infrastructure Plan Facilities	State Government Victoria - Department of Sustainability	27/11/2014	31/12/2012	None planned	1000	0	0	1
EPA Prescribed Industrial Waste	Environment Protection Authority (Vic)	31/07/2019	31/07/2019	Quarterly	1000	0	0	0
EPA Victorian Landfill Register	Environment Protection Authority (Vic)	01/10/2019	01/10/2019	Quarterly	1000	0	0	0
Former Gasworks	Various historical sources collated by Lotsearch	15/08/2017	15/08/2017	Not required	1000	0	0	0
UBD Business to Business Directory 1991 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business to Business Directory 1991 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1980 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1980 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1970 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1970 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1960-62 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1960-62 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0
UBD Business Directory 1950 (Premise & Intersection Matches)	Hardie Grant			Not required	150	0	0	0
UBD Business Directory 1950 (Road & Area Matches)	Hardie Grant			Not required	150	-	0	0

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Sands & McDougall's Directory 1945 (Premise & Intersection Matches)	Sands & McDougall, State Library Victoria			Not required	150	0	0	0
Sands & McDougall's Directory 1945 (Road & Area Matches)	Sands & McDougall, State Library Victoria			Not required	150	-	0	0
Sands & McDougall's Directory 1925 (Premise & Intersection Matches)	Sands & McDougall, State Library Victoria			Not required	150	0	0	0
Sands & McDougall's Directory 1925 (Road & Area Matches)	Sands & McDougall, State Library Victoria			Not required	150	-	0	0
Sands & McDougall's Directory 1905 (Premise & Intersection Matches)	Sands & McDougall, State Library Victoria			Not required	150	0	0	0
Sands & McDougall's Directory 1905 (Road & Area Matches)	Sands & McDougall, State Library Victoria			Not required	150	-	0	0
Historical Business Directory Drycleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	500	0	0	0
Historical Business Directory Drycleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant; Sands & McDougall, State Library Victoria			Not required	500	-	0	7
Features of Interest	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	14/10/2019	Quarterly	1000	3	3	11
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000	1	1	1
Groundwater Salinity	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	0	1	-	-
Depth to Watertable	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	29/08/2012	Unknown	0	3	-	-
Surface Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	0	1	-	-
Basement Elevation	State Government Victoria - Department of Environment, Land, Water & Planning	14/08/2015	23/09/2013	Unknown	0	1	-	-
Groundwater Boreholes WMIS	State Government Victoria - Department of Environment, Land, Water & Planning	28/08/2019	01/08/2019	Quarterly	2000	7	13	154
Groundwater Boreholes Earth Resources Database	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	27/07/2018	17/02/2010	As required	2000	4	8	75
Groundwater Boreholes Fed Uni	Federation University Australia	21/12/2017	07/01/2014	As required	2000	0	0	2
Historical Mining Activity - Shafts	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	18/10/2018	20/07/2018	As required	1000	0	0	0
Geological Units 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	2	-	3
Geological Structures 1:50,000	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	0	-	0
Dykes and Marker Beds 50k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	0	-	0
Shear zones 250k	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	13/01/2015	24/06/2014	Unknown	1000	0	-	0
Atlas of Australian Soils	ABARES	19/05/2017	17/02/2011	As required	1000	1	1	1
Victorian Soil Type Mapping	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	24/08/2017	21/03/2016	Unknown	1000	2	2	2
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000	1	1	1
Coastal Acid Sulfate Soils	State Government Victoria - Department of Economic Development, Jobs, Transport and Resources	28/03/2017	30/03/2011	None planned	1000	0	0	0

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features Onsite	No. Features within 100m	No. Features in Buffer
Planning Scheme Zones	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	09/10/2019	Monthly	1000	4	10	16
Planning Scheme Overlay	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	09/10/2019	Monthly	1000	2	4	9
Commonwealth Heritage List	Australian Government Department of the Environment and Energy - Heritage Branch	16/01/2019	31/07/2018	Unknown	1000	0	0	0
National Heritage List	Australian Government Department of the Environment and Energy - Heritage Branch	16/01/2019	28/09/2018	Unknown	1000	0	0	0
Victorian Heritage Register	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	14/10/2019	Quarterly	1000	0	0	0
Cultural Heritage Sensitivity	State Government Victoria - Department of Premier and Cabinet	14/10/2019	13/10/2019	Quarterly	1000	1	1	4
Bushfire Prone Area	State Government Victoria - Department of Transport, Planning and Local Infrastructure	19/09/2019	10/09/2019	Quarterly	1000	1	1	1
Fire History	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	13/10/2019	Quarterly	1000	1	1	1
Flood - 1 in 100 Year Modelled Flood Extent	State Government Victoria - Department of Environment, Land, Water & Planning	14/10/2019	31/12/2014	Quarterly	1000	1	1	1
Victorian Coastal Inundation Sea Level Rise	State Government Victoria - Department of Environment, Land, Water & Planning	10/04/2018	24/10/2017	Unknown	1000	0	0	0
Native Vegetation (Modelled 2005 Ecological Vegetation Classes)	State Government Victoria - Department of Environment, Land, Water & Planning	13/01/2015	31/12/2005	None planned	1000	2	2	3
Ramsar Wetland Areas in Victoria	State Government Victoria - Department of Environment, Land, Water & Planning	28/03/2017	24/06/2013	None planned	1000	0	0	0
Groundwater Dependent Ecosystems Atlas	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	5	5	7
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000	7	7	11

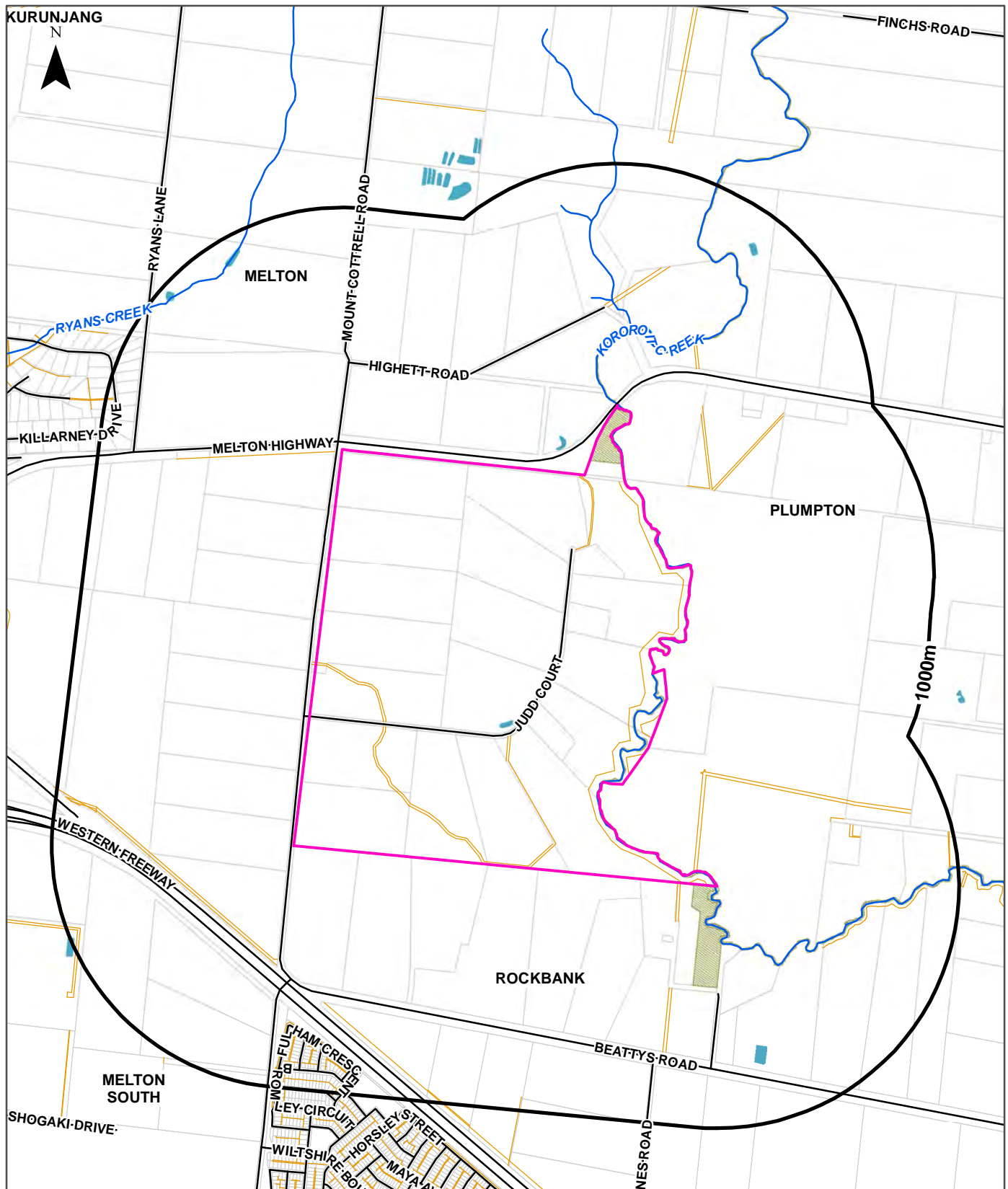
Aerial Imagery 2018

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

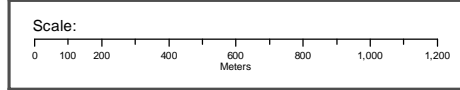


Topographic Data

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend		
Site Boundary	Water Area	Major Road
Report Buffer	Crown or Commonwealth Land	Road
Property Boundaries	Statewide Forest	Track/Pathway
		Railway
		Light Rail
		Watercourse
		Easement
		Rail - Underground/Tunnel



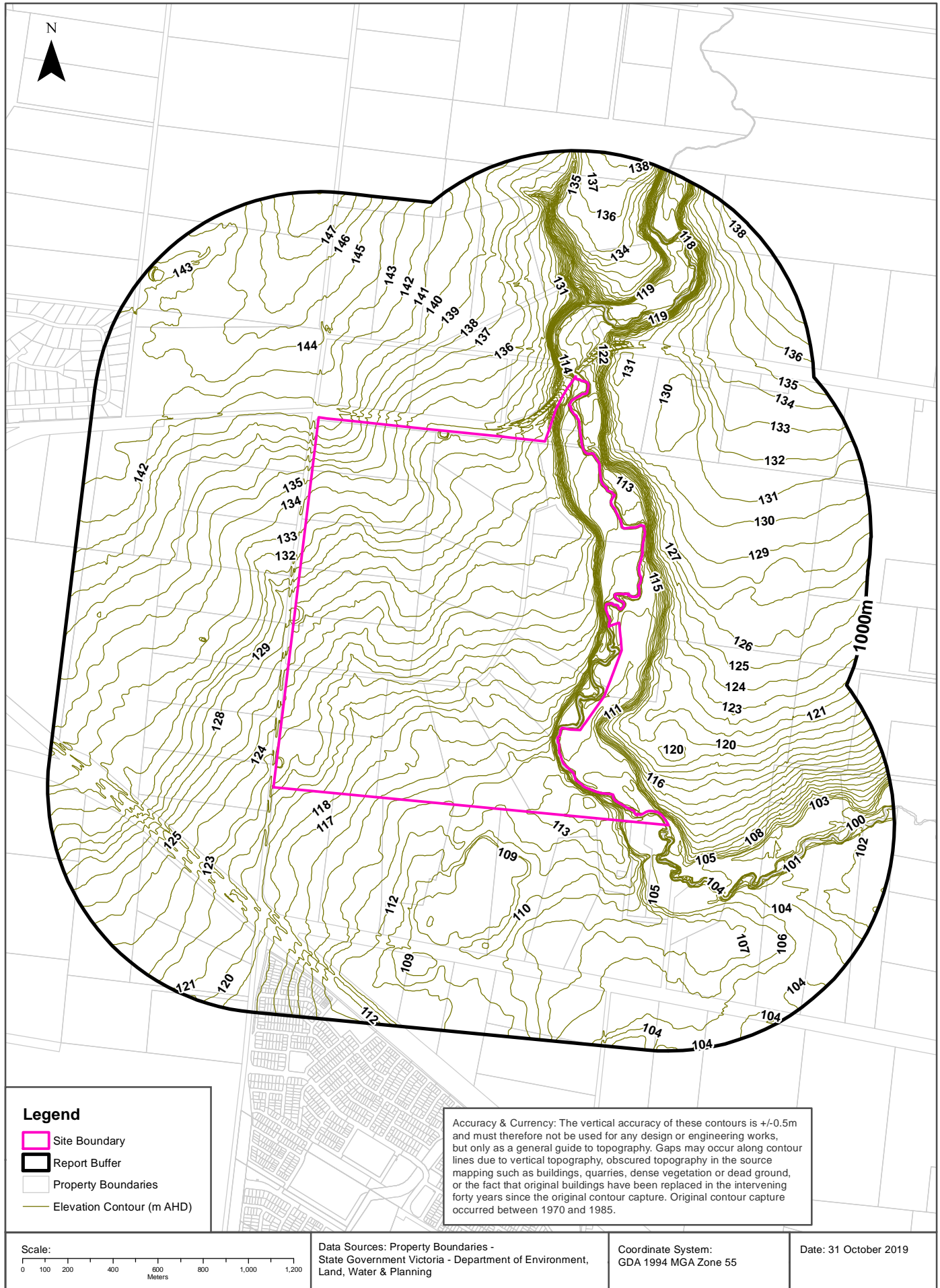
Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

Elevation Contours (m AHD)

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Current EPA Priority Sites Register

Sites on the current EPA priority sites register that exist within the dataset buffer:

Notice No	Address	Suburb	Issue	Loc Conf	Dist (m)	Direction
N/A	No records in buffer					

Priority Sites Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

Former EPA Priority Sites & Other Pollution Notices

Sites within the dataset buffer that have been issued a Pollution Notice:

Note. Due to pollution notices being revoked and removed from published lists this is not an exhaustive list of all past pollution notices.

Notice No	Notice Type	Company	Address	Suburb	Status	Issue	Date Issued	Loc Conf	Dist	Dir
N/A	No records in buffer									

Pollution Notice Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

PFAS Investigation Sites

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

EPA PFAS Site Investigations

Sites being investigated by the EPA for PFAS contamination within the dataset buffer:

Map ID	Site Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Site Investigations Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

Defence PFAS Investigation & Management Program

Sites being investigated or managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation & Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Defence 3 Year Regional Contamination Investigation Program

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

EPA Environmental Audits

EPA environmental audit records that exist within the dataset buffer:

Note. Please click on CARMS No. to activate a hyperlink to online documentation. If link does not work, documentation may still be accessible via the EPA Interaction Portal.

CARMS No	Transaction No	Site	Address	Suburb	Date Complete	Audit Category	Loc Conf	Distance	Direction
N/A	No records in buffer								

Environmental Audit Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

EPA Groundwater Zones with Restricted Uses

EPA GQRUZ records that exist within the dataset buffer:

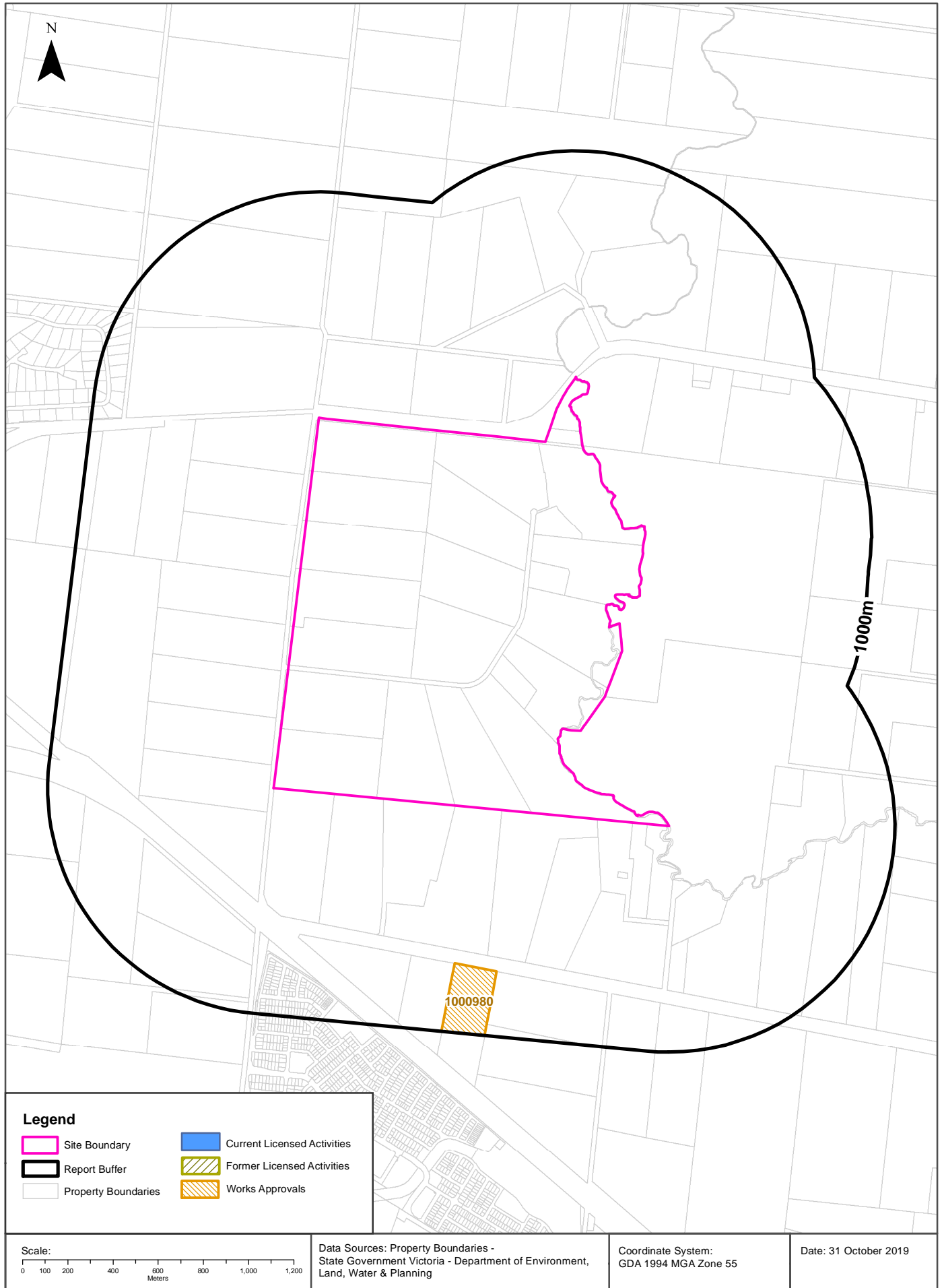
Note. Please click on CARMS No. to activate a hyperlink to online documentation.

CARMS No	EPA Id	Site History	Site Address	Restricted Uses	Status	Loc Conf	Distance	Direction
N/A	No records in buffer							

Environmental GQRUZ Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

EPA Records - Licensed Activities & Works Approvals

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



EPA Records

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

EPA Licensed Activities

EPA licensed activities that exist within the dataset buffer:

Trans No	Licence No	Licence Type	Organisation	Premise Ref	Premise Address 1	Premise Address 2	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer									

Licensed Activity Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

Former EPA Licensed Activities

Former EPA licensed activities that exist within the dataset buffer:

Licence No	Organisation	Premise Address	Suburb	Activities	Loc Conf	Dist (m)	Direction
N/A	No records in buffer						

Former Licensed Activity Data Custodian: State Government Victoria - Environmental Protection Authority (EPA)

EPA Works Approvals

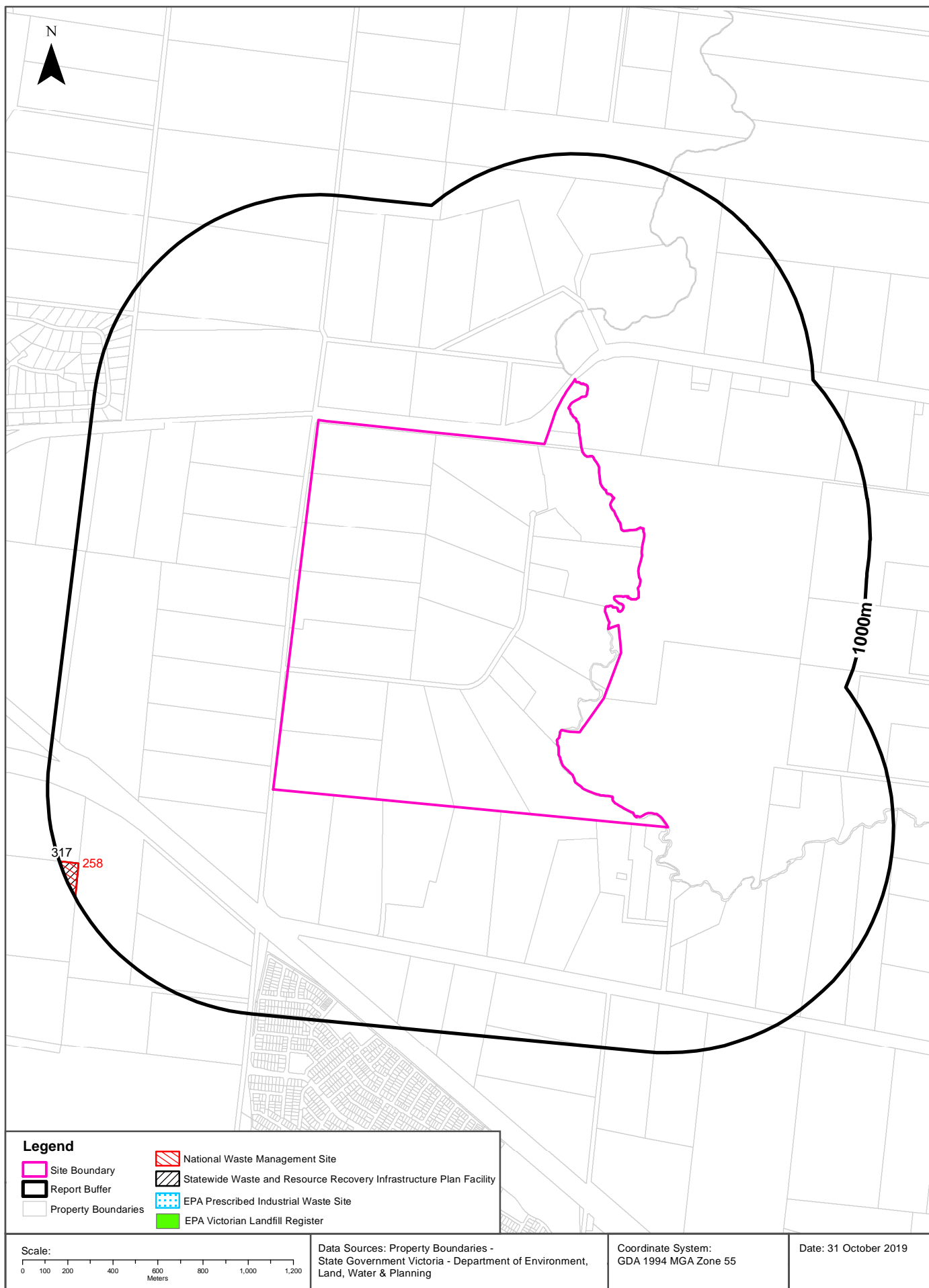
EPA works approvals that exist within the dataset buffer:

Transaction No	Status	Approval No	Organisation	Premise Address	Suburb	Scheduled Categories	Loc Conf	Dist (m)	Direction
1000980	Approved/Issued	47449	R P PETROLEUM PTY LTD [ROCKBANK]	1267 BEATTYS RD ROCKBANK VIC 3335	ROCKBANK	A03 Sewage Treatment	Premise Match	695m	South

Works Approvals Data Custodian: State Government Victoria - Environment Protection Authority (EPA)

Waste Management Facilities & Landfills

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Waste Management Facilities & Landfills

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist (m)	Direction
258	Melton Shire Council	Melton Recycling Centre	54 Ferris Road	Melton	Multi-Purpose	Operational	Operational		Original information on waste management site collected by DEWHA in 2009	Premise Match	923m	South West

Waste Management Facilities Data Source: Australian Government Geoscience Australia

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Statewide Waste and Resource Recovery Infrastructure Plan Facilities

Statewide Waste and Resource Recovery Infrastructure Plan Facilities within the dataset buffer:

Map Id	Owner	Site Name	Address	Suburb	Category	Sub Category	Loc Conf	Distance	Direction
317	Melton City Council	Melton Recycling Centre	Ferris Rd	Melton	Municipal Waste	MSW Transfer station	Premise Match	923m	South West

SWRRIPF Data Source: State Government Victoria - Department of Sustainability

EPA Prescribed Industrial Waste

EPA Prescribed Industrial Waste treaters, disposers and permitted transporters within the dataset buffer:

Map Id	Company Name	Address	Suburb	Treatment/Disposal	Transport	Accredited Agent	EPA List Status	Loc Conf	Dist' (m)	Direct
N/A	No records in buffer									

Prescribed Industrial Waste Data Source: State Government Victoria - Environment Protection Authority (EPA)

EPA Victorian Landfill Register

EPA Victorian Landfill Register sites within the dataset buffer:

Landfill Register No.	Site	Address	Operating Status	Est. Year Of Closure	Waste type	Loc Conf	Dist' (m)	Direction
No records in buffer								

EPA Victorian Landfill Register Data Source: State Government Victoria - Environment Protection Authority (EPA)

Former Gasworks

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Former Gasworks

Former Gasworks identified from various historical sources within the dataset buffer:

Note - As this is a dataset collated from various historical sources, it is not an exhaustive list of all former Gasworks

Map Id	Site Name	Date Opened	Year Closed	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Collated from various historical sources

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1991 Business to Business Directory Records Premise or Road Intersection Matches

Records from the 1991 UBD Business to Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1991 Business to Business Directory Records Road or Area Matches

Records from the 1991 UBD Business to Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1980 Business Directory Records Premise or Road Intersection Matches

Records from the 1980 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1980 Business Directory Records Road or Area Matches

Records from the 1980 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1970 Business Directory Records Premise or Road Intersection Matches

Records from the 1970 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1970 Business Directory Records Road or Area Matches

Records from the 1970 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1960-62 Business Directory Records Premise or Road Intersection Matches

Records from the 1960-62 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1960-62 Business Directory Records Road or Area Matches

Records from the 1960-62 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1950 Business Directory Records Premise or Road Intersection Matches

Records from the 1950 UBD Business Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

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1950 Business Directory Records Road or Area Matches

Records from the 1950 UBD Business Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

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Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1945 Business Directory Records Premise or Road Intersection Matches

Records from the 1945 Sands & McDougall's Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

Business Directory Content derived from Sands & McDougall's Directory of Victoria and Canberra ACT - Digitised by State Library Victoria

1945 Business Directory Records Road or Area Matches

Records from the 1945 Sands & McDougall's Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

Business Directory Content derived from Sands & McDougall's Directory of Victoria and Canberra ACT - Digitised by State Library Victoria

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1925 Business Directory Records Premise or Road Intersection Matches

Records from the 1925 Sands & McDougall's Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

Business Directory Content derived from Sands & McDougall's Directory of Victoria - Digitised by State Library Victoria

1925 Business Directory Records Road or Area Matches

Records from the 1925 Sands & McDougall's Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

Business Directory Content derived from Sands & McDougall's Directory of Victoria - Digitised by State Library Victoria

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

1905 Business Directory Records Premise or Road Intersection Matches

Records from the 1905 Sands & McDougall's Directory, mapped to a premise or road intersection, within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer					

Business Directory Content derived from Sands & McDougall's Melbourne, Suburban, and Country Directory - Digitised by State Library Victoria

1905 Business Directory Records Road or Area Matches

Records from the 1905 Sands & McDougall's Directory, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Location Confidence	Distance to Road Corridor or Area
	No records in buffer				

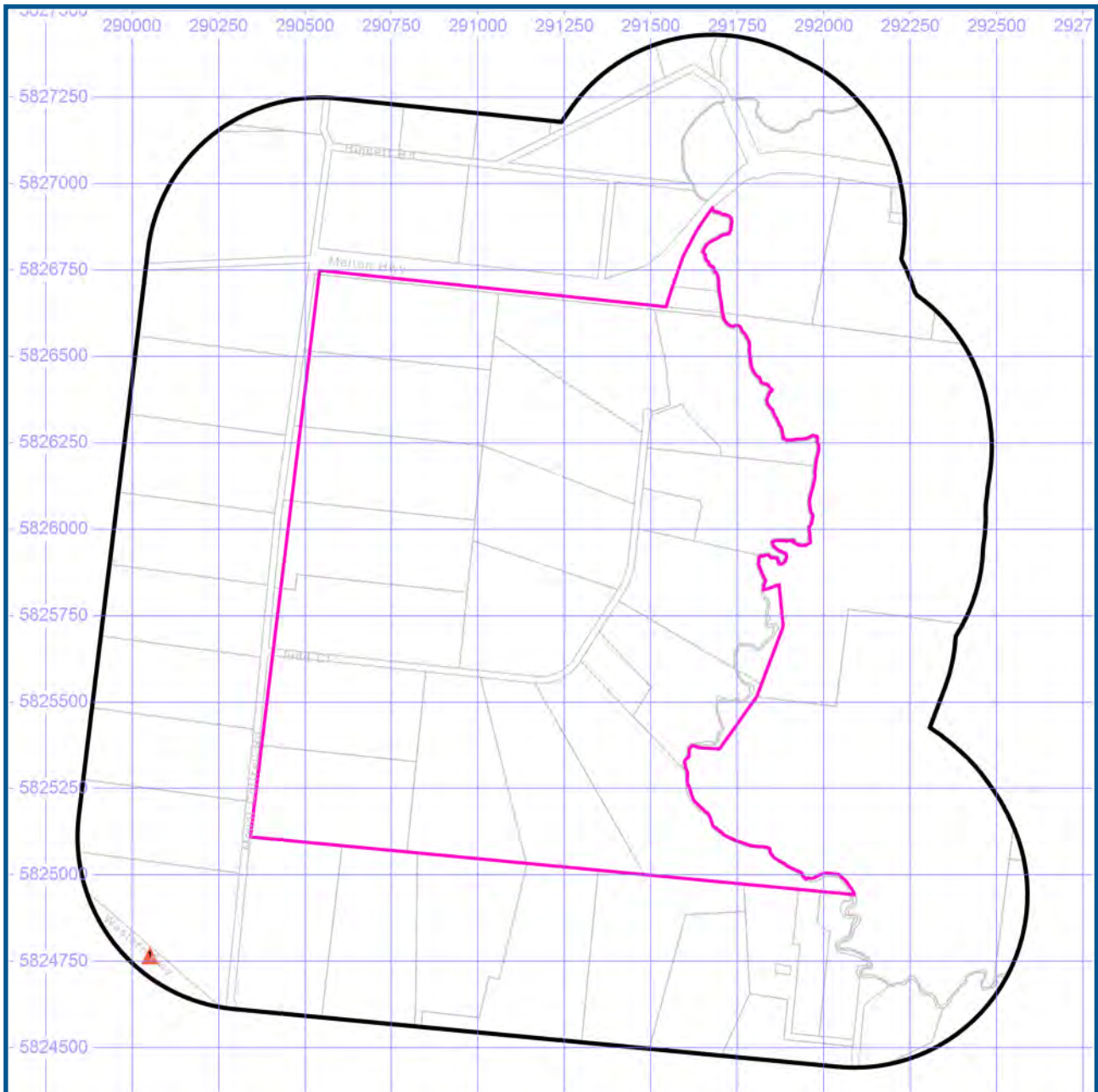
Business Directory Content derived from Sands & McDougall's Melbourne, Suburban, and Country Directory - Digitised by State Library Victoria


Historical Business Directories




Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Dry Cleaners, Motor Garages & Service Stations



-  Site Boundary
-  Buffer 500m
-  Property Boundaries

-  Business directory records mapped to a specific premise
-  Business directory records mapped to a road intersection
-  Business directory records mapped to a road corridor
- Business directory records mapped to a general area



Projected Coordinate System:
GDA94 MGA Zone 55

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018
Sands & McDougall's Directory of Victoria, derived data, digitised by State Library Victoria.
Property Boundaries © State Government Victoria - Dept. of Environment, Land, Water & Planning 2019

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from Sands & McDougall's Directories and UBD Business Directories, mapped to a premise or road intersection within the dataset buffer.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
	No records in buffer						

Business Directory Content reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018 and Sands & McDougall's Directory of Victoria (Digitised by State Library Victoria)

Historical Business Directories

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Dry Cleaners, Motor Garages & Service Stations Road or Area Matches

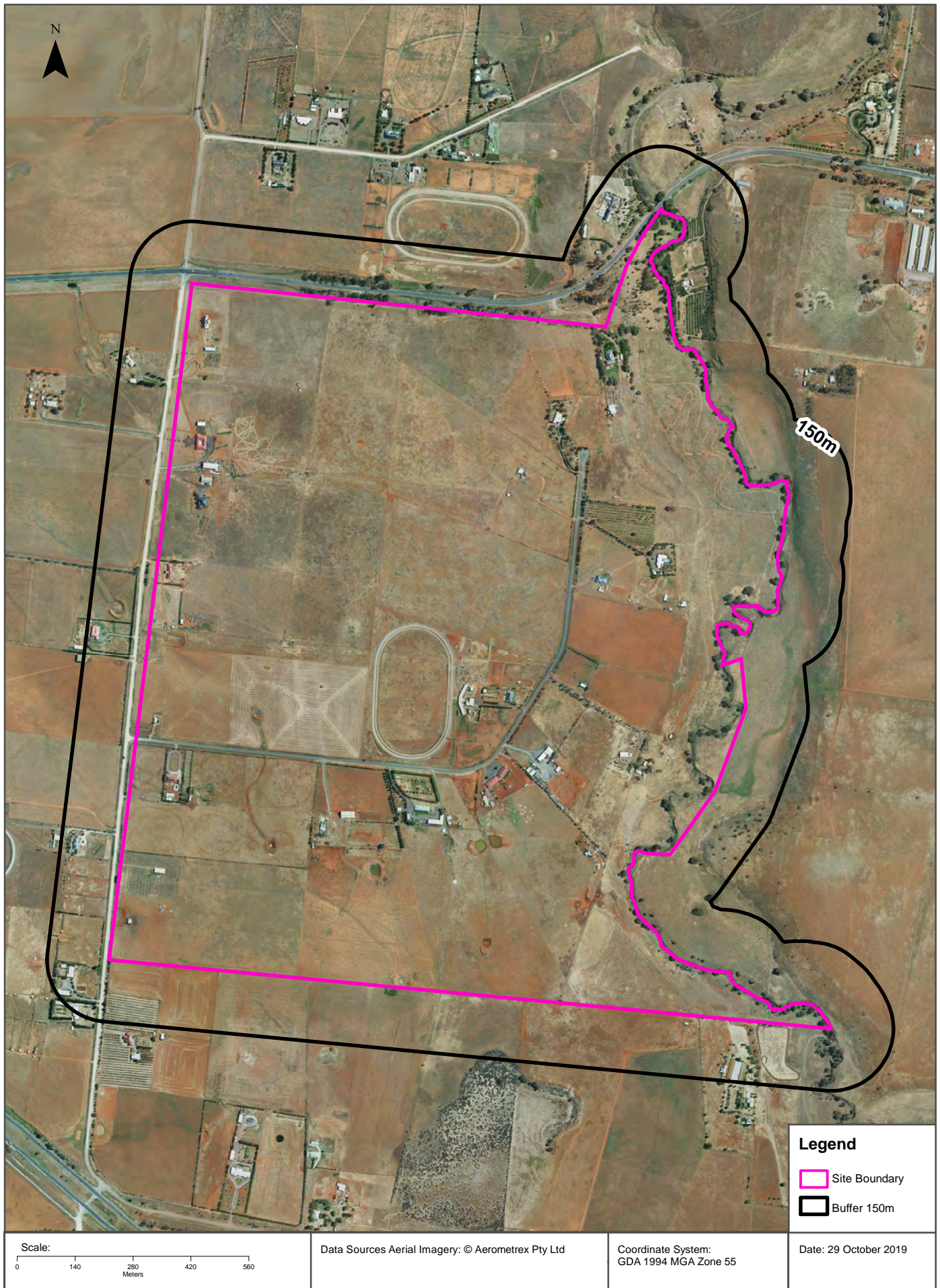
Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories and Sands & McDougall's Directories, mapped to a road or an area within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
1	MOTOR GARAGES & SERVICE STATIONS	Melton Auto Port., Ballarat Rd Melton & Melton South	12387	1970	Road Match	429m
	MOTOR GARAGES & SERVICE STATIONS	Young's Motors (Melton), High St Melton & Melton South	12388	1970	Road Match	429m
	MOTOR GARAGES & SERVICE STATIONS	Dagleish Motors, High St., Melton & Melton South.	157475	1960	Road Match	429m
	MOTOR GARAGES & SERVICE STATIONS	Melton Auto Port, Ballarat Rd., Melton & Melton South.	157476	1960	Road Match	429m
	MOTOR GARAGES & SERVICE STATIONS	Young's Motors, High St., Melton & Melton South.	157477	1960	Road Match	429m
	MOTOR GARAGES & SERVICE STATIONS	Melton Motors., Ballarat Rd. Melton & Melton South	116612	1950	Road Match	429m
	MOTOR GARAGES & SERVICE STATIONS	Woodgate Motors., High St. Melton & Melton South	116613	1950	Road Match	429m

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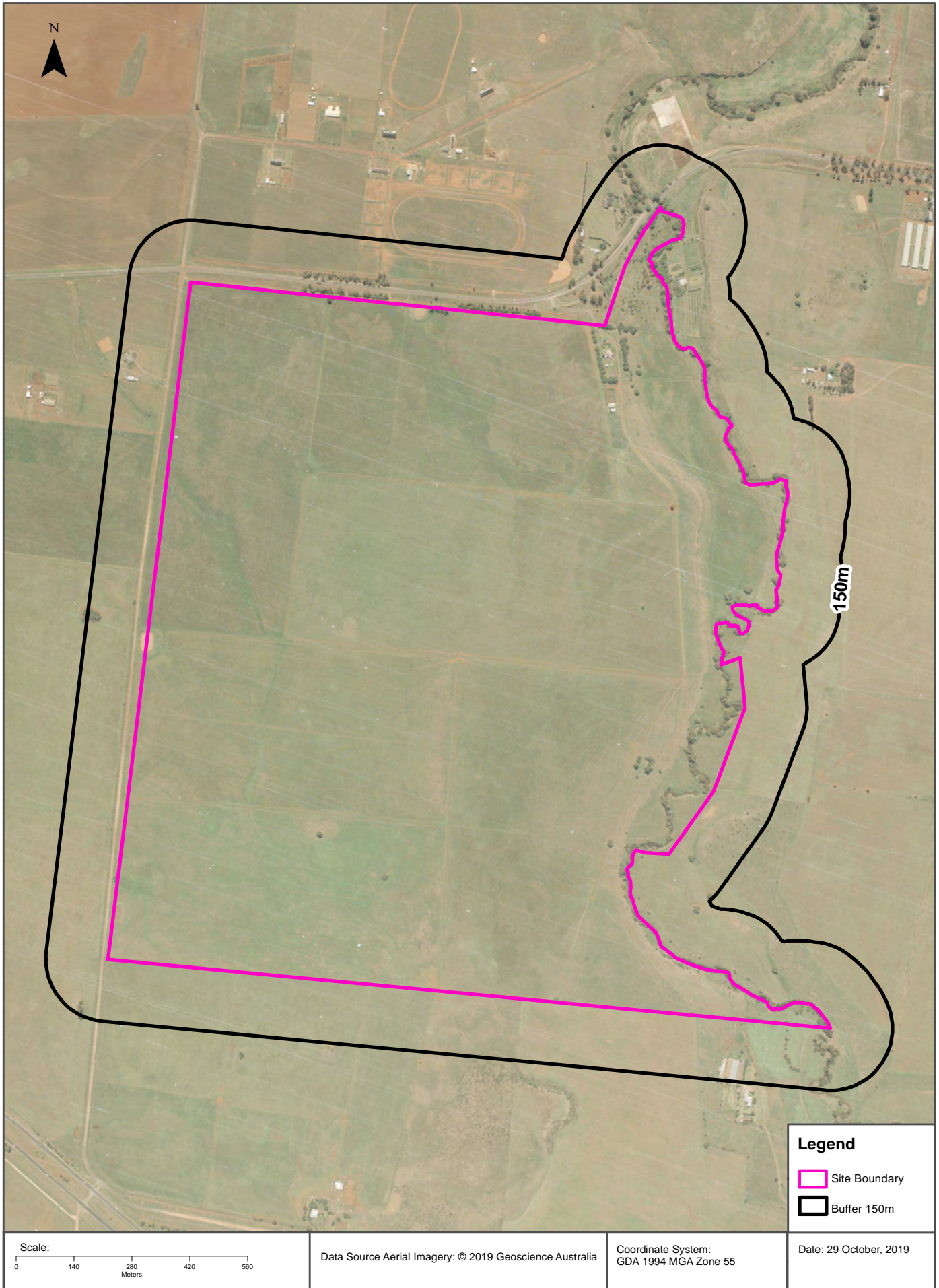
Aerial Imagery 2009

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



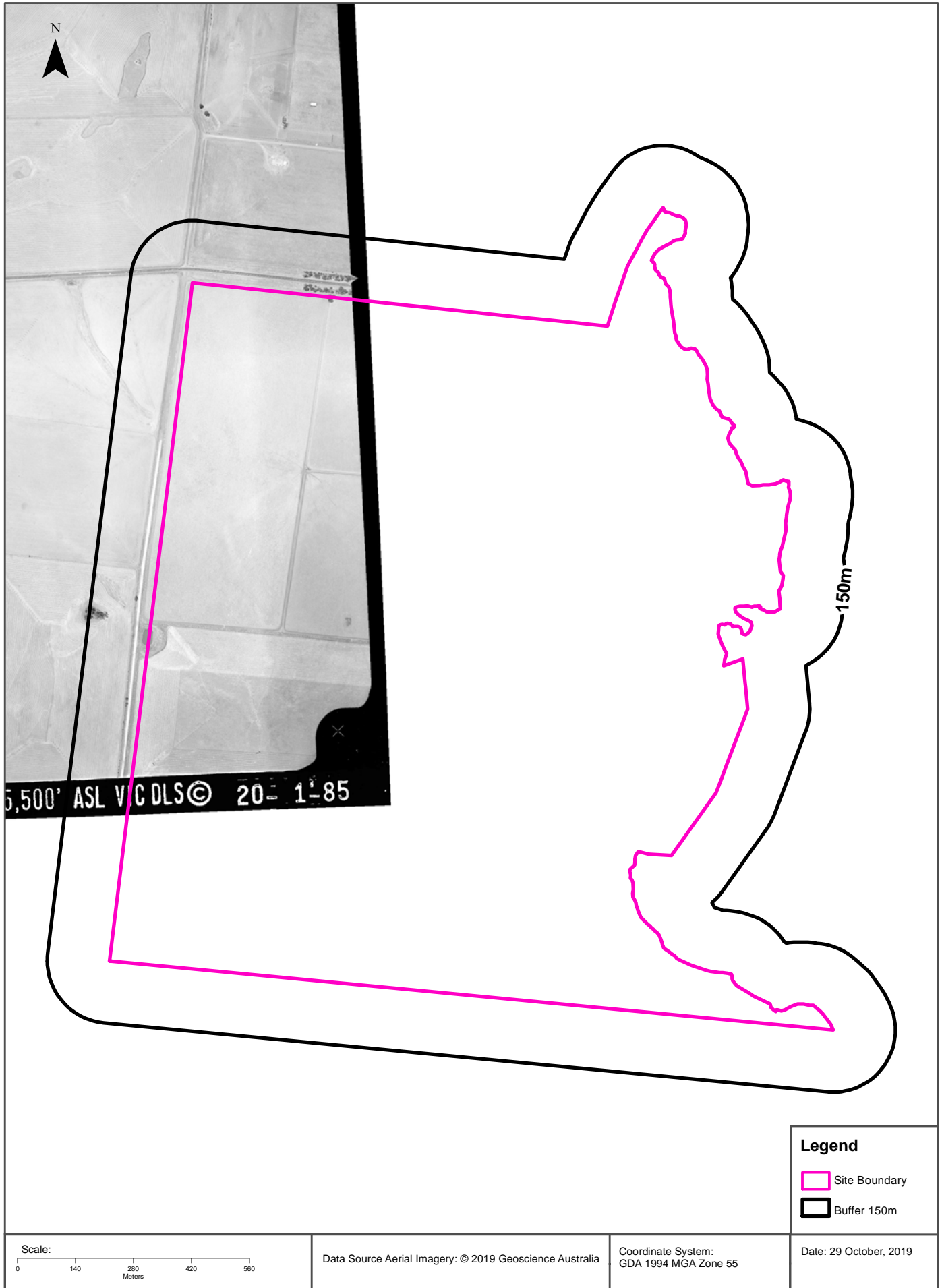
Aerial Imagery 1990

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Aerial Imagery 1985

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



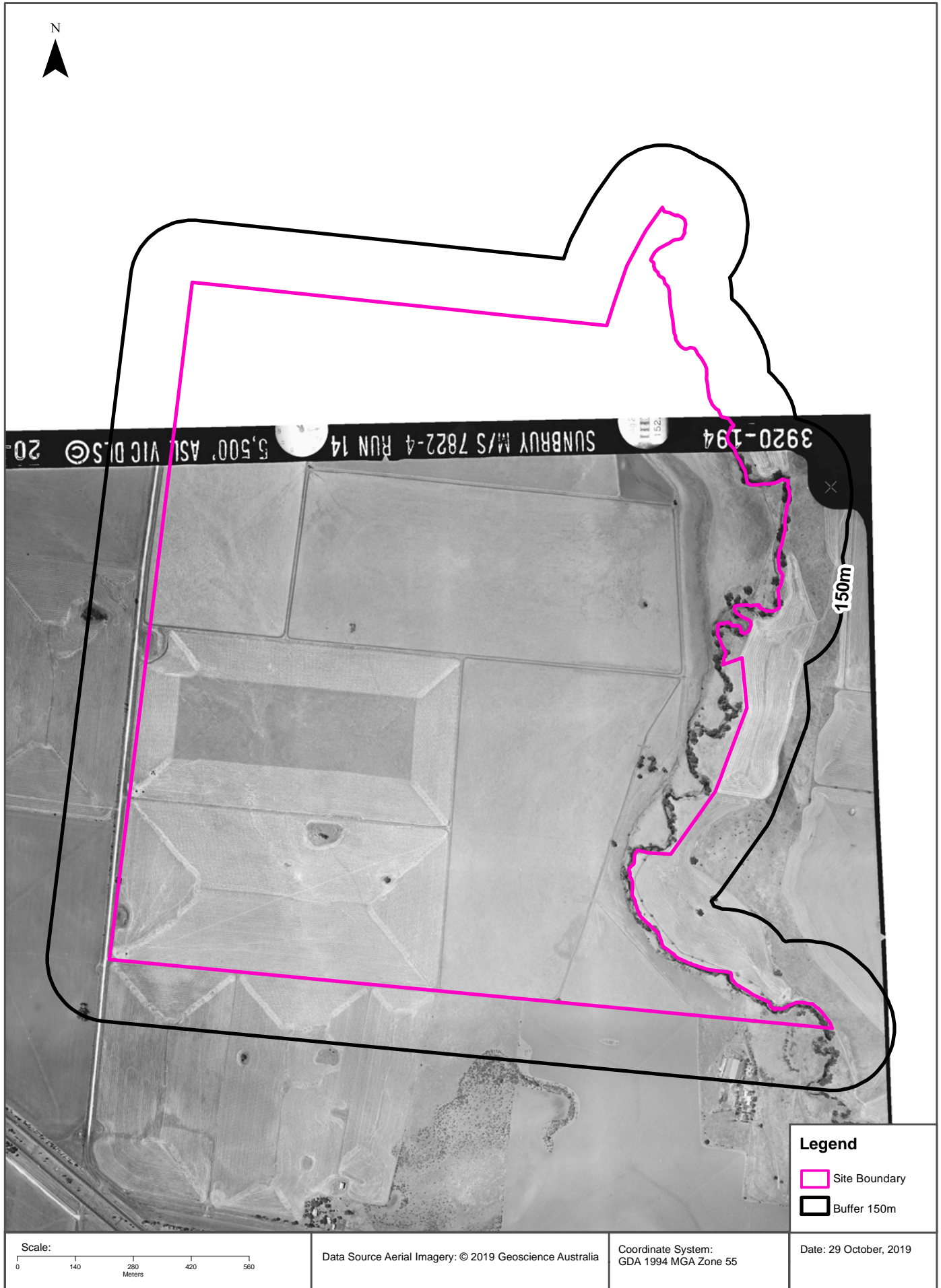
Aerial Imagery 1985

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



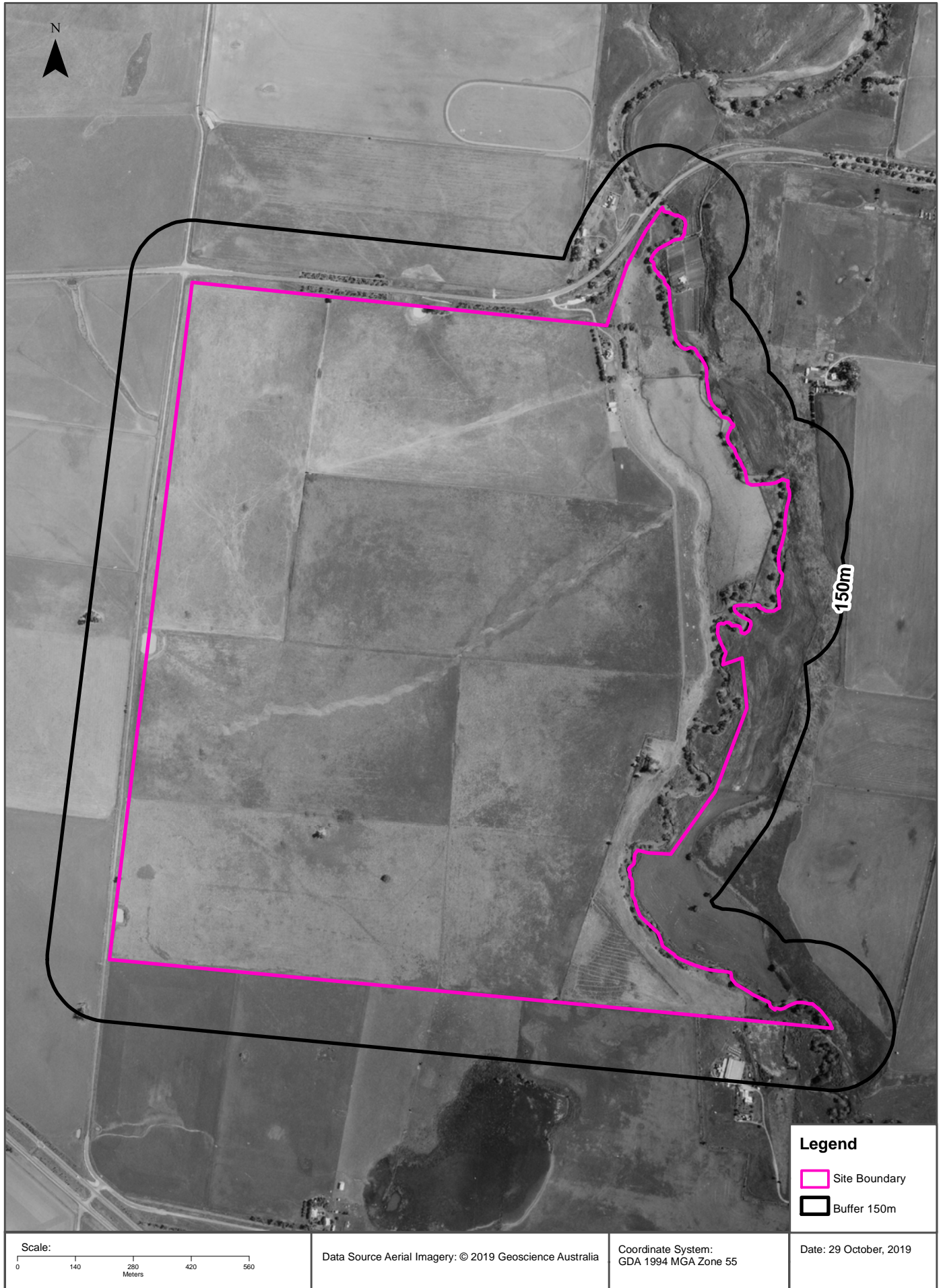
Aerial Imagery 1985

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



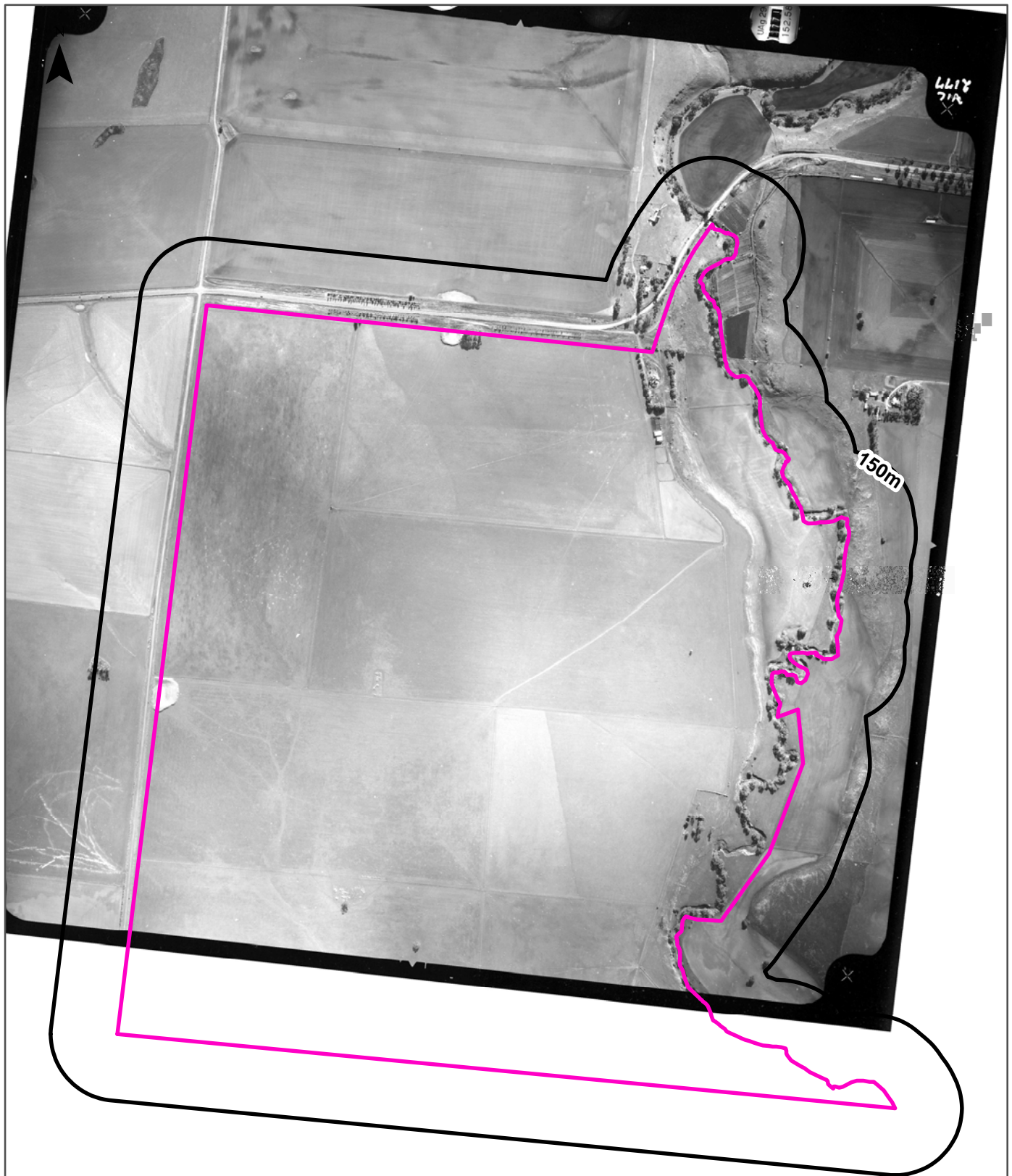
Aerial Imagery 1974

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Aerial Imagery 1968

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend	
	Site Boundary
	Buffer 150m

Scale: 0 140 280 420 560 Meters

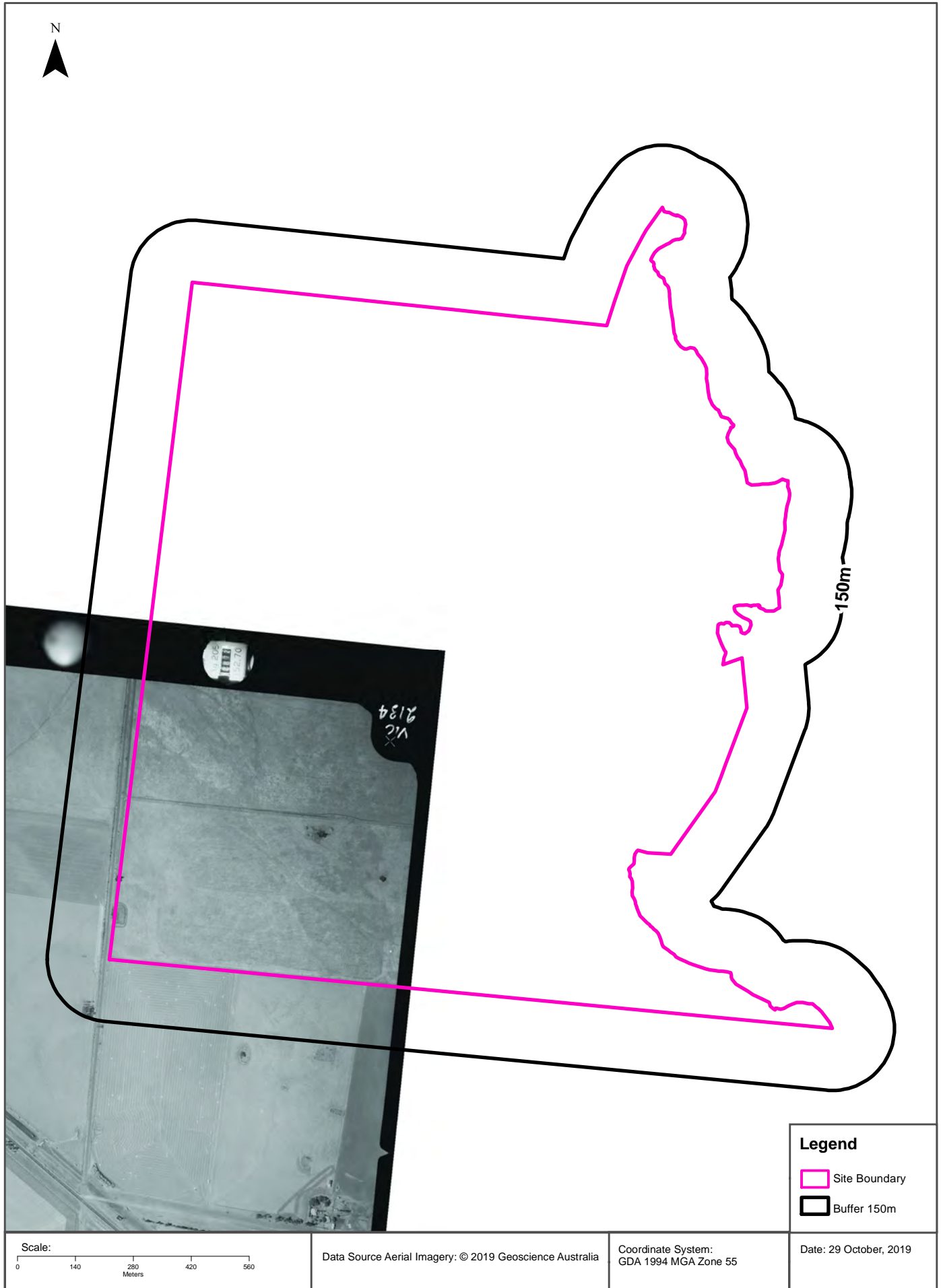
Data Source Aerial Imagery: © Department of Environment, Land, Water and Planning (Vicmap Topographic Mapping Program)
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Coordinate System: GDA 1994 MGA Zone 55
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Date: 04 November 2019

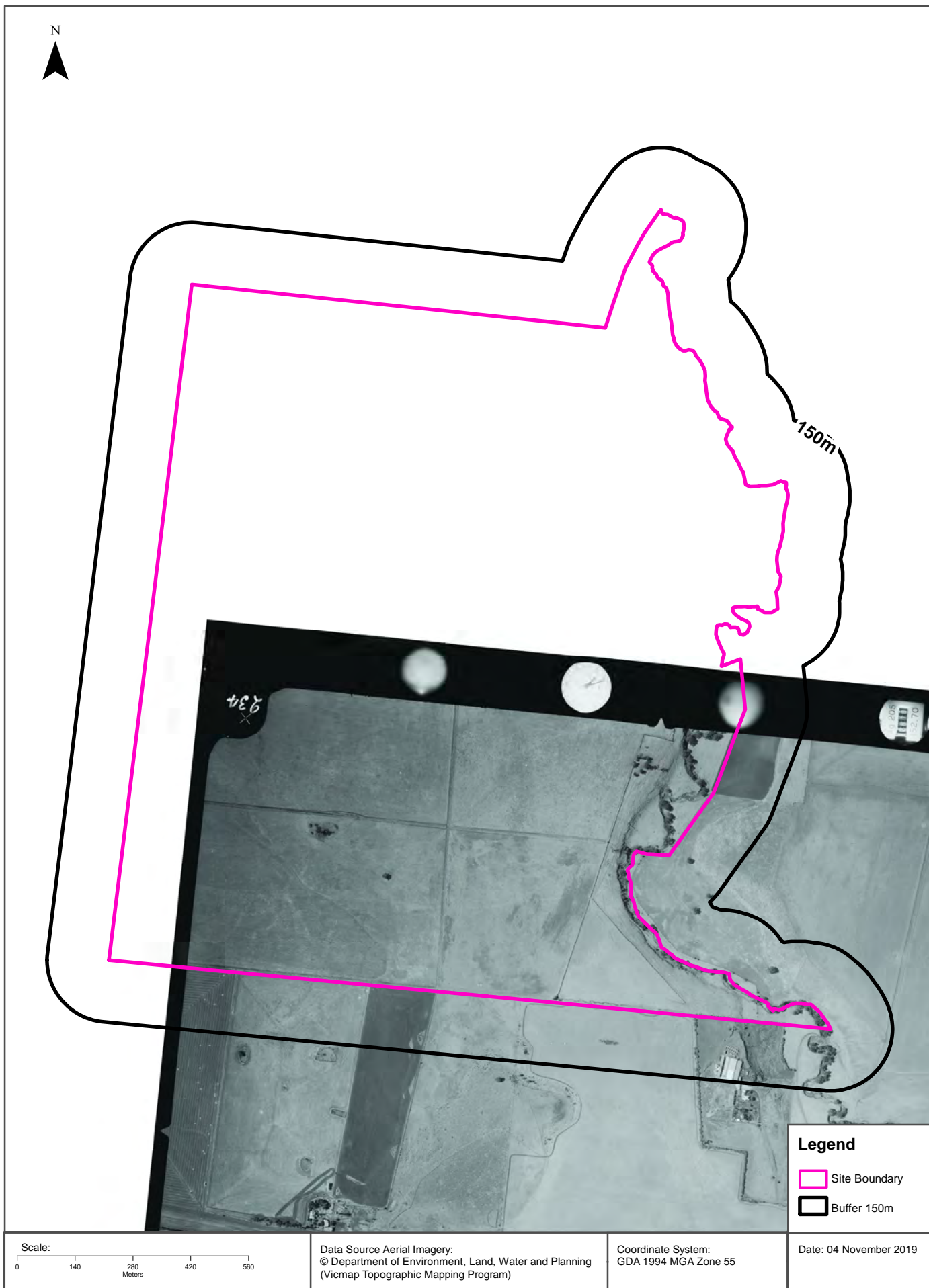
Aerial Imagery 1968

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



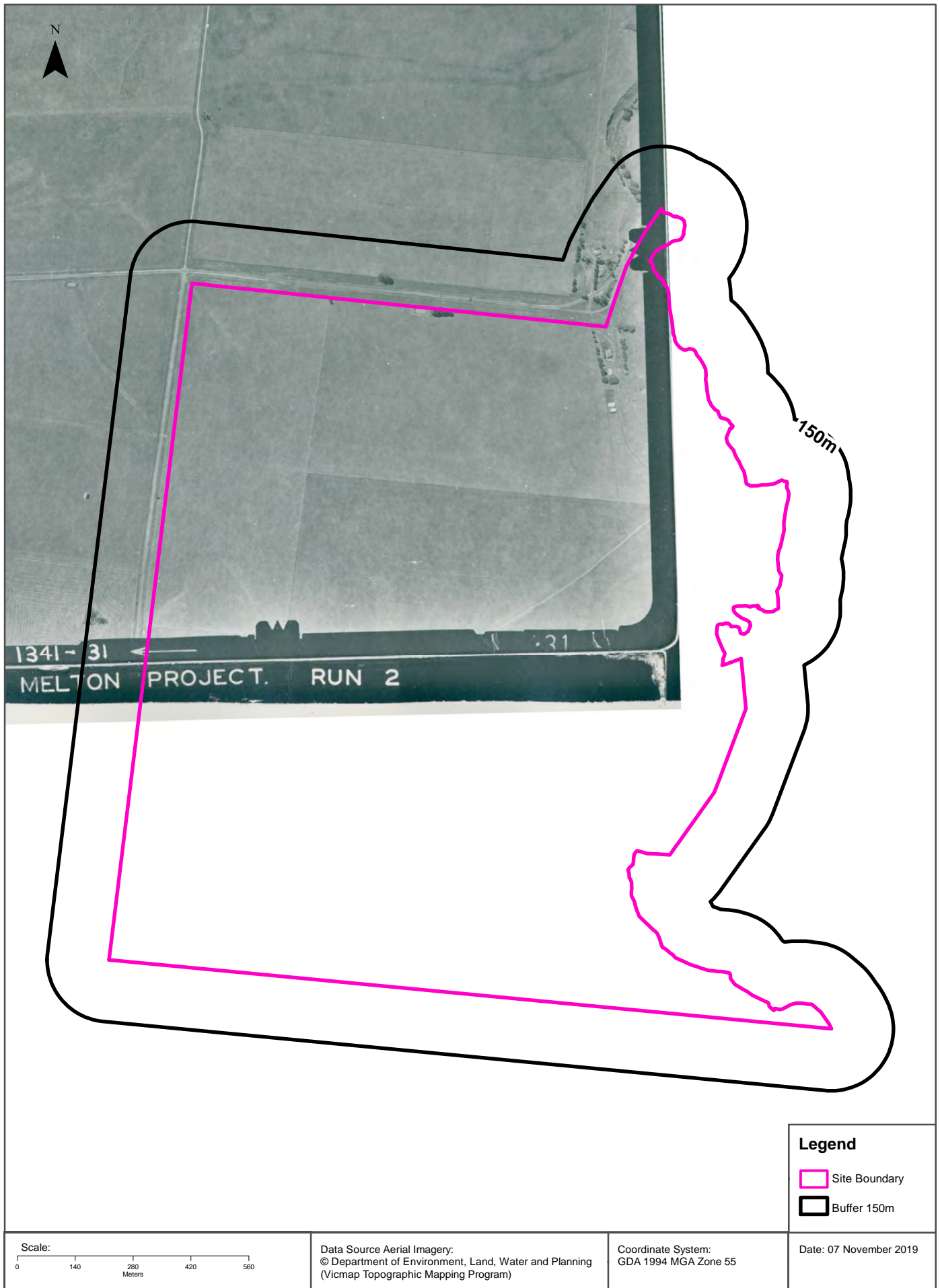
Aerial Imagery 1968

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



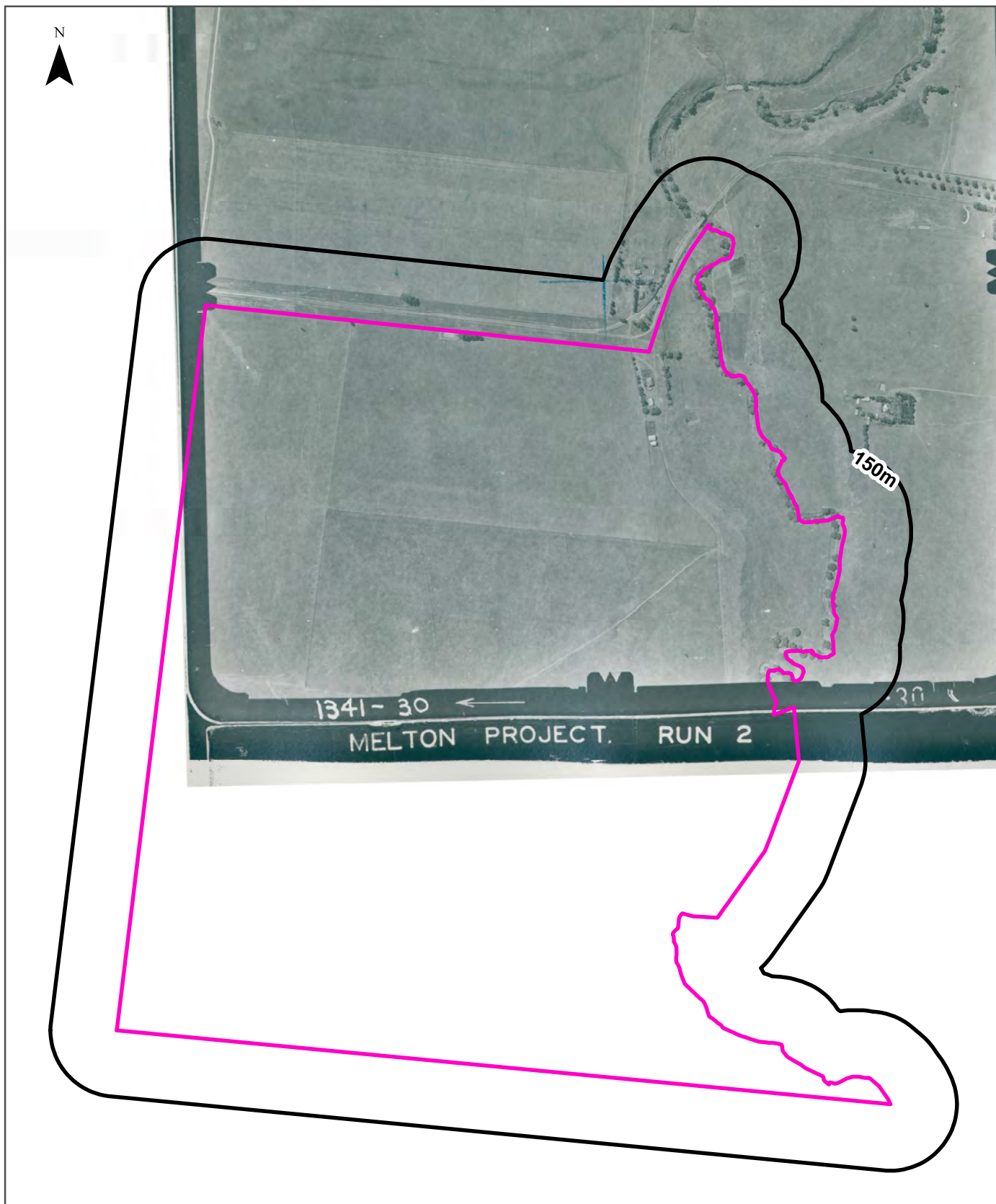
Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

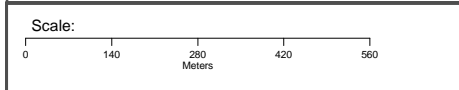


Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend	
	Site Boundary
	Buffer 150m



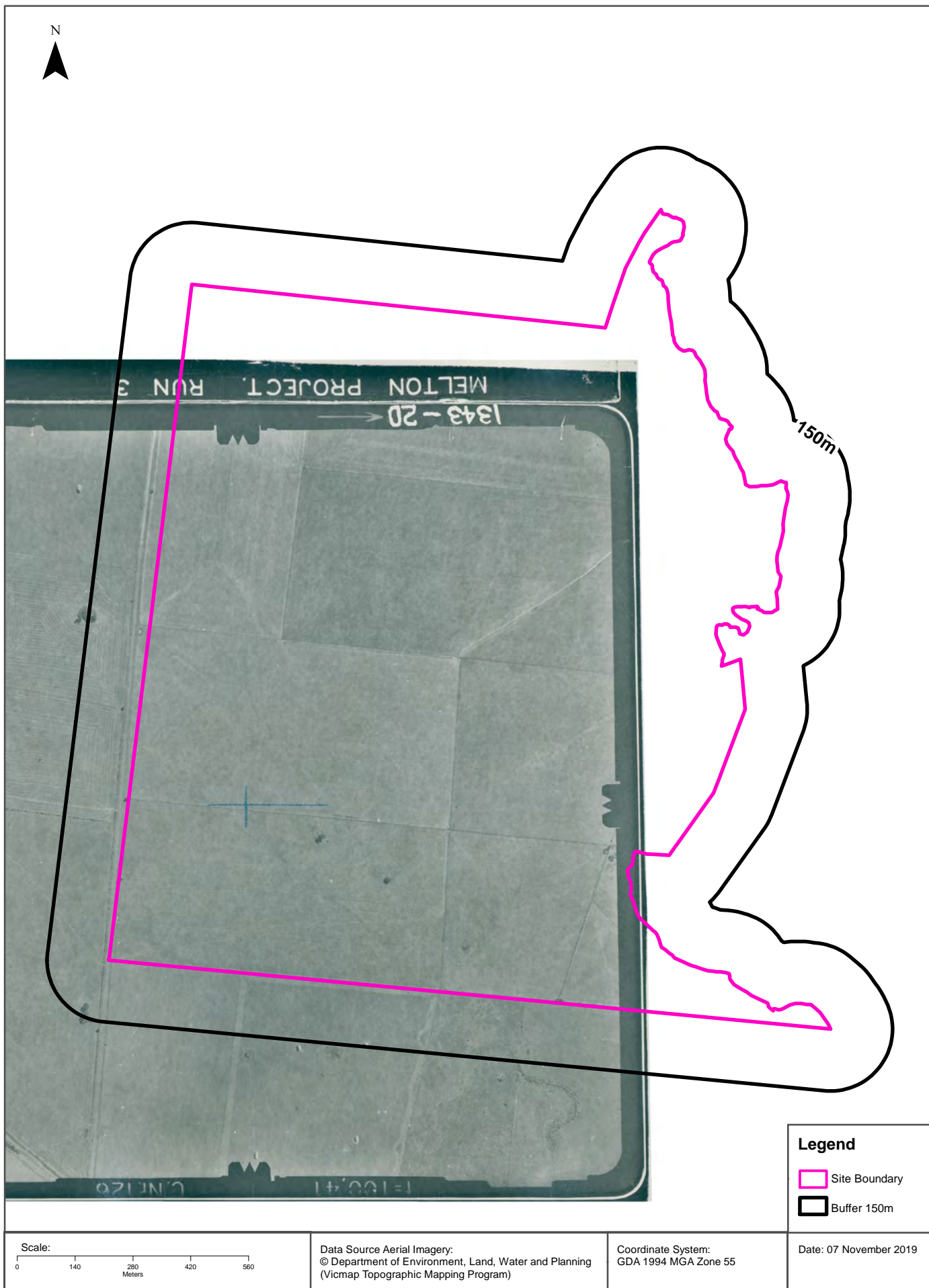
Data Source Aerial Imagery:
© Department of Environment, Land, Water and Planning
(Vicmap Topographic Mapping Program)

Coordinate System:
GDA 1994 MGA Zone 55

Date: 07 November 2019

Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



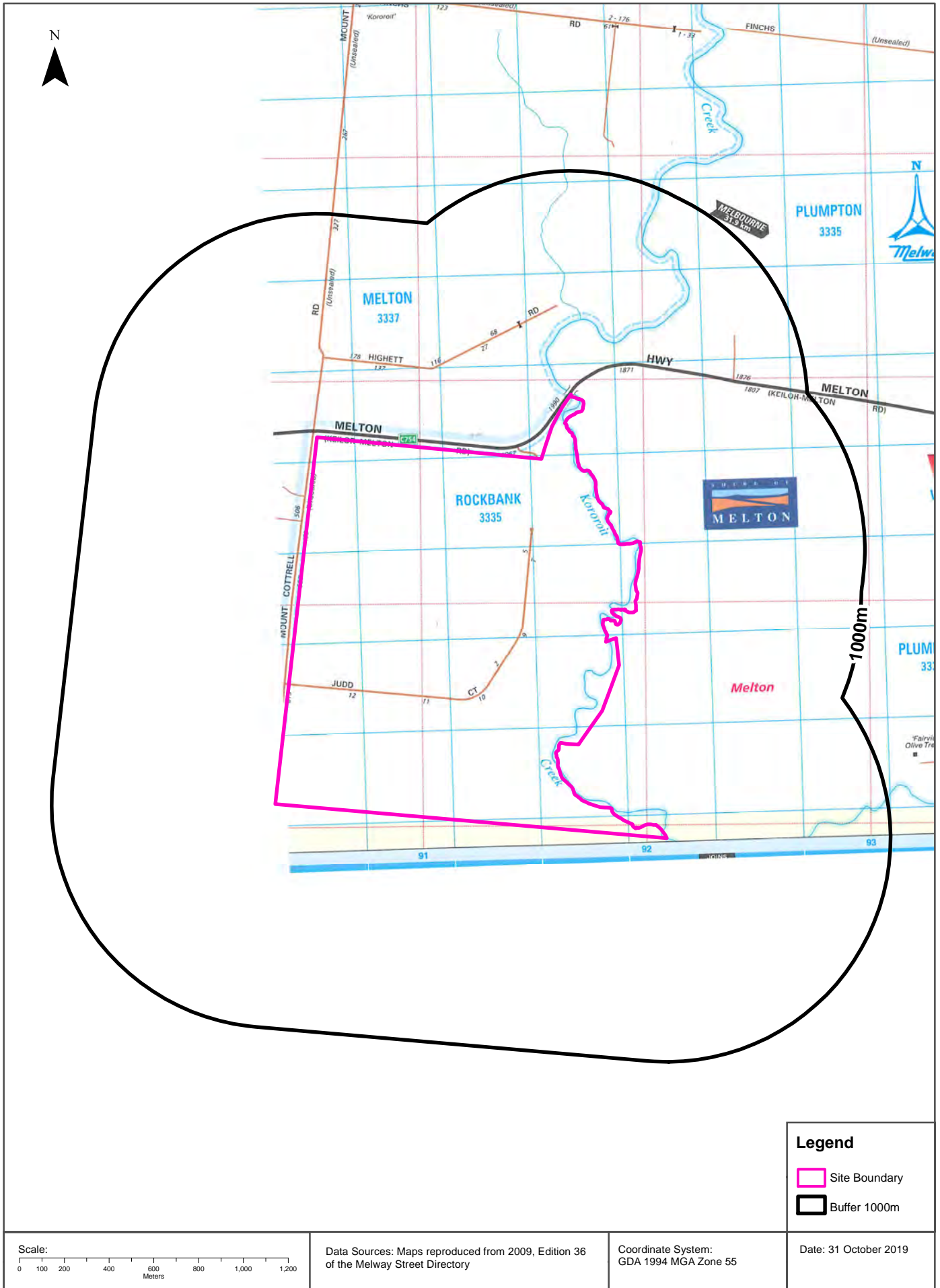
Aerial Imagery 1961

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Historical Map 2009

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Scale:
0 100 200 400 600 800 1,000 1,200
Meters

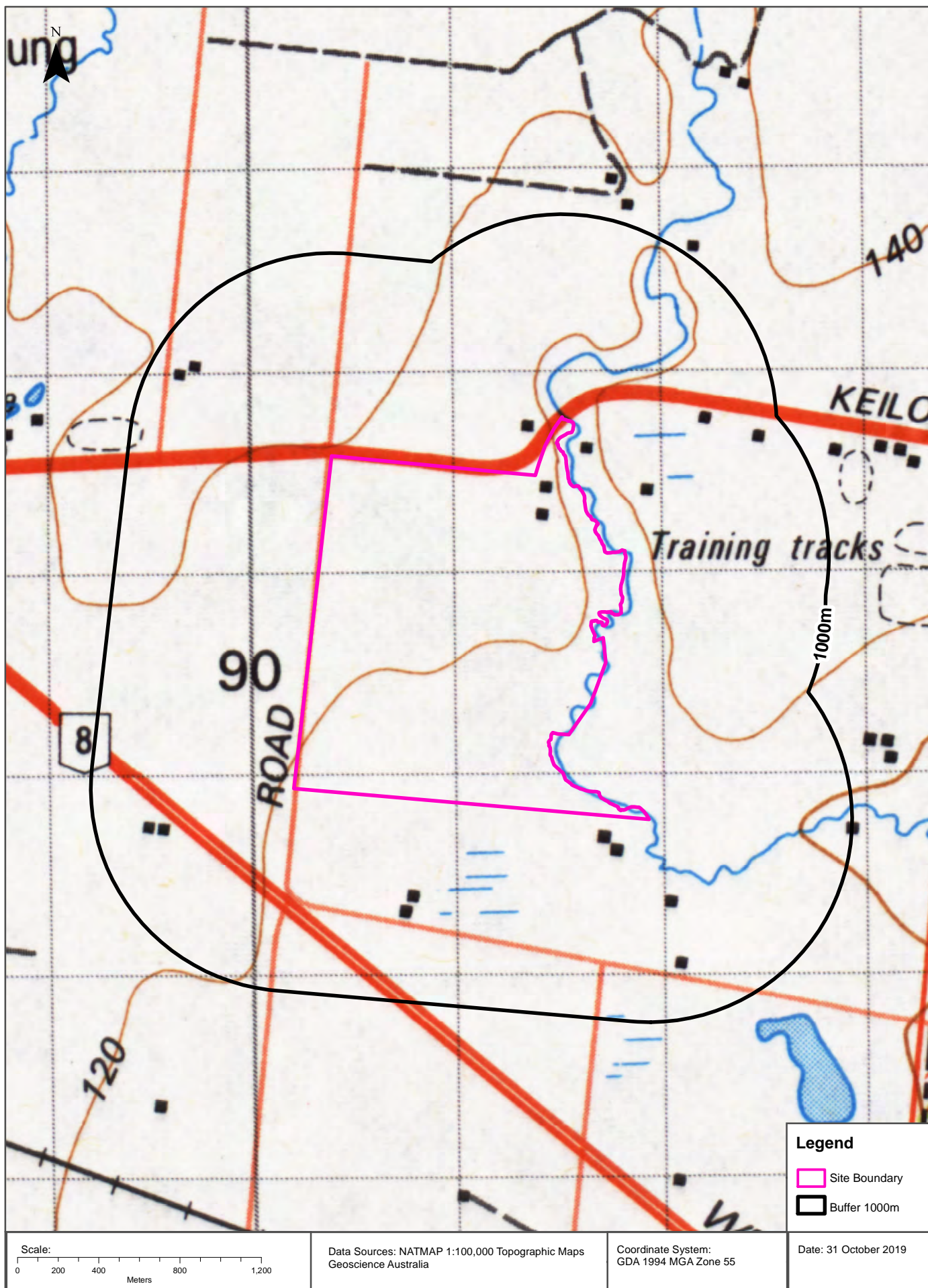
Data Sources: Maps reproduced from 2009, Edition 36 of the Melway Street Directory

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

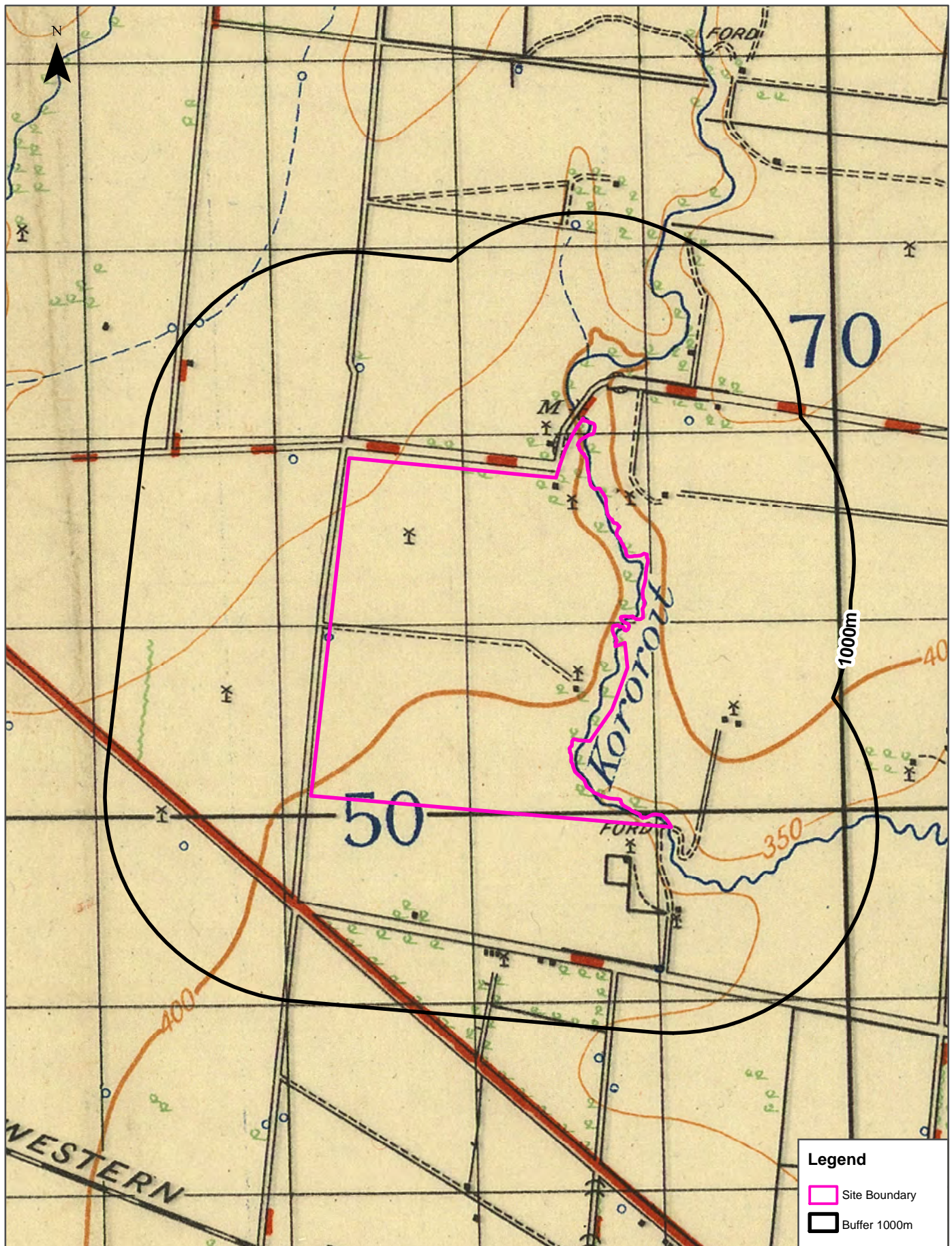
Historical Map 1982

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Historical Map c.1938

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Scale:
0 200 400 800
Meters

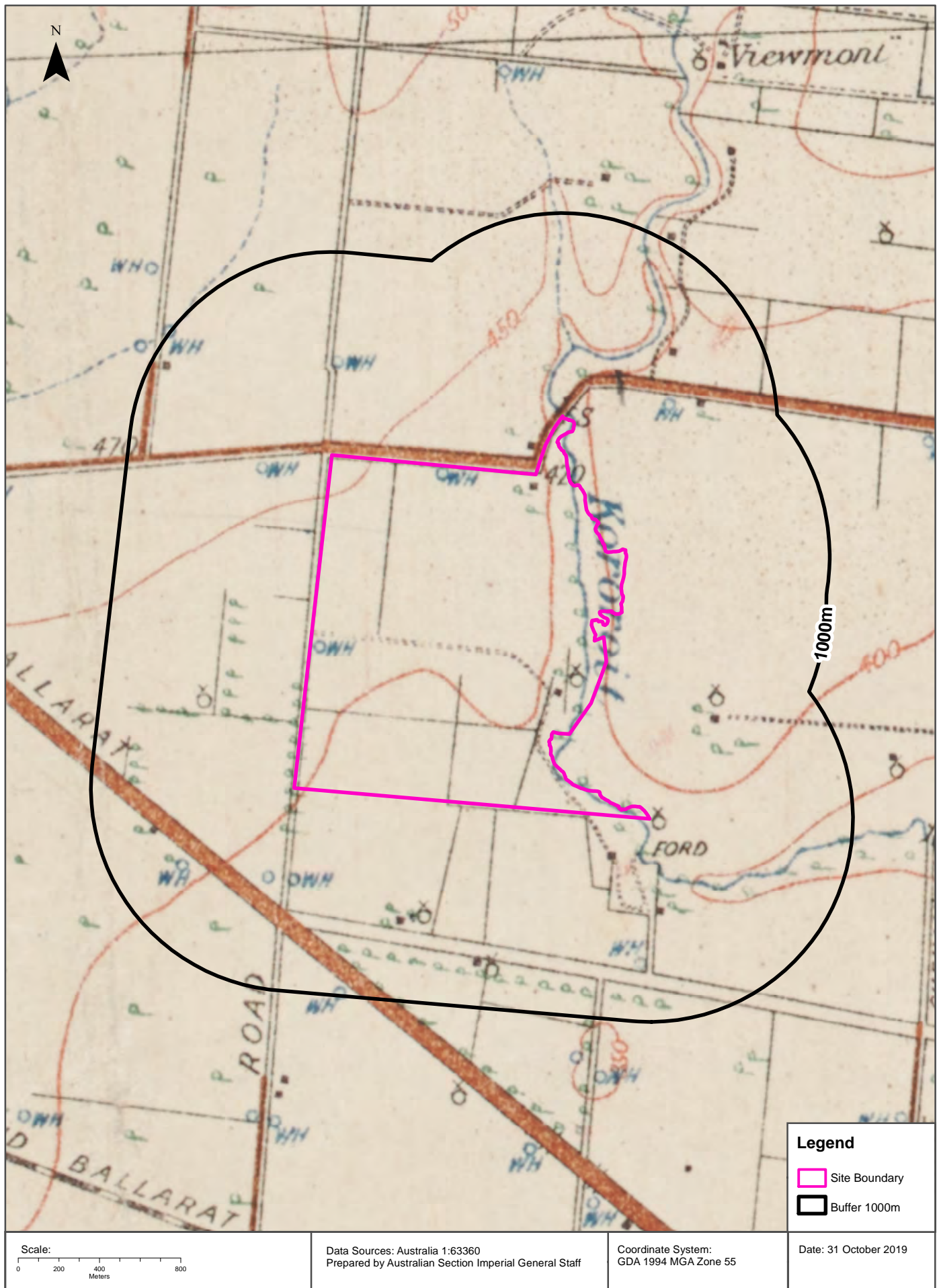
Data Sources: Australia 1:63360
Prepared by Australian Section Imperial General Staff

Coordinate System:
GDA 1994 MGA Zone 55

Date: 31 October 2019

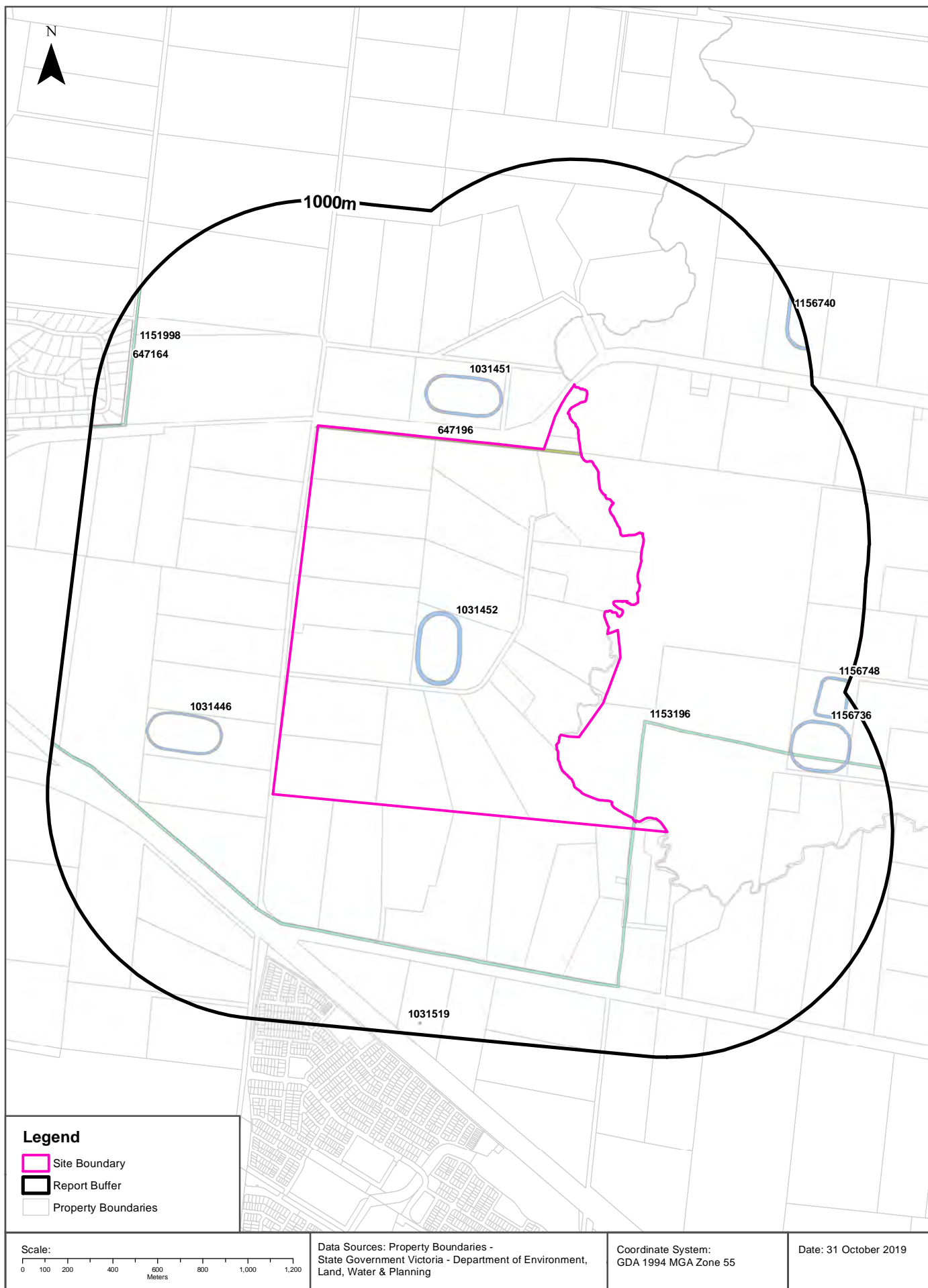
Historical Map c.1916

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Features of Interest

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Features of Interest

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Features of Interest

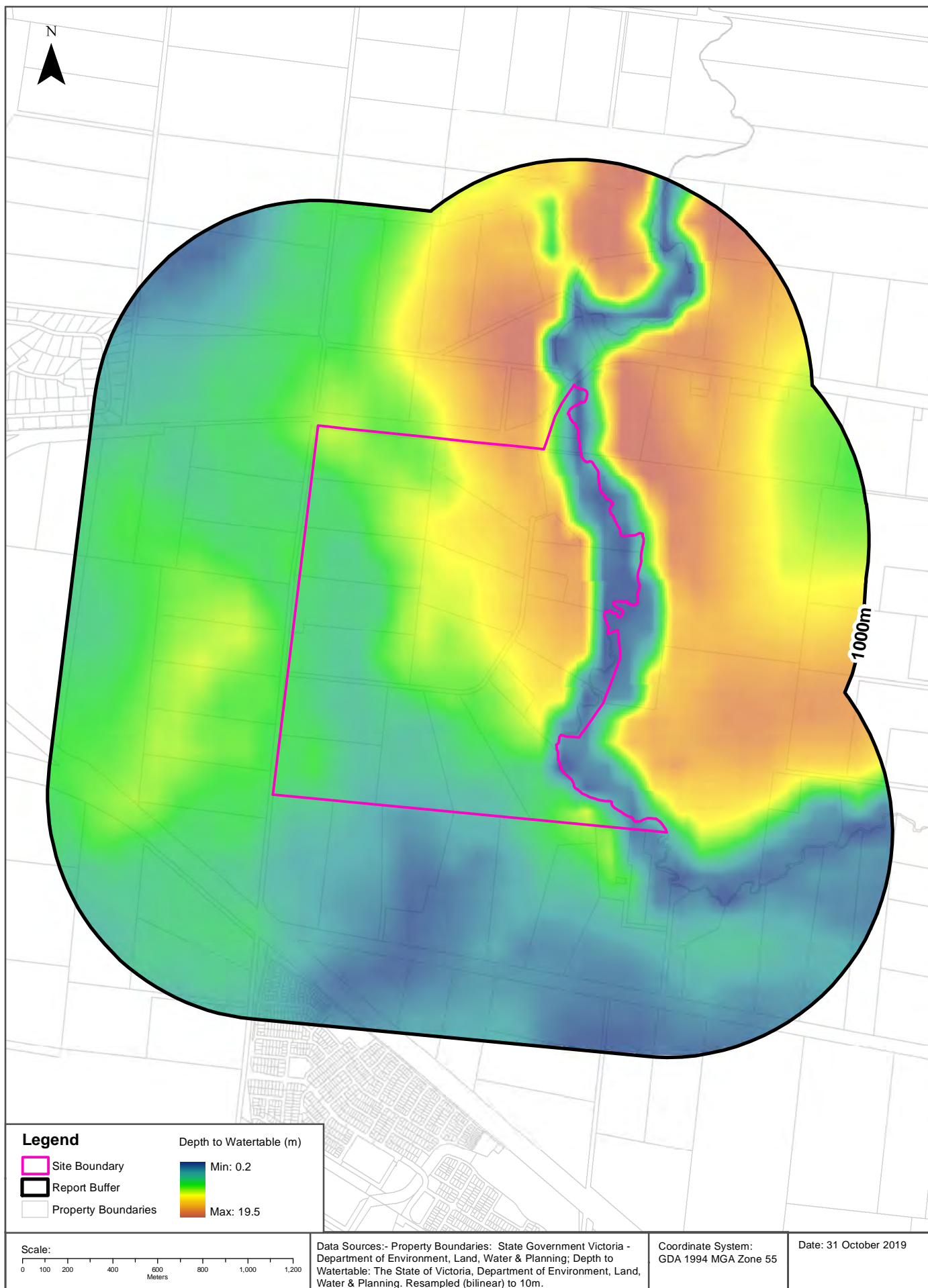
Features of Interest within the dataset buffer:

Feature Id	Feature Type	Feature Sub Type	Name	Distance	Direction
647196	reserve	park		0m	Onsite
1031452	sport facility	training track		0m	Onsite
1153196	power line	power sub transmission		0m	Onsite
1031451	sport facility	training track		112m	North
1031446	sport facility	training track		255m	West
1156736	sport facility	training track		637m	East
1156748	sport facility	training track		833m	East
1151998	power line	power sub transmission		845m	North
647164	reserve	park		868m	North West
1156740	sport facility	training track		917m	North East
1031519	community space	rest area		944m	South

Features of Interest Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Depth to Watertable

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Hydrogeology & Groundwater

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Fractured or fissured, extensive aquifers of low to moderate productivity	0m	Onsite

Hydrogeology Map of Australia: Commonwealth of Australia (Geoscience Australia)
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Groundwater Salinity

On-site Groundwater Salinity:

Groundwater Salinity	Percent Of Site Area
1,000 - 3,500 mg/l	100

Depth to Watertable

On-site Depth to Watertable:

Depth to Watertable	Percent Of Site Area
5 to 10 metres	51
10 to 20 metres	36
Less than 5 metres	11

Surface Elevation

Approximate on-site Surface Elevation:

Surface Elevation
104 AHDm to 141 AHDm

Basement Elevation

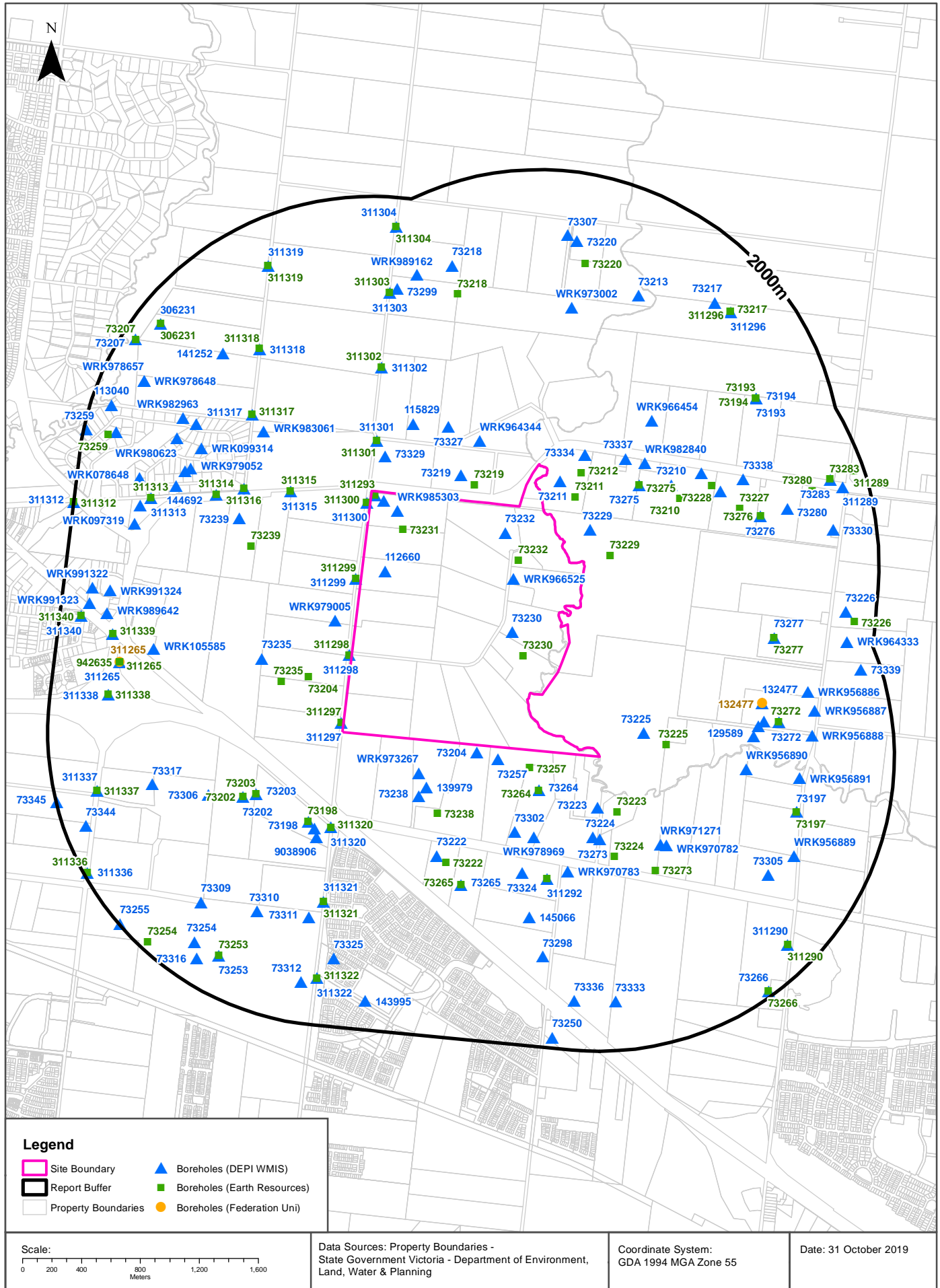
Approximate on-site Basement Elevation:

Basement Elevation - Basement Rocks comprise Lower Palaeozoic basement rocks that form the highlands and the crystalline basement; and Mesozoic rocks of the Otway and Gippsland basins both outcropping and subsurface
34 AHDm to 53 AHDm

Groundwater Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Groundwater Boreholes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Groundwater Boreholes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Boreholes (DEPI WMIS)

Boreholes from the Department of Environment and Primary Industries' Water Measurement Information System, within the dataset buffer:

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
73232	Domestic					1970-12-31	0	Onsite
WRK985303							0	Onsite
WRK966525	Domestic & Stock	0.00m-1.00m RED SOIL 1.00m-2.00m BROWN SANDY CLAY 2.00m-3.00m GREY CLAY 3.00m-13.50m BASALT 13.50m-15.50m BROWN CLAY 15.50m-25.00m WEATHERED BASALT 25.00m-35.00m FRACTURED BASALT	-0.50m-25.00m INNER LINING - CASING = Pvc 25.00m-35.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2004-08-24	0	Onsite
311293	Non Groundwater					1972-08-28	0	Onsite
73231	Stock					1970-12-31	0	Onsite
73230	Stock					1970-12-31	0	Onsite
112660	Stock	0.00m-5.00m OVERBURDEN 5.00m-10.10m CLAY 10.10m-12.30m BASALT (SOFT) 12.30m-15.20m BASALT (HARD) 15.20m-18.20m BASALT (SOFT) 18.20m-21.30m BLUESTONE	3.00m-15.20m INNER LINING - CASING = Pvc Class 9 15.20m-18.20m INNER LINING - SCREEN = Pvc Class 9 18.20m-21.30m INNER LINING - CASING = Pvc Class 9		15.20m-18.20m Basalt	1991-12-14	0	Onsite
311297	Non Groundwater					1983-03-03	14	South West
311298	Non Groundwater					1983-03-03	17	West
311300	Non Groundwater					1983-03-04	23	North West
311299	Non Groundwater					1983-03-03	34	West
73204	Stock					1957-01-11	50	South
73257	Stock					1970-12-31	82	South
73211	Domestic					1970-12-31	104	North East
WRK979005	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-02-28	140	West
73219	Domestic, Stock					1970-12-31	165	North
73229	Domestic					1970-12-31	191	North East
WRK973267	Domestic & Stock	0.00m-0.30m TOP SOIL 0.30m-3.50m WEATHERED BASALT 3.50m-15.00m BASALT 15.00m-18.00m BROWN CLAY 18.00m-28.00m FRACTURED BASALT	0.50m-18.00m INNER LINING - CASING = Pvc 18.00m-28.00m INNER LINING - SLOT = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement		0.50m-18.00m Basalt 18.00m-28.00m Basalt	2006-04-07	227	South
73329	Domestic	0.00m-1.00m TOPSOIL 1.00m-4.00m CLAY 4.00m-17.00m BASALT 17.00m-29.00m CLAY 29.00m-63.00m DECOMPOSED BASALT 63.00m-64.00m CLAY	-0.30m-30.00m INNER LINING - CASING = Pvc 30.00m-63.00m INNER LINING - SCREEN = Pvc 63.00m-64.00m INNER LINING - CASING = Pvc		30.00m-63.00m Basalt	1990-03-01	243	North West
73264	Not Known					1970-12-31	267	South East
73212	Not Known					1967-12-31	270	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
73334	Not Known					1988-01-01	270	North East
139979	Domestic, Stock	0.00m-1.00m VOLCANIC TOP SOIL 1.00m-3.00m BROWN CLAY 3.00m-30.00m FRESH BLUESTONE 30.00m-33.00m RED CLAY MOCK 33.00m-45.00m BLUESTONE 45.00m-55.00m BROWN BASALT	-0.30m-43.00m INNER LINING - CASING = Pvc 43.00m-55.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			1998-03-31	319	South
73225	Domestic					1970-12-31	336	South East
311301	Non Groundwater					1983-03-04	340	North West
73223	Domestic					1970-12-31	346	South East
73238	Domestic, Stock					1970-12-31	384	South
WRK964344	Domestic & Stock	0.00m-0.90m OVERBURDEN 0.90m-2.00m BROWN CLAY 2.00m-19.50m WEATHERED BASALT 19.50m-24.00m BLUESTONE 24.00m-27.00m BROWN CLAY 27.00m-45.00m BLUESTONE 45.00m-52.00m FRACTURED BASALT 52.00m-53.00m BROWN CLAY	-0.50m-45.00m INNER LINING - CASING = Pvc 45.00m-53.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2004-01-28	414	North
115829	Domestic	0.00m-2.00m SOIL & CLAY 2.00m-18.00m BASALT 18.00m-20.00m BASALTIC CLAY 20.00m-25.00m WEATHERED BASALT 25.00m-28.00m SCORIA 28.00m-50.00m BASALT 50.00m-55.00m SCORIA & WEATHERED BASALT 55.00m-64.50m BASALT	-0.30m-52.00m INNER LINING - CASING = Pvc Class 9 52.00m-64.50m INNER LINING - SCREEN = Pvc Class 9 0.00m-0.40m OUTER LINING - GRAVEL = Cement 34.00m-0.00m OUTER LINING - GRAVEL = Seal		52.00m-64.50m Basalt	1993-06-19	482	North
73327	Domestic, Stock	0.00m-1.00m SOIL AND CLAY 1.00m-55.00m BASALT	0.00m-49.00m INNER LINING - CASING = Pvc 49.00m-55.00m INNER LINING - SCREEN = Pvc 10.00m-55.00m OUTER LINING - GRAVEL = Gravel		49.00m-55.00m Basalt	1988-08-22	487	North
73337	Domestic, Stock					1988-01-01	535	North East
311315	Non Groundwater					1983-04-06	546	North West
73224	Domestic					1970-12-31	547	South East
73302	Domestic, Stock		0.00m-15.00m INNER LINING - CASING = Pvc 15.00m-27.00m INNER LINING - SCREEN = Pvc		15.00m-27.00m Basalt	1987-05-15	560	South
73273	Domestic, Stock	0.00m-0.30m TOP SOIL 0.30m-1.83m MOTTLED CLAY 1.83m-2.44m BASALT 2.44m-2.74m MOTTLED CLAY 2.74m-3.05m BASALT 3.05m-3.66m MOTTLED CLAY 3.66m-6.40m BASALT 6.40m-6.70m MOTTLED CLAY 6.70m-12.19m BASALT	0.00m-12.19m INNER LINING - CASING = Not Known 7.62m-12.19m INNER LINING - SCREEN = Not Known			1974-11-07	560	South East
WRK978969	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-02-28	584	South
73235	Stock					1970-12-31	603	West
73275	Domestic, Stock	0.00m-50.50m WEATHERED BASALT	0.00m-50.50m INNER LINING - CASING = Pvc 33.00m-48.00m INNER LINING - SCREEN = Pvc			1977-05-12	622	North East
311320	Non Groundwater					1983-04-08	649	South West
73198	Domestic, Stock					1919-12-31	651	South West
WRK982840							661	North East
WRK992493							678	South West
73203	Not Known					1947-10-12	719	South West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK971271	Domestic & Stock		0.50m-10.00m INNER LINING - CASING = Pvc 10.00m-16.00m INNER LINING - SLOT = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2005-09-30	723	South East
9038906	Domestic & Stock	0.00m-0.60m Red Clay 0.60m-2.70m Weathered Basalt 2.70m-11.40m Basalt 11.40m-16.00m Scoria & Red Clay 16.00m-26.40m Basalt 26.40m-30.10m Scoria & Red Clay 30.10m-50.50m Basalt	-0.30m-31.00m INNER LINING - CASING = Pvc Class 9 31.00m-33.00m INNER LINING - SLOT = Pvc Class 9 33.00m-46.00m INNER LINING - CASING = Pvc Class 9 46.00m-50.50m INNER LINING - SLOT = Pvc Class 9 25.00m-25.10m OUTER LINING - GRAVEL = Seal			2009-09-25	732	South West
WRK970782	Domestic & Stock		0.30m-9.00m INNER LINING - CASING = Pvc 9.00m-16.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2005-08-03	753	South East
73222	Domestic, Stock					1970-12-31	774	South
WRK966454	Domestic & Stock	0.00m-2.00m BROWN CLAY 2.00m-5.00m GREY CLAY 5.00m-30.00m BASALT 30.00m-39.00m FRACTURED BASALT 39.00m-40.50m BASALT	-0.50m-30.00m INNER LINING - CASING = Pvc 30.00m-40.50m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2004-08-04	781	North East
73210	Domestic, Stock					1970-12-31	787	North East
WRK970783	Domestic & Stock		0.50m-16.50m INNER LINING - CASING = Pvc 16.50m-24.00m INNER LINING - SCREEN = Pvc 24.00m-30.00m INNER LINING - CASING = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2005-07-29	793	South East
73202	Not Known					1947-10-12	804	South West
73324	Domestic	0.00m-6.00m HARD BLUE BASALT 6.00m-11.00m SOFT RED SCORIA 11.00m-16.00m STIFF RED CLAY 16.00m-24.00m HARD BLUE BASALT 24.00m-26.00m FRACTURED - DECAYED BROWN BASALT 26.00m-30.00m HARD BLUE BASALT	0.00m-24.00m INNER LINING - CASING = Pvc 24.00m-27.00m INNER LINING - SCREEN = Pvc 27.00m-30.00m INNER LINING - CASING = Pvc		24.00m-27.00m Basalt	1988-10-17	834	South
WRK983061							839	North West
311302	Non Groundwater					1983-03-07	840	North
311292	Non Groundwater					1972-07-12	857	South
311316	Non Groundwater					1983-04-06	863	North West
73239	Stock					1970-12-31	869	North West
73265	Not Known					1970-12-31	957	South
311317	Non Groundwater					1983-04-06	962	North West
73228	Domestic					1970-12-31	998	North East
WRK956890	Dryland Salinity Bore Network, Observation			Date/time: 1999-04-30 0000 Quality: 47 WLMP: 2.80m DBNS: RWL:		1994-02-28	998	South East
73306	Not Known		0.00m-28.00m INNER LINING - CASING = Mild Steel 28.00m-58.00m INNER LINING - SCREEN = Mild Steel 58.00m-60.00m INNER LINING - CASING = Mild Steel		28.00m-58.00m Basalt	1988-01-11	1003	South West
73227	Stock					1970-12-31	1042	North East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
311314	Non Groundwater					1983-04-06	1044	North West
129589	Stock	0.00m-1.80m CLAY 1.80m-12.00m HARD BASALT 12.00m-18.00m SCORIA 18.00m-25.50m FRACTURED BASALT	-0.30m-18.00m INNER LINING - CASING = Pvc 18.00m-25.50m INNER LINING - SCREEN = Pvc			1996-12-21	1052	East
WRK973002	Domestic & Stock		0.30m-45.00m INNER LINING - CASING = Pvc 45.00m-50.00m INNER LINING - CASING = Not Known 0.00m-0.50m OUTER LINING - GRAVEL = Cement 1.00m-1.50m OUTER LINING - GRAVEL = Bentonite 1.50m-1.80m OUTER LINING - GRAVEL = Seal			2006-03-21	1083	North
WRK956885	Dryland Salinity Bore Network, Observation			Date/time: 1999-04-30 0000 Quality: 47 WLMP: 1.78m DBNS: RWL:		1993-11-23	1096	East
145066	Domestic, Stock	0.00m-0.50m OVERBURDEN 0.50m-3.00m RED CLAYEY SOIL 3.00m-4.20m GREY CLAY 4.20m-7.00m BASALT 7.00m-13.00m WEATHERED BASALT 13.00m-14.50m BLUESTONE 14.50m-16.50m BROWN CLAY 16.50m-21.50m BASALT 21.50m-30.00m FRACTURED BASALT 30.00m-31.00m BASALT	-0.50m-20.00m INNER LINING - CASING = Pvc 20.00m-31.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2001-11-17	1128	South
WRK956884	Dryland Salinity Bore Network, Observation			Date/time: 1995-03-23 0000 Quality: 47 WLMP: DBNS: RWL:		1993-05-26	1138	East
311321	Non Groundwater					1983-04-08	1156	South West
132477	Domestic	0.00m-2.00m RED EARTH & CLAY 2.00m-18.00m SOFT BROWN BASALT SOME RED SCORIA 18.00m-36.00m HARD BLUE BASALT	-0.30m-24.00m INNER LINING - CASING = Pvc 16.00m-20.00m INNER LINING - SCREEN = Pvc 20.00m-36.00m INNER LINING - SCREEN = Screened Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement 6.00m-0.00m OUTER LINING - GRAVEL = Seal		16.00m-20.00m Basalt	1997-04-17	1160	East
WRK099314	Domestic & Stock	0.00m-0.50m FIRM RED CLAY 0.50m-1.40m BROWN 1.50m-6.00m BASALT 6.00m-7.50m WEATHERED BASALT 7.50m-18.30m BASALT 18.30m-18.60m RED CLAY 18.60m-20.00m BROWN CLAY 20.00m-34.00m BASALT 34.00m-34.50m FRACTURED BASALT AND BAKED CLAY 34.50m-37.00m RED WEATHERED BASALT 37.00m-45.50m BASALT	0.00m-33.50m INNER LINING - CASING = Pvc 33.50m-45.50m INNER LINING - SLOT = Pvc 0.00m-6.00m OUTER LINING - GRAVEL = Cement 6.00m-8.00m OUTER LINING - GRAVEL = Bentonite 8.00m-45.50m OUTER LINING - GRAVEL = Gravel			2018-03-08	1192	North West
73338	Domestic, Stock					1988-01-01	1217	North East
311318	Non Groundwater					1983-04-07	1227	North West
WRK979052	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-02-27	1237	North West
73272	Domestic, Stock	0.00m-9.14m WAETHERED BASALT 9.14m-12.19m RED WEATHERED BASALT 12.19m-18.89m MEDIUM HARD BASALT	0.00m-13.11m INNER LINING - CASING = Steel			1974-04-01	1237	East
73276	Domestic, Stock	0.00m-3.00m BASALTIC CLAY 3.00m-30.00m HARD BASALT 30.00m-31.00m WEATHERED BASALT 31.00m-57.00m HARD BASALT 57.00m-60.00m WEATHERED BASALT	0.00m-60.00m INNER LINING - CASING = Pvc 48.00m-60.00m INNER LINING - SCREEN = Pvc			1977-12-05	1237	East
WRK984717							1272	North West

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK980894	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-04-30	1274	North West
73311	Not Known	0.00m-2.70m RED & GREY BASALTIC CLAY 2.70m-26.50m GREY BASALT 26.50m-29.60m BROWN HIGHLY WEATHERED BASALT 29.60m-45.00m GREY BASALT	0.00m-32.15m INNER LINING - CASING = Pvc Class 18 32.15m-45.00m INNER LINING - SCREEN = Pvc Class 18		32.15m-45.00m Basalt	1983-06-30	1276	South West
144692	Domestic & Stock	0.00m-1.00m OVERBURDEN 1.00m-4.50m GREY CLAY 4.50m-22.00m BASALT 22.00m-24.00m SCORIA 24.00m-30.00m BASALT 30.00m-49.00m BLUESTONE 49.00m-52.50m BROWN CLAY 52.50m-55.00m SAND 55.00m-66.00m GRAVEL AND PEBBLES				2001-05-05	1323	North West
73213	Stock					1970-12-31	1326	North East
73277	Domestic, Stock	0.00m-1.00m TOP RED SOIL 1.00m-6.00m WEATHERED BASALT 6.00m-21.00m HARD BASALT 21.00m-34.00m MEDIUM HARD BASALT	0.00m-34.00m INNER LINING - CASING = Pvc 28.00m-34.00m INNER LINING - SCREEN = Pvc			1977-11-10	1328	East
73317	Not Known	0.00m-1.40m RED BASALT CLAY 1.40m-25.10m GREY BASALT	0.00m-8.10m INNER LINING - CASING = Pvc 8.10m-25.10m INNER LINING - SCREEN = Pvc		8.10m-25.10m Basalt	1983-06-30	1336	South West
WRK105585	Investigation	0.00m-1.30m BASALT Clay 1.30m-23.30m BASALT	0.00m-14.30m INNER LINING - CASING = Pvc 14.30m-23.30m INNER LINING - SCREEN = Pvc 0.00m-12.30m OUTER LINING - GRAVEL = Cement 12.30m-13.80m OUTER LINING - GRAVEL = Bentonite 13.80m-23.30m OUTER LINING - GRAVEL = Gravel			2018-04-04	1339	West
73310	Not Known	0.00m-2.10m RED BASALTIC CLAY 2.10m-25.20m GREY VESICULAR BASALT	0.00m-8.20m INNER LINING - CASING = Pvc Class 18 8.20m-25.20m INNER LINING - SCREEN = Pvc Class 18			1983-06-30	1346	South West
311303	Non Groundwater					1983-03-07	1350	North
WRK956891	Dryland Salinity Bore Network, Observation			Date/time: 1999-04-30 0000 Quality: 47 WLMP: 2.44m DBNS: RWL:		1996-05-23	1365	South East
WRK980623	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-05-01	1369	North West
WRK982963							1375	North West
141252	Stock	0.00m-1.00m OVERBURDEN 1.00m-2.50m BROWN CLAY 2.50m-7.50m GREY CLAY 7.50m-9.20m GRAVEL 9.20m-12.00m GREY CLAY 12.00m-21.00m BROWN CLAY 21.00m-27.00m BASALT 27.00m-30.00m FRACTURED BASALT	-0.50m-27.00m INNER LINING - CASING = Pvc 27.00m-30.00m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2000-08-26	1375	North West
73299	Domestic	0.00m-0.30m TOPSOIL 0.30m-1.00m RED CLAY 1.00m-12.10m PINK BASALT 12.10m-26.80m BLUE BASALT 26.80m-30.00m BAKED RED CLAY 30.00m-60.00m HARD BLUE BASALT WITH SOME FRACTURES	0.00m-5.40m INNER LINING - CASING = Steel 0.00m-54.00m INNER LINING - CASING = Pvc 54.00m-60.00m INNER LINING - SCREEN = Steel		54.00m-60.00m Basalt	1987-01-27	1385	North
73197	Domestic, Stock					1919-12-31	1387	South East
73298	Domestic, Stock	0.00m-2.13m RED TOP SOIL 2.13m-13.10m SOFT BASALT 13.10m-13.71m CLAY	0.00m-7.62m INNER LINING - CASING = Pvc 7.62m-13.71m INNER LINING - SCREEN = Pvc		7.62m-13.71m Basalt	1983-04-07	1388	South
73305	Domestic, Stock	0.00m-0.40m RED TOP SOIL 0.40m-2.13m RED CLAY 2.13m-3.90m LIGHT BROWN BASALTIC CLAY 3.90m-12.40m HARD BASALT 12.40m-15.20m BAKED RED CLAY 15.20m-30.00m HARD BLUE BASALT WITH SOME FRACTURES	0.00m-17.80m INNER LINING - CASING = Pvc 17.80m-30.00m INNER LINING - SCREEN = Pvc		17.80m-30.00m Basalt	1987-05-14	1397	South East

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
73280	Domestic, Stock	0.00m-0.50m SOIL 0.50m-2.00m CLAY 2.00m-14.00m BASALT 14.00m-17.00m SCORIA 17.00m-41.00m BASALT	0.00m-31.00m INNER LINING - CASING = Pvc 31.00m-37.00m INNER LINING - SCREEN = Pvc 37.00m-41.00m INNER LINING - CASING = Pvc		31.00m-37.00m Basalt	1982-06-11	1426	East
WRK956888	Dryland Salinity Bore Network, Observation			Date/time: 1999-04-30 0000 Quality: 47 WLMP: 0.79m DBNS: RWL:		1999-03-29	1447	East
73218	Stock					1970-12-31	1471	North
WRK956886	Dryland Salinity Bore Network, Observation			Date/time: 1995-03-23 0000 Quality: 47 WLMP: DBNS: RWL:		1992-11-24	1480	East
WRK956889	Dryland Salinity Bore Network, Observation			Date/time: 1999-04-30 0000 Quality: 47 WLMP: 2.20m DBNS: RWL:		1994-01-11	1481	South East
311313	Non Groundwater					1983-03-31	1481	West
WRK989162							1490	North
WRK956887	Dryland Salinity Bore Network, Observation			Date/time: 1999-04-30 0000 Quality: 47 WLMP: 1.29m DBNS: RWL:		1993-10-03	1492	East
73194	Domestic, Stock					1907-12-31	1494	North East
73193	Domestic, Stock					1907-12-31	1494	North East
73309	Not Known	0.00m-1.00m RED CLAY 1.00m-26.00m GREY BASALT 26.00m-28.00m RED BROWN CLAY 28.00m-45.10m GREY BASALT	0.00m-28.40m INNER LINING - CASING = Pvc Class 18 28.40m-45.10m INNER LINING - SCREEN = Pvc Class 18 27.40m-28.40m OUTER LINING - GRAVEL = Bentonite		28.40m-45.10m Basalt	1983-06-30	1501	South West
73325	Domestic, Stock	0.00m-3.00m SOIL AND CLAY 3.00m-50.00m BASALT	0.00m-29.00m INNER LINING - CASING = Pvc 29.00m-50.00m INNER LINING - SCREEN = Pvc		29.00m-50.00m Basalt	1988-05-12	1534	South
73220	Domestic, Stock					1970-12-31	1535	North
WRK097316	Investigation	0.00m-0.20m CONcrete 0.20m-4.00m CLAY 4.00m-20.00m BASALT	0.00m-16.00m INNER LINING - CASING = Pvc 16.00m-20.00m INNER LINING - SCREEN = Pvc 0.00m-14.00m OUTER LINING - GRAVEL = Cement 14.00m-15.50m OUTER LINING - GRAVEL = Bentonite 15.50m-16.00m OUTER LINING - GRAVEL = Gravel			2016-12-08	1546	West
311265	Non Groundwater					1981-10-29	1557	West
73307	Domestic, Stock	0.00m-0.50m SOIL 0.50m-41.00m BASALT WEATHERED	0.00m-35.00m INNER LINING - CASING = Pvc 35.00m-41.00m INNER LINING - SCREEN = Pvc		35.00m-41.00m Basalt	1987-08-21	1565	North

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK097319	Investigation	0.00m-0.20m CONcrete 0.20m-4.00m CLAY 4.00m-20.50m BASALT	0.00m-16.50m INNER LINING - CASING = Pvc 16.50m-20.50m INNER LINING - SCREEN = Pvc 0.00m-15.00m OUTER LINING - GRAVEL = Cement 15.00m-16.00m OUTER LINING - GRAVEL = Bentonite 16.00m-20.50m OUTER LINING - GRAVEL = Gravel			2016-12-08	1571	West
WRK078648	Domestic & Stock	0.00m-0.50m SOIL 0.50m-3.50m CLAY 3.50m-19.00m BASALT 19.00m-22.00m CLAY 22.00m-38.00m BASALT	0.50m-26.00m INNER LINING - CASING = Pvc 26.00m-38.00m INNER LINING - SLOT = Pvc 0.00m-5.00m OUTER LINING - GRAVEL = Cement			2014-03-02	1577	North West
73217	Not Known					1900-10-06	1600	North East
311338	Non Groundwater					1983-04-28	1607	West
311339	Non Groundwater					1983-04-28	1626	West
311296	Non Groundwater					1983-03-02	1636	North East
73333	Domestic, Stock					1988-01-01	1663	South
73336	Stock					1988-01-01	1667	South
311322	Non Groundwater					1983-04-08	1679	South
WRK991324							1679	West
311319	Non Groundwater					1983-04-07	1681	North West
WRK989642							1682	West
73330	Domestic, Stock	0.00m-1.60m SOIL AND CLAY 1.60m-45.00m BASALT 45.00m-50.00m WEATHERED BASALT 50.00m-53.00m BASALT	0.00m-49.00m INNER LINING - CASING = Pvc 49.00m-53.00m INNER LINING - SCREEN = Pvc 2.00m-53.00m OUTER LINING - GRAVEL = Not Known		49.00m-53.00m Basalt	1990-03-24	1704	East
311337	Non Groundwater					1983-04-27	1711	South West
WRK978657	Domestic & Stock					2007-01-24	1716	North West
WRK978648							1716	North West
73312	Not Known	0.00m-0.80m RED BASALT CLAY 0.80m-25.16m GREY BASALT	0.00m-8.16m INNER LINING - CASING = Pvc Class 18 8.16m-25.16m INNER LINING - SCREEN = Pvc Class 18		8.16m-25.16m Basalt	1983-06-30	1718	South West
73253	Not Known					1970-12-31	1732	South West
73254	Not Known					1970-12-31	1741	South West
73283	Domestic, Stock	0.00m-0.50m TOP SOIL 0.50m-3.00m CLAY 3.00m-27.00m BASALT 27.00m-30.00m SCORIA 30.00m-40.00m WEATHERED BASALT 40.00m-50.00m BASALT 50.00m-51.50m BASALTIC CLAY 51.50m-56.00m WEATHERED BASALT 56.00m-71.00m BASALT 71.00m-74.00m FINE SAND	0.00m-40.00m INNER LINING - CASING = Pvc 40.00m-46.00m INNER LINING - SCREEN = Pvc 46.00m-74.00m INNER LINING - CASING = Pvc 52.00m-70.00m INNER LINING - SCREEN = Pvc		40.00m-46.00m Basalt 52.00m-70.00m Basalt	1982-07-31	1761	East
WRK980406	Domestic & Stock		0.00m-0.50m OUTER LINING - GRAVEL = Cement			2007-04-30	1780	North West
73226	Domestic					1970-12-31	1794	East
311304	Non Groundwater					1983-03-07	1801	North

Bore Id	Use Type	Drillers Log	Construction	Latest Water Levels	Geology	Completed Date	Dist (m)	Dir
WRK991322	Groundwater Investigation	0.00m-0.50m orange brown stiff clay 0.50m-2.10m weathered basalt 2.10m-17.50m fresh basalt 17.50m-19.00m orange/brown weathered basalt 19.00m-32.00m weathered basalt	0.50m-20.00m INNER LINING - CASING = Pvc 20.00m-32.00m INNER LINING - SCREEN = Pvc 0.00m-18.00m OUTER LINING - GRAVEL = Cement 18.00m-19.00m OUTER LINING - GRAVEL = Bentonite 19.00m-32.00m OUTER LINING - GRAVEL = Gravel			2009-05-22	1802	West
143995	Domestic, Stock	0.00m-1.00m VOLCANIC TOPSOIL 1.00m-7.00m CLAY 7.00m-11.00m BLUE STONE 11.00m-15.00m BROWN BASALT 15.00m-21.00m FRESH BLUESTONE 21.00m-53.00m BROWN BASALT 53.00m-54.00m CLAY	-0.30m-42.00m INNER LINING - CASING = Pvc 42.00m-54.00m INNER LINING - SCREEN = Pvc			2000-01-08	1802	South
311290	Non Groundwater					1972-03-09	1804	South East
WRK991323							1810	West
WRK964333	Domestic & Stock	0.00m-0.50m OVERBURDEN 0.50m-1.80m BROWN VOLCANIC SOIL 1.80m-13.50m WEATHERED BASALT 13.50m-17.00m BROWN CLAY 17.00m-20.50m BASALT 20.50m-27.50m FRACTURED BASALT 27.50m-31.50m BLUESTONE	-0.50m-20.00m INNER LINING - CASING = Pvc 20.00m-31.50m INNER LINING - SCREEN = Pvc 0.00m-0.50m OUTER LINING - GRAVEL = Cement			2004-01-27	1822	East
73316	Not Known	0.00m-1.55m RED BASALT CLAY 1.55m-25.04m GREY BASALT	0.00m-8.04m INNER LINING - CASING = Pvc Class 18 8.04m-25.04m INNER LINING - SCREEN = Pvc Class 18		8.04m-25.04m Basalt	1983-06-30	1826	South West
306231	Non Groundwater					1983-11-23	1827	North West
311289	Non Groundwater					1969-12-31	1829	East
73344	Groundwater Investigation	0.00m-6.20m TIP FILL 6.20m-8.70m BASALTIC CLAY 8.70m-34.74m BASALT	0.00m-28.50m INNER LINING - CASING = Pvc 28.50m-34.50m INNER LINING - SCREEN = Pvc		28.50m-34.50m Basalt	1991-01-09	1850	South West
311340	Non Groundwater					1983-04-28	1854	West
113040	Groundwater Investigation	0.00m-1.00m SAN Z C DK BR 1.00m-2.00m S Z C DK BR 2.00m-4.00m S C L BR YELL 4.00m-5.00m S Z L BR 5.00m-7.00m Z C LI BR YELL BR 7.00m-8.50m Z C L YELL BR	0.00m-6.00m INNER LINING - CASING = Pvc Class 9 6.00m-8.00m INNER LINING - SCREEN = Pvc Class 9 0.00m-5.50m OUTER LINING - GRAVEL = Cement 5.50m-8.50m OUTER LINING - GRAVEL = Gravel			1992-11-18	1863	North West
73339	Domestic, Stock	0.00m-2.00m SOIL & CLAY 2.00m-26.00m BASALT	-0.30m-16.00m INNER LINING - CASING = Pvc 16.00m-26.00m INNER LINING - SCREEN = Pvc		16.00m-26.00m Basalt	1991-03-12	1869	East
73207	Not Known					1958-12-31	1903	North West
73250	Domestic, Stock					1970-12-31	1928	South
73266	Not Known					1970-12-31	1961	South East
311336	Non Groundwater					1983-04-27	1975	South West
73259	Stock					1970-12-31	1980	North West
73255	Not Known					1970-12-31	1992	South West
73345	Groundwater Investigation	0.00m-1.00m BASALTIC CLAY 1.00m-27.68m BASALT	-0.30m-21.50m INNER LINING - CASING = Pvc 21.50m-27.50m INNER LINING - SCREEN = Pvc 15.00m-27.28m OUTER LINING - GRAVEL = Gravel		21.50m-27.50m Basalt	1991-01-10	1995	South West
311312	Non Groundwater					1983-03-31	1998	West

Boreholes WMIS Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Groundwater Boreholes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Boreholes (Earth Resources Database)

Boreholes from the Earth Resources dataset, within the dataset buffer:

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
311293		Department of Manufacturing & Industry Development		Rotary (diamond/drag bit)		28/08/1972	79.25	140.00	100	0	Onsite
73230		Private Individual/Corporation				31/12/1970	30.48		300	0	Onsite
73231		Private Individual/Corporation				31/12/1970	33.53		300	0	Onsite
73232		Private Individual/Corporation				31/12/1970	12.19		300	0	Onsite
311297		Department of Manufacturing & Industry Development		Mechanical Auger		03/03/1983	1.20	121.70	100	15	South West
311298		Department of Manufacturing & Industry Development		Mechanical Auger		03/03/1983	0.85	127.00	100	18	West
311300		Department of Manufacturing & Industry Development		Mechanical Auger		04/03/1983	0.65	139.40	100	25	North West
311299		Department of Manufacturing & Industry Development		Mechanical Auger		03/03/1983	0.70	131.80	100	35	West
73219		Private Individual/Corporation				31/12/1970	30.48		300	110	North
73257		Private Individual/Corporation				31/12/1970	21.34		300	120	South East
73229		Private Individual/Corporation				31/12/1970			300	181	North East
73211		Private Individual/Corporation				31/12/1970	21.95		300	201	North East
73212		Private Individual/Corporation	Irrigation	Percussion (cable)		31/12/1967	12.80		300	228	North East
73264		Private Individual/Corporation			Abandoned	31/12/1970			300	268	South East
73204		Private Individual/Corporation				11/01/1957	31.70	122.00	100	273	West
311301		Department of Manufacturing & Industry Development		Mechanical Auger		04/03/1983	0.80	143.50	100	340	North West
73223		Private Individual/Corporation				31/12/1970	21.34		300	392	South East
73235		Private Individual/Corporation				31/12/1970	30.48		300	451	West

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
73225		Private Individual/Corporation				31/12/1970	8.53		300	456	South East
73238		Private Individual/Corporation				31/12/1970	19.51		300	490	South
311315		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	0.70	142.00	100	547	North West
73275		Private Individual/Corporation	Domestic & Stock water supply	Air Percussion/Air Rotary		12/05/1977	50.50		300	621	North East
311320		Department of Manufacturing & Industry Development		Mechanical Auger		08/04/1983	0.70	119.40	100	650	South West
73198		Department of Manufacturing & Industry Development				31/12/1919	52.43	120.00	100	652	South West
73224		Private Individual/Corporation				31/12/1970	16.76		300	686	South East
73203		Private Individual/Corporation				12/10/1947	49.38	125.00	100	720	South West
73239		Private Individual/Corporation				31/12/1970	41.15		300	767	West
73210		Private Individual/Corporation				31/12/1970	45.72		300	779	North East
73202		Private Individual/Corporation				12/10/1947	73.15	125.00	300	804	South West
73222		Private Individual/Corporation				31/12/1970	36.58		300	814	South
311302		Department of Manufacturing & Industry Development		Mechanical Auger		07/03/1983	0.80	147.60	100	841	North
311292		Department of Manufacturing & Industry Development		Rotary (diamond/drag bit)		12/07/1972	60.96	110.00	300	857	South
73273		Private Individual/Corporation	Domestic & Stock water supply			08/11/1974	12.19		300	858	South East
311316		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	1.08	143.10	100	864	North West
73265		Private Individual/Corporation			Abandoned	31/12/1970			300	958	South
311317		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	3.48	142.20	100	964	North West
73228		Private Individual/Corporation				31/12/1970	30.48		300	1010	North East
311314		Department of Manufacturing & Industry Development		Mechanical Auger		06/04/1983	1.96	142.80	100	1046	North West
73227		Private Individual/Corporation				31/12/1970	29.26		300	1117	East
311321		Department of Manufacturing & Industry Development		Mechanical Auger		08/04/1983	0.76	117.20	100	1155	South West

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
311318		Department of Manufacturing & Industry Development		Mechanical Auger		07/04/1983	4.25	143.70	100	1229	North West
73276		Private Individual/Corporation	Domestic & Stock water supply	Air Percussion/Air Rotary		05/12/1977	60.96		300	1235	East
73272		Private Individual/Corporation	Domestic & Stock water supply			06/04/1974	18.91		300	1236	East
73218		Private Individual/Corporation				31/12/1970	36.58		300	1279	North
73277		Private Individual/Corporation	Stock/Poultry water supply	Air Percussion/Air Rotary		10/11/1977	34.00		300	1327	East
311303		Department of Manufacturing & Industry Development		Mechanical Auger		07/03/1983	0.80	150.20	100	1350	North
73197		Department of Manufacturing & Industry Development				31/12/1919	16.76	98.00	100	1385	South East
73220		Private Individual/Corporation				31/12/1970	36.58		300	1396	North
311313		Department of Manufacturing & Industry Development		Mechanical Auger		31/03/1983	1.82	140.80	100	1483	West
73193		Department of Manufacturing & Industry Development				31/12/1907	40.54	137.00	100	1493	North East
73194		Department of Manufacturing & Industry Development				13/05/1907	56.84	137.00	100	1493	North East
311265		Private Individual/Corporation		Rotary (diamond/drag bit)		29/10/1981	146.00	140.00	100	1559	West
942635		CRA Exploration Pty Ltd		Rotary mud drilling	Completed	29/10/1981	146.00	136.54	25	1559	West
311338		Department of Manufacturing & Industry Development		Mechanical Auger		28/04/1983	2.05	135.00	100	1608	West
73280		Private Individual/Corporation	Domestic & Stock water supply	Air Percussion/Air Rotary		11/06/1982	41.00		100	1620	East
311339		Department of Manufacturing & Industry Development		Mechanical Auger		28/04/1983	1.30	137.10	100	1628	West
311296		Department of Manufacturing & Industry Development		Mechanical Auger		02/03/1983	1.25	117.00	300	1636	North East
73217		Private Individual/Corporation				06/10/1900	51.82		300	1636	North East
311322		Department of Manufacturing & Industry Development		Mechanical Auger		08/04/1983	1.76	113.70	100	1679	South
311319		Department of Manufacturing & Industry Development		Mechanical Auger		07/04/1983	4.25	147.00	100	1682	North West
311337		Department of Manufacturing & Industry Development		Mechanical Auger		27/04/1983	1.96	133.70	100	1712	South West

Bore Id	Bore Type	Company	Usage	Method	Status	Drill Date	Depth	Elevation	Accuracy (m)	Dist (m)	Direct
73253		Private Individual/Corporation				31/12/1970			300	1733	South West
73283		Private Individual/Corporation	Domestic & Stock water supply	Air Percussion/Air Rotary		31/07/1982	74.00		100	1760	East
311304		Department of Manufacturing & Industry Development		Mechanical Auger		07/03/1983	1.40	153.50	100	1803	North
311290		Department of Manufacturing & Industry Development		Rotary (diamond/drag bit)		09/03/1972	64.31	101.34	300	1803	South East
306231		Department of Manufacturing & Industry Development		Mechanical Auger		23/11/1983	3.40	149.00	100	1829	North West
73259		Private Individual/Corporation				31/12/1970	36.58		300	1829	North West
311340		Department of Manufacturing & Industry Development		Mechanical Auger		28/04/1983	0.45	136.80	100	1856	West
73226		Private Individual/Corporation				31/12/1970	13.72		300	1858	East
73207		Private Individual/Corporation				31/12/1958			300	1904	North West
311289		Department of Manufacturing & Industry Development				31/12/1969	62.18	123.00	100	1931	East
73254		Private Individual/Corporation				31/12/1970	27.43		300	1941	South West
73266		Private Individual/Corporation			Abandoned	31/12/1970			300	1959	South East
311336		Department of Manufacturing & Industry Development		Mechanical Auger		27/04/1983	0.80	129.60	100	1976	South West
311312		Department of Manufacturing & Industry Development		Mechanical Auger		31/03/1983	2.04	133.90	100	1999	West

Boreholes Earth Resources Data Source: © The State of Victoria, Department of Economic Development, Jobs, Transport and Resources 2015. Creative Commons Attribution 3.0 Australia

Boreholes (Federation University)

Boreholes from the Federation University Australia dataset, within the dataset buffer:

Bore Id	Authority	Type	Uses	Initial TD	Log	Dist (m)	Direct
132477		Groundwater	Domestic		D: 0.000m-2.000m Red Earth & Clay D: 2.000m-18.000m Soft Brown Basalt Some Red Scoria D: 18.000m-36.000m Hard Blue Basalt	1160	East
311265	Department of Minerals and Energy (1977 - 1985)	Coal	Non Groundwater			1557	West

Boreholes FedUni Data Source: © Federation University Australia

Historical Mining Activity - Shafts

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Historical Mining Activity - Shafts

Mine Shaft Locations were collected by a variety of methods from 1869 in some areas of the state, mainly concentrating in Ballarat and Bendigo. In places a shaft may be recorded multiple times with a different source. In cases where several shaft locations are shown close together (generally with separations less than stated position errors) and they have different sources, it is possible that one shaft has been mapped several times. In cases where several shaft locations are shown close together but they have the same information source, it is possible that each shaft location represents a different shaft on the ground.

Historical Mine Shafts within the dataset buffer:

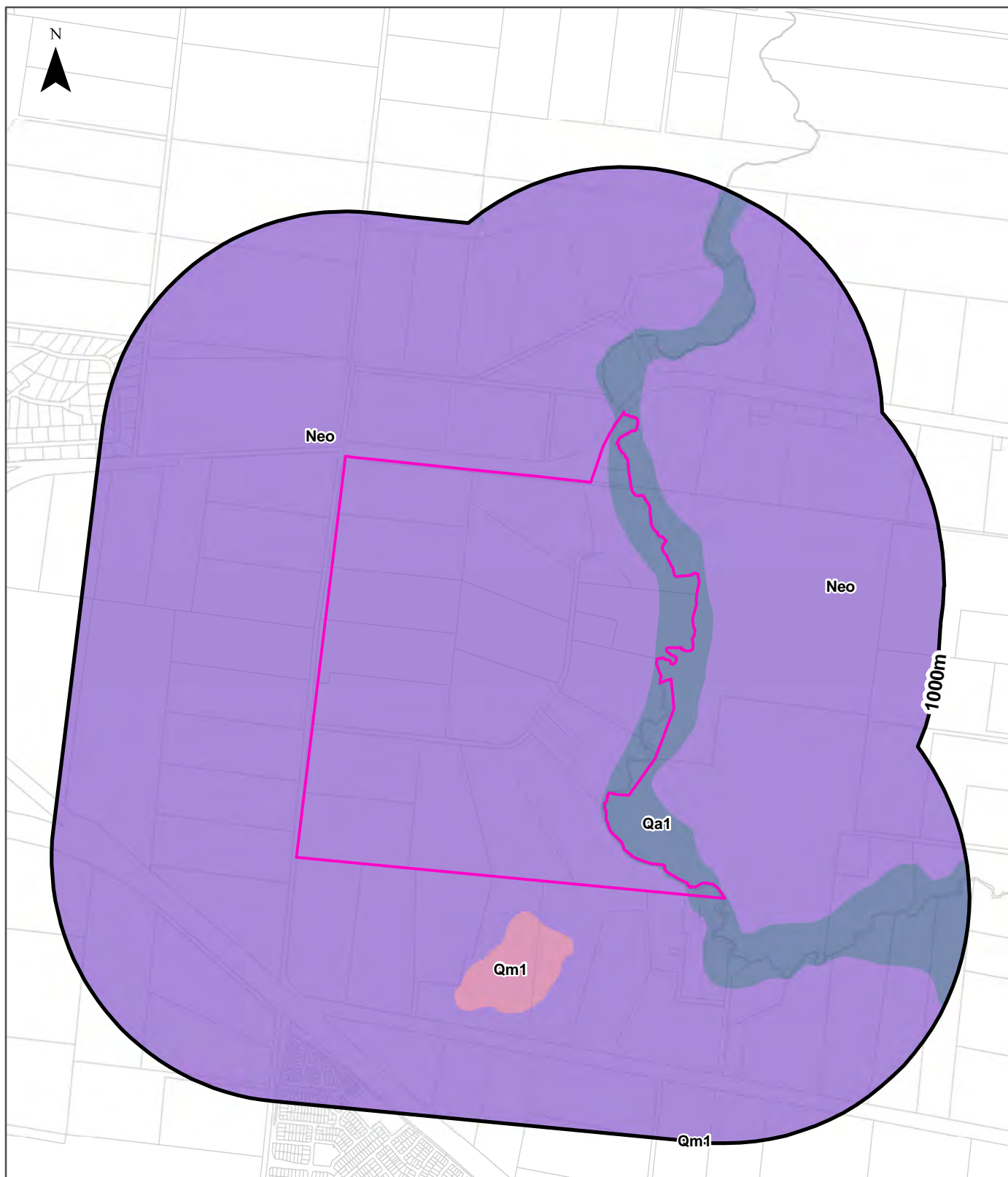
Map Id	Name	Source	Depth (m)	Collar (ft)	Fill/Cap Method	Location Desc	Location Accuracy	Distance	Direction
N/A	No records in buffer								

Historical Mining Activity Data Custodian: State Government Victoria - Dept of Economic Development, Jobs, Transport & Resources

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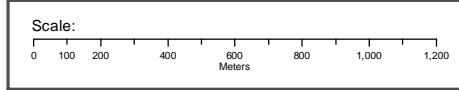
Geology 1:50,000

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend

Site Boundary	Fault	Dykes, Veins or Marker Beds
Report Buffer	Faulted Contact	Shear Zone (1:250,000)
Property Boundaries	Fault Zone	Other



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

Geology

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Geological Units

What are the Geological Units onsite?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Neo	Newer Volcanic Group - basalt flows (Neo): generic	Olivine tholeiite, quartz tholeiite, basanite, basaltic icelandite, hawaiite, mugearite, minor scoria and ash, fluvial sediments: tholeiitic to alkaline; includes sheet flows and valley flows and intercalated gravel, sand, clay	Miocene to Holocene	alkali basalt (major proportion); tholeiitic basalt (major proportion); alluvium (minor proportion); tuff (minor proportion)	1:50,000
Qa1	alluvium(Qa1): generic	Gravel, sand, silt: variably sorted and rounded; generally unconsolidated; includes deposits of low terraces; alluvial floodplain deposits	Pleistocene to Holocene	gravel material (significant); sand (significant); silt material (significant)	1:50,000

What are the Geological Units within the dataset buffer?

Symbol	Name	Description	Geological Age	Lithology	Dataset
Neo	Newer Volcanic Group - basalt flows (Neo): generic	Olivine tholeiite, quartz tholeiite, basanite, basaltic icelandite, hawaiite, mugearite, minor scoria and ash, fluvial sediments: tholeiitic to alkaline; includes sheet flows and valley flows and intercalated gravel, sand, clay	Miocene to Holocene	alkali basalt (major proportion); tholeiitic basalt (major proportion); alluvium (minor proportion); tuff (minor proportion)	1:50,000
Qa1	alluvium(Qa1): generic	Gravel, sand, silt: variably sorted and rounded; generally unconsolidated; includes deposits of low terraces; alluvial floodplain deposits	Pleistocene to Holocene	gravel material (significant); sand (significant); silt material (significant)	1:50,000
Qm1	swamp and lake deposits (Qm1): generic	Grey to black carbonaceous mud, silt, clay, minor peat: generally unconsolidated; rare dolomite	Pleistocene to Holocene	mud (major proportion); silt material (significant); clay lithology (significant); peat (minor proportion)	1:50,000

Geology Data Custodian: State Government Victoria - Dept of Economic Development, Jobs, Transport & Resources
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Geology

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Geological Structures

What are the Geological Faults or Faulted Contacts onsite?

Map Id	Type	Name	Contact	Positional Accuracy	Dataset
No features					1:50,000

What are the Dykes, Marker Beds and Veins onsite?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:50,000

What are the Shear Zones onsite (1:250,000 scale)?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

What are the Geological Faults or Faulted Contacts within the dataset buffer?

Map Id	Type	Name	Contact	Positional Accuracy	Dataset
No features					1:50,000

What are the Dykes, Marker Beds and Veins within the dataset buffer?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:50,000

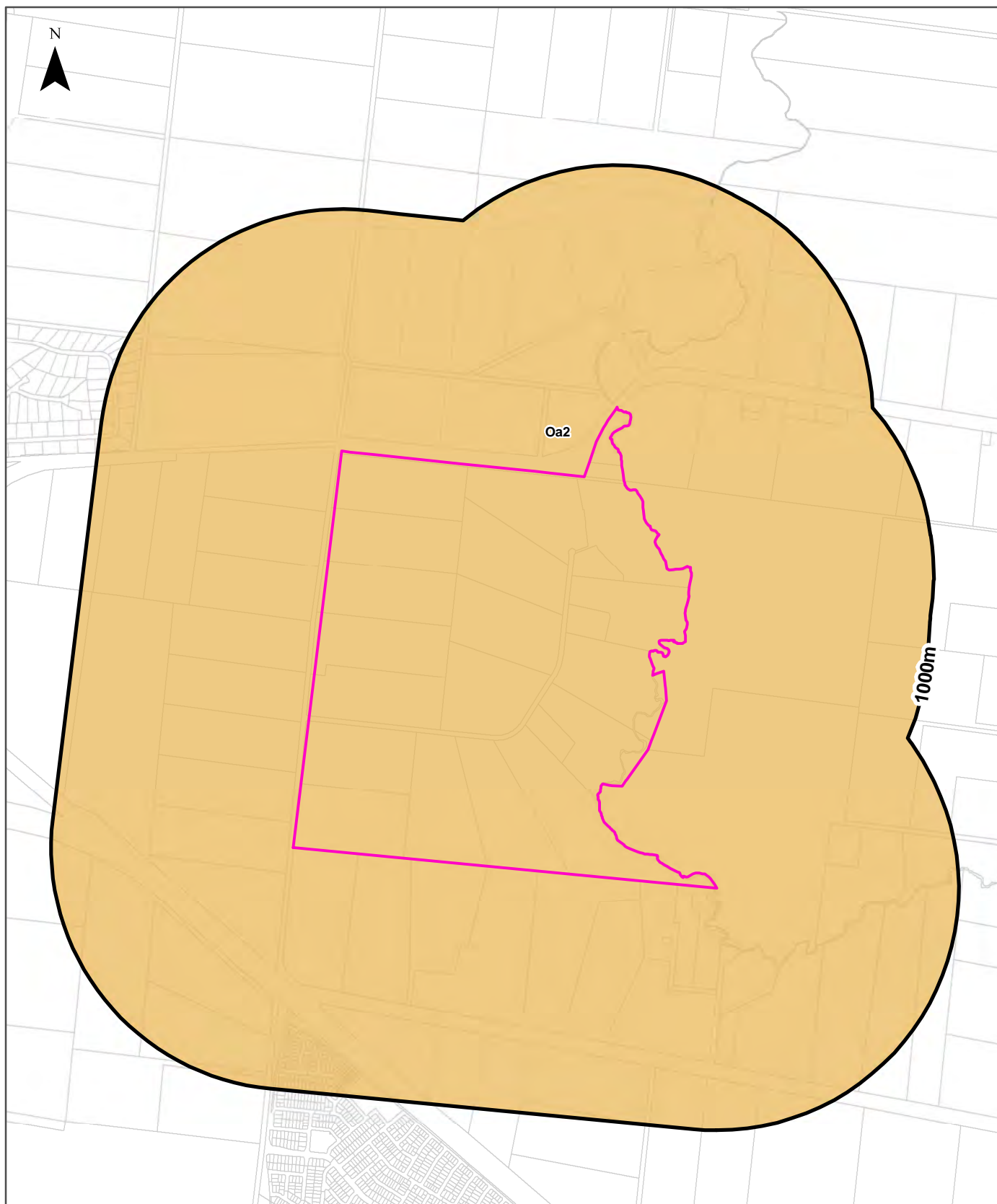
What are the Shear Zones within the dataset buffer (1:250,000 scale)?

Map Id	Type	Name	Description	Positional Accuracy	Dataset
No features					1:250,000

Geology Data Custodian: State Government Victoria - Dept of Economic Development, Jobs, Transport & Resources
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Atlas of Australian Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend		Australian Soil Classification Orders					
Site Boundary	Anthroposol	Dermosol	Kandosol	Podosol	Tenosol	No Data	
Report Buffer	Calcarosol	Ferrosol	Kurosol	Rudosol	Vertosol		
Property Boundary	Chromosol	Hydrosol	Organosol	Sodosol	Lake		
Scale: 		Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning		Coordinate System: GDA 1994 MGA Zone 55		Date: 31 October 2019	

Soil Landscapes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Atlas of Australian Soils

Australian soil types within the dataset buffer:

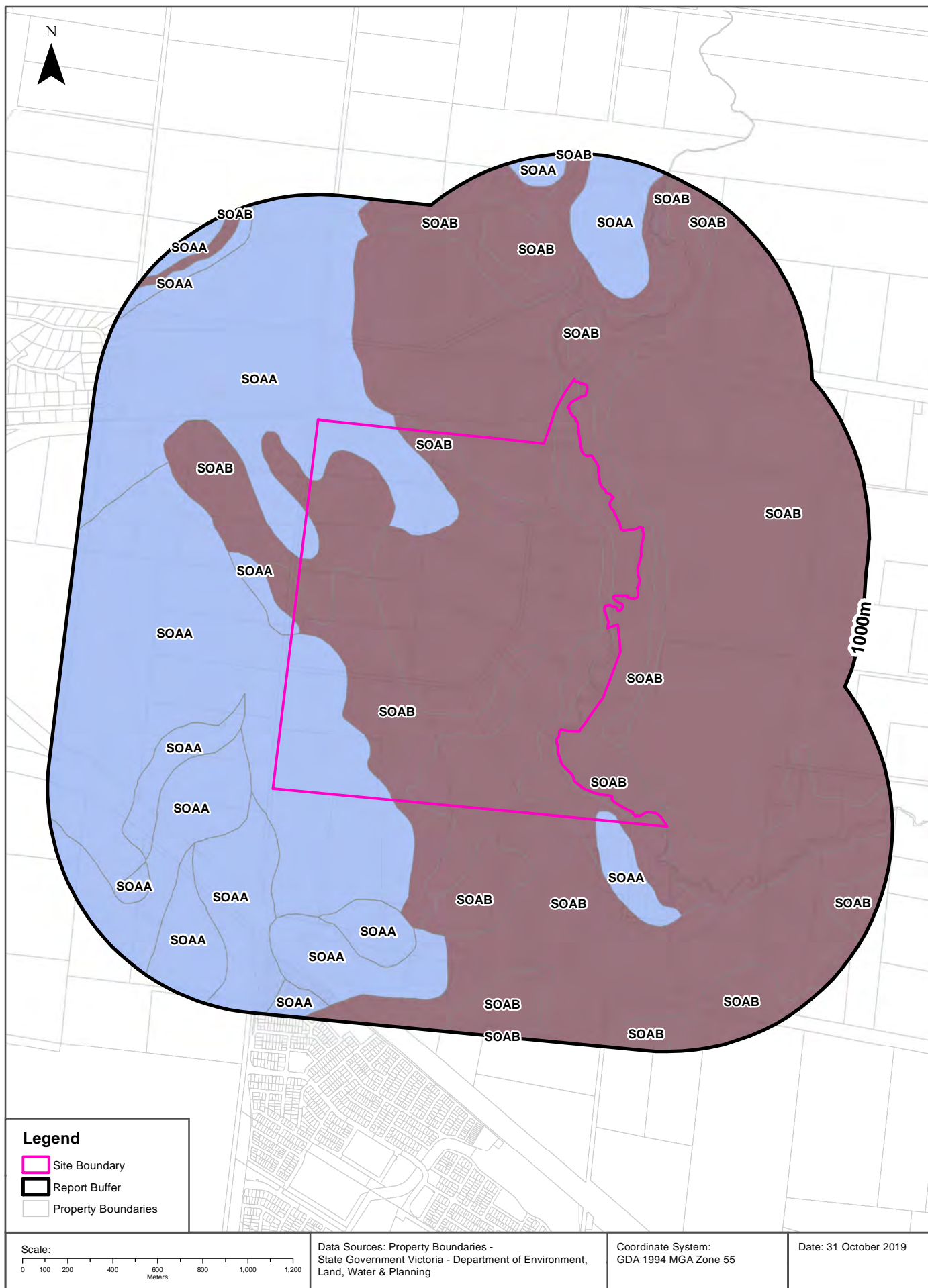
Symbol	Soil Order	Map Unit Description	Distance
Oa2	Chromosol	Dissected plateaux at low elevation: plains of hard alkaline red soils (Dr2.13) often in gilgai micro- association with dark cracking clays (Ug5.1), and grey and brown cracking clays (Ug5.2 and Ug5.3), small areas of other soils such as (Dr2.33), (Dy3.43), and (Dd1.1); also with (1) low, broad, sprawling stony rises of (Dr2.13), (2) low rounded hills of various (D) soils such as (Db1.23) with boulder strewn slopes, and (3) incised, often gorge-like, stream valleys of undescribed soils.	0m

Atlas of Australian Soils: CSIRO

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Victorian Soil Type Mapping

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Soil Landscapes

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Victorian Soil Type Mapping

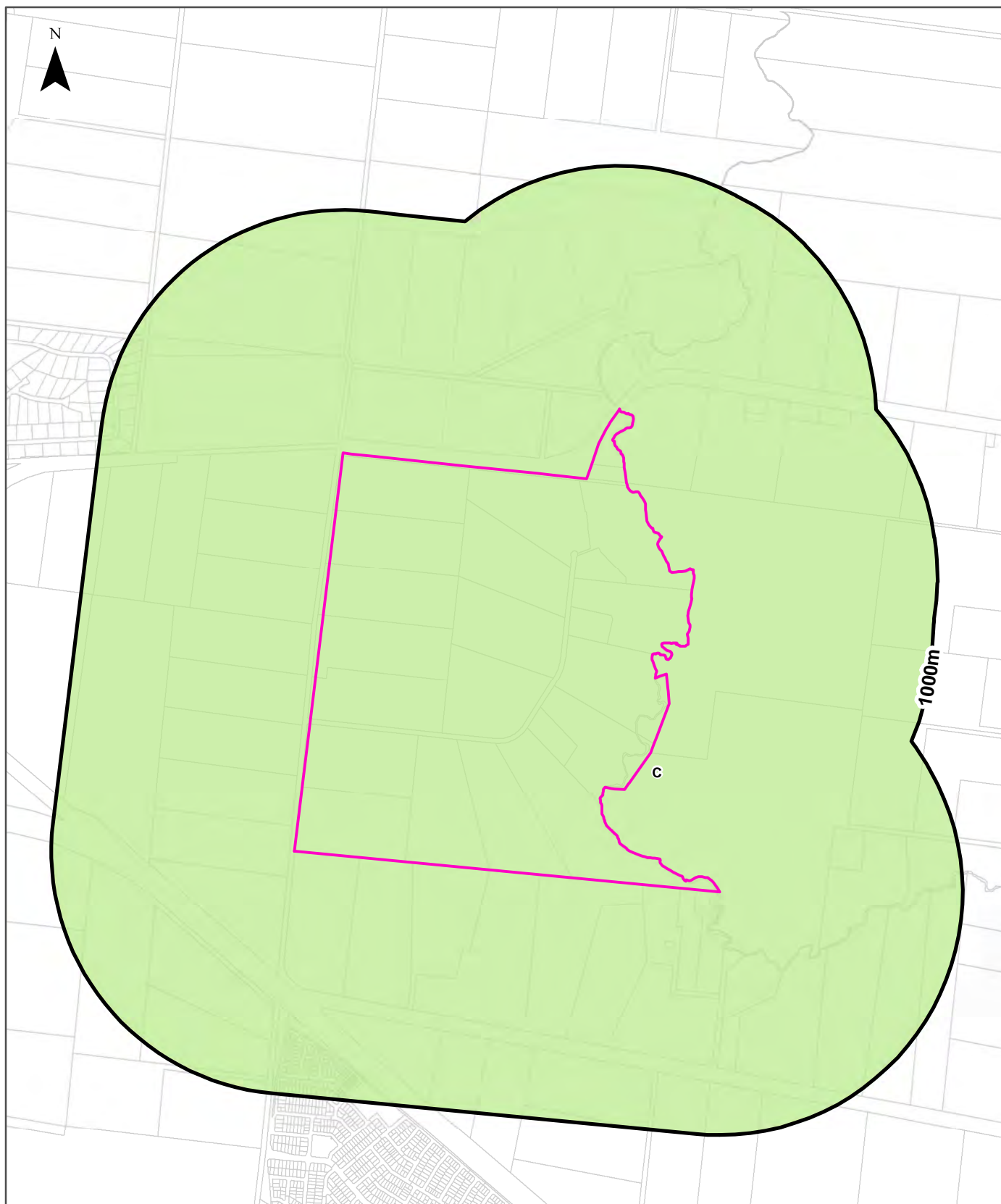
Victorian Soil Types within the dataset buffer:

Symbol	Description	Distance
SOAA	Red Sodosols	0m
SOAB	Brown Sodosols	0m

Victorian Soil Type Mapping Data Source: Department of Economic Development, Jobs, Transport and Resources
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Atlas of Australian Acid Sulfate Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend			
Site Boundary	Probability of occurrence of Acid Sulfate Soils		
Report Buffer	A. High (>70%)	C. Extremely Low (1-5%)	No Data
Property Boundary	B. Low (6-70%)	D. No Chance (0%)	
Scale: 0 100 200 400 600 800 1,000 1,200 Meters	Data Sources: Property Boundaries & Topographic Data: State of Victoria - Department of Environment and Primary Industries		Coordinate System: GDA 1994 MGA Zone 55
			Date: 31 October 2019

Acid Sulfate Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Atlas of Australian Acid Sulfate Soils

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

PROBCLASS	Description	Distance
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO

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Coastal Acid Sulfate Soils

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Coastal Acid Sulfate Soils

What are the on-site Coastal Acid Sulfate Soil types?

Coastal Acid Sulfate Soil Types
There are no Acid Sulfate areas onsite

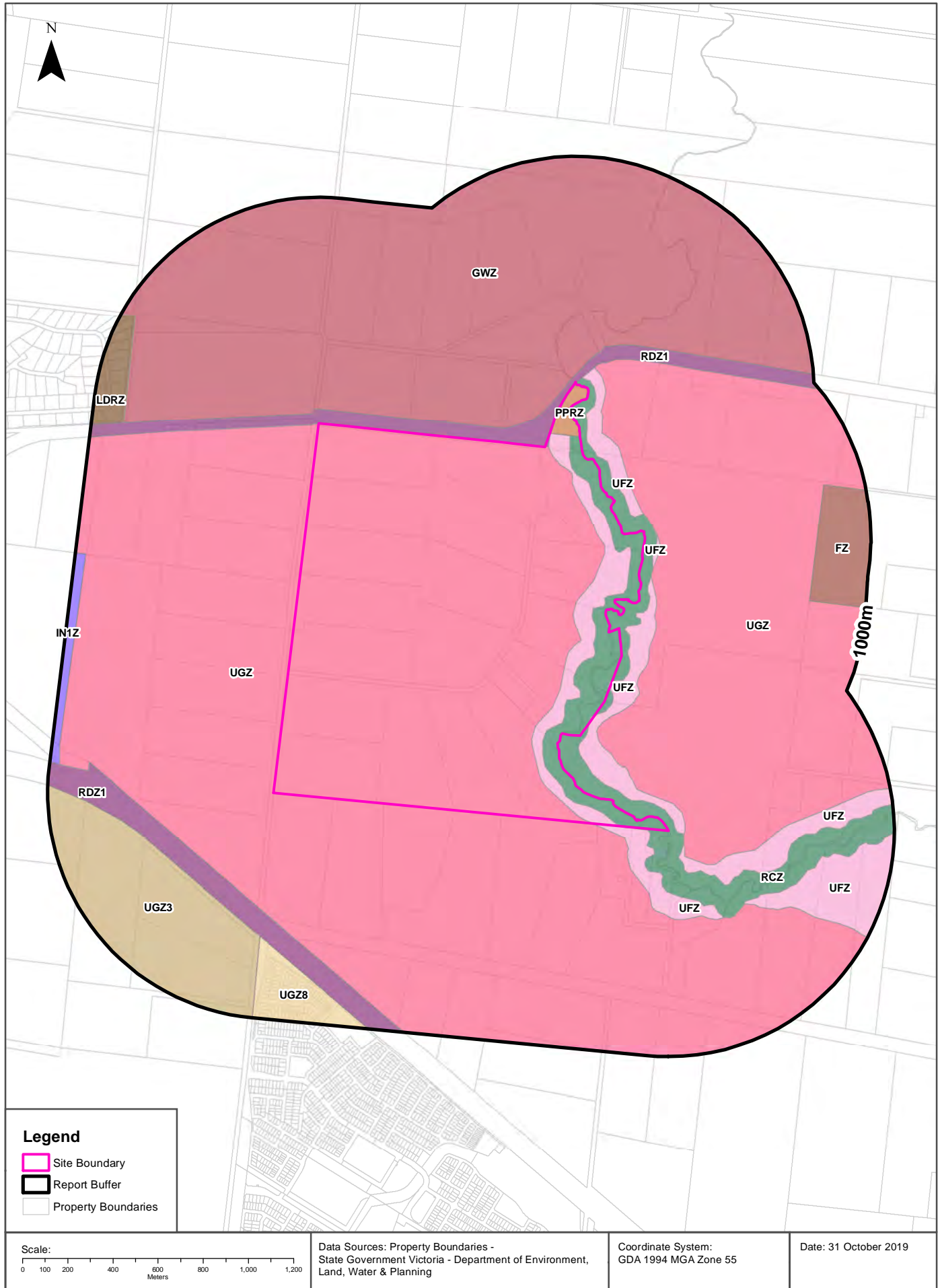
What are the Coastal Acid Sulfate Soil types within the dataset buffer?

Coastal Acid Sulfate Soil Types	Distance	Direction
There are no Acid Sulfate areas within the report buffer		

Coastal Acid Sulfate Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Planning Zones

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Planning Zones

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Planning Zones

Planning zones within the dataset buffer:

Zone Code	Description	Distance	Direction
UGZ	URBAN GROWTH ZONE	0m	Onsite
RCZ	RURAL CONSERVATION ZONE	0m	Onsite
UFZ	URBAN FLOODWAY ZONE	0m	Onsite
PPRZ	PUBLIC PARK AND RECREATION ZONE	0m	Onsite
RDZ1	ROAD ZONE - CATEGORY 1	0m	North
UFZ	URBAN FLOODWAY ZONE	20m	North East
GWZ	GREEN WEDGE ZONE	25m	North East
UFZ	URBAN FLOODWAY ZONE	40m	East
UGZ	URBAN GROWTH ZONE	42m	East
UFZ	URBAN FLOODWAY ZONE	87m	East
UFZ	URBAN FLOODWAY ZONE	460m	South East
UGZ3	URBAN GROWTH ZONE - SCHEDULE 3	521m	South West
UGZ8	URBAN GROWTH ZONE - SCHEDULE 8	636m	South
FZ	FARMING ZONE	744m	East
LDRZ	LOW DENSITY RESIDENTIAL ZONE	859m	North West
IN1Z	INDUSTRIAL 1 ZONE	954m	West

Planning Zone Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Planning Overlays

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Planning Overlays

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Planning Overlays

Planning overlays within the dataset buffer:

Zone Code	Description	Distance	Direction
ESO2	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2	0m	Onsite
ESO5	ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 5	0m	Onsite
HO54	HERITAGE OVERLAY (HO54)	0m	North East
PAO1	PUBLIC ACQUISITION OVERLAY 1	32m	North West
HO119	HERITAGE OVERLAY (HO119)	155m	South East
DCPO3	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 3	521m	South West
DCPO8	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 8	636m	South
HO89	HERITAGE OVERLAY (HO89)	769m	North West
HO57	HERITAGE OVERLAY (HO57)	921m	North East

Planning Overlay Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Heritage

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?

Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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Victorian Heritage Register

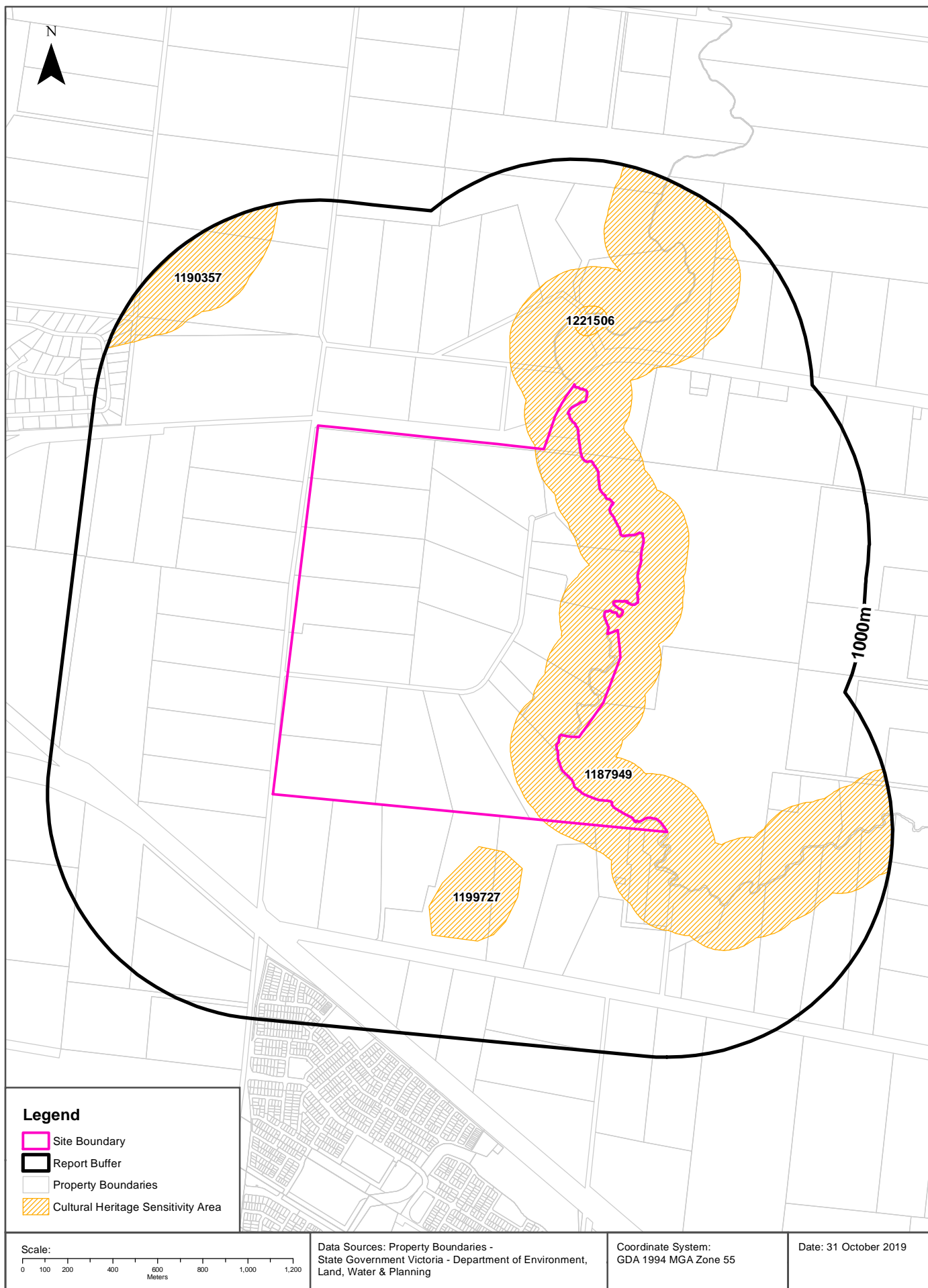
What are the Victorian Heritage Register items located within the dataset buffer?:

VHR Number	Description	Distance	Direction
N/A	No records within buffer		

Victorian Heritage Register Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Cultural Heritage Sensitivity

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Heritage

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Cultural Heritage Sensitivity

Areas of Cultural Heritage Sensitivity as specified in Division 3 of Part 2 in the Victorian Aboriginal Heritage Regulations 2018, within the dataset buffer:

Map Id	Distance	Direction
1187949	0m	Onsite
1199727	144m	South
1221506	221m	North East
1190357	678m	North West

Cultural Heritage Sensitivity Data Custodian: State Government Victoria - Department of Premier and Cabinet
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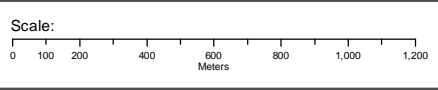
Natural Hazards

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend

- | | | | |
|---------------------|--------------------------------|---------------------------------|---------------------------------|
| Site Boundary | Flood 1 in 100 Year Extent | Sea Level 0cm (2009) | Sea Level 47cm (2070) |
| Report Buffer | Fire History Records | 1 in 100 Year Storm Tide (2009) | 1 in 100 Year Storm Tide (2070) |
| Property Boundaries | Designated Bushfire Prone Area | Sea Level 20cm (2040) | Sea Level 82cm (2100) |
| | | 1 in 100 Year Storm Tide (2040) | 1 in 100 Year Storm Tide (2100) |



Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning

Coordinate System: GDA 1994 MGA Zone 55

Date: 31 October 2019

Natural Hazards

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Bushfire Prone Areas

What are the designated bushfire prone areas within the dataset buffer?

Map ID	Feature	Plan No	LGA	Gazetted Date	Distance	Direction
59	Designated Bushfire Prone Area	LEGL./19-220	MELTON	10/09/2019	0m	Onsite

Bushfire Prone Area Data Custodian: State Government Victoria - Dept of Transport, Planning & Local Infrastructure
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Fire History

What are the fire history records of fires primarily on public land, within the dataset buffer?

Map Id	Fire Type	Fire Key	Season	Fire No	Fire Name	Treatment	Fire Cover	Start Date	Dist (m)	Direction
13291	BUSHFIRE	W196599999	1965	999		FIRE			0m	Onsite

Fire History Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Flood - 1 in 100 year modelled flood extent

What 1 in 100 year flood extent features exist within the dataset buffer?

Feature	Source	Method	Scale	Modified Date	Distance	Direction
100 Year Flood Outline	Melbourne Water	Modelled		03/10/2013	0m	Onsite

Flood Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Natural Hazards

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Victorian Coastal Inundation Sea Level Rise

What coastal inundation sea level rise features exist within the dataset buffer?

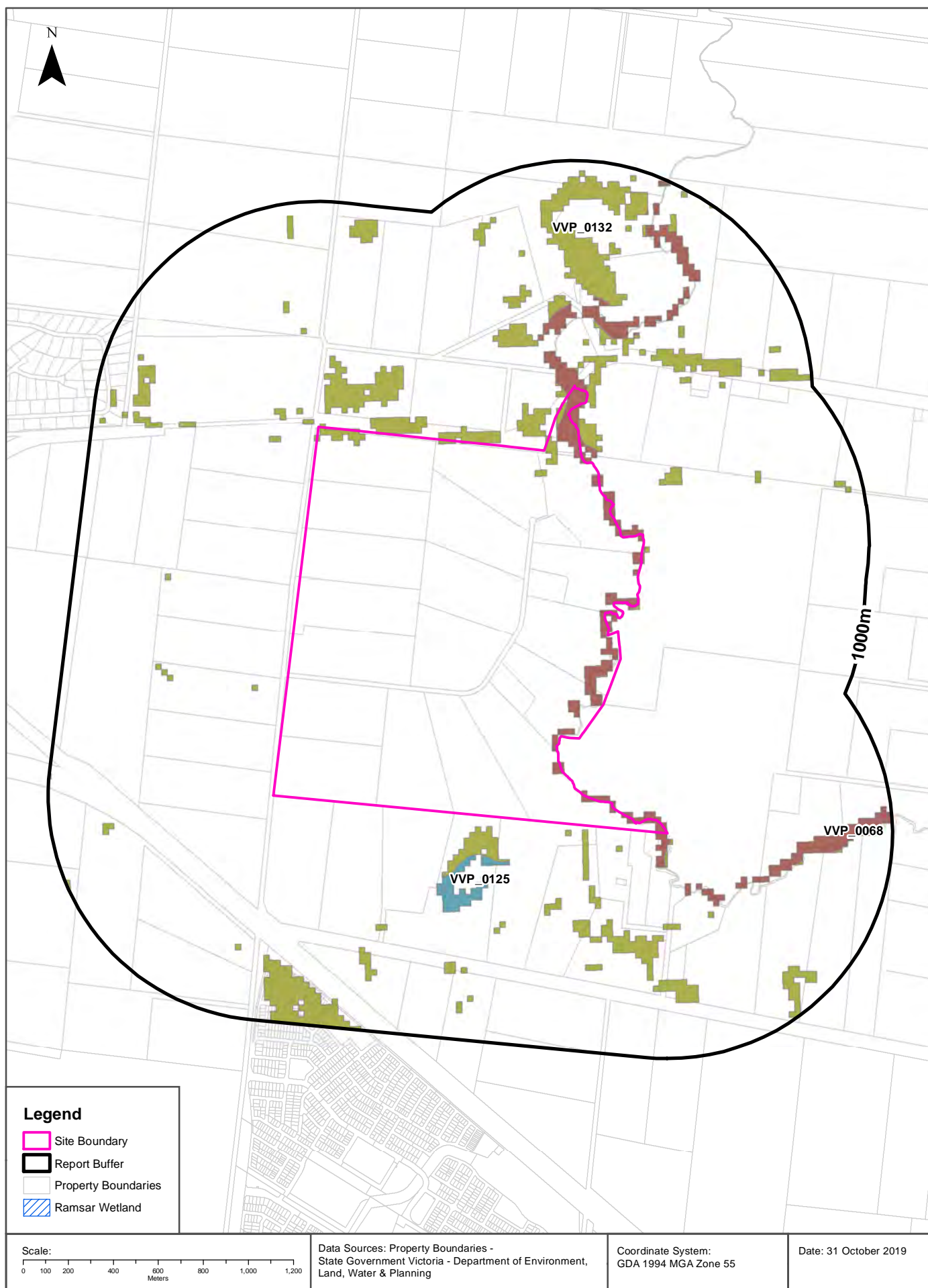
Description	Distance	Direction
No records within buffer		

Victorian Coastal Inundation Sea Level Rise Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning

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Ecological Constraints - Native Vegetation 2005 & Ramsar Wetlands

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Ecological Constraints

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Native Vegetation (Modelled 2005 Ecological Vegetation Classes)

What native vegetation exists within the dataset buffer?

Veg Code	EVC Name	EVCCode	Group	Subgroup	Bioregion	Conservation Status	Geographic Occurance	Distance
VVP_0068	Creekline Grassy Woodland	0068	Riverine Grassy Woodlands or Forests	Creekline and/or swampy	Victorian Volcanic Plain	Endangered	Common	0m
VVP_0132	Plains Grassland	0132	Plains Grasslands and Chenopod Shrublands	Clay soils	Victorian Volcanic Plain	Endangered	Common	0m
VVP_0125	Plains Grassy Wetland	0125	Wetlands	Freshwater	Victorian Volcanic Plain	Endangered	Common	177m

Native Vegetation Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Ramsar Wetlands

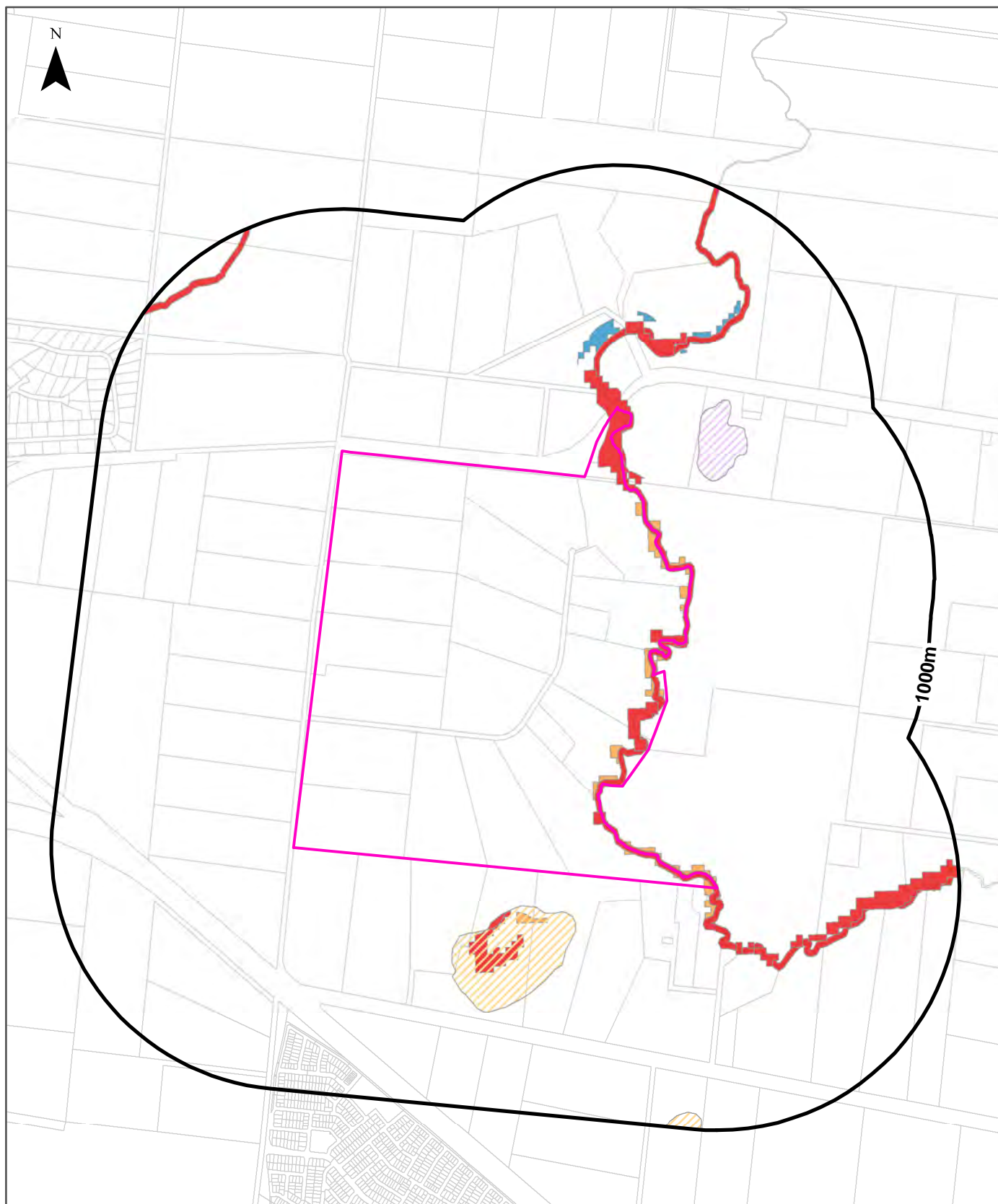
What Ramsar wetland areas exist within the dataset buffer?

Map ID	Site Name	Lake Name	Distance	Direction
N/A	No records within buffer			

Ramsar Wetland Area Data Custodian: State Government Victoria - Dept of Environment, Land, Water & Planning
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Ecological Constraints - Groundwater Dependent Ecosystems Atlas

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Legend		
High potential GDE - from national assessment	Low potential GDE - from national assessment	
Site Boundary	High potential GDE - from regional studies	Low potential GDE - from regional studies
Report Buffer	Moderate potential GDE - from national assessment	Known GDE - from regional studies
Property Boundaries	Moderate potential GDE - from regional studies	Unclassified potential GDE - from regional studies

<p>Scale:</p>	<p>Data Sources: Property Boundaries - State Government Victoria - Department of Environment, Land, Water & Planning</p>	<p>Coordinate System: GDA 1994 MGA Zone 55</p>	<p>Date: 31 October 2019</p>
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Ecological Constraints

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Groundwater Dependent Ecosystems Atlas

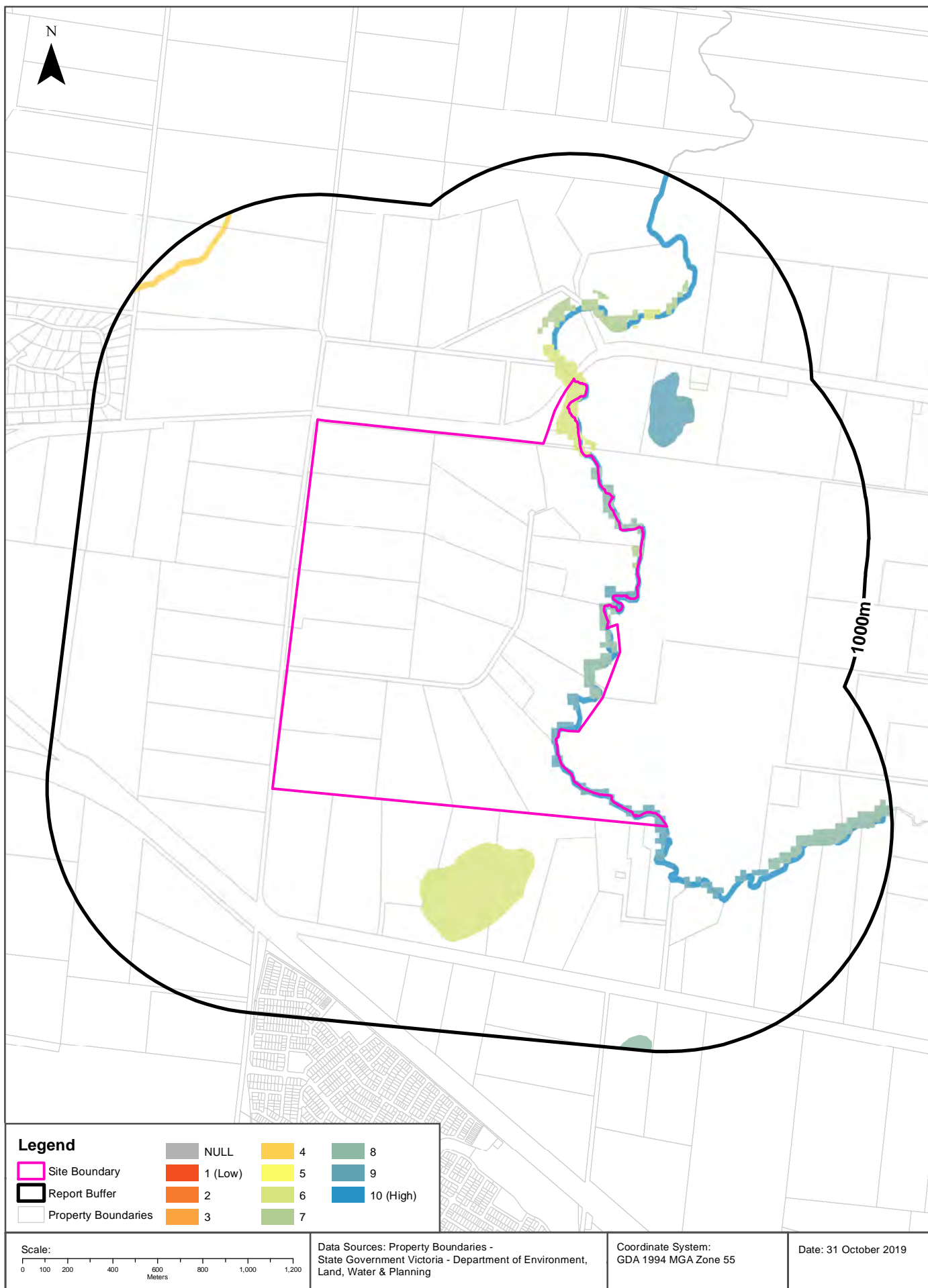
What GDEs exist within the dataset buffer?

GDE Type	Name	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Aquatic	KOROROI T CREEK	High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	River	Fractured rock	0m
Terrestrial		High potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m
Terrestrial		Low potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial		Moderate potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m
Terrestrial		Moderate potential GDE - from national assessment	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	0m
Aquatic		Moderate potential GDE - from regional studies	Moderately high plateaus and strike ridges.	Wetland		148m
Aquatic		Unclassified potential GDE - from regional studies	Moderately high plateaus and strike ridges.	Wetland		261m

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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Inflow Dependent Ecosystems Likelihood

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)



Ecological Constraints

Melton East Psp - Grangefields, Melbourne, VIC 3337 (Part 2)

Inflow Dependent Ecosystems Likelihood

What IDEs exist within the dataset buffer?

GDE Type	Name	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance
Aquatic	KOROROIT CREEK	10	Moderately high plateaus and strike ridges.	River	Fractured rock	0m
Terrestrial		6	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m
Terrestrial		7	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m
Terrestrial		7	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	0m
Terrestrial		8	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m
Terrestrial		9	Moderately high plateaus and strike ridges.	Vegetation	Fractured rock	0m
Terrestrial		9	Moderately high plateaus and strike ridges.	Vegetation	Unconsolidated sedimentary	0m
Aquatic		6	Moderately high plateaus and strike ridges.	Wetland		148m
Aquatic		9	Moderately high plateaus and strike ridges.	Wetland		261m
Aquatic	RYANS CREEK	4	Moderately high plateaus and strike ridges.	River	Unconsolidated sedimentary	864m
Aquatic		8	Plains mainly on basalt lavas with many volcanic forms and lakes, partly on weak sedimentary rocks.	Wetland		930m

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
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